TESTIMONY OF PAUL BRATOVICH

I, Paul Bratovich, declare:

Introduction

- 1. I am a Vice President and Principal Scientist of HDR/Surface Water Resources, Inc. (HDR/SWRI). I have over 25 years of professional water resources and fisheries experience and have been employed by SWRI since 1996. Exhibit YCWA-17 contains an accurate statement of my qualifications and experience.
- 2. I am providing this expert testimony on the issues pertaining to Yuba County Water Agency (YCWA), the Yuba River Development Project and related facilities that will be discussed during the December 5 and 6, 2007 State Water Resources Control Board (SWRCB) hearing to consider YCWA's petitions to modify the conditions in YCWA's water-right permits and for long-term transfer of water.

Yuba Accord EIR/EIS

- 3. HDRISWRI prepared the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) (Draft EIR/EIS - Exhibit YCWA-1 and Final EIR/EIS -YCWA-2) for the Lower Yuba River Accord (Yuba Accord), which includes YCWA's petitions to amend its water-right permits as necessary to implement the Yuba Accord.
- 4. For the EIR/EIS, hydrologic model output was used to establish baseline flow and water temperature conditions in the Yuba, Feather and Sacramento rivers, and habitat parameters in the Delta including average monthly X2 (2 parts per thousand [ppt] near-bottom salinity isohaline) location, net Delta outflow, and Delta export-to-inflow (E/I) ratio. The impact assessment relied on mass balance hydrological modeling to provide a quantitative basis from which to assess the potential impacts to fish species of management concern and aquatic habitats within the Project Study Area.
- 5. Several comparisons of different scenarios were analyzed in the EIR/EIS. One of the comparisons in the EIR/EIS analyzed the potential environmental impacts of the CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative. For these comparisons, the hydrological modeling analyses and post-processing applications were utilized to simulate data representing the Yuba River Basin and Central Valley Project/State Water Project (CVP/SWP) operational conditions that would occur from implementation of the CEQA Yuba Accord Alternative, which was compared to modeled data representing operational conditions under the CEQA No Project Alternative.

- 6. In general, the evaluation of fish species in the Project Study Area utilized data regarding reservoir water surface elevation, reservoir storage, instream flow, water temperature, spawning habitat availability, early life stage survival, stagedischarge estimation, passage conditions, salvage at the Delta CVP and SWP export facilities, and various Delta parameters (i.e., X2 location, Delta outflow, E/I ratio). The hydrologic modeling data were examined to assess potential impacts that implementation of the CEQA Yuba Accord Alternative would be expected to have on fish species and runs in the lower Yuba River, focusing on fish species of primary management concern including: (1) spring-run Chinook salmon (although it is uncertain whether lower Yuba River spring-run Chinook salmon and fall-run Chinook salmon are distinct runs, this testimony treats them as distinct runs); (2) fall-run Chinook salmon; (3) steelhead; (4) green sturgeon; (5) American shad; and (6) striped bass. For the Feather River, Sacramento splittail were evaluated in addition to those species of primary management concern listed above for the lower Yuba River. For the Sacramento River, winterrun Chinook salmon, late fall-run Chinook salmon, and Sacramento splittail were evaluated in addition to those species of primary management concern listed above for the lower Yuba River.
- 7. In the EIR/EIS, potential impacts to Delta fishes were evaluated and focused on delta smelt, striped bass, spring-run Chinook salmon, winter-run Chinook salmon and steelhead, using both a habitat-based approach and salvage estimation at the Delta CVP and SWP export facilities. Other Delta fishes, including longfin smelt, fall-run/late fall-run Chinook salmon, green sturgeon, American shad, northern anchovy, and starry flounder, also were evaluated using a habitat-based approach.
- 8. Over the 72-year period of analysis used in the EIR/EIS, potential impacts to fishes were evaluated by examining changes in: long-term average flows; average flows by water year type; individual average monthly flows of 10 percent or more; and the probability of occurrence (exceedance) of individual average monthly flows corresponding to each life stage of the species or run under the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative. The EIR/EIS also recognized that water temperature changes are important to fisheries resources and aquatic habitat utilization. Thus, the flow analyses were supplemented by separate species/run and life stage-specific water temperature analyses. Impact determinations for each species/run were based on consideration of all evaluated impact indicators for all life stages. The life stages of fish species or runs of primary management concern in the lower Yuba River evaluated in the EIR/EIS are illustrated in Slide 1. Similar analyses were conducted for each of the species/life stage combinations occurring in the Feather and Sacramento rivers. Paragraphs 9 through 16 of this testimony describe in more detail how these analyses were conducted, using spring-run Chinook salmon in the Yuba River as an example.

Example of Analyses for Spring-run Chinook Salmon

- 9. The changes in average monthly flows and water temperatures during each of the spring-run Chinook salmon life stages were considered in the EIR/EIS to determine the potential impacts of the CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative. For example, during the spring-run Chinook salmon adult immigration and holding life stage (March through October), evaluation of flows at Marysville and Smartville occurring under the CEOA Yuba Accord Alternative and the CEQA No Project Alternative indicates that both alternatives would provide adequate flows for adult spring-run Chinook salmon passage (Draft EIR/EIS – Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pgs. 125, 130 through 136, 137, 142 through 148, 297, 302 through 308, 309, and 314 through 320). Similarly, during this life stage, simulated water temperatures at Daguerre Point Dam under both the CEQA Yuba Accord Alternative and the CEQA No Project Alternative generally would not exceed 60°F over the entire cumulative water temperature distributions from March through August, and during October. However, as shown in Slide 2, during September under the CEQA Yuba Accord Alternative, water temperatures would remain below 60°F with about a 90 percent probability, by contrast to about a 60 percent probability under the CEQA No Project Alternative (Draft EIR/EIS – Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pgs. 248, 253 through 258, 260, and 265 through 270).
- 10. To assess the potential impacts to the spring-run Chinook salmon spawning life stage due to implementation of the CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative, simulated spawning habitat availabilities, expressed as weighted usable areas (WUA), were evaluated by examining the months of the spring-run Chinook salmon spawning period. Spring-run Chinook salmon reportedly spawn from September through November in the Garcia Gravel Pit Reach, which is upstream of Daguerre Point Dam. Thus, the spring-run Chinook salmon spawning habitat analysis focused on the spawning habitat availability in the Yuba River upstream of Daguerre Point Dam during the spawning months of September, October and November. The spring-run Chinook salmon spawning habitat analysis also emphasized the month of September, because this is the only month during the spring-run Chinook salmon spawning habitat is assumed to not overlap with fall-run Chinook salmon spawning.
- 11. As shown in Slide 3, spawning habitat availability for the entire spring-run Chinook salmon spawning period (September through November) under the CEQA Yuba Accord Alternative generally would be similar to that under the CEQA No Project Alternative (long-term average of 89.2 percent versus 89.1 percent of maximum WUA) (Draft EIR/EIS – Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pg. 395). The CEQA Yuba Accord Alternative would achieve over 90 percent of maximum WUA with a 72 percent probability, whereas the CEQA No Project Alternative would achieve over 90 percent of maximum WUA with a 67 percent probability (Draft EIR/EIS – Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pg. 399).

As also shown in Slide 3, spring-run Chinook salmon spawning habitat availability for September, expressed as percent maximum WUA, under the CEQA Yuba Accord Alternative generally would be similar to that under the CEQA No Project Alternative (long-term average of 90.1 percent versus 90.3 percent of maximum WUA) (Draft EIR/EIS – Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pg. 395). Overall, for the month of September, both the CEQA Yuba Accord Alternative and the CEQA No Project Alternative over 90 percent of maximum WUA with about a 62 percent probability (Draft EIR/EIS – Exhibit YCWA-1, Appendix F4, Folder for Scenario 2, pg. 397).

- 12. As shown in Slide 4, under the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative, water temperatures at Daguerre Point Dam during the spring-run Chinook salmon spawning and embryo incubation life stages would be essentially equivalent over approximately 55 percent of the cumulative water temperature distributions during September. However, for years when water temperatures would be the warmest during September (representing approximately 40 percent of the cumulative water temperature distributions), water temperatures under the CEQA Yuba Accord Alternative would be considerably lower than under the CEQA No Project Alternative (Draft EIR/EIS Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pgs. 259 and 271).
- 13. As also shown in Slide 4, water temperatures at Daguerre Point Dam during the spring-run Chinook salmon spawning and embryo incubation life stages under the CEQA Yuba Accord Alternative would be essentially equivalent over approximately 50 percent of the cumulative water temperature distribution during October, but would be measurably lower over approximately 50 percent of the cumulative water distribution, relative to the CEQA No Project Alternative (Draft EIR/EIS Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pgs. 248 and 260).
- 14. During November, water temperatures remain below 56°F at Daguerre Point Dam, and therefore suitable for spawning and embryo incubation, under both the CEQA Yuba Accord Alternative and the CEQA No Project Alternative (Draft EIR/EIS – Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pgs. 249 and 261). From December through March, water temperatures would not exceed 53°F, and therefore would remain suitable for embryo incubation under both the CEQA Yuba Accord Alternative and the CEQA No Project Alternative (Draft EIR/EIS – Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pgs. 250 through 253, and 262 through 265).
- 15. Spring-run Chinook salmon juveniles are believed to rear year-round in the lower Yuba River. In general, relatively warm water temperatures from spring through fall are typically considered a primary stressor to spring-run Chinook salmon juveniles. Simulated water temperature conditions at Daguerre Point Dam, and as

far downstream as Marysville would generally be substantially lower, and therefore more suitable, under the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative during the spring-run Chinook salmon juvenile over-summer rearing period. As shown in Slide 5, at Daguerre Point Dam and at Marysville during the warmest months of July and August, water temperatures under the CEQA Yuba Accord Alternative would be substantially lower (generally about $0.5 - 3^{\circ}$ F) over nearly the entire cumulative water temperature distributions (Draft EIR/EIS – Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pgs. 257, 258, 269, 270, 380, 381, 392, 393).

16. Based on CDFG's rotary screw trap (RST) monitoring and run-specific determinations, the vast majority (about 94 percent) of spring-run Chinook salmon emigrate from the lower Yuba River as young-of-year during November and December, with a relatively small percentage (nearly 6 percent) of individuals remaining in the lower Yuba River and emigrating from January through March. Only 0.6 percent of the juvenile Chinook salmon identified as spring-run were captured during April, 0.1 percent during May, and none during June (Draft EIR/EIS – Exhibit YCWA-1, pgs. 10-72 through 10-74). A few larger individuals (yearlings, or smolts) emigrate from fall through early winter. During relatively low to intermediate flow conditions, which generally occur during the drier water year types, the CEQA Yuba Accord Alternative would result in higher flows during early spring (April) and lower flows during later spring (May and June) (Draft EIR/EIS – Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pgs. 131 through 133, 143 through 145, 303 through 305, and 315 through 317). This pattern during drier years would occur due to an intentional operational shift in spring peak flows from late-spring (May) to early-spring (April). The temporal shift in drier year flows was designed to mimic Yuba River unimpaired flow patterns that would occur during drier year classes (Slide 6). This flow pattern was designed to facilitate the emigration of juvenile Chinook salmon, including spring-run, before the warm water temperatures that occur during late spring in drier water years in the lower portions of the lower Yuba River, the Feather River, and the Sacramento River (Draft EIR/EIS - Exhibit YCWA-1, pgs. 10-111 through 10-112).

Conclusions Regarding Effects of Yuba Accord on Lower Yuba River Fisheries

17. In the EIR/EIS, modeling data, including year-round flows and water temperatures, were evaluated for each life stage for spring-run Chinook salmon, fall-run Chinook salmon, steelhead, green sturgeon, American shad and striped bass in the manner described in paragraphs 9 through 16 (above). The monthly flow and water temperature evaluations, along with the spawning habitat availability evaluations and the findings of YCWA's recent monitoring studies, provided the basis for the following conclusions about the effects of the CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative. The CEQA Yuba Accord Alternative would result in:

Spring-run Chinook Salmon (see Slide 7)

- Generally equivalent or improved adult immigration and holding conditions, because of: (1) equivalent critical riffle passage capabilities below Daguerre Point Dam; (2) the same frequency of flows sufficient to allow passage through the Daguerre Point Dam fish ladders; (3) similar holding habitat conditions above Daguerre Point Dam; and (4) frequently cooler and therefore more suitable water temperatures at Daguerre Point Dam during September
- Improved spawning conditions due to similar spawning habitat availability during the entire September through November adult spawning period, as well as during September separately as a temporally distinct month, and generally lower and therefore more suitable water temperatures, particularly during about the warmest 45 to 55 percent of simulated water temperature conditions at Daguerre Point Dam during September and October
- Improved embryo incubation conditions due to frequently and substantially lower, and therefore more suitable water temperatures, particularly during about the warmest 45 to 55 percent of simulated water temperature conditions during September and October at Daguerre Point Dam
- □ Improved over-summer juvenile rearing conditions, due to consistently and substantially lower (generally about 0.5 3°F lower), and therefore more suitable, water temperatures at Daguerre Point Dam and at Marysville
- □ Generally equivalent smolt emigration conditions during the majority of the smolt emigration period (November through March), with lower flows during approximately the lowest 40 percent of flow conditions in May and June, accompanied by higher flows during about the lowest 35 percent of flow conditions during April. Under the Yuba Accord Alternative, this temporal shift in drier year peak flows from May to April was designed to mimic Yuba River unimpaired flow patterns that would occur during drier year classes. This flow pattern was designed to facilitate the emigration of juvenile Chinook salmon before the warm water temperatures that occur during late spring in drier water years in the lower portions of the lower Yuba River, the Feather River, and the Sacramento River.

Fall-run Chinook Salmon (see Slide 8)

- □ Generally equivalent or improved adult immigration and holding conditions, because of: (1) equivalent critical riffle passage capabilities below Daguerre Point Dam; (2) the same frequency of flows sufficient to allow passage through the Daguerre Point Dam fish ladders; and (3) frequently cooler and therefore more suitable water temperatures at Daguerre Point Dam during September, and consistently and substantially lower (generally about $1 3^{\circ}$ F lower), and therefore more suitable, water temperatures from August through October at Marysville
- □ Improved spawning conditions due to similar spawning habitat availability during the entire October through December adult spawning period, and

generally lower and therefore more suitable water temperatures, particularly during about the warmest 55 to 70 percent of simulated water temperature conditions at Daguerre Point Dam and at Marysville during October

- Improved embryo incubation conditions due to frequently and substantially lower (and therefore more suitable) water temperatures during about the warmest 55 to 70 percent of simulated water temperature conditions at Daguerre Point Dam and at Marysville during October
- □ Generally equivalent juvenile rearing and outmigration conditions during the majority of this life stage (December through March), with lower flows during approximately the lowest 40 percent of flow conditions in May and June, accompanied by higher flows during about the lowest 35 percent of flow conditions during April. Under the Yuba Accord Alternative, a temporal shift in drier year peak flows from May to April was designed to mimic Yuba River unimpaired flow patterns that would occur during drier year classes. This flow pattern was designed to facilitate the emigration of juvenile Chinook salmon when most of them are emigrating, and before the warm water temperatures that occur during late spring in drier water years in the lower portions of the lower Yuba River, the Feather River, and the Sacramento River (see Slide 6).

Steelhead (see Slide 9)

- □ Generally equivalent or improved adult immigration and holding conditions, because of: (1) equivalent critical riffle passage capabilities below Daguerre Point Dam; (2) the same frequency of flows sufficient to allow passage through the Daguerre Point Dam fish ladders; (3) similar holding habitat conditions; and (4) consistently and substantially lower, and therefore more suitable, water temperatures during August, September, and October in the lower section of the river
- □ Generally equivalent or improved spawning conditions due to slightly higher spawning habitat availability, and generally equivalent water temperatures above Daguerre Point Dam during the January through April adult spawning period
- □ Equivalent water temperature conditions over the entire embryo incubation period at Smartville; generally equivalent conditions at Daguerre Point Dam over the majority of the embryo incubation period, with slightly higher water temperatures during May although water temperatures would remain below 57°F
- □ Improved over-summer juvenile rearing conditions, due to consistently and substantially lower (generally about 0.5 3°F lower), and therefore more suitable, water temperatures at Daguerre Point Dam and at Marysville
- □ Generally equivalent smolt emigration conditions during the majority of this life stage (October through March), with lower flows during approximately the lowest 40 percent of flow conditions in May, accompanied by higher

flows during about the lowest 35 percent of flow conditions during April. Under the Yuba Accord Alternative, a temporal shift in drier year peak flows from May to April was designed to mimic Yuba River unimpaired flow patterns that would occur during drier year classes. This flow pattern was designed to facilitate the emigration of juvenile steelhead when most of them are emigrating, and before the warm water temperatures that occur during late spring in drier water years in the lower portions of the lower Yuba River, the Feather River, and the Sacramento River.

Green Sturgeon (see Slide 10)

- □ Generally equivalent or improved adult immigration and holding, adult spawning and embryo incubation conditions, because of corresponding upstream migration and spawning flow-related habitat availabilities, and lower and therefore more suitable water temperatures during adult immigration and holding
- □ Generally equivalent or improved over-summer rearing and juvenile emigration conditions, due to consistently and substantially lower (generally about $1 3^{\circ}$ F lower), and therefore potentially more suitable, water temperatures at Marysville

American Shad (see Slide 11)

□ Generally equivalent conditions for attracting American shad into the lower Yuba River with: flows in the lower Yuba River relative to flows in the lower Feather River that exhibit slightly higher average monthly long-term proportionate flows during April and June, and slightly lower long-term proportionate flows during May; and water temperatures that remain within the reported range of suitable spawning temperatures

Striped Bass (see Slide 11)

- □ Generally equivalent conditions for attracting striped bass into the lower Yuba River with: flows in the lower Yuba River relative to flows in the lower Feather River that exhibit slightly higher average monthly long-term proportionate flows during April and June, and slightly lower long-term proportionate flows during May; and water temperatures that remain within the reported range of suitable spawning and initial rearing temperatures
- 18. Therefore, in consideration of potential effects to each life stage of spring-run Chinook salmon, fall-run Chinook salmon, steelhead, green sturgeon, American shad, and striped bass, the CEQA Yuba Accord Alternative would not unreasonably affect, and would provide an equivalent or higher level of protection for lower Yuba River fisheries and their habitats, relative to the CEQA No Project Alternative.

Conclusions Regarding Effects of Yuba Accord on New Bullards Bar Reservoir Fisheries

19. The CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative, would result in:

Warmwater Reservoir Fisheries

 Reductions in the frequency of potential nest dewatering events, which would be expected to result in increased nest success and contribute to selfsustaining warmwater fish populations. Therefore, potential changes in water surface elevation under the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative would not unreasonably affect, and may be beneficial to warmwater fisheries that may be present in New Bullards Bar Reservoir.

Coldwater Reservoir Fisheries

Potential reductions in coldwater pool storage, which would not be expected to adversely affect New Bullards Bar Reservoir's coldwater fisheries because: (1) coldwater habitat would remain available in the reservoir during all months of the CEQA Yuba Accord Alternative; (2) physical habitat availability is not believed to be among the primary factors limiting coldwater reservoir fish populations; and (3) anticipated seasonal reductions in storage would not be expected to adversely affect the primary prey species utilized by coldwater fish. Therefore, the CEQA Yuba Accord Alternative would not unreasonably affect New Bullards Bar Reservoir coldwater fisheries resources, and would provide an equivalent level of protection, relative to the CEQA No Project Alternative.

Conclusions Regarding Effects of Yuba Accord on Feather and Sacramento River Fisheries

20. In the Project Study Area, the Feather and Sacramento rivers are primarily utilized as migration corridors. Although changes in lower Yuba River flows may affect downstream flows and temperatures in the Feather and Sacramento rivers, the estimated changes observed would be less than those for the lower Yuba River. In the Feather River the CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative, would generally result in equivalent or potentially more suitable conditions for lower Feather River fisheries resources due to: (1) similar flows and water temperatures below the Thermalito Afterbay Outlet with the exception of flow reductions primarily occurring at intermediate to low flow conditions during May and June, and measurably warmer water temperatures during May and June; (2) substantially cooler, and therefore more suitable, water temperatures at the mouth of the lower Feather River during the warmest and most stressful months of July and August; (3) nearly identical spawning habitat availabilities for spring-run and fall-run Chinook salmon and steelhead; and (4)

nearly identical water temperatures and early life stage survival estimates for the embryo incubation life stage of spring-run and fall-run Chinook salmon (Draft EIR/EIS – Exhibit YCWA-1, pgs. 10-124 – 10-140). Therefore, the CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative, would not unreasonably affect lower Feather River fisheries and their habitats (Slide 12).

21. While flows in the Sacramento River immediately downstream of the Feather River confluence would be expected to change in response to alterations in upstream operations in the Yuba and Feather rivers, model output demonstrates relatively minor and infrequent, but measurable changes in flows. The flow exceedance distributions for the CEQA Yuba Accord Alternative and the CEQA No Project Alternative demonstrate essentially identical flows in February, March, April and September, slightly lower flows in December and January, measurable but slight (generally < 5 percent) flow decreases at low to intermediate flow levels during May and June, measurable but slight (generally < 5 percent) flow increases nearly all of the time during July and August, and slight (generally < 5 percent) flow increases about 60 percent of the time during October and during nearly 20 percent of the lowest flow conditions during November (Draft EIR/EIS - Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pgs. 907 through 930). Similar results occur for the Sacramento River at Freeport (Draft EIR/EIS – Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pgs. 1030 through 1053). Water temperatures in the Sacramento River immediately downstream of the Feather River confluence and at Freeport generally would remain similar under the CEQA Yuba Accord Alternative and the CEQA No Project Alternative during most months (Draft EIR/EIS – Exhibit YCWA-1, page 10-141 and Appendix F4, Folder for Scenario 3 vs. Scenario 2, pgs. pgs. 981 through 1004 and 1079 through 1102). Therefore, the CEQA Yuba Accord Alternative would not unreasonably affect Sacramento River fisheries and their habitats, relative to the CEQA No Project Alternative (Slide 12).

Conclusions Regarding Effects of Yuba Accord in Delta

22. Operations associated with the Yuba Accord Alternative have the potential to affect Delta fisheries resources by: (1) altering fish mortality resulting from CVP and SWP export operations in the south Delta; and (2) modifying habitat quality and availability for various fish species within the Delta. The combined overall estimated salvage at the CVP and SWP salvage facilities under the CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative, would: (1) decrease by 1.0 percent for delta smelt; (2) not change for winter-run Chinook salmon; (3) decrease by 0.1 percent for spring-run Chinook salmon; (4) decrease by 0.1 percent for steelhead; and (5) decrease 1.2 percent for striped bass (Draft EIR/EIS – Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pgs. 1324, and 1334 through 1336). Additionally, the relatively minor and infrequent changes in X2 location, monthly mean outflow in the Delta, and E/I ratio, as described in the EIR/EIS, would not be expected to substantially affect

Delta fisheries resources habitats (Draft EIR/EIS – Exhibit YCWA-1, Appendix F4, Folder for Scenario 3 vs. Scenario 2, pgs. 1140 through 1152, 1189 through 1201, and 1238 through 1250). Therefore, the CEQA Yuba Accord Alternative would not unreasonably affect, and would provide a similar level of protection for Delta fisheries resources and their habitats, relative to the CEQA No Project Alternative (Slide 13).

Effects of *NRDC v. Kempthorne* Interim Remedies Order

- 23. Since the Draft EIR/EIS was issued in June 2007, a draft interim remedy order has been issued by the court in the litigation between the Natural Resources Defense Council (NRDC) *et al.* v. Kempthorne *et al.* (*NRDC v. Kempthorne*) regarding the U.S. Fish and Wildlife Service's (USFWS) 2005 Biological Opinion (BO) on the Central Valley Project (CVP) and the State Water Project (SWP) Operations Criteria and Plan (OCAP).
- 24. As discussed in Chapter 3 of the Final EIR/EIS, the draft interim remedies order in *NRDC v. Kempthorne* directs the Bureau of Reclamation (Reclamation) and the California Department of Water Resources (DWR) to take several actions, including some substantial curtailments in Delta exports by the CVP and SWP during late December through June of each year. This order has caused two significant changes to the Yuba Accord Alternative. First, as a result of this order, Reclamation has decided to delay completion of its ESA compliance for the Proposed Yuba Accord, and to wait to complete its Record of Decision (ROD) for the project until the ESA re-consultations for OCAP are completed. Until Reclamation issues its ROD, the Yuba Accord Alternative therefore will be implemented with just YCWA and DWR being parties to the Water Purchase Agreement. Second, the order will limit the times when Yuba Accord transfer water may be exported from the Delta, and the amounts of such exports.
- 25. The proposed phasing of the Yuba Accord Alternative, and the court's draft interim remedies order in *NRDC v. Kempthorne* have the potential to change: flows and water temperatures in the lower Yuba, Feather and Sacramento rivers; and Delta parameters and salvage estimates at the CVP and SWP export facilities. The anticipated types of potential effects that may occur as a result of these changes were evaluated by conducting sensitivity analyses for the following three scenarios:
 - a. **First Phase of CEQA Yuba Accord Alternative** During the first phase of the CEQA Yuba Accord Alternative, export pumping of Yuba Accord transfer water would be only through the Banks Pumping Plant and no Yuba Accord transfer water would be exported through the Jones Pumping Plant.

- b. **Yuba Accord Alternative with Interim Remedy** Under this scenario, exports of Yuba Accord transfer water would be limited by the interim remedies order in *NRDC v. Kempthorne*.
- c. Combined First Phase of CEQA Yuba Accord Alternative and Interim Remedy Under this scenario, exports of Yuba Accord transfer water would be only through the Banks Pumping Plant, and would be limited by the interim remedies order in *NRDC v. Kempthorne*.

The CEQA No Project Alternative that was used as a basis of comparison in the Draft EIR/EIR also is used as the basis of comparison for the three new sensitivity analyses involving the phasing of the Yuba Accord Alternative and implementation of the draft interim remedies order.

26. As was done for the Draft EIR/EIS assessment methodology, hydrologic modeling was used to simulate flows and water temperatures, and to estimate salvage at the CVP and SWP export facilities, under the First Phase of the Yuba Accord Alternative, the CEQA Yuba Accord Alternative with Interim Remedies Order, and the combined First Phase of CEQA Yuba Accord Alternative with Interim Remedies Order. The resultant model outputs for these three scenarios then were used to assess the potential effects of these changed conditions. With the phasing of the Yuba Accord Alternative and the court's interim remedies order in NRDC v. Kempthorne in effect, the Fisheries Agreement and YCWA's obligations to maintain the lower Yuba River flows that are specified by the Fisheries Agreement under the CEQA Yuba Accord Alternative would not change. However, Yuba Project operations and simulated lower Yuba River flows that are described and analyzed in the Draft EIR/EIS for the CEQA Yuba Accord Alternative would change slightly as a result of this proposed phasing and the court's interim remedies order, because of some changes in the amounts of groundwater substitution pumping during the June through September transfer period (see Exhibits YCWA-22 and YCWA-23). This analysis evaluates changes in average monthly lower Yuba River flows and water temperatures at Marysville during the June through September period. Also, although the purpose of the draft interim remedies order was only to protect delta smelt, this analysis evaluates both potential impacts to delta smelt and potential redirected impacts to other fish species (e.g., winter-run and spring-run Chinook salmon, steelhead, striped bass).

First Phase of CEQA Yuba Accord Alternative

Effects in Yuba Region and CVP/SWP Upstream of Delta Region

27. Lower Yuba River flows under the First Phase of the CEQA Yuba Accord Alternative during the June through September period will change slightly compared to the lower Yuba River flows that were evaluated in the Draft EIR/EIS

(Exhibits YCWA-22 and YCWA-23, pgs. 9 through 12). Although flows may be slightly higher or slightly lower during portions of the monthly cumulative flow distributions, the overall changes to lower Yuba River flows under the First Phase of the CEQA Yuba Accord Alternative will remain similar to flows under the CEQA Yuba Accord Alternative and, thus, within the range of effects that were evaluated in the Draft EIR/EIS. Over the monthly cumulative water temperature distributions, lower Yuba River water temperatures under the First Phase of the CEQA Yuba Accord Alternative during June and September will be essentially equivalent to those under the CEQA Yuba Accord Alternative that was evaluated in the Draft EIR/EIS. During July and August, water temperatures under the First Phase of the CEQA Yuba Accord Alternative will be slightly higher during portions of the cumulative distributions than those under the CEQA Yuba Accord Alternative. However, when water temperatures under the First Phase of the CEQA Yuba Accord Alternative are slightly higher than those under the CEQA Yuba Accord Alternative, they would remain lower than water temperatures under the CEQA No Project Alternative (Exhibits YCWA-22 and YCWA-23, pgs. 9 through 12).

- 28. As stated in Exhibit YCWA-14, these relatively minor monthly flow and water temperature changes in the lower Yuba River would decrease in magnitude as water moves downstream from the lower Yuba River and enters progressively larger river systems before flowing into the Delta.
- 29. The environmental impacts associated with the flow and water temperature changes that would occur under the First Phase of the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative would be similar to the results presented in the Draft EIR/EIS for the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative. Therefore, a phased implementation of the CEQA Yuba Accord Alternative would not unreasonably affect and would provide an equivalent or higher level of protection for fish species in the lower Yuba River, and would not unreasonably affect fishes in the Feather and Sacramento rivers relative to the CEQA No Project Alternative (Slide 14).

Effects in Delta Region

30. There potentially would be less Yuba Accord transfer water exported during the First Phase of the Yuba Accord Alternative than under the Yuba Accord Alternative discussed and analyzed in the Draft EIR/EIS. If less Yuba Accord transfer water were exported while the same amounts of Yuba Accord water were flowing into the Delta, then potential changes in other Delta parameters such as X2 locations and Delta outflows would be lower than the corresponding changes that were discussed and evaluated in the Draft EIR/EIS. For this reason, the potential impacts associated with these parameters that would occur under the First Phase of the Yuba Accord Alternative are equal to or less than those discussed in the Draft EIR/EIS.

- 31. The changes in estimated amounts of export pumping of Yuba Accord transfer water were used to determine the salvage estimates for fish in the Delta for the First Phase of the CEQA Yuba Accord Alternative. Table 1 of Exhibit YCWA-24 shows the estimated differences in salvage of Delta fish species of primary management concern for the First Phase of CEQA Yuba Accord Alternative compared to the CEQA No Project Alternative, as well as the estimated differences in salvage of these species for the CEQA Yuba Accord Alternative compared to the CEQA No Project Alternative.
- 32. Table 1 of Exhibit YCWA-24 shows that there could be some slight changes in the numbers of fish salvaged as a result of this phasing, but that the percent differences in long-term average salvage and salvage by water year for these species under the First Phase of the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative would be similar to the results presented in the Draft EIR/EIS for the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative. (The numbers presented in Table 1 of Exhibit YCWA-24 are slightly different than the corresponding numbers in Table 3-3 of the Final EIR/EIS because of a minor correction in the hydrologic modeling regarding storage of water in San Luis Reservoir.) The relatively minor changes in salvage for the First Phase of the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative still would be negative that is, fewer fish would be salvaged under the First Phase of the CEQA Yuba Accord Alternative than under the CEQA No Project Alternative.
- 33. Therefore, because changes in Delta parameters would be minor and slight changes in fish salvage estimates would be expected but would remain negative, the First Phase of the CEQA Yuba Accord Alternative would not unreasonably affect Delta fish species, relative to the CEQA No Project Alternative (Slide 15).

Yuba Accord Alternative with Interim Remedies Order

Effects in Yuba Region and CVP/SWP Upstream of Delta Region

34. Lower Yuba River flows under the CEQA Yuba Accord Alternative with Interim Remedies Order during June and September will be essentially equivalent to those under the CEQA Yuba Accord Alternative that was evaluated in the Draft EIR/EIS (Exhibits YCWA-22 and YCWA-23, pgs. 9 through 12). During July, flows under the CEQA Yuba Accord Alternative with Interim Remedies Order will be lower than those under the CEQA Yuba Accord Alternative flows during relatively high flow (\geq 1,000 cfs) conditions, and higher during about the lowest 75 percent of the cumulative flow distribution. During August, flows under the CEQA Yuba Accord Alternative during relatively high flow (\geq 1,000 cfs) conditions, and higher during relatively high flow (\geq 1,000 cfs) conditions. However, flows under the CEQA Yuba Accord Alternative during relatively high flow (\geq 1,000 cfs) conditions, and lower under low flow conditions. However, flows remain essentially equivalent to or higher than flows under the CEQA No Project Alternative over the cumulative flow distributions.

- 35. Over the monthly cumulative water temperature distributions, lower Yuba River water temperatures under the CEQA Yuba Accord Alternative with Interim Remedies Order during June and September will be essentially equivalent to those under the CEQA Yuba Accord Alternative that was evaluated in the Draft EIR/EIS. During July and August, water temperatures under the CEQA Yuba Accord Alternative with Interim Remedies Order will be both higher and lower during portions of the monthly cumulative distributions than those under the CEQA Yuba Accord Alternative. However, when water temperatures under the CEQA Yuba Accord Alternative with Interim Remedies Order are slightly higher than those under the CEQA Yuba Accord Alternative with Interim Remedies Order are slightly higher than those under the CEQA Yuba Accord Alternative with Interim Remedies Order are slightly higher than those under the CEQA Yuba Accord Alternative. However, they would remain lower than water temperatures under the CEQA Yuba Accord Alternative, they would remain lower than Water temperatures under the CEQA Yuba Accord Alternative. However, they would remain lower than Water temperatures under the CEQA Yuba Accord Alternative, they accord Alternative (Exhibits YCWA-22 and YCWA-23).
- 36. As stated in Exhibit YCWA-14, these relatively minor monthly flow and water temperature changes in the lower Yuba River would decrease in magnitude as water moves downstream from the lower Yuba River and enters progressively larger river systems before flowing into the Delta.
- 37. The environmental impacts associated with the flow and water temperature changes that would occur under the CEQA Yuba Accord Alternative with Interim Remedies relative to the CEQA No Project Alternative would be similar to the results presented in the Draft EIR/EIS for the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative. Therefore, the CEQA Yuba Accord Alternative with Interim Remedies Order would not unreasonably affect and would provide an equivalent or higher level of protection for fish species in the lower Yuba River, and would not unreasonably affect fishes in the Feather and Sacramento rivers relative to the CEQA No Project Alternative (Slide 14).

Effects in Delta Region

- 38. There potentially would be less Yuba Accord transfer water exported under the CEQA Yuba Accord Alternative with Interim Remedies Order than under the Yuba Accord Alternative discussed and analyzed in the Draft EIR/EIS. If less Yuba Accord transfer water were exported while the same amounts of Yuba Accord water would flow into the Delta, then potential changes in other Delta parameters such as X2 locations and Delta outflows also would be lower than the corresponding changes that were discussed and evaluated in the Draft EIR/EIS. For this reason, the potential impacts associated with these parameters that would occur under the CEQA Yuba Accord Alternative with Interim Remedies Order are equal to or less than those discussed in the Draft EIR/EIS.
- 39. Table 2 of Exhibit YCWA-24 shows the estimated differences in salvage of the fish species of primary management concern under the CEQA Yuba Accord Alternative with Interim Remedies Order compared to the CEQA No Project Alternative, as well as the estimated differences in salvage of these species for the CEQA Yuba Accord Alternative compared to the CEQA No Project Alternative.

- 40. Table 2 of Exhibit YCWA-24 shows that there would be large reductions in longterm average salvage, and in salvage by water year type for delta smelt under the CEQA Yuba Accord Alternative with Interim Remedies Order relative to the CEQA No Project Alternative, compared to the results presented in the Draft EIR/EIS for the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative. Although the purpose of the draft interim remedies was only to protect delta smelt, Table 2 of Exhibit YCWA-24 also shows large reductions in long-term average salvage, and in salvage by water year type for winter-run Chinook salmon, spring-run Chinook salmon, steelhead and striped bass. These salvage reductions are due to the correspondingly large reductions in CVP/SWP export pumping that would occur as a result of the interim remedies order.
- 41. Therefore, because changes in Delta parameters would be minor and there would be large reductions in long-term average salvage, and in salvage by water year type for all of the evaluated fish species, the CEQA Yuba Accord Alternative with Interim Remedies Order would not unreasonably affect Delta fish species, relative to the CEQA No Project Alternative (Slide 15).

First Phase of the Yuba Accord Alternative with Interim Remedies Order

Effects in Yuba Region and CVP/SWP Upstream of Delta Region

42. Lower Yuba River flows and water temperatures from June through September under the First Phase of the CEQA Yuba Accord Alternative with Interim Remedies Order will be nearly identical to those under the CEQA Yuba Accord Alternative with Interim Remedies Order (Exhibits YCWA-22 and YCWA-23, pgs. 9 through 12). Therefore, the environmental impacts associated with the flow and water temperature changes that would occur under the First Phase of the CEQA Yuba Accord Alternative with Interim Remedies relative to the CEQA No Project Alternative would be similar to the results presented in the Draft EIR/EIS for the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative. Therefore, the First Phase of the CEQA Yuba Accord Alternative with Interim Remedies Order would not unreasonably affect and would provide an equivalent or higher level of protection for fish species in the lower Yuba River, and would not unreasonably affect fishes in the Feather and Sacramento rivers relative to the CEQA No Project Alternative (Slide 14).

Effects in Delta Region

43. Operations and environmental considerations under the First Phase of the CEQA Yuba Accord Alternative with Interim Remedies Order would be very similar to those under the CEQA Yuba Accord Alternative with Interim Remedies Order. Therefore, the potential impacts associated with Delta parameters that would occur under the First Phase of the CEQA Yuba Accord Alternative with Interim Remedies Order are equal to or less than those discussed in the Draft EIR/EIS.

- 44. Table 3 of Exhibit YCWA-24 shows the estimated differences in salvage of the fish species of primary management concern under the First Phase of the CEQA Yuba Accord Alternative with Interim Remedies Order compared to the CEQA No Project Alternative, as well as the estimated differences in salvage of these species for the CEQA Yuba Accord Alternative compared to the CEQA No Project Alternative.
- 45. Table 3 of Exhibit YCWA-24 shows that there would be large reductions in longterm average salvage, and in salvage by water year type for all of the evaluated fish species under the First Phase of the CEQA Yuba Accord Alternative with Interim Remedies Order relative to the CEQA No Project Alternative, compared to the results presented in the Draft EIR/EIS for the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative.
- 46. Therefore, because changes in Delta parameters would be minor and there would be large reductions in long-term average salvage, and in salvage by water year type for all of the evaluated fish species, the First Phase of the CEQA Yuba Accord Alternative with Interim Remedies Order would not unreasonably affect Delta fish species, relative to the CEQA No Project Alternative (Slide 15).

Overall Conclusions

- 47. In consideration of potential effects to all life stages of fisheries resources evaluated in the EIR/EIS, the Yuba Accord Alternative would not unreasonably affect, and would provide an equivalent or higher level of protection for fisheries and their habitats in the lower Yuba River, relative to the CEQA No Project Alternative (Slide 16).
- 48. In consideration of potential effects to all life stages of fisheries resources evaluated in the EIR/EIS, the Yuba Accord Alternative would not unreasonably affect fisheries and their habitats in the Feather River, Sacramento River or Delta, relative to the CEQA No Project Alternative (Slide 16).
- 49. As confirmed by the model results for the sensitivity analysis discussed above, the changed conditions associated with phasing the Yuba Accord Alternative, or implementing the Yuba Accord Alternative (with or without phasing) while the court's interim remedies order in *NRDC v. Kempthorne* is in effect would not change the results of the environmental impact analysis or the conclusions presented in the EIR/EIS (Slide 16).

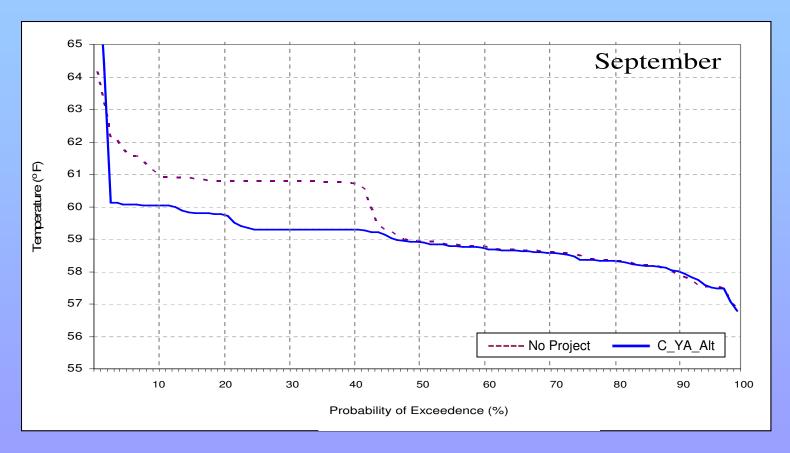
I declare under penalty of perjury that the foregoing is true and correct. Executed at Sacramento, California this 2^{nd} day of November, 2007.

Paul Bratovich

Lower Yuba River Fish Life Stages

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Spring-run Chinook Salmon	*	*									*	*
Fall-run Chinook Salmon	**	*	*									*
Steelhead					*))							
Green Sturgeon	-									-	•	-
American Shad						Ő						
Striped Bass												
Adult Immigration and Holding Spawning sembryo Incubation - Juvenile Rearing Smolt Emigration Juvenile Emigration Immigration and Spawning (Shad only)												

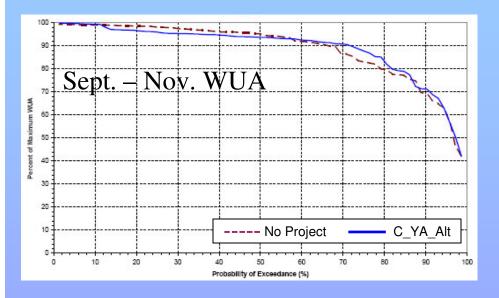
Adult Immigration and Holding



• Under the CEQA Yuba Accord Alternative, water temperatures at Daguerre Point Dam during September would remain below 60°F with about a 90 percent probability, by contrast to about a 60 percent probability under the CEQA No Project Alternative

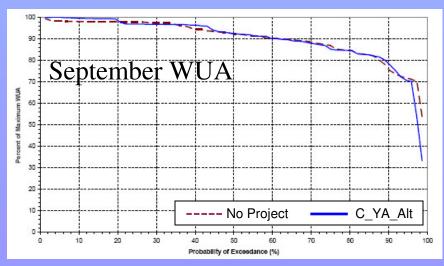
Spawning

Spawning Habitat Availability

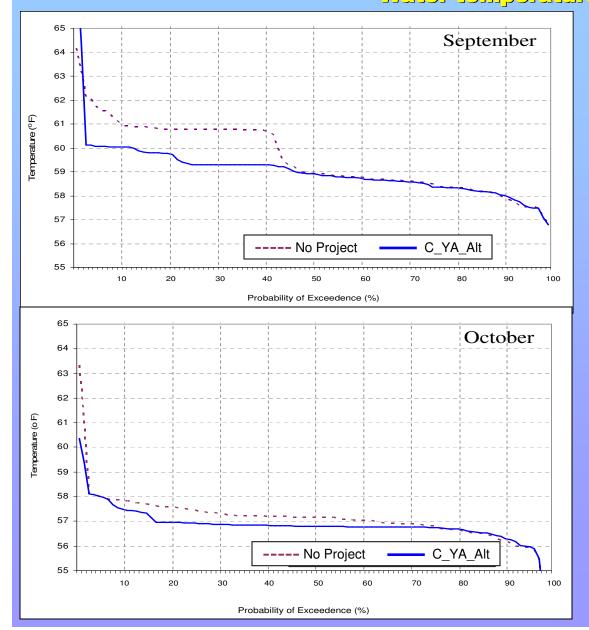


 Spawning habitat availability during September generally would be similar under both the CEQA Yuba Accord Alternative and CEQA No Project Alternative, with both alternatives achieving over 90 percent of maximum WUA with about a 62 percent probability

- Generally similar annual spawning habitat availability (WUA) under both the CEQA Yuba Accord Alternative and CEQA No Project Alternative
- The CEQA Yuba Accord Alternative would achieve over 90 percent of maximum WUA with a 72 percent probability, whereas the CEQA No Project Alternative would achieve over 90 percent of maximum WUA with a 67 percent probability



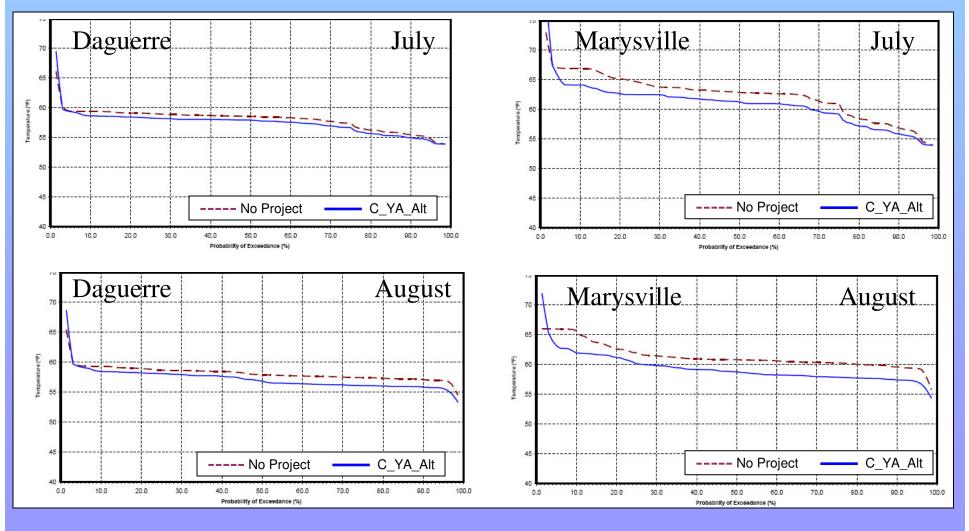
Spawning and Embryo Incubation Water temperatures



 During September, water temperatures at Daguerre Point Dam would be measurably lower over about 40 percent of the warmest part of the cumulative water temperature distributions under the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative

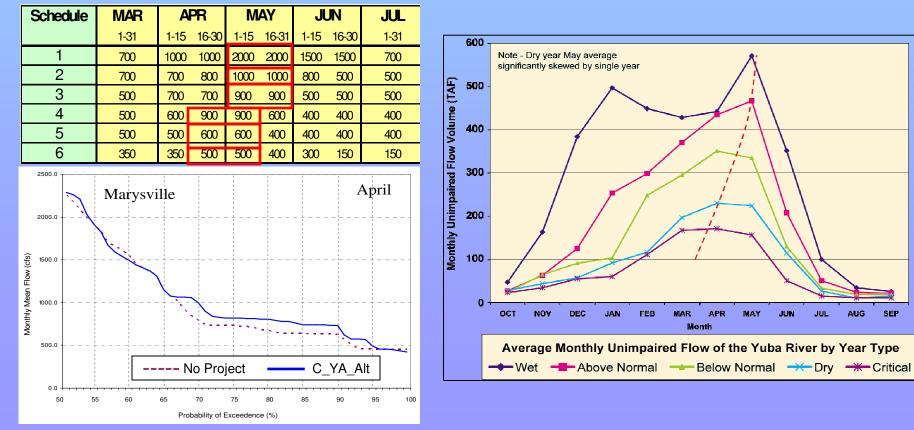
- During October, water temperatures would be measurably lower over about 50 percent of the cumulative water distribution
- Water temperatures remain suitable for spawning during November, and remain suitable for embryo incubation from December through March under both the CEQA Yuba Accord Alternative and the CEQA No Project Alternative

During the warmest months of July and August, water temperatures would be substantially and • consistently lower (generally about $0.5 - 3^{\circ}F$) under the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative



Spring-run Chinook Salmon Emigration

- Peak flow requirements earlier in the spring during drier conditions
 - mimic Yuba River unimpaired flow patterns
 - prior to warm water temperatures in the lower Yuba, Feather, and _ Sacramento rivers



AUG

SEP

Lower Yuba River Spring-run Chinook Salmon

The CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative, is expected to provide:

- Generally equivalent or improved adult immigration and holding conditions
- Improved spawning conditions
- Improved embryo incubation conditions
- Improved over-summer juvenile rearing conditions
- Generally equivalent emigration conditions



Lower Yuba River Fall-run Chinook Salmon

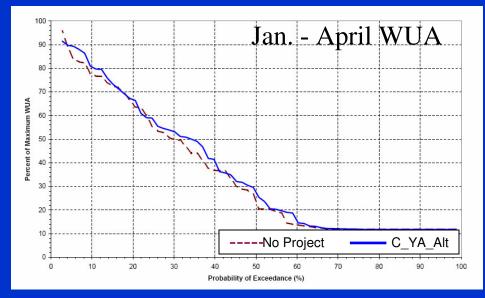
The CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative, is expected to provide:

- Generally equivalent or improved adult immigration and holding conditions
- Improved spawning conditions
- Improved embryo incubation conditions
- Generally equivalent juvenile rearing and outmigration conditions



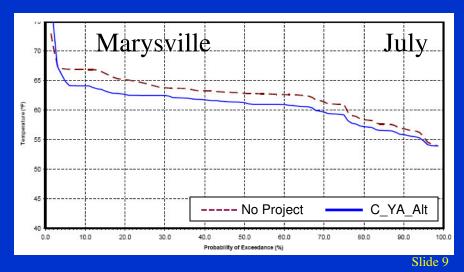
Lower Yuba River Steelhead

The CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative, is expected to provide:



- Improved over-summer juvenile rearing conditions
- Generally equivalent smolt emigration conditions

- Generally equivalent or improved adult immigration and holding conditions
- Generally equivalent or improved spawning conditions
- Generally equivalent embryo incubation conditions



Lower Yuba River Green Sturgeon

The CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative, is expected to provide:

- Generally equivalent or improved adult immigration and holding, adult spawning and embryo incubation conditions
- Generally equivalent or improved over-summer rearing and juvenile emigration conditions



Lower Yuba River American Shad and Striped Bass

The CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative, is expected to provide:

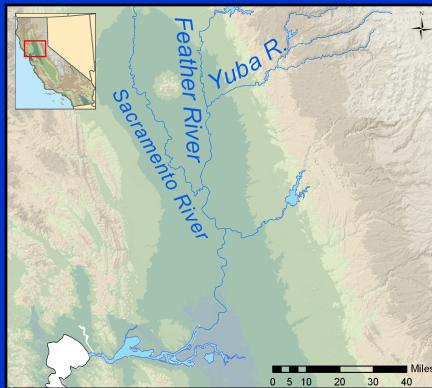
• Generally equivalent conditions for American shad and striped bass attraction into the lower Yuba River

	Ар	ril	Мау	,	June		
Long-term average flow (cfs)	Yuba Accord	No Project	Yuba Accord	No Project	Yuba Accord	No Project	
Yuba River	2578	2593	2647	2802	2125	2096	
Feather River	5863	5905	6120	6255	6300	6492	
Yuba River flow to Feather River flow (%)	44.0	43.9	43.3	44.8	33.7	32.3	
Difference (%)	0.1		-1.5		1.4		

Feather and Sacramento Rivers

The CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative, would not unreasonably affect the following species in the Feather and Sacramento rivers:

- Winter-run and late fall-run Chinook salmon (Sacramento River only)
- Spring-run Chinook salmon
- Fall-run Chinook salmon
- Steelhead
- Green sturgeon
- American shad
- Striped bass
- Sacramento splittail



Sacramento-San Joaquin Delta

The CEQA Yuba Accord Alternative, relative to the CEQA No Project Alternative, would not unreasonably affect the following species in the Delta:



- Delta smelt
- Striped bass
- Winter-run Chinook salmon
- Spring-run Chinook salmon
- Steelhead
- Other Delta fishes

Upstream of the Delta Region

Under the First Phase of the Yuba Accord Alternative, Yuba Accord Alternative (Interim Remedy), and First Phase of the Yuba Accord Alternative (Interim Remedy):

- Changes in flows and water temperatures would be within the range of effects that were presented in the Draft EIR/EIS
- Unreasonable effects would not occur, and an equivalent or higher level of protection for fish species in the lower Yuba River would be provided relative to the CEQA No Project Alternative
- Unreasonable effects would not occur to fishes in the Feather and Sacramento rivers relative to the CEQA No Project Alternative

Sacramento-San Joaquin Delta

First Phase of the Yuba Accord Alternative

- Compared to the results presented in the Draft EIR/EIS, First Phase of the CEQA Yuba Accord Alternative relative to the CEQA No Project Alternative would result in:
 - Equivalent or lesser changes in Delta parameters
 - Minor differences in long-term average and water year type-specific fish salvage (with fewer fish salvaged under First Phase relative to No Project)

Yuba Accord Alternative (Interim Remedy)

- Compared to the results presented in the Draft EIR/EIS, the CEQA Yuba Accord Alternative with Interim Remedies Order relative to the CEQA No Project Alternative would result in:
 - Equivalent or lesser changes in Delta parameters
 - Large reductions in long-term average and water year type-specific salvage for all of the evaluated fish species

First Phase of the Yuba Accord Alternative (Interim Remedy)

- Compared to the results presented in the Draft EIR/EIS, the First Phase of the CEQA Yuba Accord Alternative with Interim Remedies Order relative to the CEQA No Project Alternative would result in:
 - Equivalent or lesser changes in Delta parameters
 - Large reductions in long-term average and water year type-specific salvage for all of the evaluated fish species

Overall Conclusions

- The CEQA Yuba Accord Alternative is expected to provide an equivalent or higher level of protection, relative to the CEQA No Project Alternative, for lower Yuba River fish populations
- The CEQA Yuba Accord Alternative would not unreasonably affect Feather River, Sacramento River or Delta fish resources
- The changed conditions associated with phasing the CEQA Yuba Accord Alternative would not change the results of the environmental impact analysis or the conclusions presented in the EIR/EIS
- The changed conditions associated with implementing the CEQA Yuba Accord Alternative (with or without phasing) while the court's interim remedies order in *NRDC v. Kempthorne* is in effect would not change the results of the environmental impact analysis or the conclusions presented in the EIR/EIS