6/7/06 Bd Mtg: Scott River-
Item__Deadline 5/10/06

Quartz Valley Indian Reservation
13601 Quartz Valley Road
Fort Jones, CA 96032
phone: 530-468-5907 fax: 530-468-5908

May 10th, 2006

Song Her, Clerk to the Board
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

RE: Comment Letter - Sediment and Temperature TMDL in the Scott River Watershed

Dear Song Her,

Quartz Valley Indian Community (QVIC) of the Quartz Valley Indian Reservation (QVIR) thanks you for the opportunity to comment on *The Action Plan for the Scott River Watershed Sediment and Temperature Total Maximum Daily Loads (TMDL)* amendments to the North Coast Regional Water Quality Control Board *Basin Plan* on how to improve the implementation plan and specific recommendations on flow options that the State Water Board might take in the watershed.

Quartz Valley Indian Reservation is located in Scott Valley on a major tributary, Shackleford Creek, to the Scott River. I would like to stress the Tribe's sentiment that the state of the Scott Watershed is in peril and needs immediate attention and action. The implementation schedule is not timely enough to protect the watershed in the face of climatic changes, future development, and increased land use. My people have seen the creeks and rivers of Scott Valley dry up and become seasonal waters. We have seen populations of coho, Chinook, steelhead, and lamprey severely decline in the Scott Watershed. To us, water is life. We are concerned about the future of our lives and call upon the North Coast and State Water Boards to protect and heal this watershed.

We appreciate the efforts of your staff in the creation of this document and the development of the Scott TMDL. Please find below the attached official comments of the Quartz Valley Indian Community.

Sincerely,

Harold Bennett, Vice-Chairman Quartz Valley Indian Reservation

Cc: Beverly Wasson, Chairperson, North Coast Regional Water Quality Control Board
John Corbett, Vice-Chair, North Coast Regional Water Quality Control Board
Dr. Ranjit Gill, North Coast Regional Water Quality Control Board
David Leland, North Coast Regional Water Quality Control Board
Bryan McFadin, North Coast Regional Water Quality Control Board
Rebecca Fitzgerald, North Coast Regional Water Quality Control Board
Art Baggett Jr., State Water Resources Control Board
Adrian Perez, State Water Resources Control Board
Tim Wilhite, United States Environmental Protection Agency
Janis Gomes, United States Environmental Protection Agency
Gail Louis, United States Environmental Protection Agency

Streamflow Issues

The *Scott TMDL Amendment* to the *Basin Plan* depends upon voluntary action to increase streamflows to levels needed to support beneficial uses: "The Regional Water Board encourages water users to develop and implement water conservation practices." This contradicts the recognition in the amendment narrative that: "Diversions of surface water... have the potential to affect temperatures in smaller tributaries where the volume of water diverted is relatively large compared to the total stream flow."

We have previously noted that surface water diversion in Shackleford Creek, for example, is directly causing the stream to warm and dry before reaching the Scott River, resulting in a total loss of the creek's juvenile and adult salmon and steelhead carrying capacity. This observation was based on thermal infrared radar (TIR) data collected for the Scott River TMDL (Watershed Sciences, 2003). This is a clear case of streamflow diversions linked to water quality and its ability to support beneficial uses.

Previous comments by the Quartz Valley Indian Reservation cite legal precedents that authorize and, arguably, require water quality authorities to take steps to improve streamflow when reduced streamflow is the obvious driver of water pollution.

The inability of the Scott River's reduced streamflow to support beneficial uses is a clear issue in the Scott River canyon. The *Scott River Adjudication Decree* (SWRCB, 1980) mandated minimum flows (Table 1) to support aquatic ecosystem function: "These amounts are necessary to provide minimum subsistence-level fishery conditions including spawning, egg incubation, rearing, downstream migration, and summer survival of anadromous fish, and can be experienced only in critically dry years without resulting in depletion of the fishery resource."

Table 1. Absolute minimum instream flows to be provided U.S. Forest Service lands in the Scott River canyon as set out in the 1980 *Scott River Adjudication.*

Months	Minimum Flow in CFS
November - March	200
April - June	150
June 16 - June 30	100
July 1 - July 15	60
July 16 - July 31	40
August - September	30
October	40

That the mandated streamflow levels in Table 1 are <u>not</u> being met argues that the SWRCB should be pursuing enforcement actions, rather than relying upon volunteer actions as proposed in the Scott TMDL.

The SWRCB should develop and adopt a program of supervision of the California Department of Fish and Game's (CDFG) program of issuing stream diversion permits under

Fish and Game Code Section 1600 et seq. Such permits should be granted only in cases where sufficient streamflow will be left in the stream to support beneficial uses.

CDFG's permits cannot, by law, be granted for a period of more than five years. SWRCB oversight of CDFG permit renewal should require that a determination be made that the renewal of such diversion permits will not interfere with the attainment of other beneficial uses of water.

It is within the SWRCB's authority and responsibility to provide oversight and additional necessary control of CDFG's issuance of streamflow diversion permits in the Scott River basin.

The inability of the Scott River to attain the minimum streamflows adjudicated to the Scott River canyon is due in significant part to an increase over the past 30 years of well drilling and pumping for irrigated agriculture directly from the aquifers that support the Scott River's surface flow system. The QVIC presented well log data collected by the California Department of Water Resources (DWR) that clearly demonstrates that groundwater recharge has diminished over time as the number of wells in the Scott River valley has increased.

The *Scott River TMDL Amendment* designates Siskiyou County as the entity to investigate streamflow/groundwater interactions. This is an inappropriate delegation of responsibility by the State on two counts: the County has no demonstrated competency in the conduct of such groundwater investigations, and the County's investigators may be partial to the local landowner water users.

SWRCB staff or SWRCB designees (for example, DWR) should retain responsibility to the impartial and timely completion of the Scott River valley groundwater use/surface water relationships investigation. If the data support the conclusion that groundwater pumping is dewatering the Scott River, the SWRCB should expedite actions to reduce such pumping. And, in the interim, SWRCB should restrain development of further wells in the Scott River valley floor.

Finally, if it is determined that groundwater is interconnected with the surface flow of the Scott River, the SWRCB should inform the Siskiyou County Superior Court of the need for timely review and appropriate revision of the Scott River Adjudication.

QVIIC has noted in previous comments that cumulative watershed effects related to logging are increasing sediment loads, which cause the streambed to widen and, in the worst cases, the loss of surface flows altogether during low flow periods. The SWRCB should set prudent risk limits for disturbance in the Scott River watershed by logging and road building and prohibit or severely restrict these activities on unstable areas like decomposed granitic soils and landslide zones.

Timelines

All comments on the *Scott River TMDL* provided by QVIC to the SWRCB have emphasized that the Pacific Decadal Oscillation (PDO) cycle greatly influences both the productivity of ocean conditions and the wet-dry cycles onshore that effect Pacific salmon populations. We are currently in a good ocean and wet onshore cycle. These conditions are likely to reverse, however, some time between 2015 and 2025 (Collison et al, 2003). The 40 year timeline for recovery of the Scott River is, therefore, unacceptable to the Quartz Valley Indian Community because salmon species may be lost if conditions are not improved sooner.

Fall Chinook salmon adult spawning returns to the Scott River in 2004 and 2005 were the lowest on record (467 and 756) and are dangerously close to the minimum population size needed for maintaining long term genetic viability of this stock (Figure 1). Higgins et al. (1992) discussed the risk of extinction of northwestern California Pacific salmon stocks and discussed minimum viable population sizes:

> "When a stock declines to fewer than 500 individuals, it may face a risk of loss of genetic diversity which could hinder its ability to cope with future environmental changes (Nelson and Soule 1986). A random event such as a drought or variation in sex ratios may lead to extinction if a stock is at an extremely low level (Gilpin and Soule 1990). The National Marine Fisheries Service (NMFS, 1987) acknowledged that, while 200 adults might be sufficient to maintain genetic diversity in a hatchery population, the actual number of Sacramento River winter run Chinook needed to maintain genetic diversity in the wild would be 400- l100."

Immediate action is needed to prevent stock loss, not the longer, step-wise process contemplated in the *Scott River TMDL Amendment to the Basin Plan.*

While its provisions for road plans and plans for controlling erosion from roads is within a reasonable timeframe, the *Scott River TMDL Amendment* states that such plans will be required only on a site-specific basis. This means that only roads involved in new timber harvest activities or which have major histories of failure that are called to the attention of the NCRWQCB staff are likely to become the subject of erosion control plans.

Major problems can also result from the legacy of abandoned roads and skid roads that are not likely being examined by staff in the course of timber harvest review, but which can cause significant problems. As mentioned above, the SWRCB should consider limiting the road density in Scott River sub-basins to prudent risk levels.

The timeline suggested in the Temperature and Vegetation section of Table 4 is inappropriate, particularly since it requires only that "The Regional Water Board's Executive Officer report to the Regional Water Board on the status of the preparation and development of appropriate permitting and enforcement actions."

Landowners have removed large riparian cottonwood areas and immediate action should be taken to restrain further riparian forest removal. Kier Associates (1999) pointed out that "flood control" activities following the January 1997 storm had a disastrous adverse impact on riparian vegetation.

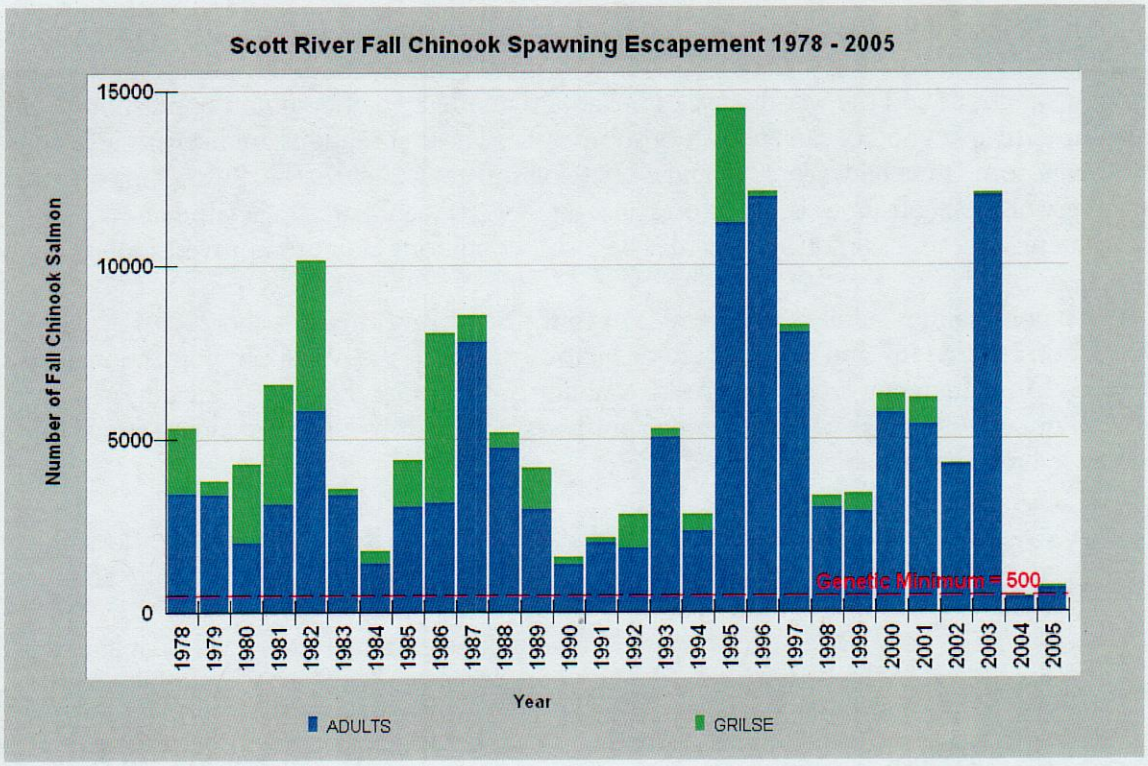

Figure 1. Scott River fall Chinook salmon returns showing a minimum viable population size reference from Gilpin and Soule (1990).

Previous comments on the Scott TMDL by the QVIC pointed out that timber harvest in riparian zones along coho bearing streams has been active in recent years. The riparian zones in historic coho streams are already heavily depleted, causing high stream temperatures and diminishing necessary large woody debris recruitment. Juvenile coho salmon remain in fresh water for at least a year and require cold water and pools scoured by large wood. Scott River coho populations are at very low levels and immediate action is needed to stop any further harvest of large trees within the riparian zone of streams where coho juveniles rear.

References

California State Water Resources Control Board. 1980. Scott River Adjudication Decree No. 30662, Superior Court for Siskiyou County. Scott River stream system within California in County of Siskiyou. Sacramento, CA. 152p.

Collison, A., W. Emmingham, F. Everest, W. Hanneberg, R. Martston, D. Tarboton, R. Twiss. 2003. Phase II Report: Independent Scientific Review Panel on Sediment Impairment and Effects on Beneficial Uses of the Elk River and Stitz, Bear, Jordan and Freshwater Creeks. Independent Science Review Panel performed analysis on retainer to the North Coast Regional water Quality Control Board, Santa Rosa, CA.

Gilpin, M.E. and M.E. Soule. 1990. Minimum Viable Populations: Processes of Species Extinction. In: M. Soule (ed) Conservation Biology: The Science of Scarcity and Diversity University of Michigan Press. pp 19-36.

Higgins, P.T., S. Dobush, and D. Fuller. 1992. Factors in Northern California Threatening Stocks with Extinction. Humboldt Chapter of American Fisheries Society. Arcata, CA. 25p.

Kier Associates. 1999. Mid-term evaluation of the Klamath River Basin Fisheries Restoration Program. Sausalito, CA. Prepared for the Klamath River Basin Fisheries Task Force. 303 pp.

Kier Associates. 2005a. Review comments on NCRWQCB's draft South Fork Scott River Watershed Pilot Study for the Total Maximum Daily Load for Sediment. Prepared for the Klamath Basin Tribal Water Quality Work Group. March 12, 2005. Kier Assoc., Sausalito, CA. 3 p.

Kier Associates. 2005b. Hypothesis Testing for Approach to Groundwater Studies, by Scott River Watershed Council – Water Committee. Memo to Quartz Valley Indian Reservation for meeting preparation. March 10, 2005. Kier Assoc., Sausalito, CA. 6p.

Kier Associates. 2005c. Review of the pre-draft Scott River Watershed TMDL. Performed under contract to the Quartz Valley Indian Reservation on behalf of the Klamath Basin Water Quality Work Group. August 9, 2005. Kier Associates, Sausalito, CA. 31 p.

Kier Associates. 2005d. Lower West Side Scott Shallow Landslide Hazard Maps. Performed under contract to the Quartz Valley Indian Reservation by Dr. Jan Derksen of Kier Associates on behalf of the Klamath Basin Water Quality Work Group. September 18, 2005. Kier Assoc., Sausalito, CA. 11 p.

Kier Associates. 2005e. Review of the Action Plan for the Scott River Watershed Sediment and Temperature Total Maximum Daily Loads. Performed under contract to the Quartz Valley Indian Reservation on behalf of the Klamath Basin Water Quality Work Group. October 25, 2005. Kier Associates, Sausalito, CA. 31 p.

National Marine Fisheries Service. 1987. Endangered and threatened species, winter run Chinook salmon. Federal Register 52: 604 I-6048.

Nelson, K. and M. Soule. 1987. Genetic Conservation of Exploited Fishes. In: N. Ryman and F.Utter (eds). Population Genetics and Fisheries Management University of Washington Press. Seattle, WA.

Watershed Sciences. 2003. Aerial Surveys using Thermal Infrared and Color Videography Scott River and Shasta River Sub-Basins. Performed under contract to the NCRWQCB and U.C. Davis by Watershed Sciences LLC, Corvallis, OR.