

YCWA-14

**REBUTTAL TESTIMONY OF PAUL BRATOVICH AND TOM JOHNSON TO
JERRY MENSCH'S TESTIMONY ON YUBA COUNTY WATER AGENCY'S
EXTENSION PETITION**

Response to Comment 1:

1. Mr. Mensch does not accurately describe the 2006 Pilot Program. Specifically, YCWA proposes to release water (including water transferred) according to the instream flow schedules that are specified in the "Fisheries Agreement for the 2006 Lower Yuba River Pilot Program" (2006 Pilot Program Fisheries Agreement), which is included in the Draft Initial Study/Mitigated Negative Declaration (IS/MND) Appendix 2. Mr. Mensch incorrectly implies that YCWA would operate solely to RD-1644 Interim minimum flow requirements during the approximate one year duration of the proposed project.
2. Besides neglecting to address the entirety of the proposed project (i.e., 2006 Pilot Program instream flow schedules and resultant flows), the conclusionary statements in this comment alleging adverse impacts also are not supported by scientific evaluation, documentation, or rationale.

Response to Comment 2:

3. The testimony of Mr. Mensch states that Proposed Yuba Accord and Pilot Program flows are experimental in nature and will provide significantly lesser fisheries protection. While the actual real-time flows that will be sent down the lower Yuba River under the proposed project are unknown at this time and would vary according the hydrologic conditions in place at the time of implementation, this is no more or no less true than the actual real-time flows that would occur under Long-Term RD-1644. The flow schedules were developed based on known stressor analyses and resource agency collaboration, to attempt to improve habitat conditions and maximize aquatic resource benefits for multiple fish species in the lower Yuba River. Although experimental and untested under real-time conditions, the flow changes expected to occur as part of the proposed project have been evaluated in detailed, species and life stage specific evaluations that consider a range of potential conditions and resultant impacts that are anticipated to occur. Overall, the species specific analyses included in Chapter 4 of the IS/MND, and the flow and water temperature exceedance plots in Appendix 4 of the IS/MND, do not support the conclusions that Mr. Mensch has presented in his testimony.

Response to Comment 3:

4. The flow schedules described in the 2006 Pilot Program Fisheries Agreement are based largely on the flow schedules developed as part of the settlement process for the Proposed Lower Yuba River Accord (Proposed Yuba Accord). Although the Proposed Yuba Accord flow schedules are designed to supplant the existing instream flow requirements, for the purposes of the 2006 Pilot Program the RD-1644 Interim instream

flow requirements still would be in place. During some months under certain water availability conditions (i.e., water year types), the minimum flows specified in the 2006 Pilot Program Fisheries Agreement are less than instream flows required under Interim RD-1644. On days when this occurs, flows under the proposed project always will meet, at a minimum, the Interim RD-1644 instream flow requirements. On days when the flow requirements under 2006 Pilot Program Fisheries Agreement are higher, they will govern YCWA's operations of the Yuba Project facilities. Therefore, the statement that flows under the proposed project would be less during some periods than those required under RD-1644 Interim is incorrect.

5. The IS/MND presents month by month flow exceedance plots in Chapter 4 of the Water Code Environmental Analysis (Appendix 2 of the IS/MND), which show exactly during which months and at what times the flows under the flows schedules described in the 2006 Pilot Program Fisheries Agreement would be lower than flows prescribed under RD-1644 Long-Term. Although not required by CEQA, this section is intended to supplement the evaluation of potential impacts relative to RD-1644 Interim flow requirements. Therefore potential impacts of the proposed project, relative to either RD-1644 Interim or Long-Term, are fully evaluated in the IS/MND.
6. In response to the statement that the Proposed Yuba Accord and 2006 Pilot Program flow schedules are unproven, please refer to section 4.3 of the IS/MND (pp 4-18 through 4-55, Appendix 3, and Appendix 4). The evaluation of the proposed project and the RD-1644 Interim and Long-Term instream flow requirements are based upon a probability of flow occurrence, which is not unproven, but in fact is evaluated in the IS/MND. Although YCWA would continue to collect flow and water temperature data and other relevant information, the analysis presented in the IS/MND is based on the best available scientific data and the collective opinion and professional judgment of the jurisdictional agencies that participated in the formulation of the flow schedules in the 2006 Pilot Program Fisheries Agreement.

Response to Comment 4:

7. Among other resource categories, the IS/MND analyzed in detail the changes in New Bullards Bar Reservoir carryover storage and resultant impacts on coldwater fisheries resources (page 4-32), warmwater fisheries resources (page 4-33) recreation and angling opportunities (page 4-91), and water supply (page 4-99) associated with those changes expected to occur under the proposed project, relative to Interim RD-1644. As described on page 4-99 of the IS/MND, any analysis of storage refill (carryover storage) effects is highly speculative because these potential impacts are directly related to future water conditions that cannot be accurately predicted. The proposed project also would adhere to storage refill criteria requirements described on page 6-5 of the Final EWA EIS/EIR (2004) Mitigation Monitoring and Reporting Program. Similar changes in carryover storage expected to occur under the proposed project, relative to Long-Term RD-1644, also were evaluated in Appendix 2 to the IS/MND, which includes a discussion of carryover storage in Section 4.8. Based on the discussion and analyses presented in the IS/MND, potential carryover reservoir storage impacts are expected to be less than significant.

Response to Comment 5:

8. The proportion of lower Yuba River outflow to the lower Feather River would be over 7 percent higher under the proposed project during the month of April, less than 5 percent lower during May, and about 6 percent higher during the month of June, relative to the basis of comparison (RD-1644 Long-Term [see Section 4.4.3.2 of the Environmental Analysis, Appendix 2 of the IS/MND]). American shad adult immigration and spawning would not be expected to be significantly affected by these changes in flows under the proposed project. Flows under the proposed project during April, May, and June are expected to provide flows of sufficient magnitude to attract American shad into the lower Yuba River to spawn. Therefore, no unreasonable effects are anticipated to occur and the proposed project is anticipated to have a less-than-significant impact on American shad attraction. Mr. Mensch's testimony alleging adverse impacts to American shad is conclusionary, and is not supported by scientific evaluation, documentation, or rationale.

Response to Comment 6:

9. Because the proposed project transfer (i.e., up to 125 TAF) was included in the analyses (i.e., a transfer from the Yuba River of up to 185 TAF) previously conducted for the EWA Program, potential impacts to fisheries resources in the Delta have been addressed via the EWA EIS/EIR (2003) for NEPA/CEQA compliance purposes and via the EWA ASIP (2004) for federal and state ESA compliance purposes. The findings presented in both the EWA EIS/EIR and the EWA ASIP concluded that the EWA Program would have less than significant impacts on fisheries resources in the Delta. References to EWA-related analyses are made in the resource specific evaluations presented in the IS/MND, particularly in describing potential impacts of the proposed project on Delta fisheries resources (see IS/MND pp 4-9, 4-10, 4-53, and 4-55). Because the entire YCWA component (i.e., 185 TAF) of the EWA Program was found to have a less than significant impact on Delta fisheries, the smaller volume of transfer water (i.e., up to 125 TAF) associated with the proposed project also would be expected to have a less than significant impact on Delta fisheries, provided that the operational constraints, timing patterns, environmental commitments and protective measures identified for the entire EWA Program continue to be implemented during the proposed project (i.e., April 21, 2006 through February 28, 2007).
10. Furthermore, whether or not the proposed project goes forward, some additional level of export pumping would most likely occur under Long-Term RD-1644 pursuant to the willing seller/willing buyer agreements described in the EWA EIS/EIR (2003), and such pumping would occur according to the pumping rates, capacity limits and pumping volumes agreed to by the EWA Management Agencies and operationally feasible at the CVP/SWP export pumping facilities. Because the EWA Program is projected to continue into the future and EWA assets could be obtained from sources other than YCWA, it is anticipated that some amount of Delta export pumping would continue even if the proposed project was not implemented and Long-Term RD-1644 came into effect.

Response to Comment 7:

11. Mr. Mensch is suggesting that actual flows under the 2006 Pilot Program would be unknown in advance, which is true, but which also would be true if RD-1644 Interim or Long-Term were in effect. It is impossible to predict the exact flows in the river until the 2006 hydrology is known. The analysis presented in the IS/MND is a simulation of probabilities of the flows that could be expected to occur under all three scenarios (proposed project, RD-1644 Interim, and RD-1644 Long-Term). The probability of occurrence and the potential ranges of flow conditions are presented and evaluated in the IS/MND and Water Code Environmental Analysis (Appendix 2 of the IS/MND).
12. Additionally, Mr. Mensch suggests that the sources of water for the 2006 Pilot Program water transfer are unspecified. Two sources of transfer water have been identified and evaluated in the IS/MND (pp 4-79 through 4-85 and 4-98 through 4-102). New Bullards Bar Reservoir would be operated according to its normal operating criteria, to attain the appropriate end-of-September carryover storage. These operations are represented in the modeling and have been evaluated in the IS/MND as part of the proposed project. Substantial additional flows in the Yuba River would only occur if a supplemental transfer (groundwater or surface water) were to occur. Although the occurrence of conditions to make either a supplemental surface water or groundwater transfer possible are highly unlikely at this time due to current conditions (e.g., CVP and SWP reservoir operators are implementing flood control operations), should the opportunity exist, and should YCWA decided to under take a supplemental transfer (surface water or groundwater substitution), then YCWA would at that time request modification of its 2006 transfer petition.
13. As stated above, the amounts, timing, and impacts of the 2006 Pilot Program flow schedules have been fully evaluated in the IS/MND and were found to have no unreasonable and or significant impacts. Therefore, this comment is incorrect.

Response to Comment 8:

14. As outlined in the 2006 Pilot Program Fisheries Agreement Section 5.1.4 (in Appendix A of the Water Code Environmental Analysis [Appendix 2 of the IS/MND]), the River Management Team (RMT) would have latitude to make limited flow changes within specific parameters, if there were unanimous concurrence from the jurisdictional agencies participating in the RMT. The RMT is not able to significantly change conditions from those evaluated in the IS/MND. Additionally, the RMT would only recommend changes that would protect fisheries resources and maximize fisheries benefits.

Response to Comment 9:

15. The 2006 Pilot Program is a proposed one year project. As such, the actions and components of the proposed project are limited to one year. The only potential effects associated with the proposed project that would extend beyond one year are: (1) lower carryover storage in New Bullards Bar Reservoir; and (2) remaining funds.
16. Carryover reservoir storage impacts are evaluated in the IS/MND (pp. 4-6, and 4-32 through 4-33). Although a residual effect of the proposed project on end-of-September 2006 carryover storage levels in New Bullards Bar Reservoir is anticipated, no long-term

effects of the proposed project would occur beyond 2007. The proposed project could reduce New Bullards Bar Reservoir storage to 594,865 acre-feet by the end of September, depending on hydrological conditions. This reduction corresponds to a water surface elevation of 1,868 feet msl. Under RD-1644 Interim, the end-of-September storage in New Bullards Bar Reservoir could be 671,063 acre-feet with a corresponding elevation of 1,885 feet msl. These reservoir storage and water surface elevations at New Bullards Bar Reservoir would remain within normal operational parameters, and are considered to be less than significant (see pp. 4-98 through 4-99 of the IS/MND).

17. Should additional funds be available (e.g., money remaining in the River Management Fund) at the conclusion of the 2006 Pilot Program, those funds would be applied to additional in-river core monitoring or focused studies in subsequent years if the Yuba Accord is place. Therefore, no impact associated with these remaining funds is anticipated as part of the 2006 Pilot Program.

Response to Comment 10:

18. During the 2006 Pilot Program, RD-1644 Interim instream flow requirements would still be in place. During some months under certain hydrological conditions, the minimum flows specified in the 2006 Pilot Program Fisheries Agreement would be less than the minimum instream flows required under RD-1644 Interim. The proposed project includes implementation of the flow schedules as defined in the 2006 Pilot Program Fisheries Agreement, but with the caveat that at a minimum, the required RD-1644 Interim instream flows would always be met. Mr. Mensch's testimony regarding a reduction in proposed project flows below RD-1644 Interim flow requirements is therefore incorrect.
19. Generally, the proposed project would result in higher flows than RD-1644 Long-Term during most months under wetter year conditions. However, the proposed project may result in lower flows than RD-1644 Long-Term in certain months under certain conditions, as discussed above. These lower flows generally would occur in December, January, May, and July, and would be the result of wet year reservoir operations to avoid triggering flood control operations. Lower flows during these months may provide some benefit to fisheries resources, and in particular, spawning steelhead. The California Department of Fish and Game (1991) reported that the maximum weighted usable area (WUA) for steelhead spawning is approximately 700 cfs. Therefore, lower flow conditions such as those seen in the above listed months (pp. 4-35 through 4-43 of the IS/MND) potentially may provide more suitable habitat for steelhead spawning (i.e., closer to the maximum WUA).

Response to Comment 11:

20. The comment is a conclusionary statement alleging adverse impacts that are not supported by scientific evaluation, documentation, or rationale. In fact, the water temperature exceedance plots for the Yuba River reaches above and below Daguerre Point Dam contained in the IS/MND and Water Code Environmental Analysis (Appendix 2 of the IS/MND) demonstrate the opposite. Therefore, this comment is incorrect.

Response to Comment 12:

21. YCWA operates its facilities, including the Yuba Project, to meet, at a minimum, the SWRCB RD-1644 Interim instream flow requirements until April 21, 2006, at which time the RD-1644 Long-Term flow requirements are scheduled to go into effect. For the purposes of the IS/MND, as required by CEQA, implementation of the proposed project was evaluated with respect to existing conditions. Therefore, the proposed project was evaluated compared to the RD-1644 Interim instream flow requirements.

22. However, a summary of the potential for impacts upon resources identified in the CEQA Environmental Checklist associated with implementation of the proposed project, relative to RD-1644 Long-Term instream flow requirements is provided in Section 4.12 of the IS/MND. Although not required by CEQA, this information nevertheless is provided so that decision makers will have another comparison of potential conditions that could exist in the proposed project area associated with implementation of the 2006 Pilot Program. Thus, potential impacts of the proposed project, relative to either RD-1644 Interim or Long-Term, are fully evaluated in the IS/MND.

**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.

2

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.

3

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.

4

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).

5

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.

6

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.

7

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.

8

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

9

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.

10

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

11

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.

12

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