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DEPARTMENT OF FISH AND GAME
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ARNOLD SCHWARZENEGGER, Governor

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TCJ

Mr. Thomas Stokely, Senior Planner
Trinity County Planning Department
P.O. Box 156
Hayfork, CA 96041

Mr. Russell Smith
US Bureau of Reclamation
16349 Shasta Dam Boulevard
City of Shasta Lake, CA 96019-8400

Dear Messrs. Stokely and Smith:

The Department of Fish and Game (DFG) has reviewed the Trinity River Fishery Restoration Supplemental Environmental Impact Statement/Environmental Impact Report (SEIS/EIR) and concurs with the selection of the preferred alternative. The SEIS/EIR selects the "Flow Evaluation Alternative" as selected by the "Record of Decision" for the Trinity River Fishery Restoration several years ago. The selected alternative also includes several watershed restoration efforts that are similar to those in the original Record of Decision when coupled with several supporting programs such as Department of Fish and Game's Coastal Salmon Initiative.

We are concerned some important sections of the SEIS/EIR that drive decision processes are not correct in our opinion. Also we believe that the analysis has taken a very conservative approach to estimating water supply impacts relating to implementation of the Flow Evaluation Alternative and suggest a more detailed assessment that considers foreseeable compensating mechanisms to reduce water storage impacts in Trinity Reservoir. Our concerns and recommendations are in the following four areas:

Environmental Decision Making for the Trinity River Based on Temperature Management for Sacramento Fisheries

The SEIS/EIR contains a substantial analysis of the effects of the Flow Evaluation Alternative on the management of temperatures in the Sacramento River. Although we believe the analysis is necessary, we do not agree with the approach in the analysis with respect to significance criteria and mitigation. In our opinion, there are institutional controls which do not allow using the Trinity River flows

prescribed in the Flow Evaluation Alternative to manage temperatures in the Sacramento River. Therefore, the impact analysis for the Sacramento River needs to be adjusted to what the lead and regulatory agencies can be expected to reasonably control under the law, specifically in the area of significance criteria for the analysis.

In California, the controls put in place governing a single source of water supply from two separate basins, requires needs for beneficial uses in the basin of origin be met first – then needs can be supplied for the other basin (Table 1). The State Water Resources Control Board (SWRCB) issued orders WR 90-5 and 91-01 that set terms and conditions for fishery protection on the water right permits, licenses, and applications for the Bureau of Reclamation's Central Valley Project including those from the Trinity and Sacramento rivers. The orders recognized that protection of the upper Sacramento River fishery by means of water diversions from the Trinity River may adversely affect the Trinity River if not properly controlled. Those orders chose to prevent and avoid any adverse effects to the Trinity River fishery. The SWRCB will consider the comprehensive protection for the Trinity River fishery in a separate water rights proceeding in the near future. In the mean time the Basin Plan for the Trinity River includes an action plan that forms the basis for a collaborative approach to the management of fishery resources in the Trinity River including the Trinity River Restoration Act (PL 98-541) and its ongoing efforts and attainment of the water quality objectives (North Coast Water Quality Control Board Basin Plan, Section 4).

There is Federal recognition that the Central Valley Project shall be operated to meet all obligations under State and Federal law including but not limited to all the decisions of the California State Water Resources Control Board (Central Valley Project Improvement Act, Section 3406 [b]). The Federal obligation to prioritize use of water stored by the Trinity Project for the Trinity-Klamath basin is included in the 1955 Act authorizing construction of the Trinity River Diversion and an opinion (letter dated December 6, 1973;[1973 Sol. Op.]) from the assistant regional solicitor of the Deportment of Interior. Therefore, we conclude that the Flow Evaluation Alternative is the only alternative in the SEIS/EIR that meets the needs of anadromous fish spawning and rearing in the Trinity River (designated beneficial uses via the Clean Water Act basin planning process implemented by the State). We conclude that it is not reasonable to judge an impact due to meeting an obligation for a basin of origin as significant if it cannot be reasonably controlled by the lead agency or the regulatory agencies under the law.

We recommend that the "Significance Criteria" in the Fishery section (page 3-117,bullet 7) be revised by adding the following italicized inserts: "Mortality of State or federally listed anadromous species, or species that are candidates for listing (CESA) or proposed listing (ESA) *in the Trinity River Basin; or in the Sacramento River Basin only to the extent controllable by the Trinity River Diversion residual to meet Trinity Basin needs specified per the Record of Decision for Trinity River Fishery Restoration."* Likewise, we recommend the Significance Criteria in the Water Quality section (page 3-76, bullet 2) be revised by inserting the following italicized inserts and strike out: "Violation of ~~*any*~~ water quality standards or waste discharge requirements in the Trinity River Basin; *or in the Sacramento River Basin only to the extent controllable by the Trinity River Diversion which is residual to meet Trinity Basin needs specified per the Record of Decision for Trinity River Fishery Restoration."*

The existing temperature management in the Sacramento River is a collaborative process that establishes a flexible compliance point along the river to the "extent controllable" (as stated in WR 90-5). The requirement to meet the basin of origin needs first is not a controllable factor in our opinion based on existing regulations and orders. However, after meeting these in basin needs through the Flow Evaluation Alternative, over half of the runoff from the Trinity River is still diverted to the Sacramento River and the timing and rate of that diversion is controllable (with the exception of flood control releases). The Department recommends examining how the timing and rate of Trinity River Diversion residual to the Trinity River Basin needs can be optimized to attain the basin plan objectives for temperature in the Sacramento River. For example, it may be feasible to move all the Trinity River Diversion that occurs in the cooler months of the year to the warmer months of the year (except for flood control). This may offer significant benefits to cooling of the Sacramento River.

Another important item in the SEIS/EIR recommended for revision to avoid problems with the environmental decision making process is the Objectives Section that drives the selection of an alternative. The last objective listed on page 1-10 (first bullet) contains an error and an omission in citing Fish and Game Code Section 6900, a statewide effort to double anadromous fish. The objective includes doubling populations in the Sacramento River and the Sacramento-San Joaquin Delta as an objective of the Trinity River Fisheries Restoration. It's the Department's interpretation that the water from the basin of origin must first satisfy the fisheries restoration needs of that river before being considered for restoration purpose for an out of basin river. The SEIS/EIR should note that both the Trinity River and the Sacramento River are designated as significant

spawning areas in the State under Fish and Game Code Section 1505 and they have equal priority for protection. In addition, the Objective on page 1-10 specifically omits Section 6930 titled "Effect of Reduced Water Flows" which we believe is relevant now that the SEIS/EIR revised the Purpose and Need section to include the Trinity River Basin, which includes streams specified in this section. We recommend the Objective be revised by adding as indicated in the italicized strike out and inserts: "Double populations of naturally-produced salmon, steelhead and anadromous fish in the *~~waters of California~~ Trinity River and Sacramento River using diversions from the Trinity River that are residual to fully meeting the fishery restoration goals in the Trinity Basin pursuant to the statewide Salmon and Steelhead Trout and Anadromous Fisheries Program Act including Fish and Game Code Section 6900 through 6930 (emphasis added to identify section 6930)."*

Table 1. California Water Code Sections Relating to Basin of Origin

11460. In the construction and operation by the department of any project under the provisions of this part a watershed or area wherein water originates, or an area immediately adjacent thereto which can conveniently be supplied with water therefrom, shall not be deprived by the department directly or indirectly of the prior right to all of the water reasonably required to adequately supply the beneficial needs of the watershed, area, or any of the inhabitants or property owners therein.
11461. In no other way than by purchase or otherwise as provided in this part shall water rights of a watershed, area, or the inhabitants be impaired or curtailed by the department, but the provisions of this article shall be strictly limited to the acts and proceedings of the department, as such, and shall not apply to any persons or State agencies.
11462. The provisions of this article shall not be so construed as to create any new property rights other than against the department as provided in this part or to require the department to furnish to any person without adequate compensation therefore any water made available by the construction of any works by the department.
11463. In the construction and operation by the department of any project under the provisions of this part, no exchange of the water of any watershed or area for the water of any other watershed or area may be made by the department unless the water requirements of the watershed or area in which the exchange is made are first and at all times met and satisfied to the extent that the requirements would have been met were the exchange not made, and no right to the use of water shall be gained or lost by reason of any such exchange.
10505. No priority under this part shall be released nor assignment made of any application that will, in the judgment of the board, deprive the county in which the water covered by the application originates of any such water necessary for the development of the county.
10505.5. Every application heretofore or hereafter made and filed pursuant to Section 10500, and held by the State Water Resources Control Board, shall be amended to provide, and any permit hereafter issued pursuant to such an application, and any license issued pursuant to such a permit, shall provide, that the application, permit, or license shall not authorize the use of any water outside of the county of origin which is necessary for the development of the county.
11128. The limitations prescribed in Section 11460 and 11463 shall also apply to any agency of the State or Federal Government which shall undertake the construction or operation of the project, or any unit thereof including, besides those specifically described, additional units which are consistent with and which may be constructed, maintained, and operated as a part of the project and in furtherance of the single object contemplated by this part.

Decisions for Temperature Management in the Sacramento River

The SEIS/EIR recommends a new temperature management process for the Sacramento River based on general monthly temperature modeling analyses and simplifying assumptions for spawning distribution. Although we believe the analyses are at a level sufficient for disclosing impacts in the Sacramento River in an environmental document we do not believe the significance criteria that evaluate the impacts are appropriate as discussed above. Using our recommended significance criteria the impact would be less than significant based on controllable factors and mitigation would not be required. Therefore, we recommend eliminating the discussion on mitigation for temperature effects in the Sacramento River from both Fisheries and Water Quality sections of the SEIS/EIR while keeping the analysis that discloses the impact. Specifically, we recommend removal of tables 3.4-7 through 3.4-12 and tables 4-4 and 4-5, along with descriptive narrative and supporting appendices. The proposed mitigation rigidly stations the Sacramento River temperature compliance point at Balls Ferry which leaves less spawning habitat compared to the existing flexible approach that moves the compliance point throughout the season as controlled by weather and coldwater reserves.

If the lead agencies were to disregard our recommendation to not require mitigation for the Sacramento River temperature impact based on controllable factors, we recommend against the proposed mitigation and changing the existing temperature under Water Rights Order 90-5 and 91-01. In our view it would not be beneficial. The existing temperature management is a collaborative process that establishes a flexible compliance point along the river to the "extent controllable (as stated in water rights orders)." The compliance point can move throughout the season based on controllable factors and real-time information on biology and meteorology. The management system has worked very well as documented in the US Bureau of Reclamation (USBR) Annual Reports to the State Water Resources Control Board required to document performance under water rights orders for the Sacramento River (SWRCB files).

The temperature effects analysis for the SEIS/EIR is not sufficiently detailed for selecting a permanent temperature management approach for a large river (however it is adequate for an environmental document). The simplified analysis in the environmental document examined monthly average temperatures with a spawning distribution representing several years of observations selected from the last decade of representative data where all the spawners happened to be above the proposed Balls Ferry compliance point.

Over the past decade (three generations of salmon), substantial spawning has been observed below Balls Ferry. In our opinion, the existing collaborative process involving the fish and water management agencies has had, and will continue to have, the flexibility needed to best manage the coldwater reserves on a real-time basis for all the species based on their needs at the time. We do believe the proposed rigid upstream compliance point offers nothing in both benefits and/or compensation should it be determined necessary.

Potential Compensating Mechanisms for Water Resource Impacts Predicted for Trinity River Restoration Project

The supplemental EIS/R for the Trinity River "Restoration Project" estimates that the proposed action will cause decreases in the long-term average end-of-water year storage by 95,000 acre feet and long-term average annual CVP deliveries by 77,000 acre feet (page 3-55). The estimated losses to storage and delivery are conservative in that the actual average losses may be less than predicted. In some cases, computer models include very conservative assumptions on water demands associated with the Restoration Project. Although a conservative approach to impact analysis is encouraged by NEPA and CEQA; water resource planning activities should adopt a more accurate assessment along with foreseeable compensating mechanisms that will be occurring in the system. Opportunities to increase conservation storage represent significant environmental benefits for temperature control in the Trinity River over the long-term. We recommend reviewing the following assumptions in the model to develop a more accurate assessment of the water supply implications of the project:

- <u>Use of Trinity Reservoir Storage to Dilute Iron Mountain Mine Discharges</u>: The SEIS/EIR characterizes the dilution water demands that Iron Mountain Mine Superfund site places on the Trinity Reservoir as "very conservative." The model assumes that dilution releases of water from Whiskeytown Reservoir to Keswick Reservoir (of which Trinity River exports are a major part) are maintained each day at a minimum level of 200 cubic feet per second regardless of power demands which tend to be low during the wet season (USBR 1992). The SEIS/EIR recognizes the very conservative nature of the dilution water assumption is due to the pollution control facilities installed at this Superfund site (now totaling over 300 million dollars in facilities and operations). Near the time the SEIS/EIR was released, the US Environmental Protection Agency

announced (USEPA 2004) the completion of the massive pollution treatment system on the Slickrock Creek unit of the site that is expected to boost the removal of metal contaminants from 75 percent to 95 percent. At the time, a 200 cubic feet per second (cfs) dilution water demand was assumed for the Trinity unit of the CVP, the estimated removal of metal contaminants from the site was approximately 20 percent. We believe it is no longer appropriate to use a 200 cfs dilution assumption and recommend a multiagency technical team with expertise on the Iron Mountain Mine site estimate a reasonable dilution requirement for the Trinity unit of the CVP. The reduction in the Trinity Reservoir portion (not the Clear Creek portion) of the 200 cfs release should also result in additional storage in Shasta Reservoir by virtue of wet season operations associated with flood control and conservation storage. To put the dilution water demand in perspective, 200 cfs for a 180-day wet season represents 72,000 acre feet of water.

- Conjunctive Use of Safety of Dam Releases and Geomorphic Releases. The water resources modeling and the document descriptions assumes that current safety of dams (flood control) releases from Trinity Dam are independent of the Restoration Project releases for geomorphic objectives such that the two releases cannot be used synergistically. Although such a conservative assumption is appropriate for a NEPA/CEQA analysis, the "Adaptive Management Plan" included in the Restoration Project could consider the synergy of combining the safety of dams release with additional releases given the substantial water storage benefits that will enhance temperature control for subsequent water years. It is recommended that a multiagency technical advisory group be formed through the Adaptive Management program to complete a feasibility analysis examining details of achieving the synergy between the two releases including (1) the possibility of increasing the maximum safety of dam release flow with the upcoming removal of the 6,000 cfs restriction with replacement of the old bridges, (2) frequency and timing of the safety of dam releases, and (3) the timing of the safety of dam releases relative to the preferred timing for the geomorphic objective and trade offs of moving the timing of the geomorphic objectives to synergize with the safety releases. Although the consequences of moving the timing for geomorphic objectives affect certain healthy river attributes, the scale of

those effects should be compared to conservation storage benefits. Safety of dam releases varies in frequency and magnitude as well as timing. When they occur, safety releases can represent substantial volumes of water (20,000 to 50,000 acre feet) at flows that typically represent 30 to 50 percent of flows estimated for geomorphic objectives.

- Use of Tributary Restoration to Contribute to Attainment of Fishery Goals: In response to litigation, the supplemental EIS/EIR has significantly broadened its "Purpose and Need" from the original EIS/EIR. The original document purpose was to restore anadromous fish populations natal to the Trinity River and has now been shifted to restoring fish populations natal to the Trinity River Basin - meaning tributary production would be included in attaining the goal. The SEIS/R, however, did not account for the additional contribution from the tributaries in terms of the water resources necessary to reach Restoration Project goals. The supplement also clarified that the specific escapement goals for the Trinity River proper are not the purpose of the project. Given this significant adjustment in project purpose and measure of success, we recommend technical staff from the TMC examine the amount of sustainable increase in fish production in tributaries using watershed restoration. At the present time, there is a great deal of uncertainty in the sustainability of increased fish production in restored tributary habitat. Appendix E in the supplemental EIS/R includes a major discussion on the scale and potential performance of the watershed improvement actions that should be included as part of the main SEIS/R; nevertheless it indicates tributary production should not be a substitute for the flows in the Record of Decision. It is recommended that the watershed program be given a greater role in the Restoration Project and assessed for how it can complement the restoration goals.

Environmental Decision Making for the Trinity River Based on a Conservative Prediction of Conditions in the Sacramento River:

The models predicting impacts of the Restoration Project on the temperature regime of the Sacramento River and survival of incubating winter-run Chinook eggs indicate that the Mechanical Restoration Alternative is the only alternative that does not significantly affect the survival of winter-run Chinook. We do not believe that the selection of the alternative should be influenced by the

finding of effects on the Sacramento River temperature regime. Trinity River water cannot be used to control water temperatures on the Sacramento River, except when Trinity water resources are shown to be excess to the needs of the Trinity River.

The SEIS/EIR needs to include an adequate description of the "Mechanical Alternative." Specifically, the description should include how the mechanical operations can be completed in perpetuity in light of the requirements of the Federal Anti-Deficiency Act. We question the intention of this alternative to transition to something other than what it appears to be. Specifically, the document in Section 2 indicates that increased hatchery production and harvest restrictions will be included as part of the Mechanical Alternative when the habitat improvements are completed. The document does not indicate exactly what would happen then with the Mechanical Alternative or if the program would be switched to another mechanism such as hatchery and harvest restrictions (pages 2-21 and 2.22).

Southern Oregon/Northern California Coast coho salmon (*Oncorhynchus kisutch*) in the project area are federally listed and a candidate species for State listing as threatened pursuant to Fish and Game Code Section 2074.2. It is anticipated that completion of the regulatory process to include coho salmon on the State list of threatened and endangered species will be completed by July 2004. During the candidacy period, take is authorized pursuant to regulations under Fish and Game Code Section 2084. Should the species become listed, in order to take or capture and relocate coho, a take permit pursuant to Fish and Game Code 2081.b or a "Consistency Determination" under Fish and Game Code 2080.1 would need to be obtained. If a Consistency Determination is requested, the request may be made once the "Incidental Take Permit" has been received from the National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries). The request will need to be sent directly to the DFG Director and include a copy of the Federal biological opinion and Federal take permit. For the DFG to find the Federal incidental take permit consistent with CESA, it must meet the requirements of Fish and Game Code Section 2081 which, in part, states "The impacts of the authorized take shall be minimized and fully mitigated" and "The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species." If DFG determines the Federal take authorization is consistent with State law, the project

would then operate under the conditions of the Federal permit. Please note that DFG may not add any additional conditions to the Federal permit. If it is determined to not be consistent, then a take permit under Fish and Game Code 2081(b) would be required.

If there are any questions regarding our comments, please contact Staff Environmental Scientist Harry Rectenwald at (530) 225-2368 or Senior Environmental Scientist Steve Turek at (530) 225-2280.

Sincerely,

for **DONALD B. KOCH**
Regional Manager

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