DRAFT - February 29, 2008

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER WR 2008 - XXXX

In the Matter of Yuba County Water Agency's (YCWA) Petition to Modify Revised Water Right Decision 1644 (RD-1644) related to Water Right Permits 15026, 15027, and 15030 (Applications 5632, 15204, and 15574)
and
Petition for Long-Term Transfer of up to 200,000 Acre-Feet of Water Per Year from YCWA to the Department of Water Resources (DWR) and the United States Bureau of Reclamation (USBR) under Permit 15026 (Application 5632)

YUBA COUNTY WATER AGENCY
Petitioner and Permittee

SOURCE: Yuba River Tributary to Feather River

COUNTY: Yuba

ORDER APPROVING PETITION FOR MODIFICATION AND PETITION FOR LONG-TERM TRANSFER OF WATER

BY THE BOARD:

1.0 INTRODUCTION

The State Water Resources Control Board (State Water Board or Board) adopted Revised Water Right Decision 1644 (RD-1644) on July 16, 2003, to address fishery protection and water right issues involving the diversion and use of water from the Yuba River. The decision established schedules for interim and long-term instream flow requirements for protection of fish in the lower Yuba River between Englebright Dam and Marysville as conditions of water right permits for consumptive use held by Yuba County Water Agency (YCWA).[1] The long-term flow requirements established in RD-1644 are scheduled to come into effect on April 1, 2008. Until that date, RD-1644, as amended by Order WR 2007-0002-DWR,[2] requires YCWA to maintain instream flows in the lower Yuba River that are equal to or greater than specified interim flow

[1] Water Right Permits 15026, 15027, and 15030 (Applications 5632, 15204, and 15574).

[2] Order WR 2007-0002-DWR issued February 1, 2007 granted YCWA's 2006 petition to change the effective date of the long-term instream flow requirements established in RD-1644 to facilitate YCWA's 2007 Pilot Program. Order WR 2007-0012-DWR, which approved a short-term transfer of up to 125,000 acre-feet, requires compliance with the flow schedule in the *Fisheries Agreement for 2007 Lower Yuba River Pilot Program*, a flow schedule that was based on the proposed Yuba River accord and applies through March 31, 2008.

requirements. The interim and long-term flow requirements established in RD-1644 vary depending upon the time of year and the hydrologic conditions in a particular year, but the long-term flow requirements scheduled to come into effect on April 1, 2008 are higher than the interim requirements during parts of some years. (RD-1644, pp. 173-178.)

On April 27, 2007, YCWA filed a petition for modification of Permits 15026, 15027 and 15030 (Applications 5632, 15024 and 15574) and petition for long-term transfer of up to 200,000 acre-feet/year of water under Permit 15026 (Application 5632). The petitions were submitted to enact changes to the permits in order to implement the lower Yuba River Accord. Following notice to the public and interested parties, the State Water Board held a hearing on YCWA's petitions on December 5, 2007. Based on the evidence in the record and the findings below, the State Water Board concludes that it is appropriate to approve YCWA's petition for modification of water rights by making changes to the conditions of RD-1644 and to approve the YCWA's petition for long-term transfer of water, subject to the terms and conditions of this order.

2.0 BACKGROUND

2.1 General Project Description

The Yuba River is the fourth largest river in the Sacramento River Basin. The river provides water for agriculture, domestic use, hydroelectric power generation, and recreation, in addition to supporting numerous species of fish including salmon, steelhead and American shad. YCWA diverts water from the Yuba River for consumptive uses under Water Right Permits 15026, 15027, and 15030. The permits authorize diversion of water to storage at New Bullards Bar Reservoir and direct diversion of water for consumptive use at downstream locations.[3] Water diverted under YCWA's water right permits is delivered to Browns Valley Water District, Cordua Irrigation District, Hallwood Irrigation Company, Ramirez Water District, Brophy Water District, South Yuba Water District, and Dry Creek Mutual Water Company. Beginning in 1987, water appropriated under YCWA's permits has also been transferred to other water users in a series of temporary water transfers that were approved pursuant to provisions of Water Code section 1725 et seq. (RD-1644, pp. 20 and 21.) Over the last 20 years, the State Water Board has addressed numerous issues regarding water use and fishery protection in the lower Yuba River,

[3] In addition to providing water for consumptive use, water released from New Bullards Bar Reservoir is used for power generation at the Colgate Powerhouse and at the Narrows 1 and Narrows 2 Powerhouses below Englebright Reservoir. YCWA's power generation is authorized under eight separate water right licenses that are not the subject of this order.

a 24-mile section of the river between Englebright Dam and the confluence of the Yuba River with the Feather River south of Marysville. (See, e.g., RD-1644, pp. 1-7; Order WR 2003-0016.)

In addition to the Lower Yuba River, the project area for the Yuba Accord also includes the reservoirs of the State Water Project (SWP) and the Central Valley Project (CVP), the Feather River, Sacramento River and the San Francisco/Sacramento-San Joaquin Delta Estuary (Delta), and the service areas of the SWP and CVP located south of the Delta. These areas are shown on Figures 2-4, 2-5, and 2-6 of the Draft EIR/EIS. (YCWA-1, pp. 2-17, 2-19, 2-22.)

YCWA operates the Yuba River Development Project[4] (Yuba Project) in part to generate hydroelectric power pursuant to the provisions of Federal Power License 2246 administered by the Federal Energy Regulatory Commission (FERC). FERC originally issued License 2246 for the Yuba Project in 1963. In 1966, FERC issued an order amending the license to contain release and instream flow requirements similar to the 1965 YCWA/CDFG agreement.[5] The FERC license requires the Yuba Project to meet minimum instream flows throughout the year below New Bullards Bar Reservoir, Englebright Dam and Daguerre Point Dam. (YCWA-1 pp 5-24 to 5-26.) On November 22, 2005, FERC approved an amendment to YCWA's license for the Yuba Project that contains flow fluctuation criteria (ramping criteria) similar to those specified in RD-1644. (RD-1644, condition 3, pp. 177-178; YCWA-1, p 2-6.) Appendix Figure 1 shows the major water development facilities in the lower Yuba River Basin.

2.2 Instream Flow Requirements Established in RD-1644

The minimum instream flow requirements adopted in RD-1644 were originally established in Decision 1644, adopted on March 1, 2001. The requirements were re-adopted in RD-1644 following the State Water Board's consideration of additional evidence pursuant to the direction of the Yuba County Superior Court. (Order WR 2003-0016.) RD-1644 specifies two sets of instream flow requirements applicable to YCWA's consumptive use permits: (1) interim flow requirements that have been in effect since the original adoption of Decision 1644 in 2001; and (2) long-term flow requirements which are scheduled to come into effect on April 1, 2008.[6]

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[4] The Yuba River Development Project is a multiple-use project utilized for flood control, generation of hydroelectric power, irrigation, recreation, and protection of fish and wildlife.

[5] Instream flow requirements for the Yuba Project were originally specified in the September 2, 1965 agreement between YCWA and DFG. These requirements (further discussed in Section 2.3.1.2) were incorporated into the 1966 FERC license. (See Appdx., Figure 7.)

[6] The original effective date, April 21, 2006, of RD-1644's long-term flow requirements was extended by two years through approval of two change petitions (WR 2006-0009 and WR 2007-0002-DWR).

The long-term flow requirements were established based on the State Water Board's determination of the minimum average daily stream flows that must be provided in order to ensure adequate protection of public trust resources and instream beneficial uses in the lower Yuba River. (RD-1644, pp. 75-78 and 173-175.) When the State Water Board adopted Decision 1644 in 2001, however, California was experiencing electrical power supply shortages, and the Board was concerned about providing YCWA operational flexibility with regard to generation of hydroelectric power. Therefore, the State Water Board determined that it was appropriate to establish interim flow requirements and defer imposition of the long-term minimum flow requirements.[7] (RD-1644, pp. 34; 125-127; and 175-178.)

The interim and long-term flow requirements both vary depending on the water year classification of a particular year. Both sets of requirements specify minimum flows to be provided in wet, above normal, below normal, dry, and critical water years, as determined using the Yuba River Index described in Appendix I of RD-1644. In addition, the long-term flow requirements include separate flow requirements for years that are classified as "extreme critical." (RD-1644, pp. 173-178.) Due to the relative abundance of water in the Yuba River in wet and above normal years, the interim and long-term flow requirements for wet and above normal water year types are identical. In below normal years, the interim and long-term flow requirements are extremely similar; however, in dry, critical and extreme critical years, the differences between the interim and long-term flow requirements are more substantial. (*Ibid*.) The interim flow requirements specified in RD-1644 have been in effect since 2001. RD-1644 expressly recognizes that the instream flow provisions and other requirements established in the decision are subject to the continuing authority of the State Water Board and may be modified pursuant to the public trust doctrine, applicable provisions of the Water Code, and article X, section 2 of the California Constitution. (RD-1644, pp. 29-35; 172-173.)

Following adoption of RD-1644, YCWA, several other water purveyors in Yuba County, and several environmental groups filed five separate challenges to the decision in Yuba County Superior Court. Among other contentions in the litigation, YCWA and the other water purveyors argue that some of the flow requirements specified in RD-1644 are unsupported and excessive, while the environmental groups contend that the decision, and particularly the interim flows,

[7] The interim flow requirements are very similar to flows that were specified in a YCWA instream flow proposal that was submitted at the 2000 evidentiary hearing. (RD-1644, p. 127.)

provides insufficient protection for fish. The lawsuits have been consolidated under *Yuba County Water Agency v. State Water Resources Control Board,* Case No. CV026505, and assigned to the San Joaquin County Superior Court. Further action on the cases has been stayed in anticipation that an agreement among the parties could settle at least part of the litigation. The Lower Yuba River Accord, if enacted, would constitute such a settlement.

2.3 Lower Yuba River Accord

With the exception of the State Water Board, the parties to the consolidated litigation over RD-1644 have been involved in extended settlement negotiations to develop a comprehensive proposal that would meet the litigants' competing interests regarding use of water from the Yuba River.[8] On April 21, 2005, YCWA, several Yuba River water purveyors, the Department of Water Resources (DWR), the U.S. Bureau of Reclamation (USBR), the California Department of Fish and Game (CDFG), and four environmental organizations (NGOs) involved in the lawsuit[9] approved principles of agreements for a proposed settlement regarding instream flow requirements and other issues related to diversion and use of water from the lower Yuba River. (YCWA-10.)

In June 2007, YCWA and the United State Bureau of Reclamation (USBR) issued a Draft EIR/EIS for the Yuba Accord. (YCWA-1.) On October 17, 2007 YCWA and USBR released a Final EIR/EIS for the Yuba Accord. (YCWA-2.) The Draft EIR/EIS and Final EIR/EIS analyze the potential impacts of implementing the Yuba Accord that would be expected to occur on various resources. On October 23, 2007 the Board of Directors of YCWA certified the Final EIR/EIS in Resolution No. 2007-23. (YCWA-3.)

According to the Draft EIR/EIS, the Lower Yuba River Accord (Yuba Accord) is intended to resolve instream flow issues associated with operation of the Yuba Project in a way that would protect and enhance lower Yuba River fisheries and local water supply reliability, while providing revenues for local flood control and water supply projects, improving statewide water supply reliability and providing water for protection and restoration purposes in the

[8] State Water Board staff discussed with YCWA the procedural requirements that would have to be followed to implement various aspects of the settlement proposal, but was not involved in the negotiations among the parties regarding development of specific settlement proposals.

[9] The South Yuba River Citizens League (SYRCL), Friends of the River, Trout Unlimited and the Bay Institute signed a statement in support for the proposed fisheries agreement in the Yuba Accord. These four organizations, along with the California Sportfishing Protection Alliance, are involved in the lawsuit challenging RD 1644. The NGO's are not parties to or signatories to the water purchase and conjunctive use elements of the Yuba Accord.

Delta. (YCWA-2, p. 1-1.) It proposes to modify the instream flow requirements established by RD-1644, and to provide a level of protection for the lower Yuba River fisheries resources, that is equivalent to or better than that in RD-1644. (YCWA-9, p. 9.) The Yuba Accord includes three separate but related agreements: (1) a Fisheries Agreement, (2) a Water Purchase Agreement, and (3) Conjunctive Use Agreements.

2.3.1 Fisheries Agreement

2.3.1.1 Instream Flow Schedules

The Fisheries Agreement was negotiated among YCWA, state and federal fishery agencies, and the four NGOs. It will require YCWA to maintain instream flows in the lower Yuba River as specified in six different flow schedules, plus special "Conference Year" rules, based on different water year types. The Fisheries Agreement would be effective only until the Yuba Project receives a renewed long-term license from the Federal Energy Regulatory Commission.[10] The Fisheries Agreement was developed after several years of negotiation among representatives of YCWA, CDFG, the National Marine Fisheries Service (NMFS), the United States Fish and Wildlife Service (USFWS), and the four NGOs. The final Fisheries Agreement was signed and executed by YCWA, CDFG and the four NGOs in October of 2007. (YCWA-9.)

Exhibit 1 (Appendix Figure 2) to the Fisheries Agreement specifies six minimum instream flow schedules for the lower Yuba River at the Marysville and Smartville Gages during the term of the Fisheries Agreement. These schedules would apply in all but the 1 in 100 driest years, discussed in section 2.3.1.2. YCWA would also provide an additional 30,000 acre-feet of groundwater substitution water during Schedule 6 years, the timing of which would be determined by the River Management Team's Planning Group to protect fisheries resources during periods of water transfer. (YCWA-1, pp. 3-6 to 3-8.)

The Fisheries Agreement instream flow requirements would be based on the North Yuba Index,[11] which is defined in the Fisheries Agreement. (YCWA-7, Exhibits 2, 4.) The frequency of occurrence of year type designations under the North Yuba Index are shown in Appendix Figure 3. (YCWA-1, pp. 3-6 to 3-8.)

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[10] The Yuba Project's current license expires in 2016. (YCWA-1, p. 3-5, Figure 3-1.)

[11] The North Yuba Index is an indicator of the amount of water available in the North Yuba River at New Bullards Bar Reservoir (NBBR) that can be used to achieve flows on the lower Yuba River through operations of NBBR. The index comprises two components: (1) active storage in NBBR at the commencement of the current water year, and (2) total inflow to NBBR for the current water year, including diversions from the middle Yuba River and Oregon Creek to NBBR.

2.3.1.2 Conference Years

During Conference Years, YCWA would operate the Yuba Project so that flows in the Lower Yuba River comply with the instream flow requirements in YCWA's FERC License 2246, as amended in 1966, with some modifications.[12] (YCWA-9, p. 10; YCWA-1, pp. 5-24 to 5-26.) The 1966 FERC license contains release and instream flow requirements based on a 1965 agreement between YCWA and CDFG. (See RD-1644, pp. 18-19 [discussing the 1965 agreement].) Additionally, the River Management Team's Planning Group (discussed further in the next section), could agree to additional instream flows. (*Ibid.*) YCWA will also limit total diversions at Daguerre Point Dam (including Browns Valley Irrigation District's diversions into its Pumpline Canal) to a maximum 250,000 af/yr. (*Ibid*.)

2.3.1.3 River Management Team

The Fisheries Agreement will establish a River Management Team (RMT) that will include representatives of the participants in the Fisheries Agreement and the parties to the Transfer Agreement. The River Management Team will consist of a Planning Group and an Operations Group. The Planning Group will include representatives of each party to the Fisheries Agreement (YCWA, CDFG and the NGOs), and the Water Purchase Agreement, NOAA Fisheries, USFWS and Pacific Gas and Electric Company (PG&E). Section 5.2.1 of the Fisheries Agreement describes the range of the Planning Group's project management responsibilities. (YCWA-9, p. 14.)

The Operations Group will include one representative each of: (a) YCWA; (b) PG&E; (c) CDFG, NOAA Fisheries and USFWS, where the one representative will rotate between these three agencies; (d) the NGOs; and (e) DWR and Reclamation, where one representative will rotate between these two agencies. The Operations Group will plan implementation and Project operations to meet the recommendations of the Planning Group. (YCWA-9, p. 15.)

The RMT will make recommendations to YCWA on lower Yuba River operations, flow release scheduling, and expenditures for fisheries studies and other related activities. (YCWA-9, p. 13)

[12] Under the amended FERC license, YCWA is obligated to operate the Yuba Project to meet minimum instream flows throughout the year below NBBR, Englebright Dam and Daguerre Point Dam. The minimum instream flows specified in the 1965 YCWA/CDFG agreement, to be maintained below Daguerre Point Dam, are shown in Appendix Figure 7 of this order. However, in conference years, YCWA would not pursue any of the flow reductions authorized by article 33(c) of that license and would limit diversions below Daguerre Point Dam to 250,000 af/year. (YCWA-1, pp.5-24 to 5-26 and YCWA-9, p. 10.)

If Conference Year conditions are present or imminent, the RMT will review any strategic management plan prepared by YCWA for the operation of the Yuba Project. (YCWA-9, p. 10.)

2.3.1.4 River Management Fund

The River Management Fund (RMF) would fund a program of monitoring and evaluation studies regarding specific elements of the Fisheries Agreement that will include core studies to assess the conditions of the fisheries in the lower Yuba River. The RMF could also fund at least part of certain habitat improvement measures. The RMT would develop and oversee all studies and restoration actions. YCWA would provide $6 million to fund the RMF, contributing approximately $550,000 annually. In addition, CDFG and YCWA will make in-kind contributions of not less than $50,000 per year (CDFG) and $15,000 per year (YCWA). YCWA will also commit $300,000 for restoration pilot programs for the lower Yuba River. (YCWA-9, pp. 15-19, Exhibit 12.)

2.3.2 Water Purchase Agreement

The Water Purchase Agreement was executed on December 4, 2007 between YCWA and DWR and establishes the terms and conditions under which YCWA and its local irrigation districts/mutual water companies will provide water supplies for DWR and the USBR, including water for water supply reliability purposes.[13] The Water Purchase Agreement was developed through an extensive collaborative and negotiation process that involved YCWA, DWR, USBR, and SWP and CVP contractors. The agreement provides for DWR to pay for eight years of transfers to the Environmental Water Account (EWA) Program, and for certain dry-year supplies for SWP and CVP contractors until 2025. (YCWA-11a and YCWA-12.)

YCWA will provide transfer water by releasing water stored in New Bullards Bar Reservoir (NBBR). Some of the released water will be available as a result of reduced water deliveries, to water users that will pump groundwater instead of receiving project surface water. The transferred water will include water released to meet instream flow needs on the Yuba River pursuant to the Fisheries Agreement flow schedules. The range of water volumes made available as a result of the executed Water Purchase Agreement, will be segregated into four component volumes of water. These component volumes reflect variation in pricing, purpose of

[13] USBR has decided to delay signing the negotiated Water Purchase Agreement with YCWA until completion of new Biological Opinions for the operation of the CVP Delta Pumps. (YCWA-2, p. 3-1.). However, it is anticipated that DWR will wheel water provided under the Water Purchase Agreement for the USBR and deliver that water to the USBR's contractors. (*Ibid.*; R.T. 11: 9-22.)

use and delivery timing, as described in the bullets below. During Conference Years, YCWA will not be obligated to deliver any water, though any Component 1 water not delivered must be "made up for" in future years. (YCWA-11a, pp. 8-18.)

- Component 1 – For the first 8 years of the water purchase agreement, DWR will purchase 60,000 acre-feet to be used for the EWA. Consistent with CALFED Bay-Delta Program (CALFED) Record of Decision, DWR will use bonding authority pursuant to Proposition 50, California Water Code section 79550, subdivision (d), as the funding source for its acquisitions of water for the CALFED EWA, and will use the water to make up for water supply losses resulting from fishery protection measures. (YCWA 11a, p.2; see Water Code § 79550, subd. (d).) If the EWA terminates before 2016,[14] Component 1 water remaining to be delivered under the agreement will be managed annually, as follows: (a) DWR will first use Component I water to enhance water supply reliability in light of current and future mandatory pumping restrictions and (b) DWR will coordinate with DFG regarding the use of any remaining Component 1 water, to ensure that the use of the water is consistent with the water supply reliability obligations of the funding source with which the water was purchased. (YCWA-11(a), pp. 27-28; Water Code, § 79550, subd. (d).)
- Component 2 – YCWA will provide DWR 15,000 af of water in any dry year and 30,000 af of water in any critical year.
- Component 3 – Under certain SWP and CVP delivery allocation scenarios, YCWA will make available a total of 40,000 af for DWR.
- Component 4 – In all water year types, YCWA will inform DWR of the quantity of any additional transfer water available from surface and groundwater supplies. DWR will then notify YCWA if DWR will opt to take delivery of any or all Component 4 water.

2.3.3 Conjunctive Use Agreements

The Conjunctive Use Agreements call for YCWA and seven of the local irrigation districts/mutual water companies (hereafter referred to as the Member Units[15]) it serves in Yuba County to implement an array of conjunctive use measures. Under these agreements,[16] the participating

[14] Funding for the EWA is currently scheduled to terminate at the end of 2008. (RT p. 161:23 – 162:18.)

[15] The Member Units are: Brophy Water District, Browns Valley Irrigation District, Dry Creek Mutual Water Company, Hallwood Irrigation District, Ramirez Water District, South Yuba Water District and Wheatland Water District.

[16] The various Member Units are deciding on whether to execute Conjunctive Use Agreements with YCWA. As of the December 5, 2007 hearing, five Conjunctive Use Agreements had been signed. (YCWA-12, p.4; RT, 48:21-22.)

Member Units will make arrangements with the farmers within the Member Units' service areas to pump groundwater in lieu of using surface water in some years, which will free up some surface-water supplies for transfer through groundwater-substitution transfers from YCWA to DWR under the Water Purchase Agreement. YCWA will compensate the participating Member Units, and these Member Units in turn will compensate the participating farmers, for this groundwater pumping. These Conjunctive Use Agreements also will provide for other payments from YCWA to the participating Member Units for compensation to the farmers for their costs to help maintain wells for participation in the groundwater-substitution transfers and for compensation for the groundwater pumping for local uses that is necessary in very dry years when YCWA does not have sufficient surface water supplies for the Member Units. (YCWA-12, p.2.)

2.3.4 2006 and 2007 Pilot Transfer Programs

During 2006 and 2007, YCWA operated the Yuba Project to maintain flows in the lower Yuba River at or above the applicable amounts in the flow schedules in Exhibit 1 of the Fisheries Agreement under the Yuba Accord. The Pilot Transfer Programs called for providing the flow levels specified in Exhibit 1 of the Fisheries Agreement and proposed temporary water transfers to DWR for use in the CALFED EWA and for possible use in DWR's 2006/2007 Dry-Year Water Purchase Programs. The stated goals for the Pilot Programs included the following:

- To implement the Yuba Accord flow schedules.
- To make temporary water transfers in 2006 and 2007 to produce revenue to help pay for the Yuba Accord EIR/EIS and fisheries studies.
- To evaluate the Yuba Accord flows and provide funding for a River Management Fund.
- To evaluate accounting rules developed for the Yuba Accord Water Purchase Agreement.
- To commence the RMT process.

As a result of the implementation of the Pilot Transfer Programs, members of the RMT met regularly during 2006 and 2007 to discuss and to provide input to YCWA regarding Yuba Project operations and to develop fisheries monitoring and study plans for 2008 and beyond. YCWA made two $550,000 payments to the River Management Fund (RMF) out of the EWA transfer contract revenues, with one payment on July 20, 2006 and the other payment on July 18, 2007. YCWA and CDFG also both made substantial in-kind contributions to the RMF during 2006

under the 2006 Pilot Program. YCWA and CDFG are in the process of fulfilling their respective in-kind contribution obligations under the 2007 Pilot Program. YCWA presented testimony indicating that the RMT is overseeing water temperature monitoring, spawning escapement, rotary screw trapping and upstream migration (VAKI fish counter) studies, with the spawning escapement and rotary screw trapping studies being funded by the RMF. (WRO 2007-0002-DWR, pp.4-7 and YCWA-12, p. 2.) Evidence submitted by YCWA also indicates that DWR, USBR, NMFS and CDFG continued to support the Yuba Accord. (YCWA-29; YCWA-30; YCWA-31.)

According to testimony presented by YCWA, the 2006-2007 Pilot Transfer Programs have shown the durability of the Yuba Accord by testing the Yuba Accord under both wet and dry hydrologic conditions and by providing over $1 million of funding for the RMT. The RMT planning and study efforts have provided an opportunity to test other provisions contained in the Yuba Accord agreements. (RT, 45:5-46:19.) As noted by submitted policy statements, all parties to the Fisheries Agreement still support the implementation of the Yuba Accord, although the NGOs expressed reservations about certain aspects of the Delta transfer.

2.3.5 Related State Water Board Orders

During 2005 and 2006, YCWA filed Petitions to Change the effective date of the long-term instream flow requirements specified in RD-1644 and Petitions for Temporary Transfer of Water. The petitions were filed to facilitate the implementation of YCWA's 2006 and 2007 Pilot Transfer Programs. The State Water Board adopted Orders WR 2006-0009, WR 2006-0010-DWR, WR 2007-0002-DWR and WR 2007-0012-DWR, that changed the effective date of the long-term instream flow requirements specified on pages 173 to 175 of RD-1644 to April 1, 2008, and approved YCWA's requested short-term transfers of water on conditions that included requirements for compliance with the flow schedules in the Pilot Programs.

2.4 Substance of the Pending Petitions

On April 27, 2007, YCWA filed the pending petition for modification of Permits 15026, 15027 and 15030 (Applications 5632, 15204 and 15574), pursuant to California Code of Regulations, title 23, section 791, subsection (e). The same day, YCWA filed the pending petition for long-term transfer of water under Permit 10506 (Application 5632), pursuant to Water Code section 1735. The petitions were submitted to enact changes to YCWA's permits to implement the Yuba Accord.

2.4.1 Petition for Modification

The petition requests changes to the following parts of RD-1644:

1. Revisions to paragraph 1 on pages 173-176 of RD-1644.
2. Deletion of paragraphs 2, 3 and 10 on pages 176-179 and 181-183 of RD-1644.
3. Revisions to Appendix 1 of RD-1644. (YCWA-7.)

The requested revisions to paragraph 1 (pages 173-176 of RD-1644) are described in YCWA's petition. (YCWA-7, Ex. 7.) The revisions would: (1) delete RD-1644's long-term instream flow requirements; (2) amend RD-1644's currently described minimum "interim" instream flow requirements by (a) reducing specified flows in "Below-Normal" years during the period late April through June, (b) reducing flows in "Critical" years during the period mid-October to mid-April, and (c) including a new "Conference" year flow regime; (3) reclassify these instream flow requirements as permanent; (4) make the flow schedule subject to the North Yuba Index, as opposed to the Yuba River Index; (5) make the Yuba Accord Fisheries Agreement flow schedule the permit schedule, should the Fisheries Agreement terminate early; and (6) replace all flows with FERC flows once a new long-term FERC license is issued.

Conditions 2, 3, & 10, which YCWA proposes deleting, are, respectively, temperature conditions, ramping requirements, and a deficiency clause, which permitted YCWA to request a reduction in instream flow requirements in very dry years.

The changes to Appendix 1 would define the North Yuba Index.

YCWA's petition also requests that the State Water Board adopt an order that finds that implementing the above specific changes and the proposed Yuba Accord Fisheries Agreement will provide a level of protection for fisheries resources in the Lower Yuba River during the term of the Fisheries Agreement that is equivalent to, or better than, that which RD-1644 provides. (YCWA-7.)

2.4.2 Petition for Long-Term Transfer

Pursuant to the Water Purchase Agreement, YCWA proposes to transfer up to 200,000 acre-feet of water per year under Permit 15026 (Application 5632) to DWR and, in the first eight years of the transfer agreement, to the EWA or substitute water supply reliability projects.

Water would be released from NBBR into Englebright Reservoir (via the Colgate Power House) to the Yuba River (through the Narrows II Powerhouse and Daguerre Point Dam) thence the Feather River thence the Sacramento River to the Delta. Water reaching the Delta would be available for use by DWR to provide salinity and water quality controls within the Delta or to export from the Delta at either the Clifton Court Forebay or the Jones Pumping Plant for use within the SWP or CVP service areas. (YCWA-8, pp. 1-16.) The anticipated maximum additional rate of rediversion at the Clifton Court Forebay or the Jones Pumping Plant is 1,500 cfs between July and October and 500 cfs during the remainder of the year. (DWR-4, p. 2.)

The water released for transfer consists of surface water held in NBBR, some of which consists of previously-stored water. The Water Purchase agreement includes provisions intended to ensure that future refill of water transferred from storage in NBBR (i.e., the yearly transfer total minus the total excess groundwater pumped) does not adversely impact the SWP or CVP. (YCWA-11a, pp. 54-56.)

The remainder of the surface water released from NBBR consists of water made available through an increase in groundwater pumping (groundwater substitution). In any year, up to 120,000 af of the potential 200,000 afa transfer total may consist of groundwater substitution. (YCWA-1, Appendix B, p. B-97.) The YCWA contractors identified in the Conjunctive Use Agreement are Brophy Water District, Browns Valley Irrigation District, Cordua Irrigation District, Dry Creek Mutual Water Company, Hallwood Irrigation Company, Ramirez Water District, South Yuba Water District, and Wheatland Water District. (YCWA-1 Appendix B, pp. B-95 to B-96.) The groundwater substitution will be performed in accordance with the terms and conditions contained in the Conjunctive Use Agreements. (YCWA-8, p. 3.)

The proposed long-term transfer would add the Clifton Court Forebay and Jones Pumping Plant as points of rediversion under Permit 15026. The service areas of the SWP (as shown on maps 1878-1, 2, 3 & 4 on file with Application 5629) and CVP (as shown on map 214-208-12581 on file with Application 5626) would be temporarily added to the place of use of Permit 15026. Municipal use, salinity control and water quality control would be temporarily added as additional purposes of use under Permit 15026. The petition requests that these changes be effective from January 1, 2008 through December 31, 2025. (YCWA-8, pg. 1-16.) YCWA also requests that the State Water Board revisit any order approving the transfer by May 2016 at the

latest, in order to consider whether to make any adjustments to the order. (YCWA Opening Statement, Exhibit E, p. 4.)

2.5 Pelagic Organism Decline and Wanger Remedy Order

In February of 2005, federal and state fishery agency scientists announced observations of a decline in the calculated abundance indices for Delta smelt and other pelagic (open water) fish, beginning in 2002. In response to these changes, the Interagency Ecological Program (IEP) formed a Pelagic Organism Decline (POD) work team to evaluate the potential causes of the widespread decline. (2005 POD Synthesis p. 3.) The POD work team has proposed at least three general factors that may have been acting individually or in concert to lower pelagic productivity: 1) toxic effects; 2) exotic species effects; and 3) water project effects. (2007 POD Action Plan pg. 12.) Evidence in the record does not quantify the degree to which each of these stressors may be responsible for the POD.

The EIR/EIS for the Yuba Accord notes that salvage[17] of Delta smelt at the water project pumps may be correlated to average reverse flows in Old River and Middle River (ORMR), especially during January and February. (YCWA-1, p. 10-33.) The EIR/EIS also notes that actions to restrict average reverse ORMR flow are recognized as a current management tool. (*Ibid.*) This evidence correlates with the hypothesis presented in the IEP's 2006-2007 Work Plan, which poses the theory that the POD could be at least partially linked to the loss of adult fish populations linked to winter-time pumping. (IEP's 2006-2007 Work Plan, pp.16-17.)

In 2005, several environmental groups filed suit challenging the FWS' Biological Opinion (BiOp) for the effects on Delta smelt of the 2004 Long-Term Central Valley Operations Criteria and Plan (OCAP). (*Natural Resources Defense Council v. Kempthorne* (E.D. Ca. No. 1:05-cv-01207-OWW-GSA.) On May 25, 2007, Judge Wanger determined that the BiOp was inadequate, and that its no jeopardy finding regarding the Delta smelt was arbitrary and capricious. (*Natural Resources Defense Council v. Kempthorne* (E.D. Cal. 2007) 506 F.Supp.2d 322.) On December 14, 2007, Judge Wanger issued an Interim Remedial Order, which restricts SWP and CVP operations while a new BiOp is being prepared. The Interim Remedial Order includes several conditions for operation of DWR's Banks and the USBR's

[17] Salvage is a commonly-used estimate of how many fish would have moved through the State and federal water project pumps at any given time (i.e., pumping time/sampling time). For example, a facility could sample fish for 10 minutes out of ever every120 minutes (2 hours) of pumping. This would produce a multiplier of 12, which would be used to estimate the number of fish moving through the facility for the two hour period.

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, Angler Committee, Cordua Irrigation District (CID) and DWR submitted notices of intention to participate in the hearing, and present direct testimony.[18] 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

[18] The CDFG, USBR, Westlands Water District, State Water Contractors and Kern County Water Agency, the San Luis & Delta- Mendota Water Authority, Trout Unlimited, Friend 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.

protections for the Delta in the transfer. Public Trust Alliance urged the State Water Board to exercise its public trust authority.

3.3 Key Issues and Briefing Issues

The modified hearing notice contains the following Key Issues and the following explanatory questions regarding the Key Issues:

1. Should the State Water Board approve YCWA's Petition for Modification of Water Right Permits 15026, 15027 and 15030 (Applications 5632, 15204 and 15574) and, if so, under what, if any, terms and conditions?
    a. Would the proposed changes injure any legal user of water?
    b. Would the proposed changes, in effect, initiate a new water right?
    c. Would the proposed changes unreasonably affect fish, wildlife, or other instream beneficial uses of water?
    d. Would implementing the YCWA's petitioned specific changes to RD-1644 and the proposed Yuba Accord Fisheries Agreement provide a level of protection for fisheries resources in the Lower Yuba River during the term of the Yuba Accord Fisheries Agreement, that is equivalent to, or better than, that which is provided by RD-1644?

2. Should the State Water Board approve YCWA's Petition for Long-Term Transfer of water under Water Right Permit 15026 (Application 5632) and, if so, under what, if any, conditions?
    a. Would the proposed transfer harm any legal user of water?
    b. Would the proposed transfer unreasonably affect fish, wildlife, or other instream beneficial uses of water?
    c. Would the proposed transfer unreasonably affect the overall economy of the area from which the water is being transferred?

During the hearing, the hearing officer asked the parties to address the State Water Board enforceability of a third-party agreement in their closing briefs. (RT, pp.128:17-130:14, 173:5-174:17)

4.0 LEGAL ISSUES

The State Water Board has a responsibility to fulfill state policy that the state's water resources "be put to beneficial use to the fullest extent of which they are capable." (Cal. Const., Art. X, § 2; Water Code, § 100.) The State Water Board is charged with ensuring that development and use of the state's waters be conducted in manner that allows for the greatest public benefit. (Wat. Code, §§ 102, 104, 105.)

As part of these responsibilities, the State Water Board has broad, continuing authority to establish minimum flows and to take other measures needed for protection of fisheries and other public trust resources. (See, e.g. Wat. Code, §§ 100, 105, 275, 1243, 1253; Cal. Const. Art X, § 2; *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419 [189 Cal. Rptr. 346]; RD-1644, pp. 29-34 [discussing public trust authority].)

4.1 Required Findings

Before approving a petition to change the point of diversion, place of use or purpose of use of a water right permit, the State Water Board must make the statutory and regulatory findings that: (1) the change will not operate to the injury of any legal user of the water involved and (2) the change will not in effect initiate a new right. (Wat. Code, § 1702; Cal. Code Regs, tit. 23, §§ 197, subd. (a) 791, subd. (a).) For a long-term transfer petition by a public agency under Water Code section 386, the State Water Board must find that: (1) the change would not result in substantial injury to any legal user of water, (2) it would not unreasonably affect fish, wildlife or other instream beneficial uses, and (3) it will not unreasonably affect the overall economy of the area from which the water is to be transferred. (Wat. Code, §§ 386, 1736; see also Yuba County Water Agency Act, Sec. 5.2, subd. (c).) Additionally, YCWA has asked the State Water Board to find that the requested petition changes and enactment of the Fisheries Agreement will provide a level of protection for fisheries resources in the Lower Yuba River during the term of the Yuba Accord Fisheries Agreement, that is equivalent to, or better than, that which is provided by RD-1644. (YCWA Petition for Modification of Water Right Nos. 15027, 15027, 15030, p. 2.)

4.2 State Water Board's Public Trust Responsibilities

4.2.1 Public Trust Responsibilities on the Lower Yuba River

YCWA has requested that the State Water Board alter the permit conditions for its consumptive water right use under permits 15026, 15027, and 15030 by reducing the amount of water

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 represents a hard-won agreement 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

to be amended by YCWA's Petition for Change, will reasonably protect the public trust values on the Lower Yuba River, the State Water Board cannot make the requested changes to YCWA's permits.

The State Water Board is obligated to place into water rights "such terms and conditions as in its judgment will best develop, conserve and utilize in the public interest the water sought to be appropriated." (Wat. Code, § 1253; see also Wat. Code, § 1257.) The Board's ability to condition permits and enforce those terms authority is integral to the State Water Board's ability to fulfill its public trust obligations, and it is state policy that the State Water Board enforce permit terms and conditions "vigorously." (Wat. Code, §§ 1253, 1825.).

Thus, a finding that other parties have negotiated and have the ability to enforce appropriate conditions, standing alone, is insufficient to meet the State Water Board's statutory obligation when the State Water Board has clear authority and an obligation to ensure that those conditions are met – the State Water Board must include appropriate conditions in the permits themselves. Moreover, including flow schedules and other appropriate conditions as permit conditions, so that those requirements can be effectively enforced by the State Water Board, is essential to the State Water Board's ability to fulfill its public trust obligations. If the flows necessary to protect the public trust are higher than the flows required by the permit, the State Water Board would lose permit enforcement authority as a tool to ensure that the public trust is protected at the appropriate level. (See SWRCB Order WR 98-05, p. 24 [emphasizing that the requirements of a water right decision must be structured to allow effective enforcement by the State Water Board; reliance on agreements the State Water Board cannot enforce is inappropriate.]) Here, the State Water Board has no evidence before it that the petitioned-for permit flows, as opposed to the Yuba Accord flows, will protect the public trust or that it is not feasible to provide that protection. Relying on the Fisheries Agreement flows to serve that function would prevent the State Water Board from implementing and enforcing the flows that will "best develop, conserve, and utilize in the public interest" the water in the Lower Yuba River. (Wat. Code, § 1253.)

Incorporation of the Fisheries Agreement flows into YCWA's water rights permit will not undermine the Yuba Accord. Incorporating the flows by reference into the permit follows the recommendations of both YCWA and DWR for the water transfer petition. YCWA recommends that the State Water Board condition the proposed transfer on maintenance of the flow schedule

in the Fisheries Agreement, and incorporate those flows by reference, similar to Term 6 of Order WR 2007-0012-DWR, which was issued for the 2007 Pilot Program. (*Id.*, at 8; YCWA Closing Brief, p. 5; YCWQA Closing Brief Exhibit E, p.2, paragraph 6.) This was also the approach the State Water Board took in approving YCWA's prior change petition. (See Order WR 2007-0012 DWR.) This method is also in accord with DWR's recommendation that the State Water Board follow the models used in the water right permits on the Feather River, which were subject to an agreement of outside parties, and on Big Grizzly Creek, which were subject to the flow rates from an agreement between other state agencies.[19] (DWR Closing Brief, p. 3; RT, 144:22-145:12; Water Right Permits No. 16478, 16479, 16480, 15254 & 15255.) In both cases, the State Water Board incorporated the agreed-upon flows into the permits by reference.

4.2.1.2 Violations of Fisheries Agreement Flow Schedules

Fisheries Agreement Sections 5.1.1 and 6.1.1. describe certain situations, outside of the adaptive management measures described below, in which the agreement's instream flow requirements would not need to be met under a five-day running average, with instantaneous flows of at least 90 percent of the applicable flow requirements. An attempt to list all the potentially excusable reasons why a rule might be violated in a water right permit is unnecessary: the State Water Board has prosecutorial discretion in exercising its enforcement authority. Consistent with the State Water Board's public trust responsibility, the YCWA should be required to report all days when the flow schedule is not maintained. Subsequent enforcement action should be at the discretion of the State Water Board.

In order to avoid any confusion as to the applicability of the various flow alteration measures discussed in the Fisheries Agreement, the State Water Board will incorporate only the flow schedule itself into the order, rather than the Fisheries Agreement

4.2.1.3 Processes to Change the Fisheries Agreement Flow Schedules

Because the State Water Board will incorporate just the flow schedules specified in Exhibit 1 of the Fisheries Agreement, without incorporating the Fisheries Agreement itself, it is necessary to specify how compliance will be measured and how some of the flexibility included in the Fisheries Agreement can be maintained.

[19] The State Water Board takes official notice of these permits, as state records.

In general, the State Water Board can address the short-term, RMT-guided changes, such as those described in Fisheries Agreement section 5.2.1, because such changes occur within defined temporal and rate limits incorporated into the EIR/EIS's impact analysis. (YCWA-9, sec. 5.1.4.) However, because reaction to major, unanticipated changes requires flexibility and knowledge of real-time conditions, it is not State Water Board practice to incorporate provisions for addressing such changes in individual permits: such changes are typically requested through either the Temporary Urgency Change or Change Petition processes. (See Water Code, §§ 1435, 1701; Cal. Code Regs., tit. 23, §791, subd. (e).) The potential future changes caused by what is described in the Fisheries Agreement as *Force Majeure* or a Regulatory Change Events, are, by their nature, unknown: therefore, they have not received any analysis as to their potential environmental and water right consequences. (See YCWA-9, Sec. 5.1.6.) The State Water Board will therefore not incorporate them into the permit directly.

4.2.1.4 Adaptive Management Measures

The Fisheries Agreement contains numerous adaptive management measures, which the River Management Team's Planning Group may recommend. (YCWA-9, sec. 5.2.1, pp. 13-15.) For example, it may agree to certain temporary alterations of instream flow requirements in March-October of Schedule 1-6 years; determine whether to reduce instream-flows at Marysville gage in certain Schedule 5 years; and determine operation of NBBR upper and lower intakes and any temperature adjustment devices constructed at Englebright Dam (YCWA-9, pp. 9-10, 14.)

The State Water Board recognizes that adaptive management can greatly improve the health of a river system, and that the flexibility inherent in the Fisheries Agreement is an integral part of its protection of the public trust resources. (YCWA-2, pp. 4-15 to 4-16.) Because the flexibility built into the Fisheries Agreement also has the potential to harm public trust resources, however, the State Water Board must have the ability to oversee and enforce measures that would potentially conflict with the permit. (See SWRCB Order 2002-0002 at p. 11 [If the State Water Board gave authority to others to modify permit flow requirements without State Water Board approval of the changes, "the SWRCB would be abdicating its public trust responsibilities"].) In order to meet public trust responsibilities, yet at the same time encourage adaptive management and broad stakeholder engagement, the State Water Board will require that all the above-listed adaptive management measures be submitted to the Deputy Director for the Division of Water Rights (Deputy Director) for approval. (See SWRCB Order WR 98-05

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.)

This recommendation addresses the problem that the change petition requests that the State Water Board remove from the permits the flows the State Water Board determined to be needed to protect the fishery, in reliance on the authority of others to enforce the Fisheries Agreement, but the Fisheries Agreement flows expire upon issuance of a new long-term FERC license. The Fisheries Agreement cannot obviate the need for the State Water Board to include permit terms protective of the fishery as applied to the period after the Fishery Agreement expires. Hence, YCWA proposes that the flow schedule in the new FERC license be incorporated automatically into the permits.[20] Because this order incorporates the Fisheries Agreement flow schedule into the permit, and that flow schedule will remain in effect until the State Water Board modifies the permit, there will be no regulatory gap upon expiration of the Fisheries Agreement, and a term that automatically incorporates the FERC flows is unnecessary. However, in recognition of the fact that a new long-term FERC license has the potential to impose requirements that would make changes to the water right permit advisable, the State Water Board will reserve jurisdiction to revisit this decision upon issuance of the new FERC license.

4.2.1.7 RD-1644 Conditions 2, 3 and 10

YCWA's petition requests that changes to RD-1644 incorporate not only revisions to the flow schedule and the method for determining water-year types, but also the deletion of conditions addressing ramping rates, dry year flow reductions, and temperature.

RD-1644's Condition 3 imposes ramping rates for the increases and decreases in controlled flows on the Lower Yuba River. No evidence presented at the hearing indicates that a change in, much less an elimination of, ramping requirements is advisable. In fact, YCWA does not propose that the actual ramping requirements on the Lower Yuba River would change, as the FERC ramping requirements are the same as those in RD-1644. (YCWA-2, p. 4-49.) The effect of removing the flows would simply be to shift enforcement authority over these flow rates away from the State Water Board. As discussed above, the State Water Board cannot abdicate its responsibilities in this way. (Sections 4.2.1.2 and 4.2.1.3.) Therefore, the State Water Board declines to remove Condition 3 from RD-1644.

[20] It is worth noting that this attempt would not be sufficient, for similar reasons as discussed in section 4.2.1.1. Allowing FERC's unknown future decision to modify the provisions of the State Water Board's order without State Water Board approval, would be inconsistent with the agency's independent obligation to appropriately condition water rights permits.

RD-1644's Condition 10 allows YCWA to request up to a 20 percent reduction of instream flows in very dry years, to alleviate hardship from potential consumptive use shortfalls. The Yuba Accord sets up a different system for addressing water supply shortages than that contemplated by RD-1644's Condition 10. The Yuba Accord relies on conjunctive use funded by a water transfer, on the use of very low flows in conference years, and on future water delivery decisions that can be made with real-time information to address potential water shortfalls in dry years. Because the Yuba Accord presents a viable alternative for addressing water shortages, the State Water Board will remove Condition 10 from RD-1644.

Similarly, the Yuba Accord sets up an alternative system for annual temperature management than that devised under RD-1644's Conditions 2 (b) and (c). (*Id*., p. 177.) The core requirements of RD-1644's Condition 2 (b) oblige YCWA to consult regularly with, and follow the reasonable recommendations of, a Temperature Advisory Committee which includes state and federal fishery agency representatives, and environmental NGOs. (RD-1644, pp. 86, 177.) Condition 2 (c)'s central requirement is for YCWA to prepare and submit for approval an annual temperature control plan for the May-October time period, in consultation with the Temperature Advisory Committee. (*Ibid*. p. 177.) The Yuba Accord provides for the River Management Team's Planning Group, which also includes state and federal fishery agency representatives and environmental NGOs, to determine the operation of the upper and lower outlets at NBBR, and any temperature control devices that might be built at Englebright Dam. As discussed in the adaptive management section above (Section 4.2.1.4), the State Water Board cannot cede authority over temperature planning to third parties, and will require submission of the Planning Group's recommendations to the Deputy Director of Water Rights. Because the Yuba Accord's temperature planning methods also include the input of fisheries agencies, the State Water Board finds that they, with State Water Board approval, will provide an appropriate equivalent to the existing temperature planning requirements under RD-1644. The State Water Board will therefore suspend operation of RD-1644's Conditions 2 (b) and (c) unless and until the Fisheries Agreement terminates, for any reason.

The central thrust of the other temperature terms in RD-1644 Condition 2 are to require diligent pursuit of the Narrows II Powerhouse Intake Extension at Englebright Dam, mandate hourly temperature monitoring at specified points, and reserve the State Water Board's jurisdiction to set specific temperature requirements in the future. (RD-1644, condition 2 (a), (d)-(e), pp. 176-78.) RD-1644 discussed a series of temperature recommendations for anadromous fish in

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.) 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 NMFS'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, the State Water Board declines to delete Conditions 2 (a), (d) and (e). 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 are in the process of studying these intensively. (YCWA-1, pp. 10-31 to 10-35.) Additionally, the regulatory framework affecting Delta pumping is undergoing change. The FWS delta smelt biological opinion for CVP and SWP operations has been judged inadequate, the NMFS winter run salmon biological opinion is under challenge, and the State Water Board has issued a resolution to consider a host of actions to better protect the Delta. (*NRDC v. Kempthorne*, 2007 WL 4462391 (E.D. Cal, 2007); State Water Board Resolution 2007-0079.) The recent Interim

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 ongoing 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

were too generous have joined with most of those who objected to RD-1644 claiming those same flows were not generous enough to present a unified proposal. The proposal demonstrates creative problem-solving that links a broad range of activities through an innovative funding strategy and exhibits a commitment to scientific research and future cooperation. The agreement also brings significant other benefits which make approval of the petitions, as conditioned by this order, beneficial.

The approvals will end extended proceedings on the Yuba River, including litigation, which will save the parties, many of which are public entities, a significant amount of money. It will also provide increased certainty to the entities with an interest the river.

The studies and pilot programs funded by the River Management Fund have the potential not only to improve habitat on the Lower Yuba River, but also to provide important information for habitat improvement in other water bodies in the state.

As discussed more extensively in the economic impacts section, the Yuba Accord will provide significant economic stimulus to Yuba County. It will also provide increased flood protection. Approval of a long-term transfer, rather than a series of interim transfers, has efficiency benefits not only for Yuba County but also for the SWP, the CVP and the State Water Board. These benefits include reduced administrative process, and also, for the water projects, increased operational certainty and flexibility.

The Yuba Accord also furthers the state policy encouraging conjunctive use programs, as well as state policy encouraging water transfers. (See, e.g., Wat. Code, §§ 109, 475, 1011.5, subd. (a).)

The transfers in the Yuba Accord would also provide a significant amount of water to the EWA, or to a substitute water supply reliability program. The EWA plans environmentally beneficial changes in CVP and SWP operations, and acquires water to replace any regular water supply interrupted by the environmentally beneficial changes to CVP and SWP operations. (YCWA-1, p. 3-26 to 3-28.) However, the funding for the EWA is scheduled to sunset at the end of 2008. It is also worth noting that YCWA Ex. 11(a) differs from the Draft Water Purchase agreement evaluated in the Draft EIR/EIS, in regards to how water would be allocated if the EWA or a substitute fisheries protection and water supply reliability program does not continue. (Compare

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].)

4.5 Appropriateness of State Water Board Action at the Present Time

Angler's Committee also contends that State Water Board action on YCWA's petitions is inappropriate at the present time because of the Interim Remedial Order in *NRDC v. Kempthorne*, the fact that new biological opinions governing operation of the CVP and SWP have not yet been issued, the fact that ESA consultation for the transfer is still incomplete, and the lack of a FERC license amendment or accompanying 401 water quality certification.[21] (Angler's Committee Closing Brief, pp. 4-6, 9, 20-21.) None of these actions provide a reason to delay approval of YCWA's petitions.

The Interim Remedial Order in *NRDC v. Kempthorne* was submitted into evidence after the hearing, and has proven to be within the range of what the evidence presented at the hearing suggested it would be. Compliance by YCWA, DWR and Reclamation with the ESA has been, is being, and will continue to be addressed in the consultations by these agencies with NMFS and USFWS and in court orders regarding these consultations. (YCWA-1, p. 23-4; YCWA Reply Brief, p. 6.) Term 4 of this order explicitly provides that any re-diversions of Yuba Accord transfer water by the SWP or CVP will be subject to all biological opinions that have been or will be issued during or in connection with these consultations. Term 11 of this order and Term 9 of RD-1644, which this order does not disturb, explicitly provides that the State Water Board does not authorize any act that would result in the taking of any candidate, threatened or endangered species under the federal or state ESA, and that YCWA shall be responsible for meeting all the requirements of the federal and state ESA.

Because neither the proposed petitions nor implementation of the Yuba Accord will require changes to YCWA or DWR's FERC licenses, the State Water Board does not need to consider whether it would be appropriate to refrain from acting until FERC acts. Likewise, because no 401 water quality certification is required in the absence of a request for a federal permit or license or a request for an amendment to a federal permit or license, there is no need to consider whether it would otherwise be appropriate to delay action until after such issuance.

The FERC licensed California Aqueduct Project does not include the SWP Delta pumps, and is not altered by the proposed transfer. (DWR Reply Brief, pp. 1-2; 51 FPC 529, FERC Op. 688

[21] Angler's Committee also suggests State Water Board action is inappropriate without a supplemental CEQA document. This argument is addressed in section 6.0 on CEQA compliance.

Feb 6, 1974.) In all years of the Yuba Accord, YCWA is expected to meet the requirements of the FERC license. The Yuba Accord flows are equal to or higher than the FERC flow requirements, and the ramping requirements are the same. Even though the Yuba Accord will affect operation of the same facilities as those in the FERC license, the changes do not violate the license provisions. Also, because they require no change to the FERC license, no water quality certification is required.

Because YCWA's FERC license for the Yuba River Development Project will expire in 2016, the State Water Board anticipates that YCWA will file a 401 certification petition at about that time. To address any coordination that would be beneficial between the FERC licensing process and the water right permit conditions and transfer, the State Water Board will specifically reserve jurisdiction to reopen the orders relating to both petitions at that time. (See Condition No. 13 in the change petition order, and condition No. 14 in the transfer order.)

4.6 Procedural Rulings

Angler's Committee has raised several procedural concerns regarding the hearing. The hearing officer has issued rulings on all of these, and the Board hereby affirms those rulings.

4.7 Clarification of RD-1644 Requested by CID

CID requested the State Water Board include in this order an explanation regarding the effect of the discussion on pages 110 to 111 of RD-1644's concerning the amount of water needed for waterfowl habitat and rice straw decomposition north of the Yuba River. As the hearing officer explained in a letter on November 11, 2007, the referenced language simply explains State Water Board usage estimates. Nothing in RD-1644 established a limit on these uses, or mandates a reduction in use for waterfowl habitat or rice straw decomposition. The order portions of RD-1644 do not address the issue. The discussion on pages 110-111 is solely for the purpose of estimating YCWA's overall water needs, and does not amount to any kind of mandate that water use be limited in accordance with those assumptions.

5.0 EFFECTS OF IMPLEMENTATION OF THE YUBA ACCORD

5.1 Effects on Other Legal Users of Water

State Water Board can only approve YCWA's change petitions if the proposed changes will not injure other legal users of water. (Wat. Code, §§ 1702, 1707(b)(2), 1736.)

5.1.1 Effects on Other Legal Users of Water in the Lower Yuba River and Yuba Basin

YCWA is a major water right holder on the Yuba River. YCWA's Permits 15026, 15027, and 15030 authorize direct diversion up to a total rate of 1,550 cfs from the lower Yuba River from September 1 to June 30 for irrigation and other uses, and diversion of up to 1,050,000 acre-feet from October 1 to June 30 for storage in NBBR. Brophy Water District (BWD), Browns Valley Irrigation District (BVID), (CID), Dry Creek Mutual Water Company (DCMWC), Hallwood Irrigation District (HIC), Ramirez Water District (RWD) and South Yuba Water District (SYWD) contract with YCWA for delivery of water. (YCWA-1, pp. 5-6 to 5-7.) Additionally, BVID, CID and HIC have separate appropriative rights for diversion of water from the Lower Yuba River. (RD-1644; pp. 154-169.) Other agencies and districts providing surface water for irrigation in Yuba County are the Yuba County Water District,[22] Camp Far West Irrigation District[23], and Plumas Mutual Water Company.[24] Appendix Figure 4 shows YCWA's Member Units and service areas of other water purveyors.

The record contains no evidence establishing that, under the Yuba Accord, any legal user of lower Yuba River surface water will be physically prevented from diverting water. The various water districts, irrigation districts, and mutual water companies that have contracts with YCWA for delivery of water all received notice of YCWA's change petitions. No water rights holders on the Lower Yuba River or any downstream area protested the change petition. Additionally, no water right holders or surface right holders have alleged injury due to implementation of the 2006 or 2007 pilot programs. The State Water Board finds that the Yuba Accord will not injure any legal user of surface water.

Analysis in the Final EIR/EIS indicates that the YUBA Accord also will not injure or harm any user of Yuba Basin groundwater. (YCWA-2, pp. 4-87 to 4-89; and pp.4-96 to 4-97; Tables LA2-1; YCWA Opening Statement, sec. 3a, p. 5.). As discussed in the Final EIR/EIS, the amount of water that must be pumped under the Yuba Accord will average 17.4 thousand acre-feet per

[22] Yuba County Water District diverts water from Dry Creek upstream of Virginia Ranch Reservoir.
[23] Camp Far West Irrigation District diverts water from the Bear River below Camp Far West Reservoir
[24] Plumas Mutual Water Company diverts water from the Feather River downstream of the confluence of the Yuba and Feather rivers.

year (TAF/yr):[25] 4.9 TAF/yr for local surface-water delivery shortages and for component 2 & 3 water transfers in schedule 6 years, plus an additional average of 12.5 TAF/yr to supply Component 2 and 3 water under the Yuba Accord's Water Purchase Agreement. (YCWA-2, pp. 4-87 to 4-89, 4-96 to 4-97.) Including the discretionary Component 4 water pumping, which averages 10.5 TAF/yr, brings that total average up to 28 TAF/yr. (*Ibid*.) This total average pumping is less than the Yuba Basin's estimated average annual recharge of 30 TAF/yr. (*Ibid*.) The additional discretionary pumping under the Yuba Accord will only occur if YCWA and its member units conclude that such pumping can happen without adverse impact to local groundwater supplies. (*Ibid*.)

The South and North Yuba Basins are in good condition, with significant amount of groundwater storage availability, relatively high annual recharge rates and relatively short recovery periods to pre-pumping conditions. (YCWA-1, Chapter 6, 6-50.) 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 and storage. (*Ibid*.) Even though modeling indicates that future groundwater transfer volumes will not affect the groundwater basin up to or beyond historic low levels (YCWA-1, pp. 6-43 to 6-50), the Yuba Accord Draft EIR/EIS includes two mitigation measures: a third-party impact action plan and a monitoring plan, the results of which will be used in annual determinations of pumping amounts. (YCWA-2, pp 6.9 to 6-13.) Given this ability for adaptive management mitigation, YCWA's environmental document concludes that impacts on long-term trends of groundwater levels and storage in the Yuba Basin during the implementation of the Yuba Accord would be less than significant. (*Ibid.*)

In its closing brief, CID argues that the State Water Board should suspend YCWA's water transfers if groundwater levels in the North Yuba Sub-basin decline to the levels that occurred in the fall of 1991 or if an ordinance is adopted that applies to the pumping of groundwater in Yuba County for transfers. CID argues that these conditions are necessary because: (a) there is no mechanism to compel good judgment in groundwater pumping decisions by those who profit from its pumping; (b) only a "firm 'do not exceed' figure" can avoid damage to other local

[25] The only two types of groundwater pumping that would have to occur under the Yuba Accord would be pumping to make up shortages in surface-water deliveries to Member Units and 30 TAF of groundwater-substitution pumping for Component 2 and 3 water in Schedule 6 years.

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 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.

5.1.2.1 Effects on Reservoirs of the SWP and CVP, and the Feather and Sacramento Rivers

In order to evaluate impacts to Oroville Reservoir from the proposed transfer, YCWA performed modeling to determine the relative end-of-month storage at Oroville Reservoir under the Accord. Modeling indicates that the proposed long-term transfer would not alter end-of-month storage by more than 1 percent. (YCWA-1, pp. 9-113.) Additionally, the Water Purchase agreement includes provisions intended to ensure that future refill of water transferred from storage in NBBR (i.e., the yearly transfer total minus the total excess groundwater pumped) does not adversely impact the SWP or CVP. (YCWA-11a, pp. 54-56.) Both DWR and USBR have indicated their support for the use of these provisions. (YCWA-29, pp. 1-2.) This order requires refill of NBBR to be performed in accordance with these refill conditions. Accordingly, the proposed long-term transfer should not injure other legal users of water through adverse impact on water quality at Oroville Reservoir or adversely impact storage in the reservoirs of the SWP and CVP.

The EIR/EIS analyses impacts to the Feather and Sacramento Rivers based on modeling results. These results indicate that the proposed long-term transfer would not alter these river flows by more than 3 percent. (YCWA-1, pp. 9-114 and 9-115.) Based on this analysis, the proposed long-term transfer should not have an adverse impact on water quality within the Feather or Sacramento Rivers. Additionally, modeling shows that the proposed long-term transfer will not significantly alter flow in the Feather or Sacramento Rivers. Therefore, the proposed long-term transfer should not injure other legal users of water who divert water from these rivers.

5.1.2.2 Effects on the Bay Delta

The proposed long-term transfer has the potential to impact other legal users of water within the Bay-Delta area due to the additional rediversion of water at Clifton Court Forebay and the Jones Pumping Plant. (YCWA-1, pp. 9-12.) Rediversion of water at the project pumps is subject to numerous regulatory requirements including those imposed by the State Water Board in Revised Decision 1641. (YCWA-1, pp. 9-26 to 9-28.) In order to evaluate potential impacts to water quality, YCWA performed modeling to compare the relative changes in several water quality parameters under the Accord. These parameters include the salinity at various locations

(measures as electrical conductivity) and the chloride ion concentrations at various locations.[26] (YCWA-1, pp. 9-37 to 9-42.)

Results of this modeling indicated very little change in water quality parameters due to implementation of the Accord and the resulting rediversion of water at the project pumps. Instances where modeling indicated adverse changes in water quality were limited in frequency of occurrence and typically would be within the range of conditions that could be mitigated to a level of no significant impact with real-time operational changes. (YCWA-1, pp. 9-53 to 9-52.) John Leahigh, Chief of the SWP Operations Planning Branch, testified that the proposed rediversion of water at the project pumps will only occur if all applicable regulatory requirements, including those contained in D-1641, were met. (DWR-4, pp. 2)

The temporary transfers approved pursuant to the Pilot Programs (State Water Board Orders 2006-0010-DWR and 2007-0012-DWR) include conditions to protect other legal users of water. One of these conditions subjects rediversion of water at the project pumps pursuant to the transfer to compliance with response plans developed to minimize water level, water quality, and fishery impacts from Joint Points of Diversion (JPOD) pumping.[27] (Order 2006-0010-DWR, p. 10; Order 2007-0012-DWR, p. 8; D-1641 pp. 150-153, 155-158.) These conditions are intended to ensure that rediversion of water at the project pumps does not cause injury to other legal users of water. (Order 2006-0010-DWR, pp. 7-8; Order 2007-0012-DWR, pp. 5-6.) In order to ensure that rediversion of water at the project pumps does not adversely impact other legal users of water within the Delta through water quality impacts or reductions in water levels, this order continues to condition this rediversion with compliance with the water level response plan and the water quality response plan.

5.1.2.3 Effects on the San Luis Reservoir and the Service Areas of the SWP and CVP Located South of the Delta

Storage in San Luis Reservoir has historically been maintained such that at least 300,000 af of water remain in storage at all times to avoid water quality impacts. (YCWA-1, p. 9-20.)

[26] Old River and Middle River flow was also modeled for this analysis, however since these flows are used as a management tool to address Delta smelt salvage from the Pumps, these modeling results are discussed below in Section 4.1.4.

[27] Joint Points of Diversion or JPOD refers to the Projects' use of each others southern Delta diversion facilities. JPOD actions are typically taken to allow the CVP to make use of available SWP diversion capacity. While the transfer of water utilizing the Project Pumps is not a JPOD action, subjecting rediversion of water at the Project Pumps to the JPOD response plans is one method of ensuring that the transfer of water does not injure other legal users of water (or unreasonably impact fish wildlife or other instream beneficial uses).

Modeling analyses performed by YCWA indicate that the proposed long-term transfer will not significantly alter the end-of-month storage in San Luis Reservoir. Additionally, YCWA's analyses indicate that the proposed transfer will not increase the number of modeled instances of San Luis Reservoir storage dropping below 300,000 af. Accordingly, the proposed long-term transfer should not injure legal users of water within the CVP and SWP service areas located south of the Delta.

5.1.3 Effects Region-Wide

Standard water right Term 91 is included in 129 water rights tributary to the Delta and prohibits diversions under these water rights during times when the SWP and CVP are releasing water to meet water quality standards and in-basin requirements. Term 91 curtailments typically occur between June and August of each year, but there is wide variation in this timing based on hydrologic conditions. During 1992, a critically dry year, Term 91 curtailments were in effect from mid-May through mid November. (YCWA-2, pp. 4-67.) Modeling performed for the EIR/EIS, using historical precipitation data, showed that the Yuba Accord would decrease flows (as measured at the Marysville Gage) during the months of April, May, and June, as compared to a RD-1644 long-term flow scenario and to the RD-1644 interim flow scenario. The average reduction in flow due to changing from the CEQA Existing Condition to the Proposed Lower Yuba River Accord would have been 58 cfs in April, 437 cfs in May, and 79 cfs in June, with maximum reductions of flow of 58 cfs in April 1984, 500 cfs in May of several years, and 158 cfs in June of several years. Changing from the CEQA No Project Alternative to the Yuba Accord Alternative would have resulted in an average reduction in flow of 19 cfs in April, 411 cfs in May, and 133 cfs in June. The maximum changes in these flows would have been 50 cfs in April 1994, 755 cfs in May 1939, and 308 cfs in June 1959. (YCWA-2, pp. 4-68.) For Term 91 to be triggered in months when it is not currently in effect would require an average flow change of 17,000 cfs in April, 9,000 cfs flow change in May, and 6,000 cfs flow change in June. Because the changes attributable to the Yuba Accord flows is so far below these thresholds, even in the years with maximum change, the State Water Board finds that the Yuba Accord will not injure legal users of Delta water.

Section 5.2 Effects on Fish, Wildlife and Other Instream Beneficial Uses of Water

5.2.1 Effects in the Lower Yuba River

Recreationally or commercially important fish in the lower Yuba River that are listed by the State and/or federal governments as threatened or endangered, or as a species of special concern,

were evaluated in the EIR/EIS. These species include the Chinook salmon (*Oncorhynchus tshawytscha),* steelhead (*Oncorhynchus mykiss*), green sturgeon (*Acipenser medirostris*), hardhead (*Mylopharodon conocephalus*), and river lamprey (*Lamptera ayersi*).

Hydrological analysis in the EIR/EIS determined that a central difference between RD-1644 long term flows, described in the "CEQA No Project Alternative," and the Yuba Accord flows, is a shift from a flow regime with higher spring flows and lower summer flows, to a flow regime with lower spring flows and higher summer flows. (YCWA-1, p. C-25.) The RD-1644 schedule more closely mimics the natural hydrograph, in which snowmelt provides higher spring flows. (RD-1644, p. 174.) However, the agencies and NGOs involved in negotiating the Yuba Accord identified high summer temperatures as a key limiting factor for fishery health in the Lower Yuba River. (YCWA-2, p. 4-37.)

Another key difference between the RD-1644 long-term and the Yuba Accord flow schedules is that the Accord allows for extremely low flows in what were historically the 1 percent driest years (referred to as "Conference Years"). (YCWA-1, pp. 3-7.) Under the Yuba Accord the only required flows below Daguerre Point Dam in such years would be the FERC license flows, which are based on the 1965 YCWA/DFG Agreement.[28] The inadequacy of these flows was the reason for initiating the proceedings that led to RD-1644. (RD-1644, pp. 17, 24.) Reducing flows in the driest years reduces the amount of water that NBBR must maintain in storage in any given year. (YCWA-9, Ex. 3.) This, in turn, gives the reservoir a greater amount of active storage, which can be released as instream flows or put to consumptive use in the other 99 percent of years. This results in overall significantly higher flows in every other year type. (YCWA-9, Ex. 5.) On the Lower Yuba River, these increased flows would benefit the fishery by reducing summer temperatures and increasing habitat. (YCWA-1, pp. 33-34.) Because the EIR/EIS shows that the benefit to the overall fishery in 99 percent of years outweighs the potential detriment in the 1 percent of years the State Water Board will authorize this change. (*Ibid.)*

The EIR/EIS notes that in warmer water years there is a higher likelihood that May water temperatures under the Yuba Accord alternative would exceed those of the CEQA No-Project Alternative, to the potential detriment of incubating steelhead embryos. (*Id.*, p. 10-118.)

[28] As noted above (sec. 4.2.1.5) the sufficiency of these minimum flows will be evaluated on a real-time basis by the RMT's Planning Group, who will decide whether to supplement these minimum flows with additional instream flows.

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.[29] (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, an adjustment in flows would have been a discretionary action. (R.T., 131:18 – 132:15.)

that adaptive management may provide, it is reasonable to assume that these measures will improve the overall health of the Lower Yuba River fishery.

Finally, there are no potentially significant unavoidable impacts to Lower Yuba River recreation associated with the implementation of the Yuba Accord. (YCWA-1, p.12-55.)

5.2.2 Effects in the Bay Delta

In the Draft EIR/EIS for the Yuba Accord, the evaluation of the biological impacts of all the various alternatives on delta fisheries resources and their habitats uses parameters established by the USFWS, CDFG, NMFS and others, including X2 locations[30], Delta outflows, Export-to-Inflow ratios (E/I ratios)[31], and CVP/SWP salvage estimates for Delta smelt, Chinook salmon, steelhead and striped bass. (YCWA-1, pp. 10-104-105.) The species chosen for evaluation are those of primary management concern, including those that are recreationally or commercially important, fall-run Chinook salmon (*Oncorhynchus tshawytscha*), American shad (*Alosa sapidissima*), and striped bass (*Morone saxatilis*), and those that are managed or being evaluated for management under federal or state endangered species laws. Federal- and/or State-listed species and species proposed for federal or State listing within the area are winter- and spring-run Chinook salmon, steelhead, delta smelt (*Hypomesus transpacificus*), longfin smelt (*Spirinchus thaleichtys*)[32] and green sturgeon (Acipenser medirostris). State listed species of special concern are late fall-run Chinook salmon, green sturgeon, river lamprey (*Lamptera ayersi*), Sacramento perch (*Archoplites interruptus*), and Sacramento splittail (Pogonichthys macrolepidotus). (YCWA-1, pp.10-1 to 10-2.) Emphasis on these species of primary management concern is appropriate as it facilitates compliance with State and federal Endangered Species Acts, and with State and federal restoration/recovery plans and NMFS and USFWS Biological Opinions. (YCWA-1, p. 10-2.) The habitat requirements and distribution for Chinook salmon, striped bass, American shad and delta smelt are largely representative of the habitat requirements and distribution of other Delta fish species. Therefore, the more in depth analysis of effects on the above species in the EIR/EIS provides adequate information for the range of potential effects on other Delta fishery resources. (YCWA-1, pp. 10-36 to 10-37.)

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[30] X2 is the common reference for the location of the 2 parts per thousand isohaline, as measured 1 meter off the bottom of the estuary, as measured in kilometers from the Golden Gate Bridge.

[31] The E/I ratios are the percentage of exports as compared to Delta inflow.

[32] At the time of EIS/EIR preparation and of the hearing on the petitions, the longfin smelt was listed as a state species of special concern. On February 7, 2008, the California Fish and Game Commission listed the longfin smelt as a candidate species under the California Endangered Species Act. In connection with the listing, the Commission prescribed terms and conditions under section 2084 of the Fish and Game Code authorizing the take of longfin smelt. The State Water Board takes official notice of this listing.

The Delta parameters were modeled using CALSIM and other simulations over a 72-year historic period. In addition, life histories and life stage environmental requirements, including temperature and habitat-flow relationships, for each of the four species were considered in the analysis.

The modeling for the Yuba Accord Alternative relative to the No Project Alternative determined that Delta parameters would be substantially similar under both scenarios: the cumulative X2 location distributions would generally overlap during each month of the year; the X2 location would be downstream of compliance points in the Delta with nearly equal probabilities; the long-term average E/I ratio would range from one percent higher during January to one percent lower during June; and Delta outflow would range from three percent higher during August to one percent lower during November, December, January and May. (YCWA-1, p.10-146 to 10-47.) Overall salvage estimates under the Yuba Accord Alternative relative to the No Project Alternative for the various species at the CVP/SWP were also similar: Delta smelt would decrease by one percent, winter-run Chinook salmon would not change, spring-run Chinook salmon would decrease by 0.1 percent, steelhead would decrease by 0.1 percent, and striped bass salvage would decrease by 1.2 percent. (YCWA-1, pp. 10-147 to 10-148.)

As discussed in Section 4.2.3 of this order, the proposed long-term transfer will contribute cumulatively to significant adverse impacts on fisheries and aquatic resources in the Delta. However, the incremental impact of the transfer is relatively minor. The State Water Board finds that subject to the conditions imposed in this order, YCWA's petition to transfer up to 200,000 af of water will not have an unreasonable effect on fish, wildlife and other instream beneficial uses in the Delta.

5.2.3 Effects on Fisheries Outside the Delta and Lower Yuba River

Along with the aquatic habitats and fish populations in the Yuba River and the Delta, the fisheries within the Yuba region, CVP/SWP Upstream of the Delta region, and the Export Service Area including the Oroville and New Bullards Bar Reservoirs, Feather and Sacramento Rivers are potentially impacted by the Lower Yuba Accord (YCWA-1, p.10-1.) Impacts to the fish species listed in section 5.2.2 and in 5.2.1, as well as the hardhead (*Mylopharodon conocepalus*) and San Joaquin roach (*Lavinia symmetricus ssp*.) were studied for these regions by modeling water surface elevations, reservoir storage, flow, temperature and habitat

availability over a 72 year period. (YCWA-1, pp.10-89, 10-94 to 10-104.) The life histories and life stage environmental requirements, including temperature and habitat-flow relationships, were used as well. Based on the modeling results, the State Water Board finds that implementation of the Yuba Accord will not have an unreasonable effect on fisheries in project areas other than the Delta and the lower Yuba River.

5.3 Effects on Overall Economy of Yuba County

The Yuba County Water Agency Act requires the State Water Board to make the finding under Water Code section 386, that any transfer from Yuba County will not unreasonably affect the county's overall economy. (Yuba County Water Agency Act, Sec. 5.2, subd. (c); Wat. Code, § 386.) Under the Yuba Accord, water from NBBR storage that is surplus to the needs of YCWA's Member Units would be transferred. (YCWA-1, Chapter 5, Appendices D, F1 and F4.) The Yuba Accord would create several types of direct economic benefits, and indirect economic stimulation benefits for Yuba County. According to unrefuted evidence presented by YCWA, these benefits include the following:

- Within 60 days after execution of the Water Purchase Agreement, DWR would pay YCWA $30.9 million for the 60,000 af/yr of Component 1 transfer water. DWR will make additional payments to YCWA for additional transfers of surface water and for groundwater-substitution transfers. YCWA will use substantial portions of the revenues that it receives from surface water transfers for fisheries and conjunctive-use programs, as described below. In addition, YCWA will use substantial remaining revenues to use to pay the local share costs for flood protection studies and projects, which are crucial to economic development and well-being of the county, which has suffered severe flooding in the past. It also may use remaining funds for other conjunctive use water projects in Yuba County, with further potential economic benefits. (YCWA-1, pp. 1-4 to 1-7, 3-13 to 3-21; YCWA-12, p. 5.)
- Under the Yuba Accord, YCWA would provide over $5 million in funding for fisheries monitoring and enhancement activities to protect and enhance lower Yuba River fisheries. This would likely result in significant recreation and associated economic benefits for Yuba County, which has a strong recreational economy. (YCWA-12, p. 4.).
- By resolving the pending litigation regarding the RD-1644 instream-flow requirements, the Yuba Accord will provide stability and certainty to YCWA's ability to provide surface-water supplies to its Member Units in the future, which will benefit Yuba County

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 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.

6.0 COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

6.1 Adequacy of CEQA Document without Supplement

In June 2007, YCWA and BOR released a Draft EIR/EIS for the Yuba Project. (YCWA-1.) The lead agencies consulted with the State Water Board, which submitted comments on the Draft EIR/EIS on August 24, 2007. (YCWA-2, pp. 4-26 to 4-34.) YCWA and BOR released a Final EIR/EIS on October 17, 2007. (YCWA-2.) In Resolution No. 2007-23, the Board of Directors of YCWA certified the EIR, issued CEQA findings of fact, made a statement of overriding considerations, and approved certain mitigation measures on October 23, 2007. (YCWA-3.) YCWA filed a Notice of Determination with the County Clerk on October 26, 2007. (YCWA-5.) No one filed a legal challenge to the document within the 30-day statute of limitations for CEQA challenges. (R.T., 42:19 - 43:9; 14 Cal. Code Regs., § 11512(c).)

The review by a responsible agency of whether an EIR prepared by a lead agency complies with CEQA is governed by sections 15096 and 15231 of the CEQA Guidelines. (Cal. Code Regs., tit. 14, §§ 15096, 15231.) Section 15231 states that a responsible agency that was consulted by the lead agency in preparing the EIR must conclusively presume that an EIR is adequate unless (1) the EIR is finally adjudicated in a legal proceeding to be inadequate, or (2) a subsequent EIR is necessary. As discussed above, YCWA and BOR consulted with the State Water Board during the drafting of the EIR, and no legal challenges were filed within the statutory period. Therefore, the State Water Board must conclusively presume that the EIR is adequate, unless a subsequent EIR is required.

Angler's Committee asserts that the State Water Board must prepare a subsequent EIR, based on new information that has arisen since the certification of the final EIR. (January 14, 2008 Amended Complaint; Angler's Committee-2, p. 2; Angler's Committee Closing Brief, pp. 13-17, 21.) Angler's Committee points to new trawl net data by the California Department of Water Resources that indicates record-low numbers for longfin smelt, Sacramento splittail and American Shad, and near record-low numbers for Delta smelt and striped bass; the issuance of Judge Wanger's opinion; and the as-yet-unreleased Biological Opinions for the state and federal pumps in the delta and for the water transfer. (*Id.*) Additionally, Angler's Committee asserts that the State Water Board should prepare a subsequent or supplemental EIR based on inadequate analysis in the EIR. (Angler's Committee Closing Brief, pp. 21)

CEQA Guidelines, section 15162, subdivision (a), describes the circumstances under which issuing a subsequent EIR based on new information is required. The new information must: (1) be of substantial importance; (2) have been unknown and not capable of being known in the exercise of reasonable diligence at the time the EIR was certified as complete; and (3) show that: (a) the project will have one or more significant effects that were not discussed in the previous EIR; or (b) significant effects will be substantially more severe than shown in the previous EIR.[33] (15 Cal. Code Regs., tit. 14, sec. 15162, subd. (a)(3); see also Pub. Resources Code, § 21166.) Because the existing EIR already discusses both the severe pelagic organism decline in the Delta and the anticipated effects of the transfer on pelagic organisms in the Delta and includes mitigation measures for those significant effects, the new trawl data are insufficient to trigger the requirement to prepare a subsequent EIR. The existing Final EIR/EIS addresses the potential impact of the interim remedy order in *NRDC v. Kempthorne*, and finds that it will not cause or exacerbate significant effects of the project. (YCWA-2, pp. 3-7 to 3-9.) The final interim remedy order has proven to be very similar to the draft order upon which this analysis was based. Finally, the future Biological Opinions do not constitute new information, because they do not yet exist. There is no evidence that the future Biological Opinions will cause or exacerbate the project's significant effects.

Inadequate analysis in the EIR is a concern to be broached through the EIR process: it is not a problem that a responsible agency may fix through a supplemental EIR. (CEQA Guidelines, §§ 15096, 15162, 15231.) Therefore, even if the analysis in the EIR were inadequate, the State Water Board would not be in a position to address Angler's Committee's concerns.

6.2 CEQA Findings

Before approving a project, a responsible agency must make findings under CEQA Guidelines § 15091, and § 15093, if applicable. (CEQA Guidelines, § 15096, subd. (h).) Under § 15091, for every significant effect of the project, a responsible agency must make one of the following findings: (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR; (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by

[33] Tit. 14, Sec. 15162, subd. (a)(3) also contains two other criteria (pertaining to mitigation measures and alternatives) that can trigger the requirement to prepare a subsequent EIR. However, these other criteria are not relevant to the instant case.

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 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:

1) Surface Water Supply and Management in the Yuba Region, the Delta Region and the Export Service Area
2) 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.

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.

The State Water Board will substitute the North Yuba Index for the Yuba River Index for purposes of determining water-year type.

7.1.2 Reservations of Jurisdiction

The State Water Board will specifically reserve jurisdiction to reopen this decision, if appropriate, after FERC has completed the relicensing process for the Yuba River Development Project.

7.1.3 Summary of Findings

Approval of the Petition for Modification, as conditioned, is in accord with the State Water Board's responsibilities under the public trust and reasonable use doctrines.

The Petition for Modification, as conditioned will not unreasonably affect fish, wildlife or other instream beneficial uses of water.

The Petition for Modification, as conditioned, will provide level of protection for fisheries resources in the Lower Yuba River during the term of the Yuba Accord Fisheries Agreement, that is equivalent to, or better than, that which is provided by RD-1644.

The Petition for Modification, as conditioned, will not harm any legal user of water.

Approval of the Petition for Modification 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 Petition for Modification will be subject to the additional mitigation measures described in sections 7.1.1 and 7.1.2.

7.2 Petition for Long-Term Transfer Under Water Right Permit No. 15026

The Petition is approved subject to the following conditions.

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.

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.

ORDER

IT IS HEREBY ORDERED that the petition of the Yuba County Water Agency for modification of water-right Permits 15026, 15027 and 15030 (Applications 5632, 15204 and 15574), filed on April 27, 2007, is approved subject to the provisions of this order, and Permits 15026, 15027, and 15030 are amended by making the following changes to Revised Decision 1644:

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.

2. 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

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

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

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 release rates of the transferred water from 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 Marysville Gage as required of YCWA in Term 2(d) of Revised D-1644;

e. The daily values of the Transfer Amount Account, as defined in the Refill Agreement; and

f. The monthly amounts of groundwater pumped to meet the needs of users within the YCWA service area in excess of that which would have been pumped in the absence of this transfer.

10. YCWA shall comply with the Mitigation Measures 6-1, 6-2, 9-1, and 9-2, summarized in Table 6-1 of the Final EIR/EIS for the Lower Yuba River Accord, a copy of which was filed in this proceeding as exhibit YCWA-2, and with the monitoring and reporting programs for those mitigation measures, as set forth in Chapter 6 of the Final EIR/EIS. To ensure compliance with Mitigation Measure 9-1, YCWA shall not redivert water from Clifton Court Forebay unless DWR is in compliance with Mitigation Measure 9-1, and shall not redivert water at the Jones Pumping Plant unless USBR is in compliance with Mitigation Measure 9-1.

11. This order does not authorize any act which results in the taking of a threatened, endangered or candidate species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a “take” will result from any act authorized under this temporary transfer, the permittee shall obtain authorization for incidental take prior to commencing transfer of water. Permittee shall be responsible for meeting all requirements of the state and federal Endangered Species Acts for the temporary transfer authorized under this order.

12. The State Water Board specifically reserves jurisdiction to add, amend, revise, supplement, or delete terms and conditions in the portions of this order that concern YCWA’s transfer petition, at the following times:

- Upon issuance of any Biological Opinion for the Central Valley Operations Criteria and Plan, if the State Water Board determines that changes are appropriate.

- 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.

AYE:

NO:

ABSENT:

ABSTAIN:

DRAFT

_____.
Jeanine Townsend
Clerk to the Board

APPENDIX

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Figure 1 – Draft EIR/EIS Figure 1-1

Figure 1-1. Major Water Development Facilities in the Lower Yuba River Basin

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Figure 2

Fisheries Agreement Exhibit 1. Instream Flow Requirements.

MARYSVILLE GAGE (CFS)																	
Schedule	OCT		NOV	DEC	JAN	FEB	MAR	APR		MAY		JUN		JUL	AUG	SEP	Total Annual
	1-15	16-31	1-30	1-31	1-31	1-29	1-31	1-15	16-30	1-15	16-31	1-15	16-30	1-31	1-31	1-30	Volume (AF)
1	500	500	500	500	500	500	700	1000	1000	2000	2000	1500	1500	700	600	500	574,200
2	500	500	500	500	500	500	700	700	800	1000	1000	800	500	500	500	500	429,066
3	500	500	500	500	500	500	500	700	700	900	900	500	500	500	500	500	398,722
4	400	400	500	500	500	500	500	600	900	900	600	400	400	400	400	400	361,944
5	400	400	500	500	500	500	500	500	600	600	400	400	400	400	400	400	334,818
6	350	350	350	350	350	350	350	350	500	500	400	300	150	150	150	350	232,155

* Indicated flows represent average volumes for the specified time period. Actual flows may vary from the indicated flows according to established criteria.
* Indicated Schedule 6 flows do not include an additional 30 TAF available from groundwater substitution to be allocated according to established criteria

SMARTVILLE GAGE (CFS)																	
Schedule	OCT		NOV	DEC	JAN	FEB	MAR	APR		MAY		JUN		JUL	AUG	SEP	Total Annual
	1-15	16-31	1-30	1-31	1-31	1-29	1-31	1-15	16-30	1-15	16-31	1-15	16-30	1-31	1-31	1-30	Volume (AF)
A	700	700	700	700	700	700	700	700	-	-	-	-	-	-	-	700	-
B	600	600	600	550	550	550	550	600	-	-	-	-	-	-	-	500	-

* Schedule A used with Schedules 1, 2, 3 and 4 at Marysville.
* Schedule B used with Schedules 5 and 6 at Marysville.

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Figure 3 – Frequency of Occurrence of Fisheries Flow Year Types

Instream Flow Schedule Occurrence				
	Schedule	North Yuba Index (TAF)	Percent Occurrence (%)	Cumulative (%)
WET	1	> 1,400	56	56
I I I I V	2	1,400 to 1,051	22	78
	3	1,050 to 931	7	85
	4	930 to 826	5	90
	5	825 to 691	5	95
	6	500 to 690	4	99
DRY	Conference	< 500	1	100

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Figure 4 – Draft EIR/EIS Figure 1-2

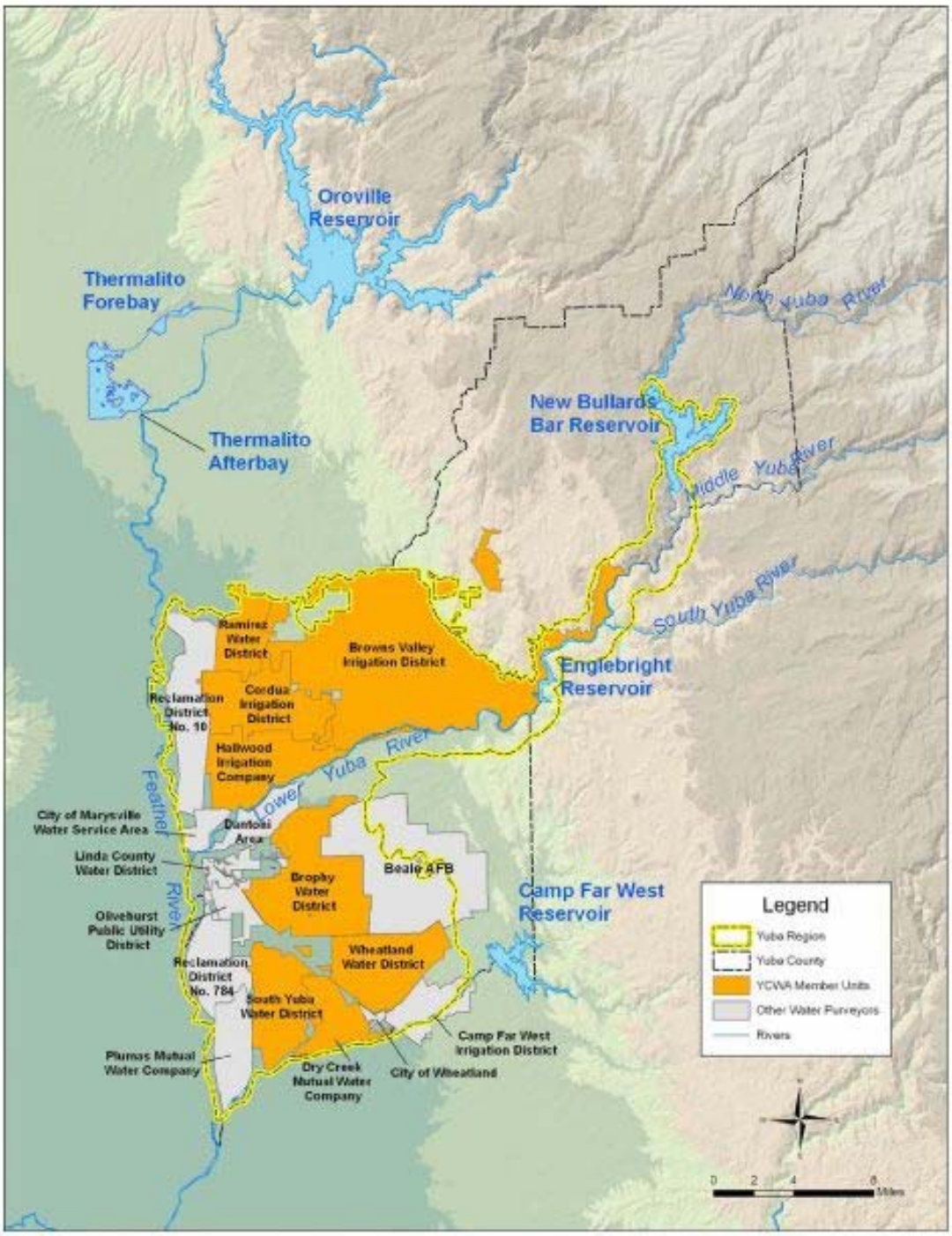

Figure 1-2. YCWA Member Units, and Service Areas of Other Water Purveyors

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Figure 5

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

DFG/NMFS Recommended Water Temperature (°F)	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TARGET SPECIES
Daguerre Dam	56	56	56	56	56	56	56	56	56	56	56	56	Spring-run, fall-run Chinook, steelhead
Recorded Average Temperature (WY2005-2006)*	Recording Problem	Recording Problems	Recording Problems	Recording Problems	47.0	46.8	49.7	53.3	Recording Problems	Recording Problems	57.1	58.2	
Recorded Average Temperature (WY2006-2007)*	55.6	51.9	48.2	45.3	47.6	51.1	54.9	56.1	58.9	59.0	58.8	58.4	
Marysville Gage	56	56	56	56	56	56	56	56	56	60	60	60	Spring-run, fall-run Chinook, steelhead
Recorded Average Temperature (WY 2005-2006)*	58.3	53.6	50.0	49.1	47.9	47.8	50.4	54.2	57.1	58.7	60.9	61.9	
Recorded Average Temperature (WY 2006-2007)*	58.0	53.7	49.4	46.3	48.8	52.1	55.9	58.6	62.0	62.3	61.6	60.5	

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

FIGURE 6

**Long-term Average Water Temperature (Full 71-Year Simulation Period)
in the Yuba River at Smartville, Daguerre Point Dam and Marysville
Under CEQA No Project Alternative and CEQA Yuba Accord Alternative Conditions
(Source: YCWA-1, Appendix F, 3 *vs*. 2. pp. 174, 223 and 346)**

Average Temperature (ºF)												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Smartville												
No Project	53.1	50.5	48.5	47.5	48.5	49.3	50.5	51.8	53.6	54.9	55.0	54.9
Yuba Accord	53.3	50.8	48.8	47.7	48.6	49.3	50.6	52.0	53.6	54.7	54.7	54.9
Difference	0.2	0.3	0.3	0.2	0.1	0.0	0.1	0.2	0.0	-0.2	-0.3	0.0
Daguerre Point Dam												
No Project	57.1	50.8	48.2	47.2	48.3	50.4	53.1	54.7	57.5	58.1	58.1	59.6
Yuba Accord	56.8	51.0	48.3	47.3	48.3	50.5	53.1	54.9	57.5	57.5	57.2	59.0
Difference	-0.3	0.2	0.1	0.1	0.0	0.1	0.0	0.2	0.0	-0.6	-1.1	-0.5
Marysville												
No Project	59.3	51.9	48.9	47.8	48.8	50.7	53.6	56.5	60.0	52.4	61.4	63.0
Yuba Accord	58.7	52.1	48.9	47.9	48.9	50.8	53.6	56.9	60.1	60.8	59.4	61.9
Difference	-0.6	0.2	0.0	0.1	0.1	0.1	0.0	0.4	0.0	-1.6	-2.0	-1.1

FIGURE 7

1965 YCWA/DFG AGREEMENT FLOWS

Minimum Flow Requirement Below Daguerre Point 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 Requirement 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