YUBA COUNTY WATER AGENCY'S COMMENTS ON AND REQUESTED CHANGES TO FEBRUARY 29, 2008 DRAFT SWRCB ORDER ON YCWA CHANGE PETITIONS FOR LOWER YUBA RIVER ACCORD March 11, 2008

General Comments

The Yuba County Water Agency ("YCWA") is pleased that the draft order (the "Draft Order") that was issued by the State Water Resources Control Board ("SWRCB") on February 29, 2008 generally would approve YCWA's petition for modification of YCWA's water-right permits and YCWA's long-term transfer petition. If the SWRCB issues an order approving these petitions, then YCWA and the other parties to the Lower Yuba River Accord (the "Yuba Accord") will be able to implement the Accord.

As discussed in the papers that YCWA and the California Department of Water Resources ("DWR") filed for the hearing in this matter, the Yuba Accord is one of the most significant multiparty consensus packages in the history of California water law, and is the product of several years of complex negotiations that YCWA and other parties conducted following the encouragement of the SWRCB. The broad-based support for the Yuba Accord demonstrates that the Yuba Accord is precisely the type of comprehensive, broadly-supported settlement that the SWRCB requested and encouraged.

Unfortunately, the Draft Order contains several provisions that are contrary to, and that would undermine, the Yuba Accord, and that are not supported by either substantial evidence in the hearing record or the applicable laws. These provisions, and YCWA's requested changes to these provisions of the Draft Order, are discussed in the following sections of these comments.

Specific Comments

1. Deputy Director's authority to order YCWA to release water for additional instream flows in Conference Years

The Lower Yuba River Fisheries Agreement (the "Fisheries Agreement") contains specific provisions for Conference Years. Conference Years are the years during which the North Yuba Index is less than 500,000 acre-feet. (See exh. YCWA-9, p. 10, § 5.1.5 & exh. 6.) Conference years are predicted to occur approximately 1% of the time. (Exh. YCWA-9, exh. 6.)

During such years, YCWA will operate the Yuba River Project to maintain instream flows in the lower Yuba River at the Marysville Gage so that they equal or exceed the minimum instreamflow requirements specified in the 1965 agreement between YCWA and the Department of Fish and Game, which are the same as the requirements in YCWA's 1966 Federal Power Act license. (See exh. YCWA-2, p. 4-46.) These requirements are for flows of 245 cubic feet per second ("cfs") during January through June, 70 cfs during July through September, and 400 cfs during October through December. (See Draft Order, app., fig. 7.)

The Fisheries Agreement also provides that, during Conference Years, YCWA, in consultation with its Member Units, will prepare a strategic management plan that will describe the steps that they will take to ensure that total diversions from the Lower Yuba River at Daguerre Point Dam do not exceed 250,000 acre-feet ("af"). This amount is considerably lower than the estimated total diversion demands of up to 344,736 af (see exh. YCWA-1, p. 5-8), so very substantial water-conservation and groundwater-substitution measures in YCWA's service area will be necessary during Conference Years.

The Fisheries Agreement provides that the Planning Group of the River Management Team ("RMT") (which will be created by the Fisheries Agreement) may agree to and schedule additional instream flows for the lower Yuba River during Conference Years. (See exh. YCWA-9, pp. 10, 14.) Because of potential differences in hydrology, different amounts of such additional flows could be appropriate during different Conference Years, and the RMT Planning Group may decide to focus any such additional flows during different times of the year, depending on the applicable hydrological conditions. (Exh. YCWA-2, p. 4-46.)

The Draft Order provides that the Deputy Director for the Division of Water Rights (the "Deputy Director") must approve any additional flows that are agreed to by the RMT's Planning Group. (Draft Order, pp. 22, 53.) YCWA does not object to this provision.

The Draft Order also provides that, if the RMT's Planning Group does not agree on additional flows by April 15 of a Conference Year, then the Deputy Director may order YCWA to provide additional flows. (Draft Order, pp. 22, 49, 53-54.) YCWA objects to this requirement for several reasons.

First, the hydrological modeling for the Yuba Accord EIR/EIS did not include any such additional flows. (See exh. YCWA-1, app. D, p. A-18.) Even without any such additional flows, the Yuba Accord will not have any unreasonable effects on fish in the Lower Yuba River and will provide an equivalent or higher level of protection for these fish, relative to the level of protection that would be provided by the Revised Decision 1644 ("RD-1644") long-term instream-flow requirements. (Exh. YCWA-1, pp. 10-108 to 10-123; exh. YCWA-16, pp. 5-8.) The applicable legal standards therefore will be satisfied even if no such additional flows occur.

Second, as the Draft Order correctly recognizes, the lower minimum required instream flows during Conference Years will reduce the amounts of carryover storage of water that YCWA must retain in New Bullards Bar Reservoir in any given year, which in turn will give the reservoir a greater amount of active storage, which can be used to maintain higher instream flows during the other 99 percent of all years. (Draft Order, p. 38.) If the Deputy Director were to have the authority to unilaterally order additional flows during Conference Years, then the carefully negotiated balance between instream flows in different types of water years would be upset, and more carryover storage could be required. This in turn would undermine YCWA's ability to maintain Yuba Accord operations during all types of water years. (See exh. YCWA-1, App. D, pp. C-3 to C-4.)

Third, the Draft Order does not specify any standards for the Deputy Director to apply to determine whether to order any additional flows during Conference Years, or to determine the amounts of any such flows. Without any such standards, the Deputy Director could order additional

instream flows, even if they would adversely affect carryover storage, which in turn could seriously affect YCWA's ability to meet instream-flow requirements or deliveries of water to its Member Units during subsequent years. YCWA is not aware of any adopted SWRCB water-rights order that gives the Deputy Director such broad discretion to issue an order that would have such serious impacts, and such broad discretion is not appropriate here.

Fourth, the proposed delegation is not authorized by law. (See *California Sch. Employees Assn. v. Personnel Commission* (1970) 3 Cal.3d 139, 144: "As a general rule, powers conferred upon public agencies and officers which involve the exercise of judgment or discretion are in the nature of public trusts and cannot be surrendered or delegated to subordinates in the absence of statutory authorization.") The Draft Order does not cite any such statutory authorization and YCWA is not aware of any. Water Code section 186, subdivision (b), provides that the chief of the Division of Water Rights (now the Deputy Director) shall supervise Division staff and "act as a technical advisor to the [SWRCB] on functions under his or her jurisdiction," but this statute does not authorize the Draft Order's proposed delegation. While Water Code sections 1704.1-1704.3 authorize the Division of Water Rights to take specified actions on minor petitions for change, YCWA's petitions for the Yuba Accord are not such minor petitions, and there is no similar authorization to the Division of Water Rights in Water Code section 1736, the statute that applies to petitions for long-term transfers.

The first sentence of Term 13 on page 55 of the Draft Order provides that the SWRCB would reserve jurisdiction to amend the new instream-flow requirements that are specified in the Draft Order, as future conditions may warrant. YCWA is willing to accept this reservation, because the SWRCB would exercise it only after giving notice to interested parties, holding a hearing and issuing a well-reasoned order. However, for the reasons discussed in this comment, YCWA objects to the provisions of the Draft Order that would give the Deputy Director the authority to unilaterally order YCWA to provide additional instream flows during Conference Years, which apparently could be done without notice or any opportunity to be heard. No party asked for this provision and it would not be appropriate to give the Deputy Director such broad discretion, particularly where an exercise of this discretion could seriously disrupt the Yuba Accord's carefully negotiated balance among lower Yuba River instream flows, deliveries of water to Yuba County farmers and water transfers. Any such discretionary decision should be made by the SWRCB itself, and not by a member of the SWRCB staff.

YCWA's requested changes to the Draft Order, which would delete this provision, are attached to these comments at tab 1.

2. Other reservation of authority to Deputy Director

Besides the reservation of jurisdiction to the SWRCB in the first sentence of Term 13 on page 55 of the Draft Order, under the second sentence of this term the SWRCB would delegate authority to the Deputy Director "to take actions under this reservation of jurisdiction when the action is consistent with this Order." Other than this general consistency requirement, this sentence does not describe what actions the Deputy Director may take under this delegation, apparently no notice or hearing would be required, and no standards would be specified for any such actions. Moreover, nothing in the text of the Draft Order describes why this delegation is in the Draft Order.

Because of these problems, this essentially unlimited delegation is not appropriate, and this sentence should be deleted from the Draft Order. As discussed above, such discretionary decisions should be made by the SWRCB itself, and not by a member of the SWRCB staff.

YCWA's requested changes to the Draft Order, which would delete this delegation, are attached to these comments at tab 2.

3. Potential limits on Delta exports

On pages 26-27, the Draft Order states that, if any Yuba Accord water is pumped from the Delta during November through June, then the amount would "be limited to roughly 20,000 af/year in the November-June period, and to a pumping rate of 500 cfs." The Draft Order cites "RT, 167:3 to 168:10" and "YCWA-1, p. 3-8" for this statement. Although the cited testimony supports the 500 cfs maximum pumping rate during the November-June period, neither of the cited authorities supports the alleged 20,000 af/yr maximum pumping amount.

While transfers of Yuba Accord water during November through June normally will be less than 20,000 af/yr (see exh. YCWA-2, p. 3-8), there could be circumstances when such transfers exceed this amount. Specifically, during some months of this period, Yuba Accord flows may exceed baseline flows (i.e., RD-1644 interim flows, see exh. YCWA-11a, pp. 38-39, § 3.3) by up to 500 cfs (compare exh. YCWA-9, exh. 1 with RD-1644, p. 176; see exh. YCWA-2, p. 4-60, fig. SA3-10.1), and, under these circumstances, YCWA will be providing up to 500 cfs of Released Transfer Water from the Lower Yuba River to the Feather River (see exh. YCWA-11a, p. 42, § 4.2). If the Delta is in balanced conditions and DWR has capacity to pump this water from the Delta, then this water will be accounted for as Delivered Transfer Water under the Water Purchase Agreement. (*Id.*, pp. 43-44, § 5.) Because 500 cfs equals approximately 1,000 af/day, the 20,000 af/yr limit could be exceeded during the November-through-June period if hydrological conditions in the Yuba River require YCWA to release the water to the Feather River as part of the Yuba Accord instream flows, and if the water then is exportable by DWR.

Moreover, the 20,000 af/yr limit in the Draft Order (see Draft Order, p. 56, term 3) would provide no benefits to any fish. Even if this limit were to remain in the final order, during balanced conditions in the Delta DWR and Reclamation still would implement the Bay/Delta water quality standards and still would operate the Banks and Jones Pumping Plants to pump water from the Delta at the maximum rates at which such pumping is authorized by the various SWRCB decisions and orders, court orders and biological opinions that apply to such pumping. This 20,000 af/yr limit would not restrict that pumping. The only effect of this limit would be to require that the after-the-fact accounting of such water provide that such water be accounted for as water that was abandoned by YCWA and then pumped under DWR's or Reclamation's own water-right permits, instead of being accounted for as water that was transferred under YCWA's water-right permit.

For these reasons, the 20,000 af/yr limit should be deleted from the Draft Order.

The second paragraph of term 3 on page 56 of the Draft Order also should be deleted. This paragraph would delegate to the Deputy Director the authority to reduce or eliminate "YCWA transfer diversions at the Delta pumps" under certain circumstances. If the Deputy Director were

to issue such an order, then, during balanced conditions in the Delta, the Yuba Accord water that YCWA still had to provide to meet the Yuba Accord Lower Yuba River instream flows and that then flowed into the Feather River and ultimately was pumped from the Delta by DWR or Reclamation would be accounted for as being abandoned by YCWA and then pumped by DWR or Reclamation under their own water-right permits, instead of being accounted for as being transferred under YCWA's water-right permits. However, such an order would not change any of the physical flow regimes in the Yuba, Feather and Sacramento Rivers or the Delta, and therefore would provide no benefits to any fish, because DWR and Reclamation would continue to implement the Bay/Delta water quality standards and operate their Delta pumps to the maximum extents authorized by the orders that apply to such pumping. Moreover, this proposed delegation to the Deputy Director of the authority to make a major discretionary decision would be improper for the reasons discussed above.

YCWA's requested changes to the Draft Order, which would correct these problems, are attached to these comments at tab 3.

4. Reservation of jurisdiction regarding North Yuba Basin groundwater

The Draft Order correctly states that groundwater conditions in the South and North Yuba Basins are good, with significant amounts of groundwater storage availability, relatively high annual recharge rates and relatively short recovery periods to pre-pumping conditions. (Draft Order, p. 33.) The Draft Order also correctly states that future groundwater transfer volumes anticipated during the implementation of the Yuba Accord would not lower groundwater levels to historic low levels and would not result in long-term negative impacts on groundwater levels or storage. (*Ibid.*) The Draft Order describes the two mitigation measures in the Yuba Accord EIR/EIS, and it would order YCWA to comply with these mitigation measures and the groundwater-protection measures in the Yuba Accord Conjunctive Use Agreements. (*Id.*, at pp. 33, 57, 58.) The Draft Order also correctly states that Cordua Irrigation District did not present evidence to support its assertions about potential groundwater impacts, and therefore that the SWRCB will not include Cordua's requested conditions in the order. (*Id.*, pp. 33-34.)

The Draft Order then states that the SWRCB will reserve jurisdiction to revisit the effects of the Yuba Accord groundwater-substitution transfers on groundwater conditions, if "groundwater supplies in either Yuba basin drop below the levels seen in Fall 1991." (*Id.*, p. 34.)

These provisions are appropriate for the <u>South</u> Yuba Basin. In this basin, groundwater storage dropped significantly between 1961 and 1982, and then rose after 1982, when deliveries of surface water to the lands over the South Basin began. (Exh. YCWA-1, p. 6-38.) By 1991, storage in this basin had recovered to the 1961 level, and since 1991, storage in this basin has increased by an additional 200,000 acre-feet. (*Ibid.*) The 1991 levels therefore are an appropriate trigger level for further actions.

On the other hand, the situation in the <u>North</u> Yuba Basin is very different. Because lands over the North Basin have historically received surface water since well before 1961, groundwater storage in this basin has not changed significantly since 1961 and today's groundwater storage is not

significantly different from the storage that was present in 1991. (*Id.*, p. 6-41.)¹ During the hearing, in response to cross-examination questions from Cordua's attorney, one of YCWA's expert witnesses explained that, for this reason, a pumping limit based on 1991 levels would not be appropriate for the North Yuba Basin. (RT 70-71.) Also during the hearing, in the testimony that the Draft Order cites for the proposed groundwater conditions for both basins, one of YCWA's expert witnesses clearly stated that using the 1991 level was an appropriate trigger only for the South Yuba Basin. (RT, p. 53, lines 5-7.)

For these reasons, the Draft Order incorrectly would apply conditions that are appropriate for the South Yuba Basin to the North Basin as well, where such conditions are not appropriate. For the North Yuba Basin, terms 8 and 10 on pages 57 and 58 of the Draft Order are sufficient to ensure that the Yuba Accord will not have any unreasonable effects on groundwater.

YCWA's requested changes to the Draft Order to address this problem are attached to these comments at tab 4.

5. Retention of RD-1644 water temperature requirements

During the 2000 SWRCB hearing that ultimately led to RD-1644, witnesses of the Department Fish and Game ("DFG") and the National Marine Fisheries Service ("NMFS") asked the SWRCB to impose water temperature requirements of 56° F year-round at Daguerre Point Dam, and 56° F during October through June and 60° F during July through September at the Marysville Gage. (RD-1644, pp. 83-84.) Because implementing these requirements would not have been feasible, RD-1644 did not include them in its final order. (*Id.*, pp. 84-85.) But, to attempt to reduce water temperatures in the Lower Yuba River to levels that would approach these proposed requirements, RD-1644 required YCWA to "diligently pursue" development of the Narrows 2 Powerhouse Intake Extension Project, which would allow the Narrows 2 Powerhouse to receive water from deeper in Englebright Reservoir, where the water is cooler. (*Id.*, pp. 86-87, 176-177.) RD-1644 also retained the SWRCB's continuing authority to establish Lower Yuba River water-temperature requirements. (*Id.*, p. 178.) Subparagraph a. of this paragraph 2 contains the water-temperature requirements, and subparagraph e. contains the retention of continuing authority. (*Id.*, pp. 176-178.)

During the negotiation of the Lower Yuba River Fisheries Agreement, the parties decided to take a different approach to address Lower Yuba River water temperatures. That agreement provides for instream flows in the Lower Yuba River during July through October that are significantly higher than the corresponding long-term instream-flow requirements in RD-1644. (Compare exh. YCWA-9, exh. 1 with RD-1644, p. 174.) With these higher flows, water temperatures at the Marysville Gage will be up to 2° F lower during July through October than they would have been under the RD-1644 long-term requirements. (Exh. YCWA-1, p. 9-50; see Draft Order, fig. 6.) As a result of this improved water-temperature regime, the parties to the Fisheries

¹For reference, copies of Figures 6-13 and 6-16 from the Yuba Accord Draft EIR/EIS (exh. YCWA-1), which show these large differences in historical storage amounts, are attached to these comments at tab 13.

Agreement agreed that deleting paragraph 2 on pages 176-178 of RD-1644 would be a condition precedent to the Fisheries Agreement going into effect. (Exh. YCWA-9, p. 7, § 4.1.1.)

Notwithstanding this agreement and the fact that no one during the 2007 SWRCB hearing opposed the deletion of these RD-1644 requirements, the Draft Order nevertheless would retain these requirements. The Draft Order states that such retention is appropriate because the Yuba Accord flows will not meet "CDFG and NMFS's water temperature objectives" or the "index temperature of 60° set in the Draft EIR/EIS." (Draft Order, p. 25.)

The provisions of the Draft Order retaining subparagraphs 2.a and 2.e of RD-1644 should be deleted for two reasons. First, it would not be appropriate for the SWRCB to base its order on the water-temperature objectives that DFG and NMFS advocated during the 2000 hearing, when DFG and NMFS now have agreed to the Yuba Accord's alternative approach to addressing water temperatures. Second, the Yuba Accord EIR/EIS's detailed analysis of the water temperatures that are predicted to occur in the Lower Yuba River with implementation of the Yuba Accord and the effects of these water temperatures on the various specifies of fish that are present there demonstrate that the Yuba Accord will not have any unreasonable effects on those fish (exh. YCWA-1, pp. 10-107 to 10-123), and there is no contrary evidence in the hearing record. Under these circumstances, subparagraphs 2.a and 2.e of the Draft Order are neither necessary nor proper.²

YCWA's requested changes to these provisions of the Draft Order are attached to these comments at tab 5.

6. Order that RD-1644 is a non-precedent decision

Government Code section 11425.60 authorizes the SWRCB to designate its water-right decisions and orders as precedent or non-precedent decisions. In the past, the SWRCB has designated water-right decisions and orders as non-precedent decisions under this statute when the decision or order involved site-specific facts. (See Decision 1645, p. 26; Order WRO 2004-0029, p. 2, fn. 2.) Because the changes requested in YCWA's change petition will significantly change the primary provisions of the order portion of RD-1644, the chain of analysis from findings to conclusions to order will be fundamentally altered, and any remaining precedential effect of RD-1644 therefore will be very questionable. Moreover, because the Yuba Accord contains detailed provisions that are specific to the Lower Yuba River, and that are based on a comprehensive settlement rather than an SWRCB decision, these provisions are not precedents that can be readily applied to other rivers or situations.

²YCWA does not object to the Draft Order's retention of subparagraph 2.d of RD-1644, which requires YCWA to collect extensive water-temperature data and to provide it to the SWRCB each year. YCWA already is complying this requirement. YCWA also does not object to the Draft Order's provisions that subparagraphs 2.b and 2.c of RD-1644 will go into effect when the Fisheries Agreement terminates.

For these reasons, and to avoid future uncertainties regarding the precedential effects of RD-1644, YCWA's written opening statement for this hearing asked the SWRCB to formally designate RD-1644 as a non-precedent decision. (YCWA Written Opening Statement, pp. 12-13.)

The Draft Order does not address this issue. YCWA's requested changes to the Draft Order to address this issue are attached at tab 6.

7. Characterization of Yuba Accord

On page 18, the Draft Order states that the Yuba Accord "represents a hard-won agreement." YCWA is concerned that this description implies that there were "winners," and thus "losers," in the Yuba Accord process, ignoring the broad consensus that is represented by the Yuba Accord. YCWA requests that this description be changed to "is a set of carefully negotiated agreements." YCWA's requested change to the Draft Order to address this point is attached at tab 7.

8. Federal Preemption

In section 4.4 on page 29, the Draft Order discusses the Anglers Committee's argument regarding preemption by the Federal Power Act, and the Draft Order correctly concludes that the SWRCB's authority to issue the order is exempt from Federal Power Act preemption because section 27 of the Act (18 U.S.C., § 821) gives the SWRCB authority to regulate YCWA's transfers of Yuba River Project water to the State Water Project and Central Valley Project for irrigation, municipal and other uses.

However, the Draft Order then goes on to state that the order also is exempt from federal preemption under the "market-participant exemption," citing *Engine Manufacturers Assn. v. South Coast Air Quality Management Dist.* (9th Cir. 2007) 498 F.3d 1031, 1040-1042. (Draft Order, p. 29.)

This statement is incorrect. Under the market-participant doctrine, federal preemption applies only to state regulation, and not to "proprietary" actions, where the state, like a private person, is buying, selling, owning or managing property. (498 F.3d, at pp. 1041-1042.) However, here the SWRCB is regulating YCWA's operations of the Yuba River Project, so there clearly is regulation by the state, and the market-participant doctrine therefore does not apply. Contrary to the Draft Order, this conclusion is not changed by the fact that one of YCWA's activities operating this project will be to transfer water to DWR and Reclamation. Even though such activities will occur, the SWRCB clearly still will be taking regulatory actions, so the market-participant doctrine is not applicable.

YCWA's requested change to the Draft Order to address this issue is attached at tab 8.

9. Language regarding groundwater-substitution transfers in Schedule 6 years

Section 5.1.3 of the Fisheries Agreement provides that, during Schedule 6 years (the driest water years besides Conference Years), YCWA will operate a groundwater-substitution program that will result in an additional 30,000 af of water not shown in the flow schedule flowing in the Lower Yuba River during the portions of such water years when this water is transferable. (Exh. YCWA-9,

p. 9, § 5.1.3.) In contrast, the subparagraph 1.a. on page 53 of the Draft Order simply would require YCWA to supply 30,000 af of "additional water." To confirm that this water will be transferable, YCWA requests that this language be changed to "groundwater-substitution transfer water."

YCWA's requested change to the Draft Order to address this issue is attached at tab 9.

10. Transfer reporting requirement

Subparagraph 9.b on page 57 of the Draft Order would require YCWA to include daily release rates of transferred water from New Bullards Bar Reservoir in its annual reports to the SWRCB of its Yuba Accord water transfers. Because Released Transfer Water actually will be measured at the Marysville Gage (see exh. YCWA-11a, p. 46, § 6.3.5), this language should be edited to instead refer to rates of transferred water at the Marysville Gage.

YCWA's requested change to the Draft Order to address this issue is attached to these comments at tab 10.

11. Draft Order, Figure 7

Figure 7 of the Draft Order incorrectly states that the requirements for minimum releases below New Bullards Bar Dam and the minimum flow requirements below Englebright Dam are in YCWA's Federal Power Act License 2246, but are not in the 1965 agreement between YCWA and DFG. These requirements actually also are in the 1965 agreement, in sections 1.4 and 2.2 of that agreement. For reference, a copy of the 1965 agreement is attached to these comments at tab 14. (The 1965 agreement was in exhibit DFG-27 for the 1992 SWRCB hearing. This exhibit is part of staff exhibit 1.a for the present hearing.)

YCWA's requested changes to correct this table are attached to these comments at tab 11.

12. Typographical errors

Pages 15, 26, 39 and 51 of the Draft Order contain some typographical errors. YCWA's recommended corrections of these errors are attached to these comments at tab 12.

Dated: March 11, 2008

BARTKIEWICZ, KRONICK & SHANAHAN A Professional Corporation

By Ole B. Lully
Alan B. Lilly

Attorneys for the Yuba County Water Agency

at p. 25 ["The delegation of authority to the Chief of the Division of Water Rights establishes a workable procedure allowing for adaptive management"].)

In recognition of the importance of acting quickly in adaptive management, the Deputy Director will raise any objections to the above-listed measures within 10 days. If the Deputy Director raises no objections, the measure will go into effect. This process mirrors the one already outlined in the Fisheries Agreement for changes to the instream flow schedules and for implementation of the discretionary dry year storage adjustment. (YCWA-9, Section 5.2.1, p. 14.)

4.2.1.5 Conference Year Flows

Additionally, for conference year flows, the State Water Board will reserve jurisdiction for the Deputy Director to determine flows by April 15 of the conference year, if the River Management Team's Planning Group does not put forward a suggestion for additional flows by that time. Because the particularities of each conference year will affect water availability, and therefore the balancing of reasonable uses on the Lower Yuba River, the State Water Board finds it reasonable to exercise approval authority over the conference-year suggestions for additional flows offered by the River Management Team's Planning Group, which will include federal and state fisheries agency representatives. The State Water Board will include the 1965 CDFG/YCWA agreement flows, as petitioned. The State Water Board will also include the 250 thousand-acre-foot acre-feet (TAF) diversion limit below Daguerre Point Dam for conference years in the permit. Setting the flows at this level will permit YCWA to operate as contemplated in the Yuba Accord. Furthermore, because of the likelihood that additional instream flows will be required during conference years, if the River Management Team is unable to reach consensus, or decides not to include any additional flows above those required in the FERC license during a conference year, the Deputy Director will be authorized to set minimum additional flows for that term, using real-time information.

4.2.1.6 Substitution of FERC Flows

YCWA's change petition requests that the State Water Board automatically substitute the flow schedule in the water right permit with that of the future long-term FERC license, which YCWA anticipates receiving after expiration of the current license in 2016. (YCWA-7, Ex. 7, p. 7.)

The State Water Board, under delegation to the Deputy Director, will have 10 days to object to the adaptive management measures described below. If the Deputy Director does not object, the recommendation of the River Management Team's Planning Group will go into effect. This condition will apply to the following adaptive management measures:

- Certain temporary alterations of instream flow requirements in March-October of Schedule 1 – 6 years, as described in Fisheries Agreement Section 5.1.4.
 (YCWA-9, p. 10.)
- The determination of whether to reduce instream flows at the Marysville gage in Schedule 5 years, as described in Fisheries Agreement, Section 5.2.1(3), and Exhibit 3. (YCWA-9, p. 14, Exhibit 3.).
- Any supplemental conference year flows. Additionally, the State Water Board reserves the authority, delegated to the Deputy Director, to set additional flows if no supplemental flow recommendations are provided by April 15 of the conference year.
- Determination of operation of NBBR upper and lower intakes and any temperature adjustment devices constructed at Englebright Dam.

The State Water Board will not approve deletion of Condition 3 in RD-1644, relating to ramping requirements. (RD-1644, pp. 176-179.).

The State Water Board will suspend operation of temperature planning Conditions 2(b) and 2(c) in RD-1644 for the duration of the Fisheries Agreement, subject to the requirement that the RMT's Planning Group's determinations of the operation of the upper and lower outlets at NBBR, and any temperature control devices that might be built at Englebright Dam, will be submitted to the Deputy Director for approval, as described above. The State Water Board will not delete temperature Conditions 2(a), (d) & (e), which have no substitute mechanism in the Fisheries Agreement.

The State Water Board will approve deletion of Condition 10 in RD-1644, relating to a dry-year reduction in flows.

- 1. Term 1 on pages 173-176 of Revised Decision 1644 is amended to read as follows:
- 1. For the protection of fish and other public trust resources in the lower Yuba River, permittee shall release, immediately upon adoption of this order, water in accordance with the flow schedules contained in Exhibit 1 of the Lower Yuba River Fisheries Agreement on file with the State Water Board as exhibit YCWA-9 of this proceeding. Streamflow shall be maintained at or above the flows specified as measured at the USGS gauging installations at Marysville and Smartville. Application of the flow schedules shall be in accordance with the following terms and conditions. Only those terms and conditions of the Yuba Accord Fisheries Agreement expressly stated below are included in the permit.
 - a. YCWA will comply with the Schedule 1 through 6 and A-B instream flow requirements in Exhibit 1 (plus the 30,000 acre-feet of additional water in Schedule 6 Water Years that is described in section 5.1.3 of the Fisheries Agreement) unless modified under the terms and conditions contained in this permit or by a subsequent order issued by the State Water Board.
 - b. The minimum flow requirements shall be maintained as measured by a 5-day running average of average daily streamflows with instantaneous flows never less than 90 percent of the specified flow requirements. In addition, instantaneous flows will not be less than the applicable flow requirements specified in the schedules for more than 48 consecutive hours.
 - c. During the parts of September of Schedule A Water Years when the Narrows II Powerhouse Full Flow Bypass is not available for operation, the Smartville Gage requirements will be 700 cfs or the full release capacity of the Narrows I Powerhouse at the Englebright Reservoir level that occurs at that time, whichever is less.
 - d. During conference years, YCWA shall release minimum flows to the Lower Yuba River in accordance with the applicable schedules specified in agreement between Yuba County Water Agency and the Department of Fish and Game dated September 2, 1965, without the reductions authorized by section 1.6 of that agreement, and shall release any supplemental flows recommended by the Planning Group and approved by the Deputy Director for the Division of Water Rights (Deputy Director) or, if no supplemental flows are recommended by the

- Planning Group by April 15 of the conference year, shall release any supplemental flows ordered by the Deputy Director.
- e. In conference years, YCWA's total diversions below Daguerre Point Dam will be limited to 250,000 af/year.
- f. Dry year storage may be adjusted during Schedule 5 years as described in Section 5.2.1(3) and Exhibit 3 of the Lower Yuba River Fisheries Agreement.
- g. If the River Management Team's Planning Group, as defined in the Yuba Accord Fisheries Agreement at Section 5.2, (YCWA-9, p. 13), recommends making a change to the flow requirements as described under Sections 5.1.4 and 5.2.1 (2) (3), (7); (YCWA-9, pp.10 and 14.), then the Deputy Director will issue any objection to such change within 10 days. If no objection is received, or if affirmative permission is granted sooner, the recommended changes will become effective. After expiration of the Fisheries Agreement, the management measures contemplated by this term may be recommended by the joint agreement of YCWA, CDFG, USFWS, and NMFS, rather than by the River Management Team's Planning Group.
- h. If the River Management Team's Planning Group recommends supplemental flows during a conference year, the Deputy Director will have ten days to approve the release amounts and schedule. If the Deputy Director does not make any adjustments, the recommended schedule will go into effect. If by April 15 of the conference year, the River Management Team's Planning Group has not recommended any additional flows, the Deputy Director reserves the right to set additional flows.
- i. If YCWA either fails, or anticipates failing, to maintain or measure the required flows, YCWA shall promptly report the failure or anticipated failure to the State Water Board. Subsequent enforcement action shall be at the discretion of the State Water Board.
- Term 2 in RD-1644, pages 176-178, is Supplemented with the Following Text, as new sub-part (f).
 - (f) The State Water Board will suspend operation of Terms 2(b) and 2(c), during the period of operation of the Yuba Accord Fisheries Agreement. During that period, the River Management Team's Planning Group's determinations of the operation



Tab 2

of the upper and lower outlets at NBBR, and any temperature control devices that might be built at Englebright Dam, will be submitted to the Deputy Director, and the permittee shall implement temperature control operations as approved. Upon termination of the Fisheries Agreement for any reason, Terms 2(b) and (c) shall automatically be reinstated as terms and conditions of RD-1644.

- 3. Term 10 in RD-1644, pages 181-183, is deleted.
- 4. The Following Terms are Added to RD-1644, directly following Term 11 on page 183.
 - 12. The State Water Board specifically reserves jurisdiction to add, amend, revise, supplement, or delete terms and conditions in this order upon issuance of a new license for the Yuba Development Project by the Federal Energy Regulatory Commission, if the State Water Board determines such changes to be necessary or appropriate in light of any changes to the release, bypass, reservoir capacity, fish protection or related requirements in the Federal Energy Regulatory Commission license.
 - 13. The Board reserves jurisdiction over the long-term changes authorized in this Order, to supervise the diversion, release, and use of water under this Order and to coordinate or modify terms and conditions, for the protection of other legal users of water, fish, wildlife, instream beneficial uses, and the public interest as future conditions may warrant. The Board delegates authority to the Deputy Director to take actions under this reservation of jurisdiction when the action is consistent with this Order.
- 5. Appendix 1 (Definition of Yuba River Index)

Appendix 1 of Revised Decision 1644 is revised and replaced with the definition of the North Yuba Index as described in Exhibit 2, Exhibit 4 and Exhibit 5 of the Lower Yuba River Fisheries Agreement on file with the State Water Board as Exhibit YCWA-9 of this proceeding.

IT IS HEREBY FURTHER ORDERED that the petition of Yuba County Water Agency (YCWA) for Long-Term Transfer of up to a total of 200,000 acre-feet per calendar year of water under Permit 15026 (Application 5632) until December 31, 2025 is approved, subject to the following

Tab 3

Remedial Order in *NRDC v. Kempthorne*, 2007 WL 4462391 (E.D.Cal.), available at: http://www.waterrights.ca.gov/HTML/loweryubariver.html, has implemented specific temporary pumping restrictions and USFWS and the NMFS have begun the process to issue new biological opinions that would affect operation of the CVP's and SWP's Delta pumps. (*Ibid.*)

As discussed above, the Interagency Environmental Program has identified three hypotheses regarding the potential contributing factors to the POD. (2007 POD Action Plan, p. 12.) Of these, the one potentially applicable to the proposed transfer is increased operation of the Delta pumps. (See YCWA-1, p. 10-32; YCWA-2, p. 4-11.) Because YCWA's transfer petition requests inclusion of the CVP's and SWP's Delta pumps as additional points of diversion, because the EIR/EIS for this project concludes that the Yuba Accord, in combination with existing and future projects, could contribute to cumulatively significant impacts on fisheries and aquatic resources in the Delta, and because modeling demonstrates an increase in Delta pumping in some years as compared to a situation without the project, the State Water Board must address the potential incremental impact of this transfer on the Delta environment. (YCWA-8, supplement p. 1; YCWA-1, p. 5-48.; YCWA-2, pp. 4-11, 4-17.)

Because of the POD, the State Water Board is particularly concerned about the incremental effects of the transfer during the period in which the Delta smelt and other pelagic species may be negatively affected by pumping. Parties to the Fisheries Agreement, who otherwise support implementation of the Yuba Accord, have expressed similar concerns. (YCWA-2, pp. 4-11 [CDFG comment that timing of YCWA transfer water "will be critical to minimizing incremental impacts to fish in the Delta"], 4-105 [Trout Unlimited and The Bay Institute comments that they are concerned about pumping outside the summer months, when new incremental export impacts could occur]; RT p. 15:2-15.) While there is a great deal of uncertainty regarding the exact effects of Delta pumping on the POD in general and the Delta smelt in particular, some evidence suggests that winter and spring pumping is a significant factor in the decline. (IEP 2006-2007 Work Plan, pp. 16-17; YCWA-1, 10-33.) This also the timeframe in which DWR and YCWA witnesses testified that there would be very little, if any, transfer pumping in the Delta under the Yuba Accord. (YCWA-14, pp 13-14; YCWA-1, p. 3-8; DWR-4, p. 1.). Both with and without the Interim Remedial Order in NRDC v. Kempthorne, there would be no YCWA water transferred during this time period, in most years, but in very wet or very dry years there could be some transfers. (Ibid.; Transcript p. 169, lines 19-23; Draper Testimony, YCWA-13, p. 14, paragraph 66.) If there is such pumping, it would be limited to below roughly 20,000 af/year in



the November-June period, and to a pumping rate of 500 cfs. (RT, 167:3 to 168:10; YCWA-1, p. 3-8.)

Based on this evidence that transfers during the November through June time period will be small, and have a relatively small effect on Old and Middle River negative flows, the State Water Board will permit transfers in this sensitive time period, within the constraints that DWR and YCWA testified to as being within the modeled range: namely, limited to a pumping rate of 500 cfs, and an annual limit of 20,000 acre feet. This limit will ensure that the transfers during this sensitive period remain as small as expected, yet not interfere with the transfers as anticipated in the Yuba Accord.

Because of the small size of the transfer during the sensitive period, the State Water Board does not find that additional transfer restrictions should be imposed at this time. However, the State Water Board is aware that engoing research into the causes of the POD may shift the balance of what is considered unreasonable in the future. Therefore, the State Water Board will reserve the authority, delegated to the Deputy Director of Water Rights, to order YCWA transfer diversions at the Delta pumps to be reduced or halted at any time during the November through June time frame in which the effects of the diversions cause or threaten to cause a negative impact on fisheries in the Delta, based on real-time monitoring information.

Additionally, in anticipation of new information and a changing regulatory framework, the State Water Board will reserve the authority to review and make changes to the transfer portion of this order upon issuance of any Biological Opinion for the Central Valley Operations Criteria and Plan, if the Interim Remedial Order in *NRDC v. Kempthorne* is stayed or overturned on appeal, or upon issuance of a new FERC license for the Yuba Project.

These reservations of authority allow the State Water Board to act on best information before us now, yet maintain the flexibility to address the likely changes in both the scientific understanding of the Delta and in the regulatory structures that manage it.

4.3 Other Factors in Determining whether the Petitions are Reasonable

The Yuba Accord represents a significant achievement in bringing together parties with differing stakes in the water of the Yuba River, and very different starting points of view about its allocation. Most of the parties who objected to RD-1644 claiming the required instream flows

- Surface Water Supply and Management in the Yuba Region, the Delta Region and the Export Service Area
- Surface Water Quality in the CVP/SWP Upstream of the Delta Region and in the Delta Region
- 3) Fisheries and Aquatic Resources in the CVP/SWP Upstream of the Delta Region and in the Delta Region
- 4) Recreation in the CVP/SWP Upstream of the Delta Region and in the Delta Region.

As noted in Section 4.2.3 above, the State Water Board has imposed additional mitigation measures to help offset the potential incremental and cumulative impacts of this project on the Delta, including limiting the amount and rate of pumping during the November to June period, and allowing the State Water Board, through delegation to the Deputy Director, to immediately condition or halt pumping if it is causing or threatening to cause an unreasonable effect on Delta Fisheries. However, these additional mitigations are likely insufficient to account for all potential cumulative impacts of the project.

As described above (section 5.2.1), approval of the Yuba Accord will benefit public trust resources on the Lower Yuba River, will provide valuable data for other river reaches in the state, and will improve water reliability and management throughout the state. It will also allow for settlement of litigation concerning RD-1644; if that decision were vacated, the public trust values on the Lower Yuba River would be left severely under-protected. The Accord will benefit the economy of Yuba County, and the flood control management will bring humanitarian benefits, as well. The State Water Board finds that these benefits provide the justification to override the potential contribution of the Yuba Accord to cumulative significant effects.

7.0 SUMMARY AND CONCLUSIONS

7.1 Petition for Modification of Water Right Permit Nos. 15026, 15027 and 15030. The Petition is approved subject to the following conditions.

7.1.1 Instream Flow and Water Quality Requirements

The Fisheries Agreement flow schedule will be incorporated into the permits by reference.

The FERC license flows will be included in the permits by reference for conference years.

7.2.1 Conditions of Transfer

The Petition for Long-Term Transfer of up to 200,000 Acre-Feet per Year Under Water Right Permit No. 15026, subject to the following modifications:

Pumping during the November through June period will be limited to a rate of 500 cubic feet per second, with an annual limit on pumping of 20,000 acre-feet. During this time period, the State Water Board, through delegation to the Deputy Director, may further condition or cease water transfers under this order, if real-time monitoring data indicate a cause or the threat to cause a negative impact on Delta fisheries.

In the traditional July through October transfer period, water transfers under this order will be limited to a rate of 15,000 cubic feet per second, with a limit in this period of 200,000 acre-feet, as well as an annual total limit of 200,000 acre-feet.

The terms of the Yuba Accord Conjunctive Use Agreements will govern groundwater substitutions for transfer purposes.

Any water transfers under this order will be subject to DWR and USBR compliance with regulations under RD-1641, including compliance with the plans that are prerequisites for the use of Joint Points of Diversion, as well as compliance with all applicable biological opinions and any court orders.

7.2.2 Reservations of Jurisdiction

The State Water Board will specifically reserve jurisdiction to modify any action subject to this order or to amend or add any condition thereto:

- upon issuance of any new Biological Opinion for the Central Valley Operations Criteria and Plan or if the Interim Remedial Order in NRDC v. Kempthorne is stayed or overturned on appeal,
- upon issuance of a new FERC license for the Yuba River Development Project,
- at any time in which the groundwater aquifer levels in the North or South Yuba Basins fall below their autumn 1991 levels,
- upon a change in listing status of any species in the Delta.

terms and conditions. All existing terms and conditions of Permit 15026 as modified by the State Water Board Revised Decision 1644 (RD-1644) and this order remain in effect, except as temporarily amended by the following provisions:

- 1. The transfer of water is limited to the period from April 1, 2008 through December 31, 2025.
- 2. The place of use of Permit 15026 is amended as follows:

The authorized place of use is expanded to include the service areas of the State Water Project (as shown on maps 1878-1, 2, 3, & 4 on file with Application 5629) and the Central Valley Project (as shown on map 214-208-12581 on file with Application 5626).

3. The Clifton Court Forebay and the Jones Pumping Plant are temporarily added as points of rediversion under Permit 15026. During the time period between November 1 and June 30, rediversion of water at the Clifton Court Forebay and the Jones Pumping Plant is subject to a combined rate of rediversion of 500 cubic feet per second, and the annual limit of water transferable during this period is 20,000 acre-feet. During the time period between July 1 and October 31, the maximum combined rate of rediversion at the Clifton Court Forebay and the Jones Pumping Plant is 1,500 cubic feet per second.

During the time period between November 1 and June 30, the State Water Board reserves the authority, delegated to the Deputy Director to order YCWA transfer diversions at the Delta pumps to be reduced or eliminated at any time that the effects of the diversions cause or threaten to cause a negative impact on fisheries in the Delta...

4. Rediversion of water at the Clifton Court Forebay and the Tracy Pumping Plant pursuant to this Order is subject to compliance by the operators with the objectives currently required of the Department of Water Resources (DWR) and the United States Bureau of Reclamation (USBR) set forth in Tables 1, 2, and 3 on pages 181 to 187 of State Water Board Revised Decision 1641 (D-1641), including compliance with the various plans required under D-1641 as prerequisites for the use of the Joint Points of Diversion by DWR and USBR. Rediversion of water at the Clifton Court Forebay and the Tracy Pumping Plant pursuant to this Order is also subject to compliance by the operators with

groundwater users, and (c) the failure to condition the transfer will leave Yuba County in regulatory purgatory" vis-à-vis, groundwater pumping. (CID Closing Brief, p. 4, lines 14-28.) But YCWA and DWR already have agreed to specific groundwater monitoring, groundwater pumping operations, and third party impacts action plans to prevent the Water Purchase Agreement from unreasonably impacting Yuba Basin groundwater. (YCWA Reply Brief, pp. 2-4; YCWA-2, pp. 4-73 to 4-75; YCWA-3, Exhibit A, pp. 9-11.) CID did not present evidence to support the assertions that damage to local users was inevitable without a firm pumping limit, to demonstrate that the Yuba Accord Draft EIR/EIS mitigation measures are inadequate, or to demonstrate that damage to local users would occur if groundwater pumping levels dropped below those in the fall of 1991. Therefore the State Water Board will not include the requested conditions. However, to allay any concerns about the effectiveness of the mitigation measures YCWA has presented or about the availability of regulation over groundwater in Yuba County, the State Water Board will include a reservation of jurisdiction to revisit the transfers, should groundwater supplies in the South either Yuba basin drop below the levels seen in Fall 1991. Because modeling does not predict a drop below this level (RT, 52:4-53:14), it would be reasonable for the State Water Board to re-evaluate existing protections should these models prove to be inaccurate.

Given the projections regarding groundwater pumping, the mitigation measures adopted under CEQA, and the reservation of jurisdiction by the State Water Board, the State Water Board finds that the transfer will not injure or harm any legal users of Yuba Basin groundwater.

5.1.2 Effects on Legal Users of Water Outside of the Yuba Basin and Lower Yuba River

The proposed long-term transfer has the potential to impact legal users of water outside the region discussed in Section 5.1.1. Discussion of these impacts is divided into three regions (similar to those discussed in Section 2.1 of this Order): the reservoirs of the SWP and the CVP, the Feather River, and the Sacramento River; the Delta; and the San Luis Reservoir and service areas of the SWP and CVP located south of the Delta. Additionally, effects on region-wide water users are also discussed.

agriculture and the portions of the Yuba County economy that rely upon agriculture. (*Ibid.*)

- Local farmers will benefit from having to pump less groundwater to make up for deficiencies in their surface-water supplies under the Yuba Accord than they would have to pump under RD-1644. (YCWA-2; pp. 4-98 and 4-99; Table La2-2.)
- Under the Yuba Accord Conjunctive Use Agreements, YCWA will provide about \$4 million to the participating Member Units, which they will use to help make their landowners' wells available to pump groundwater. Also, YCWA will make additional payments to the Member Units to pay for the costs of pumping these wells for deficiency pumping. (YCWA-12, p. 4.)
- The Yuba Accord Conjunctive Use Agreement will also provide substantial additional
 economic benefits to the Member Units and landowners that participate in the Yuba
 Accord's groundwater substitution transfers. The Draft EIR/EIS estimates that these
 additional benefits will average \$625,000 per year, with average annual revenues to
 participating landowners ranging from \$6,000 to \$10,500. (YCWA-1; pp. 17-13; YCWA
 12, p. 4.)

The Final EIR/EIS for this project determined that there was a potential for significant groundwater impacts from the Yuba Accord, with potential impacts on local farmers. However, this potential impact was found to be mitigated to a less than significant level through implementation of a groundwater monitoring plan and a third-party impacts action plan. (YCWA-3, Appdx. A, pp. 9-11.) Additionally, the State Water Board will reserve jurisdiction to reopen approval of the water transfer if groundwater levels in the South Yuba Basin reach or go below the levels reached in 1991. (See discussion above, Section 5.1.1.)

The State Water Board has balanced the numerous economic benefits that the Yuba Accord would bring to Yuba County against the potential for negative groundwater impacts on local farmers, which has been fully addressed by the Yuba Accord mitigation measures and by the State Water Board's reservation of jurisdiction. The State Water Board finds, as required under Water Code section 386, that the transfer will not have an unreasonable impact on the economy of the local area.

such other agency or can and should be adopted by such other agency; or (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR. (CEQA Guidelines § 15091, subd. (a).) If approval of the project will cause an unmitigable significant impact, CEQA Guidelines § 15093 requires the approving agency to make a statement of overriding considerations, before approving the project. A responsible agency's role in considering alternatives and mitigation measures is limited to only the direct or indirect environmental effects of those parts of the project it decides to carry out, finance or approve. (CEQA Guidelines § 15096, subd. (g)(1).)

6.2.1 Significant Mitigable Effects

As discussed in the Draft EIR/EIS, the significant, mitigable effects of the Project within the State Water Board's purview are:

- 1) A change in groundwater pumping that could impact local groundwater users in the Yuba Region.
- 2) A change in salinity and chloride concentrations that could degrade water quality conditions in the Delta.
- 3) A change in reservoir refilling could impact water quality in the Delta or in the export service areas south of the Delta.

For each of these potential impacts, mitigations incorporated into the project and required as a condition of this order will reduce the impact to a less than significant level, and monitoring and reporting of compliance is required as part of this order. (*Id.* § 15091, subd. (d).)

6.2.1.1 A change in groundwater pumping that could impact local groundwater users in the Yuba Region.

The groundwater substitution portion of the Yuba Accord will result in increased groundwater pumping in some years. As described in section 5.1.1 above, YCWA will implement a Groundwater Monitoring and Reporting Program that will guide decisions regarding discretionary groundwater pumping under the Yuba Accord. (YCWA-2, pp. 6-8 to 6-13.) YCWA and the Member Units will also implement a Third Party Impacts Action Plan that will address third-party impacts related to the Yuba Accord's groundwater substitution program. Finally, the State Water Board will reserve jurisdiction to reopen the proceedings, should groundwater

aquifer levels in the South Yuba Basin fall below those recorded in 1991. With these mitigation measures, the State Water Board finds that the effect will be avoided or substantially lessened.

6.2.1.2 A change in salinity and chloride concentrations that could degrade water quality conditions in the Delta

The project could result in a change in salinity and chloride concentrations that could degrade water quality in the Delta. To mitigate this potential impact, YCWA will include "carriage water." (YCWA-2, p. 6-14.) "Carriage water" is an amount of water released in addition to that which will be pumped through the CVP or SWP pumps, which will be dedicated to increase Delta outflow in order to mitigate any changes in salinity and chloride concentrations in the Delta. Carriage water is calculated on a real-time basis using a DSM2 model, and generally results in additional releases of water between 0% and 25% of the amount of water to be transferred. Because YCWA will release additional water for Delta outflows, calculated at an amount to cause no increase in salinity or chloride concentrations in the Delta, the State Water Board finds that this effect will be avoided or substantially lessened.

6.2.1.3 A change in reservoir refilling could impact water quality in the Delta or in the export service areas south of the Delta

The Yuba Accord allows NBBR to be drawn down farther than it would under RD-1644 as it currently stands. Therefore, during the time in which NBBR is refilling (generally during February and March), less water may be released into the Lower Yuba River, which could in turn affect water quality in the Delta. YCWA operational flexibility will be utilized to ensure that refilling NBBR will not adversely affect water quality in the Delta. (YCWA-2, p. 6-15.) YCWA will use the water accounting mechanisms described in YCWA-11(a) Appendix E2 to ensure that any refill that occurs when the Delta is in balanced conditions will be released again when the Delta is in balanced conditions. The State Water Board finds that this potentially significant effect will be avoided or substantially lessened by YCWA's use of operational flexibility to not refill at times when Delta water quality would be impacted, and by the release of additional water to improve Delta water quality, should refill occur at these times.

6.2.2 Significant Unmitigable Effects and Statements of Overriding Consideration

The Project's significant unmitigable effects within the State Water Board's purview are all cumulative effects. They are the potentially significant and unavoidable cumulative effects on:

7.2.1 Conditions of Transfer

The Petition for Long-Term Transfer of up to 200,000 Acre-Feet per Year Under Water Right Permit No. 15026, subject to the following modifications:

Pumping during the November through June period will be limited to a rate of 500 cubic feet per second, with an annual limit on pumping of 20,000 acre-feet. During this time period, the State Water Board, through delegation to the Deputy Director, may further condition or cease water transfers under this order, if real-time monitoring data indicate a cause or the threat to cause a negative impact on Delta fisheries.

In the traditional July through October transfer period, water transfers under this order will be limited to a rate of 15,000 cubic feet per second, with a limit in this period of 200,000 acre-feet, as well as an annual total limit of 200,000 acre-feet.

The terms of the Yuba Accord Conjunctive Use Agreements will govern groundwater substitutions for transfer purposes.

Any water transfers under this order will be subject to DWR and USBR compliance with regulations under RD-1641, including compliance with the plans that are prerequisites for the use of Joint Points of Diversion, as well as compliance with all applicable biological opinions and any court orders.

7.2.2 Reservations of Jurisdiction

The State Water Board will specifically reserve jurisdiction to modify any action subject to this order or to amend or add any condition thereto:

- upon issuance of any new Biological Opinion for the Central Valley Operations Criteria and Plan or if the Interim Remedial Order in NRDC v. Kempthorne is stayed or overturned on appeal,
- upon issuance of a new FERC license for the Yuba River Development Project,
- at any time in which the groundwater aquifer levels in the North or South Yuba Basins fall below their autumn 1991 levels,
- upon a change in listing status of any species in the Delta.



- Upon issuance of a new license for the Yuba Development Project by the Federal Energy Regulatory Commission, if the State Water Board determines such changes to be necessary or appropriate in light of any changes to the release, bypass, reservoir capacity, fish protection or related requirements in the Federal Energy Regulatory Commission license.
- At any time in which the groundwater levels in the North or South Yuba groundwater basins go below 1991 levels, if the State Water Board determines such changes to be necessary or appropriate to protect legal users of water.
- Upon a change in listing status for any species in the Delta, if such change is
 appropriate to ensure that the actions approved in this order do not adversely impact the
 species, or that the protections specified in the order do not unduly interfere with the
 beneficial transfer of water.
- When appropriate to coordinate the operations of this project with (1) water quality objectives adopted to protect the beneficial uses of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Estuary) or (2) water right decisions or orders implementing the order. The State Water Board will make such additions or modifications to this order only when reasonably necessary to achieve the water quality objectives or protect the beneficial uses of water in the Bay-Delta Estuary.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on March 18. 2008.

	Jeanine Townsend Clerk to the Board	
	DRAFT	
ABSTAIN:		
ABSENT:		
NO:		
AYE:		

general and for the Lower Yuba River in particular, and concluded that construction of additional facilities was required to meet temperature requirements for anadromous fish. (RD-1644, pp. 78 – 87.) The parties to the Yuba Accord have taken a different approach to addressing water temperatures in the Lower Yuba River, and the detailed analyses in the Draft EIR/EIS conclude that the water temperatures that will occur under this alternative approach will not unreasonably affect fish in the Lower Yuba River. (YCWA-1, pp. 10-107 to 10-123; see Appendix, Figure 6.) It therefore is appropriate to delete Conditions 2(a) and 2(e) from RD-1644. YCWA's WY 2005-2006 operations report, required under RD-1644 conditions 1, 2, 3 and 7, demonstrates that operation under the Yuba Accord flows does not meet CDFG and NMES's maximum water temperature objectives for anadromous fish in the months of May through September, even in a wet year. (See Appendix, Figure 5.) Additionally, the wet year Yuba Accord flows did not meet the index temperature of 60° set in the Draft EIR/EIS, in August and September at the Marysville Gage.

Because the evidence does not demonstrate that temperature objectives will be met in the Lower Yuba River, and the Yuba Accord does not offer an alternate model for meeting these requirements, tThe State Water Board declines to delete Conditions 2 (a), (d)-and (e). YCWA already is collecting and reporting the water-temperature data that are required by this condition and is willing to continue to do so. To assure compliance with all public trust permit conditions, the State Water Board will also impose reasonable monitoring and reporting requirements.

4.2.2 Public Trust Obligations between the Lower Yuba River and the Delta

Because there is no evidence in the record that the Yuba Accord will cause unreasonable impacts on the public trust resources in the river reaches between the Lower Yuba River and the Delta, and the State Water Board will require compliance with the fisheries agreement flows, the State Water Board does not need to impose additional public trust protections for this area. (YCWA-1, pp. ES-10 to ES-36; YCWA-2, pp. 1-4 to 1-29)

4.2.3 Public Trust Obligations in the Delta

As described in section 2.5 above, the ecological health of the Delta is poor. Despite a range of regulatory measures imposed on diversions from the Delta, a number of pelagic organisms in the Delta are suffering a severe decline. (YCWA-1, p. 10-31; YCWA Closing Brief, p. 10; IEP 2006-2007 Work Plan, p. 1.) There is a great deal of uncertainty as to the various factors behind the pelagic organism decline (POD) and as to potential solutions to the decline, and scientists

The FERC license flows will be included in the permits by reference for conference years.

The State Water Board, under delegation to the Deputy Director, will have 10 days to object to the adaptive management measures described below. If the Deputy Director does not object, the recommendation of the River Management Team's Planning Group will go into effect. This condition will apply to the following adaptive management measures:

- Certain temporary alterations of instream flow requirements in March-October of Schedule 1 – 6 years, as described in Fisheries Agreement Section 5.1.4.
 (YCWA-9, p. 10.)
- The determination of whether to reduce instream flows at the Marysville gage in Schedule 5 years, as described in Fisheries Agreement, Section 5.2.1(3), and Exhibit 3. (YCWA-9, p. 14, Exhibit 3.).
- Any supplemental conference year flows. Additionally, the State Water Board reserves the authority, delegated to the Deputy Director, to set additional flows if no supplemental flow recommendations are provided by April 15 of the conference year.
- Determination of operation of NBBR upper and lower intakes and any temperature adjustment devices constructed at Englebright Dam.

The State Water Board will not approve deletion of Condition 3 in RD-1644, relating to ramping requirements. (RD-1644, pp. 176-179.).

The State Water Board will suspend operation of temperature planning Conditions 2(b) and 2(c) in RD-1644 for the duration of the Fisheries Agreement, subject to the requirement that the RMT's Planning Group's determinations of the operation of the upper and lower outlets at NBBR, and any temperature control devices that might be built at Englebright Dam, will be submitted to the Deputy Director for approval, as described above. The State Water Board will not-delete temperature Conditions 2(a), (d) & (e), because of which have no substitute mechanism in the Fisheries Agreement's acceptable alternative method of addressing water temperatures.

that agreement, and shall release any supplemental flows recommended by the Planning Group and approved by the Deputy Director for the Division of Water Rights (Deputy Director) or, if no supplemental flows are recommended by the Planning Group by April 15 of the conference year, shall release any supplemental flows ordered by the Deputy Director.

- e. In conference years, YCWA's total diversions below Daguerre Point Dam will be limited to 250,000 af/year.
- f. Dry year storage may be adjusted during Schedule 5 years as described in Section 5.2.1(3) and Exhibit 3 of the Lower Yuba River Fisheries Agreement.
- g. If the River Management Team's Planning Group, as defined in the Yuba Accord Fisheries Agreement at Section 5.2, (YCWA-9, p. 13), recommends making a change to the flow requirements as described under Sections 5.1.4 and 5.2.1 (2) (3), (7); (YCWA-9, pp.10 and 14.), then the Deputy Director will issue any objection to such change within 10 days. If no objection is received, or if affirmative permission is granted sooner, the recommended changes will become effective. After expiration of the Fisheries Agreement, the management measures contemplated by this term may be recommended by the joint agreement of YCWA, CDFG, USFWS, and NMFS, rather than by the River Management Team's Planning Group.
- h. If the River Management Team's Planning Group recommends supplemental flows during a conference year, the Deputy Director will have ten days to approve the release amounts and schedule. If the Deputy Director does not make any adjustments, the recommended schedule will go into effect. If by April 15 of the conference year, the River Management Team's Planning Group has not recommended any additional flows, the Deputy Director reserves the right to set additional flows.
- i. If YCWA either fails, or anticipates failing, to maintain or measure the required flows, YCWA shall promptly report the failure or anticipated failure to the State Water Board. Subsequent enforcement action shall be at the discretion of the State Water Board.
- Subparts (a) and (e) of Term 2 in RD-1644, pages 176-178, are deleted. This Term
 2 is Supplemented with the Following Text, as new sub-part (f).

DRAFT - February 29, 2008 Figure 5

DFG-and-NMFS-REVISED RECOMMENDED WATER TEMPERATURE-REQUIREMENTS (°F) (2000) (RD-1644, Table 12. p. 84)

TARGET	Spring-run, fall-run Chineok, steelhead			Spring-run, fall-run Chinook, steelhead		
SEP	5.6	58.2	58.4	09	6.19	60.5
AUG	95	57.1	58.8	09	6.09	61.6
TOP	95	Recording Problems	9:65	09	58.7	623
NAf	95	Recording Problems	58.9	95	57.1	62.0
MAY	96	53.3	56.1	99	54.2	58.6
APR	95	49.7	54.9	95	50.4	55.9
MAR	95	46.8	51.1	95	47.8	48.8 52.1
FEB	95	47.0	47.6	95	47.9	48.8
NVf	95	Recording	45.3	956	49.1	46.3
DEC	95	Recording Problems	48.2	95	90.03	49.4
10N	56	Recording Problems	51.9	56	53.6	53.7
130	956	Recording	55.6	95	58.3	58.0
DFGANMFS Recommended Water Temperature (=F)	Daguerre Dam	Recorded Average Temperature (WY2005-2006)*	Reported Average Temperature (WY2006-2007)*	Marysville Gage	Recorded Average Temperature (WY 2005-2006)*	Recorded Average Temperature (WY 2006-2007)*
	Dag	Reek Tem (WY	Rese Tem (WY	Mary	1-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8	Reek Tem (WY

^{*} YCWA Annual Operations Report (WY 2005-2006 and WY 2006-2007)

7.2.3 Summary of Findings

The record shows that the requested transfer is in accord with the State Water Board's responsibilities under the public trust and reasonable use doctrines.

The record shows that the requested transfer, as conditioned, will not injure any legal user of water.

The record shows that the requested transfer, as conditioned, will not unreasonably harm fish, wildlife, or other instream beneficial uses of water.

Approval of the Transfer Petition is in compliance with the California Environmental Quality Act. Mitigation measures described in Section 6.2.1 will avoid or substantially lessen significant, mitigable changes in (1) salinity and chloride concentrations that could degrade water quality conditions in the Delta; (2) groundwater pumping that could impact local groundwater users and the Yuba Region; and (3) reservoir refilling that could impact water quality in the Delta, or in the export service areas south of the Delta. The benefits of the Yuba Accord, override the contribution of the Yuba Accord, to cumulative unavoidable significant effects, as described in Section 6.2.2. The transfer will be subject to the additional mitigation measures as described in sections 7.2.1 and 7.2.2.

The record shows that the requested transfer, as conditioned, will not unreasonably affect the overall economy of the region from which the water is being transferred.

7.2.4 Non-Precedent Decisions

Because this order significantly changes the primary provisions of the order portion of RD-1644, and because this order relies on the specific facts of the Yuba Accord, this order and RD-1644 are not precedent decisions and may not be expressly relied on as precedents, in accordance with Government Code section 11425.60, subdivision (a).

ORDER

required for instream flows in below normal, dry and critical years; removing certain temperature and ramping requirements; removing dry-year adjustment provisions; eliminating permit flows in the driest years; changing the index used to determine water year types in the watershed; and substituting FERC flows for existing permit flows upon issuance of a new long-term FERC license to YCWA.

As noted above, RD-1644 expresses the State Water Board's best judgment of the flows necessary to balance protection of the public trust with consumptive needs on the Lower Yuba River, given the evidence in front of the Board at that time. New evidence presented at the December 5, 2007 hearing regarding impacts to the Lower Yuba River addressed the effect of implementing the proposed Yuba Accord, rather than the effect of implementing the petitioned-for changes, which would set flow schedules in the permits that are different from, the flows in the Yuba Accord.

4.2.1.1 Incorporation of Accord Flows

The State Water Board recognizes that the Yuba Accord is a set of represents a carefully negotiated hard-won-agreements among a wide range of interests. In order to enable the Yuba Accord to go into effect, yet still fulfill the State Water Board's public trust obligations, the State Water Board will incorporate by reference the flows contained in Exhibit 1 of the Fisheries Agreement into this order, with conditions governing the application of flow, including conditions allowing for adaptive management. This method is based on the model for flow incorporation suggested by both YCWA and the Department of Water Resources in their closing briefs.

Approving the changes as proposed in YCWA's Petition for Change, which would omit from the permits any requirement for compliance with the flows required under the Fisheries Agreement, would not be appropriate because the State Water Board has an independent duty to protect the public trust when feasible. A similar question of relying on third party agreements arose in *Central Delta Water Agency v. State Water Resources Control* Board (2004) 124 Cal.App.4th 245 [20 Cal.Rptr.3d 898]. In that case, the State Water Board had approved an appropriation of water, basing its public trust findings on a settlement agreement between the applicant and potential municipal water users that imposed water quality management measures. The court held that the third party agreement did "not satisfy the Water Board's independent duty to resolve the water quality issues and to place appropriate conditions in the permits." (*Id.* at 265 [20 Cal.Rptr.3d at 910.) Without evidence that the actual provisions of the permit, as proposed

YCWA-11(a) pp. 27-28 with YCWA-1 at p. B-182 [Draft EIR/EIS Appendix B2 at p. 28].) In the event that the EWA does not continue, the Draft Water Purchase Agreement states that Component 1 water would first be used for fisheries enhancement in the Delta in consultation with CDFG. If any water were left over, it would be used for water supply reliability purposes. The signed Water Purchase Agreement essentially reverses the priority of these uses, with Component 1 water being used first to make up for new restrictions on SWP or CVP operations, including the restrictions in NRDC v. Kempthorne, and then if any is left over, it would be used by DWR in consultation with CDFG for water supply reliability purposes consistent with subdivision (d) of section 79550 of the Water Code. The signed agreement also eliminates the previous limitation on the use of Component 1 water for meeting existing regulatory baseline requirements. (Compare YCWA-1 at p. B-162 [Draft EIR/EIS Appendix B2 at p. 8] with YCWA-11a at p. 9.) Because the State Water Board's finding that this transfer will not unreasonably affect fish, wildlife or other instream beneficial uses did not rely on the transfer being used for any particular purpose, this change does not affect the Board's decision. Both fisheries protection and enhanced water supply reliability are of significant benefit to the State.

4.4 Federal Preemption

Angler's Committee has argued that the State Water Board is preempted from acting on YCWA's petitions because YCWA is subject to the FERC License 2246, the hydropower license for the Yuba River Development. (Angler's Committee Closing Brief, pp. 2, 4.) Their closing brief may also be read to raise the same argument vis-à-vis DWR, whose California Aqueduct Project operates under FERC license 2426. (Angler's Committee Closing Brief, pp. 3-5.) The State Water Board's action is not subject to Federal Power Act preemption for two reasons. First, state authority over consumptive use or other non-hydroelectric power use rights is explicitly exempt from Federal Power Act preemption. (16 U.S.C., § 821; County of Amador v. El Dorado County Water Agency (1999) 76 Cal. App. 4th 931; see also discussion in RD-1644, pp. 136-39.) Here, the State Water Board's actions fall within this exemption because they involve modification of YCWA's water rights for irrigation and other non-hydroelectric power uses. Additionally, because DWR is a state agency and YCWA is a political subdivision of the State, and are operating their respective projects as market participants, rather than as regulators, both the changes they propose and State Water Board's actions in regulating their activities are likely subject to the market-participant exemption from federal preemption. (See Engine Manufacturers Asso. v. South Coast Air Quality Management District (9th Cir. 2007) 498 F.3d 1031, 1040-42 [discussing the market participant exemption from preemption].)

- 1. Term 1 on pages 173-176 of Revised Decision 1644 is amended to read as follows:
- 1. For the protection of fish and other public trust resources in the lower Yuba River, permittee shall release, immediately upon adoption of this order, water in accordance with the flow schedules contained in Exhibit 1 of the Lower Yuba River Fisheries Agreement on file with the State Water Board as exhibit YCWA-9 of this proceeding. Streamflow shall be maintained at or above the flows specified as measured at the USGS gauging installations at Marysville and Smartville. Application of the flow schedules shall be in accordance with the following terms and conditions. Only those terms and conditions of the Yuba Accord Fisheries Agreement expressly stated below are included in the permit.
 - a. YCWA will comply with the Schedule 1 through 6 and A-B instream flow requirements in Exhibit 1 (plus the 30,000 acre-feet of <u>groundwater-substitution</u> <u>transfer additional-water</u> in Schedule 6 Water Years that is described in section 5.1.3 of the Fisheries Agreement) unless modified under the terms and conditions contained in this permit or by a subsequent order issued by the State Water Board.
 - b. The minimum flow requirements shall be maintained as measured by a 5-day running average of average daily streamflows with instantaneous flows never less than 90 percent of the specified flow requirements. In addition, instantaneous flows will not be less than the applicable flow requirements specified in the schedules for more than 48 consecutive hours.
 - c. During the parts of September of Schedule A Water Years when the Narrows II Powerhouse Full Flow Bypass is not available for operation, the Smartville Gage requirements will be 700 cfs or the full release capacity of the Narrows I Powerhouse at the Englebright Reservoir level that occurs at that time, whichever is less.
 - d. During conference years, YCWA shall release minimum flows to the Lower Yuba River in accordance with the applicable schedules specified in agreement between Yuba County Water Agency and the Department of Fish and Game dated September 2, 1965, without the reductions authorized by section 1.6 of that agreement, and shall release any supplemental flows recommended by the Planning Group and approved by the Deputy Director for the Division of Water Rights (Deputy Director) or, if no supplemental flows are recommended by the

all applicable biological opinions, and any court orders applicable to these operations.

- 5. Municipal use, salinity control, and water quality control are temporarily added as purposes of use under Permit 15026.
- 6. The criteria delineated in the Reservoir Refill Account Provisions, Exhibit 2 to YCWA-11a, shall govern the conditions under which future refill of the reservoir space that results from water transferred from storage pursuant to this Order occurs. YCWA shall submit to the Deputy Director an accounting of the Impact Account completed under paragraph 11 of the Reservoir Refill Account Provisions by August 15 of each year, and shall submit to the Deputy Director a report of any impact account adjustments agreed to under paragraph 12 of the Reservoir Refill Account Provisions within 30 days after agreement.
- 7. During the period the transfer agreement is in effect, YCWA shall comply with all applicable requirements ordered by Revised Decision 1644, as amended by this order.
- 8. Groundwater substitution (increases the amount of groundwater pumped from the North and South Yuba Groundwater Basins in excess of that which would have been pumped in the absence of the transfer) shall be performed in accordance with the provisions contained in the Conjunctive Use Agreement portion of the Yuba Accord.
- 9. By June 1, of each year, YCWA shall provide to the Deputy Director a report describing the use of the water transferred pursuant to this Order and refill of storage resulting from this Order. The report shall include the following information:
 - a. General locations where the transferred water was used or stored;
 - b. The daily <u>flows release rates</u> of <u>released the transferred water at the Marysville</u> Gagefrom New Bullards Bar Reservoir;
 - c. The average daily streamflow measured at the USGS gauging stations located on the Yuba River at Marysville and Smartville;
 - d. The hourly temperature readings at the Smartville Gage, Daguerre Point Dam, and the

Tab 11

FIGURE 7

1965 YCWA/DFG AGREEMENT FLOWS (ALSO REQUIRED BY 1966 AMENDMENTS TO FERC LICENSE 2246)

Minimum Flow Requirements Below Daguerre Point Dam

Minimum Tie W Requirements Delew Dagaerre I emit Dam		
TIME PERIOD	FLOW REQUIREMENT BELOW DAGUERRE POINT DAM (as measured over crest of dam) (CFS)	
January 1 - June 30	245	
July 1 - September 30	70	
October 1 - December 31	400	

ADDITIONAL FLOWS REQUIRED BY THE 1966 AMENDMENTS TO

FERC LICENSE 2246

Minimum Releases Below New Bullards Bar Dam

TIME PERIOD	FLOW REQUIREMENT (CFS)
January 1 – December 31	5

Minimum Flow Requirements Below Englebright Dam

TIME PERIOD	FLOW REQUIREMENT (within the limits prescribed) (CFS)
October 16 to October 31	600 to 1,050
November 1 to November 30	600 to 700
December 1 to December 31	600 to 1,400
January 1 to January 15	1,000 to 1,850
January 16 to March 3	600

Tab 12

Jones Delta Pumping Plants. (Interim Remedial Order, p. 3.) The condition that significantly affects the proposed long-term transfer restricts average reverse flows in ORMR between about December 25, 2007 and June 20, 2008. (Interim Remedial Order, pp. 5-8.) These limits on average reverse flows tend to reduce the amount of CVP and SWP pumping in the Delta and the corresponding ability for water to be transferred through the Delta. This reduction in pumping between-will significantly reduce the amount of water which may be transferred during this period. (YCWA-14, p. 14.) Additionally, YCWA performed modeling that assumes that similar OMRM reverse flow pumping restrictions will remain in place after the Interim Remedial Order expires, upon issuance of the new OCAP BiOp. Based on this analysis, on average only 1.6% of the transfer total would be rediverted between January and June of each year. (YCWA-2, pp. 3-8.)

3.0 PROTESTANTS, PARTICIPANTS AND KEY ISSUES

3.1 Petitions Protestants

On June 29, 2007, The State Water Board issued public notices of YCWA's petition for modification and petition for long-term transfer of water. The State Water Board received protests from the South Delta Water Agency (SDWA) and the Anglers Committee of California (Anglers Committee). SDWA later withdrew its protest, and the State Water Board dismissed it. The Anglers Committee's protest was based on grounds that both the petition for modification and petition for long-term transfer of water raised environmental and public trust concerns. The Angler's Committee's protest was not resolved prior to the hearing: as a result, the State Water Board held a hearing on YCWA's petitions.

3.2 Hearing Participants

On September 6, 2007 and October 1, 2007, the State Water Board issued a Notice of Public Hearing and a Change to Notice of Public Hearing, respectively. YCWA, Anglers Committee, Cordua Irrigation District (CID) and DWR submitted notices of intention to participate in the hearing, and present direct testimony. CDFG, DWR, Kern County Water Agency and State Water Contractors, NMFS and USBR submitted policy statements supporting the Yuba Accord and recommending State Water Board approval of YCWA's petitions. The NGOs involved in the Fisheries Agreement negotiations recommended approval of the Accord, with some

The CDFG, USBR, Westlands Water District, State Water Contractors and Kern County Water Agency, the San Luis & Delta- Mendota Water Authority, Trout Unlimited, Friends of the River, South Yuba River Citizens League, (SYRCL), the Bay Institute and Public Trust Alliance also submitted notices of intention to appear, to present policy statements and to cross-examine witnesses or present rebuttal, but they did not present testimony.



Remedial Order in *NRDC v. Kempthorne*, 2007 WL 4462391 (E.D.Cal.), available at: http://www.waterrights.ca.gov/HTML/loweryubariver.html, has implemented specific temporary pumping restrictions and USFWS and the NMFS have begun the process to issue new biological opinions that would affect operation of the CVP's and SWP's Delta pumps. (*Ibid.*)

As discussed above, the Interagency Environmental Program has identified three hypotheses regarding the potential contributing factors to the POD. (2007 POD Action Plan, p. 12.) Of these, the one potentially applicable to the proposed transfer is increased operation of the Delta pumps. (See YCWA-1, p. 10-32; YCWA-2, p. 4-11.) Because YCWA's transfer petition requests inclusion of the CVP's and SWP's Delta pumps as additional points of diversion, because the EIR/EIS for this project concludes that the Yuba Accord, in combination with existing and future projects, could contribute to cumulatively significant impacts on fisheries and aquatic resources in the Delta, and because modeling demonstrates an increase in Delta pumping in some years as compared to a situation without the project, the State Water Board must address the potential incremental impact of this transfer on the Delta environment. (YCWA-8, supplement p. 1; YCWA-1, p. 5-48.; YCWA-2, pp. 4-11, 4-17.)

Because of the POD, the State Water Board is particularly concerned about the incremental effects of the transfer during the period in which the Delta smelt and other pelagic species may be negatively affected by pumping. Parties to the Fisheries Agreement, who otherwise support implementation of the Yuba Accord, have expressed similar concerns. (YCWA-2, pp. 4-11 ICDFG comment that timing of YCWA transfer water "will be critical to minimizing incremental impacts to fish in the Delta"], 4-105 [Trout Unlimited and The Bay Institute comments that they are concerned about pumping outside the summer months, when new incremental export impacts could occur]; RT p. 15:2-15.) While there is a great deal of uncertainty regarding the exact effects of Delta pumping on the POD in general and the Delta smelt in particular, some evidence suggests that winter and spring pumping is a significant factor in the decline. (IEP 2006-2007 Work Plan, pp. 16-17; YCWA-1, 10-33.) This also is the timeframe in which DWR and YCWA witnesses testified that there would be very little, if any, transfer pumping in the Delta under the Yuba Accord. (YCWA-14, pp 13-14; YCWA-1, p. 3-8; DWR-4, p. 1.). Both with and without the Interim Remedial Order in NRDC v. Kempthorne, there would be no YCWA water transferred during this time period, in most years, but in very wet or very dry years there could be some transfers. (Ibid.; Transcript p. 169, lines 19-23; Draper Testimony, YCWA-13, p. 14, paragraph 66.) If there is such pumping, it would be limited to below roughly 20,000 af/year



Because steelhead are a federally listed as threatened, this potential impact is of special concern.

Paul Bratovich, a fisheries expert testifying for YCWA, testified that the EIR/EIS's impact evaluation considered the overall impact on each species: it considered each species, each run, each life stage, each month that occurs during that life stage throughout the probability of occurrence in covering the suite of hydrologic scenarios. Because the overall effect from the entire suite of flows, temperatures, and habitat availabilities, at all months of the year and at all life stages, did not negatively impact the species, Mr. Bratovich concluded that the detriment to steelhead embryos would not constitute an unreasonable effect or an unreasonable impact on steelhead due to that one factor for that one-month period. (R.T., 126:6-126:19) Additionally, the modeled difference in temperatures between the No Project and Yuba Accord Alternatives is generally small. (See Figure 6 of this order; YCWA-1, p. 10-107 to 10-123.) Therefore, because of the overall suitability of conditions for the species across water year types and life stages, the steelhead would not be unreasonably affected by slightly higher temperatures in May, despite the low threshold for unreasonable impact for listed species.

The adaptive management measures that are part of the Fisheries Agreement, in combination with the increased monitoring and the studies funded by the RMF, allow a significant amount of fisheries-based adaptive management flexibility. (YCWA-9, pp. 14, 38.) For example, the RMT's Planning Group has the ability to recommend a shift in spring attraction flows in a given year, in order to encourage anadramous fish to spawn at a more temperature-appropriate time under that particular year's conditions. (YCWA-9, pp. 13-14) The same group may also decide to lower flows in some months of Schedule 5 years to ensure sufficient carryover storage in the event of a subsequent very dry year. (YCWA-9, p. 14, Exhibit 3.) The group also recommends the timing of a supplemental 30,000 AF of water in Schedule 6 years, for the time when the releases would be most beneficial, and can recommend additional flows in Conference years, based on real-time information regarding water availability and other conditions. (YCWA Exh-9, p. 14; YCWA-1, p. C-26.) While it is difficult to quantify the benefits

²⁹ For the period of record that was analyzed 1922 to 1994, there are four years that are Schedule 5 years when the storage adjustment would have potentially gone into effect. Three of those four years would have met the criteria of having storage at the end of September, below 400,000 acre-feet. Therefore, the mandatory action adjustment in flows at Marysville Gage would have gone into effect, which is a reduction inflow from 500 cfs to 400 cfs. The one year the storage would have been above 400,000 af, but below 450,000 af, an adjustment in flows would have been a discretionary action. (R.T., 131:18 – 132:15.)

7.2.1 Conditions of Transfer

The Petition for Long-Term Transfer of up to 200,000 Acre-Feet per Year Under Water Right Permit No. 15026, subject to the following modifications:

Pumping during the November through June period will be limited to a rate of 500 cubic feet per second, with an annual limit on pumping of 20,000 acre-feet. During this time period, the State Water Board, through delegation to the Deputy Director, may further condition or cease water transfers under this order, if real-time monitoring data indicate a cause or the threat to cause a negative impact on Delta fisheries.

In the traditional July through October transfer period, water transfers under this order will be limited to a rate of <u>1,500</u>15,000 cubic feet per second, with a limit in this period of 200,000 acrefeet, as well as an annual total limit of 200,000 acre-feet.

The terms of the Yuba Accord Conjunctive Use Agreements will govern groundwater substitutions for transfer purposes.

Any water transfers under this order will be subject to DWR and USBR compliance with regulations under RD-1641, including compliance with the plans that are prerequisites for the use of Joint Points of Diversion, as well as compliance with all applicable biological opinions and any court orders.

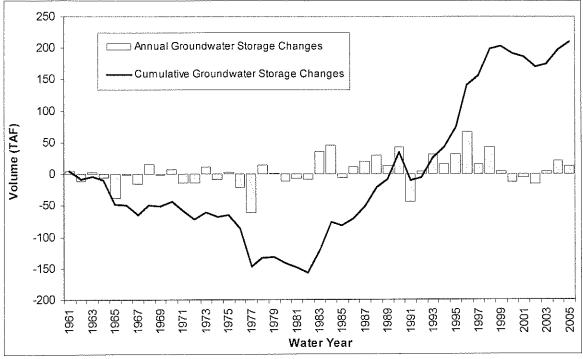
7.2.2 Reservations of Jurisdiction

The State Water Board will specifically reserve jurisdiction to modify any action subject to this order or to amend or add any condition thereto:

- upon issuance of any new Biological Opinion for the Central Valley Operations Criteria and Plan or if the Interim Remedial Order in NRDC v. Kempthorne is stayed or overturned on appeal,
- upon issuance of a new FERC license for the Yuba River Development Project,
- at any time in which the groundwater aquifer levels in the North or South Yuba Basins fall below their autumn 1991 levels,
- upon a change in listing status of any species in the Delta.

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Chapter 6



(1960 represents the baseline year from which changes in groundwater storage are calculated)

Figure 6-13. Estimated Groundwater Storage Changes in the South Yuba Subbasin from 1960 to 2005

South Yuba Subbasin

Figure 6-13 shows groundwater storage changes and cumulative storage changes in the South Yuba Subbasin from water years 1960 to 2005, assuming 1960 is the zero or baseline reference point from which changes in storage are calculated (Step 3 in the methodology). Annual storage changes between 1960 and 1982 were mostly negative, indicating a net loss of water in the groundwater basin due to extensive groundwater pumping. The abrupt decrease in the 1976 to 1977 period was a result of extensive drought in California. The beginning of a significant rebound of groundwater storage in 1983 was a result of the start of surface water delivery from YCWA to its Member Units through the South Yuba Canal. Storage decreases during 1991, 2001, and 2002 were due to groundwater substitution transfers. In general, significant changes in the long-term state of the South Yuba Subbasin were due, in part, to the following factors: (1) development of groundwater as an irrigation source, (2) surface water deliveries, (3) past groundwater substitution transfer, and (4) hydrological conditions.

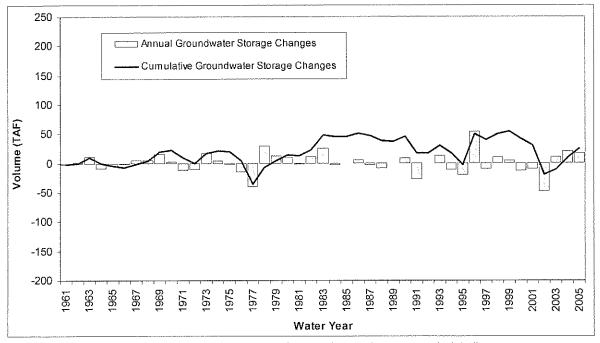
Among the factors listed above, development of groundwater as an irrigation source and surface water deliveries to the Member Units appear to have been the main causes of changes in historical groundwater levels and storage. Prior to the Yuba River Development Project, groundwater was the primary supply for agricultural development in the South Yuba Basin. As discussed in Section 6.1.1.5, since the delivery of surface water to the Member Units began in 1983, groundwater elevations have risen to historical high levels in some areas of the South Yuba Subbasin and have exceeded historical high levels in other areas. Activities undertaken through the groundwater substitution transfers have led to the further development of



Chapter 6

North Yuba Subbasin

Figure 6-16 shows groundwater storage changes and cumulative storage changes in the North Yuba Subbasin from water years 1960 to 2005, assuming 1960 is the zero or baseline reference point from which changes in storage are calculated (Step 3 in the methodology). Similar to the South Yuba Subbasin, the past transfer pumping resulted in negative storage changes. Total groundwater substitution pumping of 129 TAF during 1991, 1994, 2001, and 2002 resulted in a total storage decline of 100.3 TAF. Because the North Yuba Subbasin has been historically receiving surface water (Figure 6-17), the effects of surface water deliveries on groundwater levels are not as pronounced in the North Yuba Subbasin as in the South Yuba Subbasin. The longest period of groundwater recharge occurred between 1977 and 1985, as shown in Figure. During this period surface water deliveries remained relatively unchanged, implying that groundwater pumping would also remain relatively unchanged. The average recharge rate estimated for this period was approximately 11 TAF per year (Step 4 in the methodology) (Figure 6-18). This rate, however, would not be considered as a representative long-term recharge rate in the North Yuba Subbasin because recharge at this rate does not appear to be continuous over time.



(1960 represents the baseline year from which changes in groundwater storage are calculated)

Figure 6-16. Estimated Groundwater Storage Changes in the North Yuba Subbasin from 1960 to 2005

Tab 14

AGREEMENT

THIS AGREEMENT, made this 2nd day of September, 1965, between the YUBA COUNTY WATER ACKNOY, bereinefter called "AGENCY" and the STATE OF CALIFORNIA, represented by the CALIFORNIA DEPARTMENT OF FIGH AND GAME, hereinefter called "STATE", supersedes and replaces the preliminary agreement dated December 28, 1961, and the agreement dated November 23, 1962, between the parties hereto.

WITHESSETH:

WHOREAS, the Yuba River and its tributaries comprise a natural river system frequented by king salmon, steelhead trout, brown trout, rainbow trout, shad, and other fish; and

WHEREAS, the Water Rights Board of the State of California has issued its Decision No. Dll59 adopted December 19, 1963, and amended February 17, 1964, wherein Applications Nos. 5631, 5632, 15204, 15205, 15563, and 15574 of the ACENCY were approved under the terms and conditions of said decision, and permits were ordered to be issued to the ACENCY for the diversion and use of certain quantities of water from the Yuba River System for irrigation and municipal purposes and for the generation of electrical power; and

WHEREAS, the ACENCY has obtained a license from the FEDERAL POWER COMMISSION for the construction of the Yuba River Development designated in the Federal Power Commission proceedings as Project No. 2246; and

WIERRAS, since the issuance of said Decision No. D1159 and said Federal Power Commission license, the AGENCY has revised the Yuba River Development and intends to construct Hour House Diversion Dam on the Middle Yuba River, Log Cabin Diversion Dam on Oregon Creek, New Bullards Bar Dam and Reservoir and New Colgate Tunnel intake on the North Yuba River, New Marrows Power Plant, and Irrigation Diversion Works on the mainstem of the Yuba River in order to divert and store the water and apply the same to beneficial uses under permits to be issued to the AGENCY and under license from the Federal Power Commission; and

MEMMERS, the construction of the New Marrows Power Plant and Irrigation Diversion Marks may affect the spawning area presently utilized by king salmon and stacinged prout runs of the Yuba River and will require the release of water from Englebright Reservol. and Hour House Dam, Log Cabin 1 and the existing Colgate Dam for the preservation and enhancement of the fisheries of said river system below said dams:

NC., THEREFORE, in consideration of the mutual covenants herein contained, IT IS AGREED between the parties hereto as follows:

Section 1.1 - The following minimum flows shall be released into the Middle
Yuba River immediately below Hour House Diversion Dam for the maintenance of fishlife:

50 cubic feet per second or the natural flow, whichever is less, from April 15 through June 15

30 cubic feet per second or the natural flow, whichever is less, from June 16 through April $1^{\rm th}$

The above releases shall be measured at a stream gaging station located approximately 500 feet downstream of said dam.

Section 1.2 - The following minimum flows shall be released into Oregon Creek from Log Cabin Diversion Dam for the maintenance of fishlife:

12 cubic feet per second or the natural flow, whichever is less, from April 15 through June 15

 $8\ \mbox{cubic feet per second or the natural flow, whichever is less, from June 16 through April 14$

The above releases shall be measured at a stream gaging station located approximately 500 feet downstream of said dam.

Section 1.3 - The flows stipulated above in Sections 1.1 and 1.2 shall not fluctuate more than plus or minus 10 percent from the respective mean flows in any 24-hour period. The term "natural flow" in Sections 1.1 and 1.2 means the inflow to the respective reservoirs.

Section 1.4 - The following minimum flow shall be released for maintenance of fishlife from the existing Colgate Dam on the North Yuba River:

5 cubic feet per second year around

The flow shall be measured at a stream gazing station located approximately 500 feet downstream of said dam.

Section 1.5 - The AGENCY shall make releases of water from Englebright Reservoir to maintain in the Yuba River immediately below Daguerre Point Dam the following minimum flows for the maintenance of fishlife:

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"nese flow releases s' be in addition to releases a to satisfy existing downstream water rights and shall be measured over the crest of Daguerre Point Dam and through the fishways at that dem.

Section 1.6 - Water releases for fishlife shall be subject to reduction in critical dry years.

A critical dry year, as used herein, is defined as a water year for which the April 1 forecast of the California Department of Water Resources predicts that streamflow in the Yuba River at Smartville will be 50 percent or less than 50 percent of normal. The critical dry year provisions herein shall be effective from the time the aforesaid forecast is evailable until the April 1 forecast of the following year.

The water release curtailment schedule for critical dry years will be as follows:

Yusa	River	at	Smart	ville
Strea	rar low	Fo:	recast	Per
Cent	or No	ma.	<u> </u>	

Reduction in Water Releases for Fishlife, Per Cont

Normal	····	
150		
45		

15 50

40 or less

However, in no event shall water releases for fishlife below Daguerre Point Dam be reduced to less than 70 cubic feet per second.

Section 1.7 - A minimum pool shall be maintained in New Bullards Bar Reservoir at elevation 1730 feet.

Section 1.8 - The AGENCY shall clear vegetation in New Bullards Bar Reservoir from 1700 foot elevation to the 1955 foot elevation.

Where borrow areas are proposed, the top soil shall be stripped first and stockpiled. When borrow operations are completed, the area shall be graded as practicable, and the top soil shall be replaced where the topography permits. Borrow areas on U. S. Covernment land shall be revegetated with browse species. This stipulation does not apply to those areas which will be inundated by the reservoirs.

Section 1.9 - AGENCY shall mitigate damages to wildlife resulting from project activities in accordance with recommendations of the Department of Fish and Came. The extent of ACEMCY'S obligation under this Section will be determined through further investigation and negotiations.

Section 2.1 - During the period January 16 through October 15, flows released by the AGFNOS from the Englebright Reservoir for start-up, shutdown and operation of New Marrows power plant shall not fluctuate at an hourly rate of more than 500 cubic feet per second and releases shall be changed as gradually as possible within this hourly period.

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Section 2.2 - Ex for flood flows, and uncontract flows of tributary streams (Deer Crock and French Dry Creek) the releases from Englebright Dam during the period October 16 - January 15 shall be continuous and uniform, but the scheduled release for the specified period shall be within the limits prescribed below and these releases shall be measured at the same gaging station as described in Section 2.4:

COLEGE	RELEASES - C.F.S.
October 16 - October 31	600 - 1,050
November	600 - 700
December	600 - 1,400
January 1 - January 15	1,000 - 1,850

The release during the specified period shall not vary more than 15 percent from the scheduled uniform release and this variance shall be further minimized whenever possible.

Except in case of emergencies, during years other than critical dry years as defined in Section 1.6, minimum continuous release by the AGENCY from Englebright Reservoir during the period January 16 through March 31, shall be 600 cubic feet per second, subject to the above 15 percent variance.

Section 2.3 - The allowable reduction in the average continuous flow during the operational period of October 15 - 31 shall be minimized and limited to not more than 35 percent of the average flow during the preceding seven day period. The reduction in the average continuous flow during "ovember 1 - 30 shall be minimized and limited to not more than 15 percent of the average continuous flow during the preceding fifteen day period. The STATE shall be furnished with the proposed operation schedule five days before the scheduled release period with further notification of any subsequent change at or before the time it is made.

When the storage and runoff may allow a higher scheduled uniform flow during October and November without a reduction in flow in December, the uniform scheduled release in October and Movember may be increased.

Section 2.4 - Fluctuations in the streamflow are to be measured at the new Yuba River gaging station below Englebright Dam which will be constructed for the AGENCY by the U. S. Geological Survey at a location below the discharges of the two powerhouses.

Section 2.5 - The requirements of Sections 2.1 through 2.4 shall be subject to re-evaluation and revision at such time as Marysville or other downstream storage reservoir is constructed on the Yuba River.

Section 3.1 - I stances where the AGENCY or i ontractors propose to remove vegetation from a reservoir site, strip earth from the abutments, remove sand or gravel from a stream, wash gravel near a stream or carry on any activity in or along a stream which might result in muddying, silting or allowing to enter the stream any substance, which might injure fish life or fish habitat, the AGENCY shall be responsible for providing and maintaining in effective condition check dams, settling ponds, and such other features as may be required to maintain the fishery values of the streams below such operations.

The AGENCY shall be responsible for its contractor's compliance with Sections 5650, 5948, 12015, 1601, and 1602 of the California Fish and Game Code and other applicable statutes relating to pollution prevention or abatement.

Section 3.2 - Free public access shall be allowed within the proposed project boundary, except in areas where public safety, security of AGENCY'S property, or interference with project operations are the controlling factors.

Section 3.3 - It is recognized by the AGENCY and the STATE that the temperature of water released from the New Bullards Bar Reservoir during the spawning seasons of king salmon in the fall and shed in the spring can have an effect upon mitigation and enhancement of the salmon and shad runs in the Yuba River. The AGENCY shall so locate and operate the power intake and outlet works at New Bullards Bar Dam so as to provide water temperatures of the releases from New Bullards Bar Dam comparable to or better than present values with regard to the fishery resources.

Section 3.1: - ACENCY shall bear the cost of constructing, operating and maintaining fish screening facilities at the Irrigation Diversion Works.

Section 3.5 - Design of facilities referred to in Section 3.4 above will be in accord with the criteria described in Exhibit "A", dated August 9, 1965, attached hereto, and which is made a part of this agreement. If said criteria are revised, whereby the cost of fish facilities is increased, such increase shall not be the responsibility of the AGENCY.

Section 4.1 - The AGENCY will file a copy of this agreement with the State Water Rights Board and with the Federal Power Commission and will request emendment of Decision D1159 and F.P.C. License for Project \$2246 consistent with the provisions of this exceedent. By the execution of this agreement, the STATE bareby concents to the amendment of Decision D1159 and F.P.C. License for Project \$2246 consistent

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with the provisions or this agreement.

CALIFORNIA DEPARTMENT OF FISH AND CAME

By Director

YUBA COUNTY WATER ACERCY

By ////

By John S. Sanbrook, Secretary

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