

Testimony of Jerry L. Mensch on Yuba County Water Agency Petition to Defer Implementation of RD1644

My name is Jerry L Mensch. I reside at 1644 Kendall Street, Roseburg, Oregon 97470

Education: B.S. Degree Life Science, Biological Conservation Specialization-California State University, Sacramento 1964

Experience: Biologist with California Department of Fish and Game, 1964-2000.

Supervision of Environmental Review for Region 2 of CDFG 1979-1993, and

Statewide Hydro projects coordinator 1998-2000. Activities included design and direction of biological studies for hydroelectric relicensing, design, conduct and analysis of fisheries and flow studies, analysis of temperature and flow relationships for establishment of fisheries flows, negotiation of fisheries flow and temperature regimes for new hydroelectric projects and relicensing of existing projects including projects on the Pit, Feather, Yuba, American, Mokelumne and Santa Ana Rivers and numerous tributaries. Work also included conducting of studies, analysis of study data and development of flow releases on Water Right applications.

Consulting Biologist, J. Mensch Natural Resources, 2000 to present. Activities include review of Water Right applications and preparation of Protests and dismissal terms, review of studies and development of fisheries flow recommendations as part of Hydroelectric project relicensing, review of technical studies of impacts of fluctuating flows on aquatic life. Activities also included review of studies and data collection and participation in analysis of alternative flow regimes for the Yuba River.

I have reviewed the Petition by Yuba County Water Agency (YCWA) to change the effective date of the Long Term Instream Flow requirements (Long Term) established under Board Decision RD1644. In my opinion the proposed action, to maintain the RD1644 Interim Flow requirements (Interim), will provide significantly less protection to aquatic life in the Yuba River and will provide a significantly lesser level of protection to State and Federally listed species including Steelhead rainbow trout and Spring run Chinook Salmon and provide significantly lesser attraction flows for American Shad.

I have participated in studies and analyzed fisheries habitat and flow needs on the Yuba River since 1980. I designed and directed the study plan leading to the Department of Fish and Games' "Lower Yuba River Fisheries Management Plan" and with the assistance of the public and State and Federal agencies, was responsible for preparation of the plan and its recommendations. While the RD 1644 Long Term requirements have deficiencies in the areas of flow and temperature, it provides a significantly greater level

of protection and benefits to aquatic life in the Yuba River than that provided under RD 1644 Interim. Based on many years of study of the Yuba Rivers aquatic resources, it is my opinion that an action to maintain the recognized significantly inferior flow regimes contained in the RD 1644 Interim would constitute an unreasonable and significant adverse impact to fish and wildlife and other beneficial instream uses and is not in the public interest.

Fisheries problems identified on the Yuba River include inadequate fry and juvenile trout and salmon rearing habitat, limited salmon and steelhead out-migrant transportation flows in the Yuba , Feather and Sacramento Rivers and the Sacramento-San Joaquin delta, attraction flows for American Shad, and inadequate water temperatures for rearing and spawning. The fisheries flows provided under RD 1644 Long Term provide significantly greater benefits in every area compared to flows under RD 1644 Interim.

Lower flows in RD 1644 Interim can add to passage problems and to the poaching and illegal take of listed Steelhead and Spring run Chinook salmon by concentrating habitat and restricting movement.

Continuation of lower fisheries flows contained in RD 1644 Interim will reduce habitat diversity and complexity by limiting flows to low flow channels and will continue unreasonable reductions in flow dependent habitat availability for fry and juvenile salmon and steelhead. Elements which are considered of high importance to fisheries of the Yuba River

Lower flows such as those contained in RD 1644 Interim have been identified as resulting in an increase in the take (loss) of fish at water diversions. Studies have documented the take of fish at on-stream water diversions is related to the rate of flow in the stream and the rate of diversion. The higher the proportion of diversion to instream flow the greater the impact to fisheries and the greater the loss of fish. This is particularly important due to both unscreened diversions, and diversions with screens not meeting agency screening criteria, being located on the Yuba River and significant flows being diverted at these diversions. Site specific studies have documented the loss of fish at diversions on the Yuba River.

To continue the take of listed species by maintaining the reduced flows under RD 1644 Interim, as compared to reducing the take of these species through increased flows under RD 1644 Long Term will result in unreasonable impacts to fisheries of the Yuba River

Among the most significant of the impacts which will result from maintenance of RD 1644 Interim flows are temperature impacts on spawning fish. The reduction of flows from those contained in RD 1644 Long Term will cause unreasonable adverse impacts to spawning fish entering the Yuba River, during upstream migration and during spawning and egg incubation. Studies have documented the adverse impacts of elevated temperatures on egg fecundity and survival. Temperature measurements at the Marysville USGS gage site have documented temperatures deleterious to salmonids.

The following comments and testimony relate to Key Issue 4, YCWAs proposed conditions (Pilot Project) and conditions which CSPA recommends should be in any order.

First the Board should not approve the petition as it is severely deficient compared to the protections of RD 1644 Long Term. It is unspecified as to the actual flows, lacks the necessary authority to be implemented, will have unreasonable impacts on fish resources in the Yuba River and The Sacramento-San Joaquin Delta, is experimental in nature and will provide significantly lesser fisheries protection.

YCWA has included in its application a proposal to implement what they refer to as a Pilot Project to implement the “Yuba River Accord”. The fisheries flows in the Accord (Pilot Project) are less during some periods than RD 1644 Interim flows and at times provide significantly different and lesser value conditions than the Long term flows. The Long Term flows are higher than flows in the 2006 Pilot Project flow schedule which is proposed as a substitute. In addition the Accord and Pilot Project flows are unproven and have been identified as study flows.

Specific deficiencies in the Accord flow approach are a significant reduction in long term carryover storage and a specific change in operational criteria from 200 year carryover criteria to a 100 year event criteria in New Bullards Bar Reservoir. Such reduction is necessary to meet the proposed water sales contract and water delivery. This will result in a significant long term reduction in coldwater fisheries habitat in the reservoir and a loss of recreational use.

YCWA does not have the necessary agreements in place to be able to legally implement the Accord flows. Releases from Bullards Bar Reservoir for hydroelectric power generation are controlled by a license issued by the Federal Energy Regulatory Commission and an Operational Contract between Pacific Gas and Electric Company and YCWA. The proposal may cause major changes in the operation of the hydroelectric project which could require review by the FERC. The proposal will also require amendment to the PG&E contract if flows in the Accord are to be specified by the Board as an alternative to Long Term RD 1644. YCWA has not submitted such a document as part of their Petition.

The Accord flows will provide significantly lesser protect in for American Shad. Spring flows necessary for Shad attraction are significantly less in the Accord. In my opinion this constitutes an unreasonable impact to instream beneficial uses (angling).

The Pilot Project will also require a change in points of rediversion to include the Clifton Court Forebay and Tracy Pumping Plant. This will cause significant and unreasonable additional impacts to already seriously depleted aquatic species in the Sacramento-San Joaquin Delta through increased Delta diversions. This can increase the take of state and federally listed species including Delta smelt and Spring and Winter run Chinook salmon. Such impacts will not occur under the Long Term RD 1644 flows.

The actual amount of water and river flows are unknown, unidentified and could vary substantially from the schedules shown as Pilot Project flows. Substantial additional flows could be added to already high summer flows with added impacts to the Yuba River. The sources of this water are unspecified but include reservoir storage and additional groundwater pumping. The Pilot Project also provides for unspecified amounts of “supplemental surface water transfers”. The amounts, timing and impacts of such transfers are not identified. However they could be substantial both in the Yuba River and the Delta. Such changes could significantly change and reduce any supposed benefits of the Pilot Project flows.

Another unidentified and unquantified impact of YCWAs alternative is a proposal for a River Management Team to make unidentified and unspecified changes in flows. Such a flow proposal could increase amounts of water for diversion at the expense of fisheries flows and increasing Delta impacts.

Numerous actions and components of the Pilot Project are long term and extend substantially longer than one year.

The proposed Pilot Project will reduce flows below the Interim RD 1644 flows 20 to 40 percent of the time during Steelhead spawning periods and an even greater reduction below RD 1644 Long Term flows.

The proposed Pilot Project flows will result in increased temperatures during periods of the year including critical life stages.

YCWAs proposed use of the RD 1644 Interim flows as the basis for comparison of impacts and benefits of the Pilot Project is improper and totally distorts the alleged benefits of the Pilot Project. Any and all comparisons should be based on the RD 1644 Long Term flow regime. The entire transfer period is within the time frame of implementation of Long term flows.

No changes should be made at this time to delay implementation of RD 1644 Long Term Flows to implement a Pilot Project.