

ISSUE PAPER FOR THE TRINITY MANAGEMENT COUNCIL
IS THERE A CAUSAL LINK BETWEEN RESTORATION ACTIVITIES
IN THE SOUTH FORK TRINITY RIVER AND OTHER TRIBUTARIES
AND THE TRINITY RIVER DIVISION OF THE CVP

DRAFT 1/9/03

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Background

Funding for the Trinity River Restoration Program (TRRP) between 1985 and 1998 occurred under the authorization of the Trinity River Basin Fish and Wildlife Management Act of 1984 (P.L. 98-541, as amended). When the funding authorities of PL 98-541 expired on October 1, 1998, there were questions about whether or not all or a portion of the activities of the TRRP were authorized for funding through the Bureau of Reclamation's budget and the Central Valley Project Improvement Act (CVPIA), including the CVPIA Restoration Fund (CVPIA RF). As a result, former California First District Representative Frank D. Riggs requested a legal opinion from the Department of Interior on what funding authorities would exist after expiration of funding authorities in P.L. 98-541. On May 22, 1998, the Interior Department responded to Representative Riggs with an Interior Solicitor's Opinion on the subject matter (attached).

Of particular interest and varied interpretation, is a footnote on page 5 of the Solicitor's Opinion, which states as follows:

“Like the mechanical restoration recommendations, sediment control management entails activities independent of management of a flow regime or OCAP. Nonetheless, to the extent activities are designed to address “adverse environmental impacts of the project” they are authorized by Section 3406(b)(1).”

And

“Other activities may also fall under the authority of section 3406(b)(1), to the extent they are directed at rectifying the impacts sustained from operation the Project (“the Secretary shall make all reasonable efforts...to address other identified adverse environmental impacts of the Central Valley Project”). If no causal link be established between the harm being rectified and the operation of the Project, section 3406(b)(1) is inapplicable.” (emphasis added)

And a footnote:

“To the extent the Flow Study identifies work on tributaries or elsewhere in the Basin that lacks a causal link to impacts of the project, reauthorization of the 1984 Act might prove an appropriate vehicle for seeking authorization of such work. Such a conclusion seems premature, however, until the recommendations of the Flow Study are finalized and until compliance with NEPA is complete.”

It is understood that the Bureau of Reclamation’s (Reclamation) interpretation of the 1998 Solicitor’s Opinion regarding the Trinity River Restoration Program, is that the expenditure of program funds on watershed restoration within the South Fork Trinity River basin (and possibly other tributaries below the North Fork confluence) has been prohibited on the grounds that there is no “causal link” between problems in the South Fork of the Trinity River and other tributaries and the operation of the Trinity River Division (TRD) of the Central Valley Project (CVP). The discussion below could be used by the Trinity Management Council or the Trinity Adaptive Management Working Group to make a finding that there is a strong “causal link” between the South Fork Trinity River and other tributaries, and the operation of the TRD.

The Solicitor’s Opinion recognizes the Trinity River Division as part of the Central Valley Project, thus qualifying the Trinity River as a part of the anadromous fish restoration program directed towards Central Valley rivers and streams. The opinion states that Congress has directed the Secretary to address adverse impacts of the project, including those activities directed at rectifying the impacts sustained from operating the Project (“the Secretary shall make all reasonable efforts . . . to address other identified adverse environmental impacts of the Central Valley Project”) provided that a causal link can be established between the harm being rectified and the operation of the Project.

The causal linkage between watershed restoration, fisheries restoration and monitoring work in the South Fork and other tributaries of the Trinity River can be put into four categories as follows:

- Sediment and water quality contributions to the mainstem Trinity River
- Hatchery and fish harvest impacts to the South Fork and other tributaries
- The use of tributary fish in meeting Trinity River fishery restoration and ESA goals
- Consistency with the Trinity River Record of Decision (Trinity ROD)

Sediment and Water Quality Contributions to the Mainstem Trinity River

The South Fork of the Trinity River is inextricably linked to the Trinity River system. As the Trinity River’s largest tributary encompassing approximately one-third of the Trinity River watershed, the South Fork annually contributes large amounts of sediment into the system which cannot be flushed out as a result of “streamflow depletion” (see “Water Quality Control Plan for the North Coast Region” North Coast Water Quality Control Board, pg I-15). Sediment loading from the Trinity River’s tributaries has contributed to

poor water quality conditions in the mainstem Trinity, and has resulted in the loss of anadromous habitat, such as juvenile salmon and steelhead moving through the lower Trinity and Klamath Rivers which are trying to get to the Pacific Ocean. Flows are often reduced during the spring smolt outmigration period as a result of Reclamation's diversions from both the Trinity and Klamath projects. Reduced flows can result in increased adult fish densities, increased temperatures and low dissolved oxygen and fish kills under certain circumstances such as the historic fish kill of September 2002.

Formerly deep pools have filled in, and in some areas, the river runs wider and shallower, thus reducing fish habitat and pool refugia. This is easily demonstrated in odd numbered years through Reclamation's additional water releases from Trinity Dam for the Hoopa Valley Tribe's Boat Dance Ceremony. Reclamation, since 1993, has increased Lewiston Dam releases from 450 cfs to 1250 cfs (1650 cfs in 2001) in late August or early September for the Boat Dance on the premise that the traditional log canoes can no longer go down the river during that time due of year due to sediment accumulation in the Hoopa Valley (downstream of the South Fork confluence). The Hoopa Valley Tribe contends that many of the traditional holes and runs have been filled with sediment, thus the river runs wider and shallower. The relationship of sediment from the South Fork and the operation of the TRD clearly establishes a causal link between the adverse environmental impacts that have resulted since the construction of the TRD and the Trinity River.

Hatchery and fish harvest impacts to the South Fork and other tributaries

The effects of the dam go far beyond sediment and instream habitat issues of the mainstem river, and have far reaching effects on the river's tributaries through the complex dynamics of anadromous fish populations and their interactions with other biological elements. South Fork anadromous fish populations have been severely impacted by the reductions of Trinity and Klamath populations in terms of both actual numerical loss and stock diversity loss. For instance, when the Klamath and Trinity fall chinook runs are strong, but South Fork runs are not, fish harvest allocations are increased, thus increasing pressure on a weak stock. Conversely, as Klamath-Trinity stocks have declined overall, SFTR fish have, in the past, been harvested at a higher and higher rate, and as a weak stock, their decline is precipitous and disproportionate. The dams on both the Klamath and Trinity systems have had a dramatic effect on the Klamath-Trinity anadromous fish runs, and have also been instrumental in the decline of the South Fork runs.

Additionally, the introduction of hatchery stocks through straying or past planting into the South Fork and other tributaries has had negative impacts in terms of loss of genetic diversity, and reductions in population size caused by competition, predation, disease, and other factors. For example, direct genetic effects occur as hatchery fish interbreed with natives, resulting in the loss of genetic diversity. With salmonids, the concern is that a variety of locally adapted stocks will be replaced with a smaller number of relatively homogeneous ones (Allendorf and Leary, 1988). This process of consolidation tends to limit the evolutionary potential of the species as a whole. For example, different salmonid populations utilize spawning, rearing, migratory, and oceanic resources in a

variety of ways and show a similar diversity in response to changing environmental conditions. This diversity helps to buffer population loss against periodic or unpredictable changes (Riggs 1990). Without this diversity, weaker stocks are put at higher risk. For example, as the hatcheries produces more and more fish and the ocean harvest increases, a strain is put on weak stocks as harvest quotas are increased for all stocks, without a corresponding increase in the run size of weaker stocks such as those in the South Fork Trinity River. These factors, including the South Fork Trinity River's anadromous fish populations as they relate to the Trinity River, demonstrate a causal link between the South Fork Trinity River and the harm that has been imposed on the system through the construction and operation of the TRD of the CVP. This includes the operation of the Trinity River Hatchery at Lewiston.

The use of tributary fish to meeting Trinity River fishery restoration goals

This causal linkage is further demonstrated through the South Fork's role in meeting restoration program goals. In helping to determine compliance with TRRP numerical fishery restoration goals, upstream adult migrant fish traps are set at Willow Creek where numbers of fish moving upstream to spawn are counted. Located below the confluence of the South Fork and the mainstem Trinity River, those fish counted at Willow Creek moving upstream to spawn in the South Fork and other tributaries play an important role in determining compliance with Trinity River Restoration Program fishery goals, as well as determination of adult chinook populations for Harvest Management purposes. The information is closely linked to the Trinity River Restoration Program and the harm being rectified associated with the operation of the TRD. Downstream juvenile salmonid migrant fish traps are also placed downstream of the South Fork's confluence with the Trinity River. Those fish would also be counted as meeting restoration program goals for smolt production, if the trapping program could be calibrated to actual populations of smolts.

In addition to meeting overall TRRP fishery restoration goals, the South Fork and other tributaries have an important role to play in restoration of the coho salmon, which are listed as "threatened" under both the federal and State Endangered Species Acts. The only known and consistent population of non-hatchery coho salmon is located in Old Campbell Creek, a tributary of the lower South Fork Trinity. Stream surveys conducted by the California Department of Fish and Game in 2002 may have found coho juveniles in other South Fork tributaries. Coho are known, in general, to prefer tributaries for spawning and rearing because of suitable habitat conditions found there. If the Trinity River Restoration Program develops or is assigned an ESA or CESA coho recovery target, it is clear that tributaries, including the South Fork will play a vital role in coho recovery.

Consistency with Trinity River Record of Decision (Trinity ROD)

Finally, the Watershed Restoration Component of the ROD explicitly calls for watershed restoration throughout the Trinity River basin. The ROD states as follows:

“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:”

...

“Sediment management, including the supplementation of spawning gravels below the TRD and reduction in fine sediments which degrade fish habitats.”

and

“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. Approximately 80 percent of the lands within the Trinity basin are federally managed of which the USDA Forest Service administers approximately 95 percent and the Bureau of Land Management administers five percent. Of the remaining 20 percent privately owned land in the basin, approximately half (10 percent of the total) are industrial timberlands, with the remainder being small private holdings. Additional environmental planning and environmental compliance steps will be performed as necessary in order to acquire all the necessary permits and other authorizations prior to implementation of this portion of the Preferred Alternative.”

Furthermore, the Final EIS/EIR states (page C-17):

“CVPIA Restoration Fund- An Interior Solicitor’s Opinion states that these funds, appropriated by Congress from fees charged to CVP water and power users, could be used to implement this ROD. This could include watershed protection and restoration activities.”

The Trinity ROD makes no differentiation between the South Fork and the mainstem Trinity River, nor does it contain any prohibition whatsoever on allocation of funding to implement watershed restoration. Lack of any funding authority by the TMC for the South Fork and other tributaries appears to undermine the Trinity ROD’s effectiveness and the TMC’s authority.

Implementation Strategies

The Trinity River Task Force allocated substantial funds to the South Fork and watersheds in general after issuance of the North Coast Regional Water Quality Control Board’s Cease and Desist Order on mainstem restoration program in 1993. Concerns

exist among some Trinity River Restoration Program participants that the tributaries and watersheds of the Trinity River will siphon off substantial sums of money that would otherwise be used to “restore” the mainstem. No funds have been spent in the South Fork since about 1998 because of Reclamation’s objections, but the issue has never been resolved at the level of the TMC.

Since 1998, work in tributaries and watersheds (other than Grass Valley Creek) has come primarily through the California Department of Fish and Game’s Coastal Salmon Recovery Program (formerly known as the SB 271 program). Over \$3 million has been allocated to the Trinity River and lower Klamath River over the past 3 years for a variety of projects including, but not limited to education, environmental review and permitting of the Trinity River bridges project, road and watershed inventories, fish barrier removal, and extensive up-slope watershed restoration and road decommissioning by the Yurok Tribe, the Trinity County Resource Conservation District and others.

Funding for projects in the South Fork and other tributaries need not be substantial, but could still make a big difference. For instance, small amounts of funding through the Trinity River Restoration Program could provide strategic matching fund sources for programs such as Clean Water Act 205j and 319h, Fish and Game’s Coastal Salmon Recovery Program (CSRP), Forest Service Resource Advisory Committee funds and other programs. Funding of coordination for the South Fork Trinity River CRMP could be tailored to specifically develop project proposals to submit to the CSRP. It would indeed be unreasonable to expect that the Trinity River Restoration Program (TRRP) should shoulder the entire burden, but occasional strategic contributions from the TRRP could generate substantial funding from other sources to help meet fishery restoration goals for the Trinity River.

Recommendation

It should be the position of the Trinity Management Council that there is a clear causal link between the South Fork Trinity River, and other tributaries and watersheds in the Trinity River Basin and the adverse impacts that have resulted from the construction and operation of the TRD for the reasons stated above. The TMC should determine that it is appropriate and proper for the Trinity River Restoration Program, through whatever funds are available, to fund appropriate monitoring and restoration work on the South Fork Trinity River, as well as other tributaries from Lewiston Dam to the Pacific Ocean (excluding the Klamath River upstream of Weitchpec). The Trinity Adaptive Management Working Group should be given an opportunity to evaluate the issue prior to action by the TMC.