

CHAPTER 3

PROPOSED PROJECT/ACTION AND ALTERNATIVES

This chapter describes the Proposed Project/Action and alternatives that are evaluated in this Draft EIR/EIS.

The EIR/EIS evaluates four alternatives:

- Yuba Accord Alternative (Proposed Project/Action Alternative)
- Modified Flow Alternative
- No Project Alternative (as defined by CEQA)
- No Action Alternative (as defined by NEPA)

The Proposed Project/Action Alternative would implement the Yuba Accord Alternative, including its three primary proposed elements: (1) Fisheries Agreement; (2) Water Purchase Agreement; and (3) Conjunctive Use Agreements.

3.1 DEVELOPMENT OF ALTERNATIVES

Under CEQA and NEPA, an EIR/EIS should consider a range of reasonable alternatives that could feasibly attain the overall purpose and need and all or most of objectives of the project, including alternatives that would avoid or substantially lessen any of the significant impacts of the project. CEQA and NEPA also require analysis of a “No Project” alternative and a “No Action” alternative, respectively.

Potential alternatives were considered in two forums. First, a wide variety of alternatives were considered during the collaborative development of the Proposed Project/Action Alternative, as described in Section 3.4. Second, variations on the Proposed Project/Action Alternative were considered during the public scoping process for this EIR/EIS. Reasons describing why these variations on the Proposed Project/Action Alternative are not analyzed in this EIR/EIS are presented in Section 3.4.

3.2 ALTERNATIVES CONSIDERED IN DETAIL

This section of the Draft EIR/EIS describes each alternative in narrative fashion in comparison to the Existing Condition. Throughout this narrative description of the alternatives, pertinent data (e.g., the detailed instream flow schedules for each of the alternatives) is included. However, other data regarding the specifics of each alternative is not presented in this chapter. Instead, references to the appropriate resource chapter or appendix are provided for specific data. The purpose of the narrative description is to provide a basic understanding of each alternative before introducing the details of the alternatives.

Selection of the Yuba Accord Alternative or Modified Flow Alternative would result in implementation of a revised instream flow regime and other related actions. The No Project and No Action alternatives would result in no project or action being implemented. The primary differences between the Yuba Accord and the Modified Flow alternatives and the No Project and No Action alternatives are related to: (1) the instream flow schedules that would be implemented and the potential level of protection and enhancement for lower Yuba River fisheries; (2) variations in the level of groundwater pumping that would occur within Yuba

County; and (3) the volumes of water acquisitions by the EWA Program, DWR, and Reclamation.

The primary differences between the Yuba Accord Alternative, Modified Flow Alternative, No-Action/Project Alternatives, and the Existing Condition are summarized in **Table 3-1**. The differences are categorized as follows:

- ❑ ***Instream Flow Schedules*** – Describes the source for the monthly minimum flow requirement assumed for each alternative and the Existing Condition
- ❑ ***Local Supply Reliability*** – Describes the changes in groundwater and surface water collaborative use and the change in groundwater demand:
 - Pumping volumes for transfer and deficiencies
 - Local surface water demand estimates
- ❑ ***Water Transfers*** – Describes potential water acquisition volumes and the source of the water to:
 - The EWA Program
 - Reclamation and DWR
- ❑ ***Revenues for Yuba County Flood Control and Water Supply Projects*** – Describes the assumptions behind revenue projections
- ❑ ***Reservoir Operations*** – Describes changes to operational targets or constraints:
 - Carry-over targets
 - Flood control
 - Hydropower generation
- ❑ ***Other Projects*** – Describes the assumptions for other projects to be implemented

The differences between the alternatives are briefly described below. A detailed description of each alternative begins in Section 3.2.1. Details regarding how each alternative was modeled are included in Appendix D.

The instream flow schedules of the Existing Condition are the RD-1644 Interim instream flow requirements. The instream flow schedules for the Proposed Project/ Action Alternative are the schedules in the Fisheries Agreement (Appendix B1). The instream flow schedules for the Modified Flow Alternative are the RD-1644 Interim requirements with a provision for Conference Years. The instream flow schedules for the No Project and No Action alternatives are RD-1644 Long-term requirements.

Differences in conjunctive use operations between the Existing Condition and the four alternatives are due largely to assumptions about the volume of groundwater pumping. Under the Proposed Project/ Action Alternative, conjunctive use would operate as described in the Conjunctive Use Agreements (see Appendix B3). Under the No Project and No Action alternatives, little change would occur to YCWA's existing conjunctive use program and groundwater management (described in detail in Section 2.2.4 and Section 2.2.7).

Table 3-1. Summary Comparison of Operational Assumptions and Constraints Associated with the Existing Condition and the Alternatives Considered in the Proposed Yuba Accord EIR/EIS

Analysis of Existing Condition and the Alternatives		CEQA		NEPA	Yuba Accord Alternative	Modified Flow Alternative
		Existing Condition	No Project Alternative	No Action Alternative		
Instream Flows		RD-1644 Interim ^a	RD-1644 Long-term ^b		Yuba Accord Alternative flow schedules listed in the Fisheries Agreement ^c	RD-1644 Interim with Conference Year Provisions
Water Supply Reliability	Conjunctive Use (Groundwater Pumping)	Pumping primarily for transfer	Drier year pumping to meet deficiencies in surface water deliveries; some groundwater substitution transfers.		Pumping in drier years as needed to meet the conjunctive use agreements ^d	Pumping primarily for transfer
	Local Surface Water Demand	Current demand without Wheatland Water District	-----Current demand plus demand for Wheatland Water District -----			
	Reservoir Carry-over Targets	Target is the maximum 50% shortage for 1-in-100-year drought event in the following year			Target is the maximum 50% shortage for 1-in-100-year drought event in the following year. Actual storage determined by Accord requirements.	Target is the maximum 50% shortage for 1-in-100-year drought event in the following year.
Water Transfers	YCWA to EWA	At historical volumes ^e	No stored water transfers. Possible groundwater substitution transfers.		60 TAF per year ^f	Both stored water and groundwater substitution transfers, as possible.
	YCWA to CVP/SWP	At historical volumes ^e	No stored water transfers. Possible groundwater substitution transfers.		Up to an additional 140 TAF in drier years ^f	Both stored water and groundwater substitution transfers, as possible.
Revenue for Local Projects (Flood Control)		At historical levels	None to YCWA		Revenue ^f to YCWA	Commensurate with the volume of stored surface water transfers.
Reservoir Operations	Flood Control	-----No Change-----				
	Hydropower	Historical practice	Historical practice		Historical practice with adjustments to Yuba Accord target line	Historical practice
Other New Projects Considered for Modeling		Implemented	Near-term (2007)	-----Longer term (2025)-----		
^a Detailed information on RD-1644 Interim instream flow requirements (i.e., monthly release patterns, by water year type) is presented in Table 2-1. ^b Detailed information on RD-1644 Long-term instream flow requirements (i.e., monthly release patterns, by water year type) is presented in Table 3-7. ^c Detailed information on the Yuba Accord Alternative flow schedules is presented in Tables 3-3 and 3-4. ^d See Conjunctive Use Agreement in Appendix B3. ^e Information on historical water transfer volumes under the Existing Condition is presented in Table 2-2. ^f See Water Purchase Agreement in Appendix B2.						

The assumption of the demand for local surface water deliveries is the same among the alternatives, but not the Existing Condition. Under the Existing Condition, surface water deliveries to WWD are not included. The canal that will bring surface water to WWD is currently under development and is scheduled to be operational in 2007 (environmental document requirements for the Yuba/Wheatland In-Lieu Groundwater Recharge and Storage Project (Wheatland Project) are being met separately from this document). In each of the four alternatives, the canal is assumed to be operational. Delivering surface water to WWD is assumed to increase surface water diversions at Daguerre Point Dam by 40 TAF.

The ability of YCWA to deliver water, either to the EWA Program or to Reclamation and DWR, would be significantly different under the various alternatives. Under Yuba Accord Alternative, delivery of water to the EWA Program would be 60 TAF per year. Additional volumes of water, ranging up to approximately 140 TAF per year, would be delivered to Reclamation and DWR in drier years. Under the Modified Flow Alternative, transfers may occur, based on hydrology (estimates of delivery volumes are presented in Chapter 5). Under both the No Project and the No Action alternatives (using RD-1644 Long-term instream flow requirements), no stored surface water would be transferred, and the only transfers would be from groundwater substitution. Under the Existing Condition (using RD-1644 Interim instream flow requirements), the transferable volume of water is assumed to be equal to historical volumes (see Table 2-2).

The ability of YCWA to generate revenue would be significantly different under the various alternatives. The ability of YCWA to generate revenue to support ongoing flood control efforts, groundwater pumping for deficiencies in local deliveries during droughts, and future water supply projects depends on the volume of water transferred. Under the Yuba Accord Alternative, the revenue is specified in the Transfer Agreement. Under the Modified Flow Alternative, revenue would depend on the ability of YCWA to transfer stored surface water each year. Under the No Project and No Action alternatives, YCWA would receive no net revenue because no stored surface water transfers would occur (YCWA receives a minor portion of the groundwater substitution revenues; however, all of that money is used to cover YCWA's administrative costs of these transfers). Therefore, YCWA receives no net revenue for general purposes from these transfers). Under the Existing Condition, annual revenues are characterized as being approximate to historical levels.

No difference exists in reservoir operations for carry-over storage operational targets and flood control operations between the Existing Condition or any of the four alternatives. Similarly, no difference exists in the criteria for setting carry-over storage operational targets between the Existing Condition or any of the four alternatives. However, the actual carry-over storage levels that will occur under the Yuba Accord Alternative will be determined by the flow requirements in the Fisheries Agreement. **Power generation would be different under the Proposed Project/Action Alternative** compared to the Existing Condition. A new "Accord Target Line" was developed in conjunction with PG&E. This operational requirement is discussed in detail in Section 3.2.1.5.

For modeling purposes, other new projects that are expected to be operational in the foreseeable future are included in the NEPA analysis. Under the Yuba Accord Alternative, the Modified Flow Alternative, and the No Action Alternative, other new projects, such as a long-term EWA Program or program equivalent to the EWA, are assumed to be operational. Under the CEQA No Project Alternative, other new projects are included in the modeling assumptions only if they are expected to be operational in the near term. Therefore, under the No Project Alternative, the list of other new projects included for modeling purposes is smaller than under

the No Action Alternative. **The only difference between the No Project Alternative (under CEQA) and the No Action Alternative (under NEPA) is the list of other new projects included or excluded.** The list of other projects that are considered in the modeling assumptions for each alternative is fully described in Table 4-1 of Appendix D.

The next sections describe the four alternatives. The descriptions following the categories of analysis presented in Table 3-1 of this chapter are: (1) fisheries; (2) local supply reliability, including conjunctive use, water demand, and reservoir carry-over targets; (3) water transfers; (4) revenue generation; and (5) other projects included for modeling considerations. In addition to these categories, two additional categories are included: (1) flood control, and (2) hydropower generation. Following the descriptions of the four alternatives is a discussion of alternatives previously considered and then dismissed from further consideration.

3.2.1 PROPOSED PROJECT/ACTION ALTERNATIVE (YUBA ACCORD ALTERNATIVE)

The Yuba Accord Alternative, which is the Proposed Project/Action Alternative, is the result of over two years of work and discussions by Yuba River stakeholders (listed in Section 1.2.4) to resolve the controversies regarding RD-1644. The goal of the negotiations and discussions was to find a solution to the challenges of competing interests by providing water for fisheries (Fisheries Agreement), developing new tools to ensure a reliable local water supply (Conjunctive Use Agreements), and crafting a revenue stream to pay for the Yuba Accord Alternative and to provide additional water for out-of-county environmental and consumptive uses (Water Purchase Agreement). The three proposed agreements are in Appendix B. The implementation process, anticipated duration of each proposed agreement, and relationships of other actions and approvals affecting the Yuba Accord Alternative are shown on **Figure 3-1**.

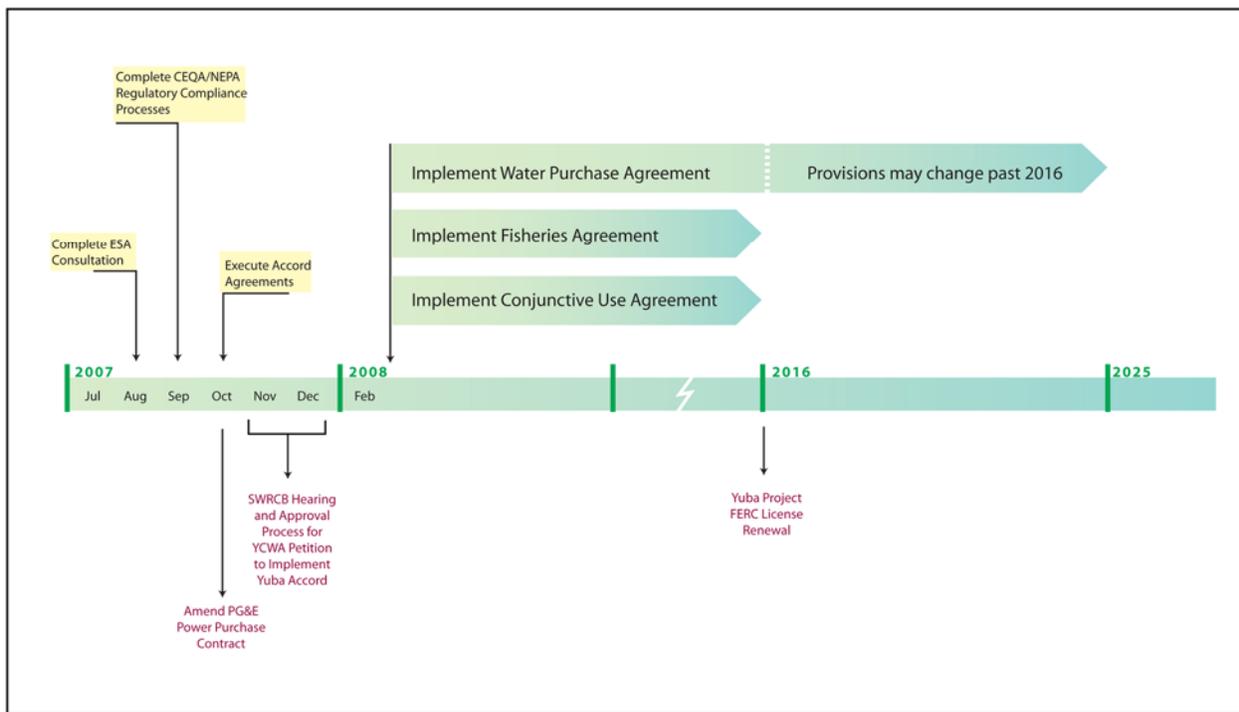


Figure 3-1. Implementation Process Associated with the Yuba Accord Alternative

YCWA, SYRCL, TU, TBI, FOR, CDFG, USFWS, and NMFS developed the comprehensive proposal contained in the Fisheries Agreement. The Fisheries Agreement is the cornerstone of the Yuba Accord Alternative. The Fisheries Agreement contains proposed new instream flow requirements for the lower Yuba River that are intended to increase protection of the river's fisheries resources. In addition to the best available science and data, the interests of the participating state, federal, and local fisheries biologists, fisheries advocates, and policy representatives were considered during development of the Yuba Accord Alternative. A fundamental precept of the Yuba Accord Alternative is the provision of instream flows during specified periods of the year that are higher than the Interim flow requirements of D-1644.

To provide these flows, YCWA proposes to implement the Conjunctive Use Agreements, which would establish a conjunctive use program that would provide for comprehensive management of the surface water and groundwater supplies within Yuba County, in coordination with the local irrigation districts and mutual water companies that YCWA serves in the county.

Under the Water Purchase Agreement, Reclamation and DWR would purchase water from YCWA to improve water supply reliability for the CVP and SWP and to contribute to the security of a long-term EWA Program or a program equivalent to the EWA. Substantial portions of the water obtained by the CVP and SWP under the Water Purchase Agreement may be used for fish and wildlife purposes, which may include meeting refuge water supply commitments and helping to achieve Delta outflow requirements.

The following sections provide more detail about each of the three Proposed Yuba Accord agreements, and describe how implementing the provisions and actions identified in the agreements could change the conditions identified in Table 3-1.

3.2.1.1 FISHERY PROTECTION AND ENHANCEMENT MEASURES - FISHERIES AGREEMENT AND STATEMENT OF SUPPORT FOR THE FISHERIES AGREEMENT

The signatories to the proposed Fisheries Agreement (see Appendix B1) would be YCWA, CDFG, SYRCL, FOR, TU, and TBI. NMFS and USFWS, although not signatories to the Fisheries Agreement, have signed the *Statement of Support for Proposed Lower Yuba River Fisheries Agreement* and have provided critical input into the development of the Fisheries Agreement. The term of the proposed Fisheries Agreement would extend until FERC issues a new long-term license for the Yuba Project (approximately 2016).

Key elements of the Fisheries Agreement include: (1) changes to lower Yuba River instream flow requirements; and (2) formation of a RMT (a collaborative decision-making body made up of the signatories to the "*Statement of Support for Proposed Lower Yuba River Fisheries Agreement*") and River Management Fund (RMF). Each of these elements is discussed below.

INSTREAM FLOWS

The Fisheries Agreement would establish new instream flow schedules for the lower Yuba River Chinook salmon, steelhead, and other fish species, which would provide protection equivalent or greater than the protection provided by the instream flow requirements in RD-1644. A suite of six flow schedules, plus Conference Year rules for 1-in-100 critically dry years, has been developed for the Fisheries Agreement. The flow schedules are based on water availability, including inflow into New Bullards Bar Reservoir and reservoir carry-over storage.

The flow schedules were developed by biologists representing YCWA, the NGOs, CDFG, NMFS, and USFWS with the express goal of optimizing fisheries conditions in the lower Yuba River, given existing operational and physical constraints on the river. During development of the flow regime for the Fisheries Agreement, extensive stressor analyses were undertaken, and several dozen flow combinations were analyzed. A discussion of the development of the flow regimes is in Appendix C.

The six flow schedules for specific types of water years are based on hydrologic conditions represented by the North Yuba Index (NYI). The NYI is an indicator of the amount of water available in the North Yuba River at New Bullards Bar Reservoir that could be used to achieve proposed project flow schedules on the lower Yuba River through operations of the reservoir. The estimated frequencies of occurrence of year-type designations under the NYI are shown in **Table 3-2**. The development of the NYI is described in Section A.2.5.2 of Attachment A to Appendix D.

Table 3-2. Instream Flow Schedule Occurrence

Schedule	North Yuba Index (TAF)	Percent Occurrence (%)	Cumulative (%)
1	≥ 1,400	56	56
2	1,040 – 1,399	22	78
3	920 – 1,039	7	85
4	820 – 919	5	90
5	693 – 819	5	95
6	500 - 692	4	99
Conference	< 500	1	100

In addition to the six types of water years for the flow schedules, Conference Years would occur at a frequency of one percent or less (during the driest years). Conference Years are defined as water years for which the NYI is less than 500 TAF. The Yuba Accord Alternative would have provisions for the management and operation of the Yuba Project in Conference Years. In such years, YCWA would meet with the parties to the Fisheries, Conjunctive Use, and the Water Purchase agreements to develop a strategic management plan to balance water supply and lower Yuba River instream flow needs for that year. YCWA also would notify the SWRCB of the Conference Year conditions.

As part of the Yuba Accord Alternative, YCWA would operate the Yuba Project and manage lower Yuba River instream flows according to proposed revised instream flow requirements, and according to specific flow schedules, numbered 1 through 6 (measured at the Marysville Gage) and lettered A and B (measured at the Smartville Gage), based on water availability (see **Table 3-3** for Schedules 1 through 6 and **Table 3-4** for Schedules A and B). The specific flow schedule that would be implemented at any time would be determined by the value of the NYI and the rules described in the Fisheries Agreement.

In Schedule 6 water years, an additional 30 TAF of water would be made available through groundwater substitution programs during the portions of such water years when this water would be transferable under provisions of the Water Purchase Agreement. This groundwater component would be managed by the RMT to achieve maximum fisheries resource benefits during the transfer period (i.e., June 16 to August 31). Additionally, pursuant to specific rules, minor modifications to the applicable instream flow requirements in Schedules 1 through 6 may be agreed to by the RMT.

Table 3-3. Yuba Accord Alternative - Lower Yuba River Minimum Instream Flows (cfs) for Schedules 1 through 6, Measured at the Marysville Gage

Schedule ^a	Oct 1-31	Nov 1-30	Dec 1-31	Jan 1-31	Feb 1-29	Mar 1-31	Apr 1-15	Apr 16-30	May 1-15	May 16-31	Jun 1-15	Jun 16-30	Jul 1-31	Aug 1-31	Sep 1-30
1	500	500	500	500	500	700	1,000	1,000	2,000	2,000	1,500	1500	700	600	500
2	500	500	500	500	500	700	700	800	1,000	1,000	800	500	500	500	500
3	500	500	500	500	500	500	700	700	900	900	500	500	500	500	500
4	400	500	500	500	500	500	600	900	900	600	400	400	400	400	400
5	400	500	500	500	500	500	500	600	600	400	400	400	400	400	400
6 ^{b,c}	350	350	350	350	350	350	350	500	500	400	300	150	150	150	350

^a For the Yuba Accord Alternative (using the NYI): Schedule 1 years are years with the NYI \geq 1,400 TAF, Schedule 2 are years with NYI 1,040 to 1,399 TAF, Schedule 3 are years with NYI 920 to 1,039 TAF, Schedule 4 are years with NYI 820 to 919 TAF, Schedule 5 are years with NYI 693 to 819 TAF, Schedule 6 are years with NYI 500 to 692 TAF, and Conference Years are years with NYI < 500 TAF.

^b Indicated flows represent the average flow rate at the Marysville Gage for the specified time periods listed above. Actual flows may vary from the indicated flows according to established criteria.

^c Indicated Schedule 6 flows do not include an additional 30 TAF available from groundwater substitution to be allocated according to the criteria established in the Fisheries Agreement.

Table 3-4. Yuba Accord Alternative – Lower Yuba River Minimum Instream Flows (cfs) for Schedules A and B, Measured at the Smartville Gage

Schedule ^a	Oct 1-31	Nov 1-30	Dec 1-31	Jan 1-31	Feb 1-29	Mar 1-31	Apr 1-15	Apr 16-30	May 1-15	May 16-31	Jun 1-15	Jun 16-30	Jul 1-31	Aug 1-31	Sep 1-30
A ^a	700	700	700	700	700	700	700	^c	700						
B ^b	600	600	550	550	550	550	600	^c	500						

^a Schedule A flows are to be used concurrently with Schedules 1, 2, 3, and 4 at Marysville.

^b Schedule B flows are to be used concurrently with Schedules 5 and 6 at Marysville.

^c During the summer months, flow requirements at the downstream Marysville Gage always will control, and thus, Schedule A and Schedule B flows were not developed for the May through August period. Flows at the Smartville Gage will equal or exceed flows at Marysville.

In Conference Years, the strategic management plan would identify the steps that YCWA and the Member Units would undertake to ensure that total water diversions at Daguerre Point Dam would not exceed 250 AF per year. Groundwater pumping practices would be implemented to meet irrigation demand. Minimum instream flow requirements in Conference Year conditions would be the FERC license requirements. The RMT also may determine and advise YCWA to make additional instream flows depending on water availability for the purposes of meeting fisheries resources needs.

YCWA would not be obligated to deliver Components 1 through 4 water in a Conference Year or refund any part of payment received for Component 1 water in such a year. However, YCWA would deliver, in a subsequent water accounting year, on a schedule acceptable to Reclamation and DWR, the amount of Component 1 water that was not delivered in a Conference Year.

Other flow elements in the Fisheries Agreement include rules regarding shifting flow releases to achieve specific biological objectives as directed by the RMT, and rules for supplemental surface and groundwater transfers

RIVER MANAGEMENT TEAM AND RIVER MANAGEMENT FUND

In addition to the instream flows described above, the Fisheries Agreement would provide for the formation of the RMT and the RMF. The RMT would be composed of representatives from YCWA, CDFG, NMFS, USFWS, Reclamation, DWR, PG&E, and the NGOs, and would be charged with providing a forum for consensus-based decisions and actions for management of the lower Yuba River. The RMF, which would be administered by the RMT, would be funded by YCWA with \$6 million over the term of the agreement to finance a long-term fishery

monitoring, study, and enhancement program for the lower Yuba River. The enhancement program element could include physical restoration projects.

The RMT would be responsible for scheduling additional instream flows (above the FERC license requirements) during Conference Years and for scheduling water made available for supplemental instream flows in connection with any supplemental water transfer. The RMT also would modify flow schedules, when necessary, in accordance with the terms of the Fisheries Agreement and would oversee various environmental actions for the lower Yuba River, including operation of water temperature devices, the planning of fisheries monitoring and studies, and habitat enhancement measures. Primary fisheries resources of concern for monitoring and habitat enhancement in the Yuba River include Central Valley steelhead, spring-run Chinook salmon, fall run Chinook salmon, American shad, and Southern DPS of North American green sturgeon.

The RMT would consist of a Planning Group and an Operations Group. The Planning Group would include representatives of each party to the Fisheries Agreement or the Water Purchase Agreement, and NMFS, USFWS, and PG&E. The Operations Group would include one representative each from YCWA, PG&E, CDFG, NMFS, USFWS, the NGOs, DWR, and Reclamation. One representative would rotate between CDFG, NMFS, and USFWS, and one representative would rotate between Reclamation and DWR. If necessary, the Planning Group may convene a Technical Working Group, which would include members designated by the Planning Group. Only the parties to the Fisheries Agreement, NMFS and USFWS, would participate in making formal decisions on Planning Group actions involving fisheries issues.

In Schedule 5 years, the Planning Group may decide to adjust the Marysville Gage instream flows to 400 cfs during all or part of the period extending from October 1 until the next February Bulletin 120 forecast is available. The Planning Group also may decide to temporarily alter the applicable instream flows in Schedules 1 to 6 at any time during the term of the Fisheries Agreement, if necessary or appropriate for aquatic resources, Yuba Project operations or maintenance, or CVP/SWP operations or maintenance, as long as the agreed-to instream flows comply with the applicable requirements of YCWA's FERC license and water right permits. Additionally, the Planning Group may schedule any water made available for supplemental instream flows in connection with a supplemental surface water transfer or the groundwater substitution program or additional instream flows during Conference Years.

The Planning Group also may determine the planned operations of the upper and lower outlets for New Bullards Bar Dam into the New Colgate Dam penstock and any temperature adjustment device that is constructed at Englebright Dam. In addition, the Planning Group may comment on YCWA's plans for Narrows I and II powerhouse maintenance outages.

In association with planned fisheries studies, the Planning Group may develop and implement studies of lower Yuba River fish or fish habitat, monitoring of flows or water temperatures, or fry studies. The Planning Group also may make decisions to spend money in the RMF for any authorized purpose, and designate a fiscal agent for the RMF.

The Operations Group would provide specific guidance to YCWA for recommendations or directions given from the Planning Group. The Operations Group would provide guidance related to YCWA's implementation of the flow schedule set by the Planning Group for the 30 TAF of groundwater substitution program water during Schedule 6 years. The Operations Group also would provide guidance to YCWA associated with any temporary alterations in the applicable instream flow requirements in Schedules 1 to 6 that had been agreed on by the Planning Group, any supplemental instream flows that had been scheduled by the Planning

Group in connection with a supplemental surface water transfer or the groundwater substitution program, and any additional instream flows during Conference Years that had been scheduled by the Planning Group. Additionally, the Operations Group would provide guidance on any Planning Group decision regarding the operation of the upper and lower outlets from New Bullards Bar Dam into the New Colgate Dam penstock or any temperature adjustment device that is constructed at Englebright Dam.

YCWA would use some of the revenues generated by implementation of the Water Purchase Agreement to provide annual funding to the RMF, in amounts subject to the rules outlined in the Fisheries Agreement. Additionally, both YCWA and CDFG would make in-kind contributions of services and equipment to the RMF on an annual basis. The RMF would be used for various fisheries monitoring and evaluation studies and habitat enhancement measures, including: monitoring and evaluating the effectiveness of the implementation of the Yuba Accord Alternative; evaluating the condition of fisheries resources in the lower Yuba River; evaluating the viability of lower Yuba River fall-run Chinook salmon Evolutionarily Significant Units (ESU) that may exist in the lower Yuba River; implementing habitat improvement and non-flow enhancement actions and activities; purchasing water for instream flows in the lower Yuba River above the flows specified in the Water Purchase Agreement; retaining expert advice for specified technical questions; retaining an expert or experts for dispute resolution process; and paying local shares of grant-funded projects for fish or fish habitat in the lower Yuba River, specifically to facilitate unique grant-matching opportunities.

If implemented, the Yuba Accord Alternative flow schedules would continue through the term of the Fisheries Agreement and expire when FERC issues a new long-term license to YCWA for the Yuba Project. Through the Fisheries Agreement activities, the participating parties would obtain a credible and relatively long-term data set that could be used to develop a proposal for future Yuba River instream flow requirements to be established by FERC as part of its relicensing efforts for the Yuba Project, anticipated to occur 2016. If consensus could be reached, then the participants could jointly submit the proposal to the SWRCB and FERC during their processes regarding the new FERC license.

3.2.1.2 CONJUNCTIVE WATER MANAGEMENT - CONJUNCTIVE USE AGREEMENTS

YCWA would enter into individual Conjunctive Use Agreements with each of the participating Member Units: BWD, BVID, DCMWC, HIC, RWD, SYWD, and WWD. The terms of the Conjunctive Use Agreements would be until FERC issues a new license for the Yuba Project (approximately 2016). Additionally, the agreements would provide for consideration of extending the terms of the agreements if the parties to the individual agreement concurred.

The proposed Conjunctive Use Agreements would formalize the integration of surface water and groundwater supplies in Yuba County. Integration of Yuba County's groundwater and surface water supplies has been a key element of the YCWA transfer program for the past 14 years. Under the Yuba Accord Alternative, this integration would be formalized to assure a supplemental dry year supply of groundwater to irrigate local farmland and to allow storage in New Bullards Bar Reservoir to be more fully exercised to meet: (1) the instream flow requirements in the Fisheries Agreement; and (2) the commitments to deliver water in the Water Purchase Agreement. If YCWA and a Member Unit decide to enter into a conjunctive use agreement, then the Member Unit would arrange for its respective water users to reduce their use of surface water diversions by amounts to be determined by YCWA and its Member Units during the water accounting year, and to pump equivalent amounts of groundwater from approved wells as replacement supplies for the groundwater substitution component of the

YCWA water transfer to Reclamation and DWR. YCWA would provide a list of groundwater well locations that may be used to Reclamation and DWR. Wells located within two miles of the Yuba and Feather rivers would be subject to review and approval by Reclamation and DWR prior to the commencement of groundwater pumping. Other listed wells would be approved by Reclamation and DWR after YCWA had demonstrated that all required local permits for these wells have been obtained. Pumped groundwater would be used to irrigate lands within the Member Units' service areas that otherwise would have been served by surface water between March 1 and December 31. These operations would be consistent with the implementation of YCWA's Groundwater Management Plan (YCWA 2005) and within the safe yields of the groundwater basins.

In Schedule 6 years, the participating members would implement 30 TAF of groundwater substitution to increase surface water storage releases for instream flows. This commitment would be proportionally split among those members. YCWA would provide the participating Member Units, one-time, upfront payments for their commitments to pump groundwater in these years, and additional per-acre-foot payments for actual pumping during Schedule 6 years.

YCWA also would provide financing to assist in modernizing local diesel groundwater pumps through conversions to more efficient and cleaner electric pumps. Meeting the Yuba Accord Alternative's higher instream flow requirements may result in occasional surface water deficiencies under YCWA's contracts with participating members. To mitigate such deficiencies, YCWA would compensate participating Member Units for the costs associated with groundwater pumping determined necessary to irrigate crops and avoid irrigation deficiencies.

Under the Transfer Agreement, Reclamation and DWR, in dry and critical years, would purchase from YCWA the surface water made available by participating Member Units' use of groundwater as a substitute supply. YCWA would compensate those Member Units for: (1) associated groundwater pumping, and (2) electric standby charges incurred to implement the conjunctive use program (if the wells were not used to provide water for a groundwater substitution water transfer during the period when the standby charge was incurred).

Under the Existing Condition, groundwater substitution transfers have occurred at sustainable levels. Implementation of the Yuba Accord Alternative would continue to exercise the aquifer at sustainable levels. Differences in the patterns and volumes of groundwater extraction between the Existing Condition and the Yuba Accord Alternative have been analyzed using the modeling tools and impact analysis. The results of this analysis are described in Chapter 6.

One change to groundwater that would occur during implementation and operation of the Yuba Accord Alternative, but which is not directly related to the Proposed Yuba Accord, is the increase in in-lieu groundwater recharge that is anticipated to occur when the Wheatland Project is completed. The Wheatland Project is described in Section 3.2.1.6. The Wheatland Project will deliver up to 40 TAF of water to WWD from the Yuba Project. Currently, the growers in WWD all rely on groundwater for irrigation. After completion of the Wheatland Project, most WWD growers will be using surface water rather than groundwater, thereby normally reducing the demand for groundwater in Yuba County.

3.2.1.3 WATER DELIVERIES - WATER PURCHASE AGREEMENT

YCWA, DWR, and Reclamation would be parties to the proposed Water Purchase Agreement. This agreement provides for the purchase and delivery of water to Reclamation and DWR in quantities described below. The term of the Water Purchase Agreement (Tier 1 Agreement)

would extend until December 31, 2025. Related to implementation of the Water Purchase Agreement and use of the transfer water, Reclamation and DWR would enter into an agreement regarding sharing of the water and related integrated operations of the CVP/SWP system (Tier 2 Agreement). Additionally, Reclamation and DWR would each enter into separate agreements with the federal and state water contractors, respectively, regarding allocation of the transfer water supply (Tier 3 Agreements).

Key elements of the Water Purchase Agreement include: (1) definition of water supply components and related pricing structures; (2) a water accounting mechanism; (3) explanation of Conference Year principles; (4) definition of the proposed place of use of the water; and (5) Groundwater Monitoring and Reporting Program. These elements are described below.

From 2008 through 2015, the Water Purchase Agreement would require YCWA to provide 60 TAF of water annually to the EWA Program or an equivalent program. Additionally, the Water Purchase Agreement would enable provision of a supplemental water supply of up to 140 TAF in dry years for use in the CVP and SWP, including for fish and wildlife purposes. The proposed agreement includes provisions to ensure that the water transfer flows first would protect and improve fisheries habitat conditions within the lower Yuba River.

The Water Purchase Agreement would provide YCWA with a stable source of revenue for flood control and water supply activities in Yuba County, including the conjunctive use program with Member Units. Yuba County has identified a funding shortfall of more than \$150 million for short to medium-term flood control projects. Revenues from the Water Purchase Agreement could be used to address some of this funding shortfall

The Water Purchase Agreement would require a petition to SWRCB to add the CVP (Jones Pumping Plant) and SWP (Banks Pumping Plant) as new points of diversion/diversion and the CVP and SWP as new places of use, as necessary to implement the Water Purchase Agreement.

From January 1, 2016 through December 31, 2025, the Water Purchase Agreement would allow YCWA to deliver Component 1 (up to 60 TAF) and Component 2 through 4 water (up to 140 TAF) to Reclamation and DWR if the terms of the new FERC long-term license¹ do not affect YCWA's ability make these water supplies available. At a minimum, the Water Purchase Agreement would provide only a guaranteed supply of 20 TAF after 2015. If YCWA would be able to make additional supplies of water available consistent with its FERC long-term license and the water supply needs in Yuba County, then YCWA may be able to provide additional Component 1 through 4 water to Reclamation and DWR.

It is anticipated that Component 1 water provided after 2015 would be pumped primarily during the July through September period. Because of the uncertainties associated with future conditions and changed uses of this water in the Yuba Region (e.g. FERC license conditions for the Yuba Project) and the CVP/SWP system (e.g., other projects on the planning horizon, CVP/SWP operational constraints) the amounts of any additional Component 1 water and of any Component 2, 3 and 4 water available for delivery through the remaining term of the Water Purchase Agreement (i.e., 2016 through 2025) cannot be definitively determined at this time. If additional supplies were available, the first 40 TAF of any additional supplies above the 20 TAF would be allocated to Component 1 water deliveries. Any additional supplies above this 40 TAF would be allocated to Components 2, 3 and 4 and could be used for CVP and SWP

¹ YCWA's new FERC license is scheduled to be issued in 2016.

purposes. Recognizing the range of conditions and constraints that could be in place after 2015, it is assumed in this EIR/EIS that Component 1, 2, 3 and 4 water deliveries to the CVP/SWP potentially could range from a “lower boundary” of 20 TAF up to an “upper boundary” that could include full Yuba Accord deliveries. For analytical purposes, this approach was taken to describe the broadest spectrum of potential hydrologic changes that could occur as a result of water deliveries under a range of potential future conditions after 2015. However, it is recognized that only 20 TAF would be guaranteed after 2015.

WATER SUPPLY COMPONENTS AND DELIVERY OPERATIONS UNDER THE WATER PURCHASE AGREEMENT

YCWA would provide water for purchase from both New Bullards Bar Reservoir surface water storage releases and groundwater substitution programs. These quantities would include some of the water used to implement the instream flow schedules in the Fisheries Agreement, some storage releases from New Bullards Bar Reservoir besides the releases needed to implement the instream flow schedules, and foregone surface water diversions resulting from groundwater substitution programs implemented by YCWA Member Units.

The Water Purchase Agreement identifies four water supply components that would be provided based on certain water availability conditions and subject to various pricing structures. Portions of the water used to implement Schedules 1 through 6 of the Fisheries Agreement would be delivered as Component 1, 2, 3, or 4 water.

Component 1 Water Supplies – For the first 8 years of this agreement (2008 to 2016), Reclamation and DWR would purchase 60 TAF per year of Component 1 water, for a total of 480 TAF. Reclamation and DWR plan to use these supplies exclusively for the EWA Program. In certain years, operational limitations of the Yuba Project, the CVP or the SWP may cause the quantity of water provided by YCWA to be less than 60 TAF. In this event, YCWA would provide "makeup" water quantities in a later water year, ensuring that over the course of the agreement the EWA Program or a program equivalent to the EWA would receive its full entitlement of Component 1 water. Subsection 5.B.1 of the 2005 draft Water Purchase Agreement provided that Reclamation and DWR would make two payments to YCWA for Component 1 water. Since then, the representatives of Reclamation, DWR and YCWA have agreed to amend this payment provision in the proposed agreement to provide for one payment of \$30.9 million within 60 days of the effective date of the agreement – after all environmental compliance required by state and federal law has been completed.

Component 2 Water Supplies – YCWA would provide Reclamation and DWR 15 TAF of water in any dry year and 30 TAF in any critical year. Reclamation and DWR would pay YCWA \$50.00 per acre-foot for this water in dry years and \$62.50 per acre-foot in critical years.

Component 3 Water Supplies – When, on April 21, the allocations to CVP south of Delta agricultural contractors are less than 45 percent of their contractual entitlements and the allocations to SWP contractors are less than 60 percent of their Table A amounts, Reclamation and DWR may request up to 40 TAF of water from YCWA as Component 3 water. If allocations to CVP south of Delta or SWP contracts decrease between April 21 and May 21, then Reclamation and DWR may call for additional Component 3 water from YCWA, up to a total maximum amount of 40 TAF. If these allocations increase between April 21 and May 21, then Reclamation and DWR may reduce the amounts of Component 3 water that they will receive from YCWA. Reclamation and DWR would pay \$50.00 per acre-foot for this water in above

normal years, \$75.00 per acre-foot in below normal years, \$100.00 per acre-foot in dry years, and \$125.00 per acre-foot in critical years.

Component 4 Water Supplies – In all water year types, YCWA would inform Reclamation and DWR of the quantity of any additional water available from surface and groundwater supplies. Reclamation and DWR then would notify YCWA if they opted to take delivery of any or all of this Component 4 water. The pricing for the Component 4 water would be the same as Component 3, and wet year water would be priced at \$25 per acre-foot.

Water Supplies Available to Third Parties – If YCWA identified an opportunity to provide Component 3 or 4 water, but Reclamation and DWR decided not to take delivery of that water, YCWA could sell that water to a third party, provided that: (1) the sale would not impair YCWA's ability to meet its current and future obligations to deliver water to Reclamation and DWR; and (2) YCWA would provide Reclamation and DWR with advance notice of such sale. In addition, any Component 2, 3, or 4 water released by YCWA that could not be used by Reclamation and DWR, but met the criteria to be considered transferable, would be water that could be sold by YCWA to a third party.

Accounting for the transfers would occur as follows. On April 10 of each year, the parties to this agreement would discuss the schedule for the Component 1, 2, 3, and 4 water that YCWA would provide to Reclamation and DWR during that water year. The final schedule would be determined no later than May 21 of each year. The agreement also would include specific accounting provisions for reservoir refill impacts. This accounting would be very similar to the refill accounting used for the previous 1-year temporary transfers that YCWA has made to the EWA Program.

Although the Yuba Accord Alternative would provide certainty to YCWA's transfer program, it probably would not significantly change the average annual amounts of water transferred. Under the Existing Condition, YCWA would continue to transfer water at historical rates (see Table 2-2). Those historical volumes are within the same range of volumes as the Yuba Accord Alternative volumes.

RECLAMATION AND DWR TIER 2 AND TIER 3 AGREEMENTS

The Water Purchase Agreement would be the Tier 1 Agreement under which Yuba Project water would be transferred to Reclamation and DWR. Reclamation and DWR also would enter into Tier 2 and Tier 3 agreements. The Tier 2 Agreement would describe the conditions under which Reclamation and DWR would share water made available for purchase from YCWA. The Tier 3 Agreements would be individual agreements entered into by Reclamation and CVP water contractors and DWR and SWP contractors, which would establish the terms regarding use of the water delivered by YCWA for the purposes of the CVP and SWP providing supplemental water supplies to these contractors.

Tier 2 Agreement

This agreement between Reclamation and DWR would describe the allocation of Yuba River water made available under the Water Purchase Agreement, and would be executed prior to implementation of the Water Purchase Agreement. As described in the Water Purchase Agreement, Component 1 water would be supplied to the EWA Program or an equivalent program through 2015. A long-term EWA Program or a program equivalent to the EWA would be implemented such that annual transfers of Component 1 water would be managed by DWR,

in coordination with CDFG, for purposes designed to benefit the fish and wildlife resources of the Delta. If any Component 1 water could not be put to beneficial use by the EWA Program (or an equivalent program), DWR would use the remaining quantity of Component 1 water for other purposes served by the SWP, consistent with the provisions described by the funding source from which the water was purchased.

Component 2, 3, and 4 water normally would be shared equally between Reclamation and DWR for purposes served by the CVP and SWP. Although most of the Component 2, 3 and 4 water would be conveyed to CVP/SWP south of Delta contractors, DWR also may provide a small percentage of this water to SWP contractors located upstream of the Delta (see Chapter 5). During any year in which either Reclamation or DWR did not acquire its full portion of the water, the remaining amounts of Component 2, 3 and 4 water could be acquired by the other agency for its contractors, or if the other agency decided not to acquire the water, by the EWA Program (or an equivalent program) or for any other CVP or SWP purpose (e.g., refuge water supply).

In this EIR/EIS, the analysis of the Yuba Accord Alternative is based on the concept that the Component 2, 3, and 4 water transfer amounts would be shared equally between the CVP and SWP, and thereafter would be divided among the respective projects' contractors, most likely in proportion to contract water allocation provisions.

It is expected that contractual arrangement between the CVP and SWP (the Tier 2 Agreement) would recognize the potential that one project could receive more than 50 percent of the Component 2, 3 and 4 transfer water, up to 100 percent of the total amount, in a particular year, depending on the relative allocations of each project's supplies to its contractors in that year, and on the willingness of the other project to relinquish some or all of its share of Yuba Accord water in that year. For example, in a dry year that followed a relatively wet year, the SWP might be able to maintain relatively high allocations, while the CVP would have lower allocations. In that case, the projects might arrange for the CVP to potentially receive the entire volume of Component 2, 3 and 4 water in that year. The opposite could occur in years when CVP allocations are high and SWP allocations are low.

Thus, there could be a year within the initial eight-year portion of the Yuba Accord Alternative when one project or the other receives all of the Component 2, 3 and 4 water made available by YCWA in that year.

Export of Component 2, 3 and 4 water would be divided between the Banks and Jones pumping plants according to each project's share of water, fisheries considerations, and available pumping capacity. In practice, limited or no pumping capacity is expected to exist at the Jones Pumping Plant except during dry and years when CVP south-of-Delta allocations are low. The modeling approach used for this EIR/EIS assumes that during wet and above normal years, all transfers from the Yuba Accord Alternative would be exported through the Banks Pumping Plant until all capacity is used. Any remaining Component 2, 3 and 4 water would be exported through any available capacity at the Jones Pumping Plant. During below normal, dry and critical years, transfer of Component 2, 3 and 4 water would be split evenly between Banks Pumping Plant and Jones Pumping Plant, as long as export capacity is available. Once either pumping plant reaches capacity, any remaining Component 2, 3 and 4 water would be exported through the remaining capacity at the other pumping plant.

Under the Tier 2 and Tier 3 agreements, Component 4 water (and Component 3 water to a limited extent) foregone by the CVP/SWP contractors would be available to the EWA Program or an equivalent program. For modeling purposes, it is assumed that during wet and above

normal years, the CVP and SWP contractors would totally forego their priority to Component 4 water, and that 100 percent of Component 4 water would be available to the EWA Program (or an equivalent program). In below normal, dry and critical years it is assumed that all Component 4 water would be delivered to the CVP and SWP contractors.

For analytical purposes in this EIR/EIS, it is assumed that Component 2, 3 and 4 water from Yuba Accord Alternative deliveries provided to CVP and SWP contractors would be split equally between the CVP and SWP. While this may not be the case in specific years, it is consistent with the proposed Tier 2 Agreement and is the best estimate of what will occur.

Tier 3 Agreements

Under the provisions of the Water Purchase Agreement, Reclamation and DWR would provide water to those contractors that elect to purchase Component 2, 3, and/or 4 water made available under the Yuba Accord Alternative. Reclamation would provide additional water furnished by the Yuba Accord Alternative to existing CVP contractors. The additional Component 2, 3 and 4 water deliveries would provide a supplemental supply, not to exceed the maximum existing CVP contract entitlements, which would improve reliability, particularly during dry years. During wetter years, the contractors may choose to forego their right to Component 4 water (and Component 3 water on rare occasions), and allow it instead to go to the EWA Program, or an equivalent program. Water also could pass between Reclamation and DWR on behalf of their respective contractors, such that the overall quantities to either the CVP or the SWP contractors could be greater than 50 percent of the estimated Component 3 and 4 quantities.

Water supplies for certain wildlife refuges² within the Central Valley are administered through CVPIA programs that acquire and convey water. Water for refuges is acquired through water supply contracts with “willing sellers”.³ The water to be acquired is known as Incremental Level 4 supplies. Incremental Level 4 supplies, when added to Level 2 supplies (historical deliveries), make up full Level 4 supplies (quantity of water needed to achieve full development). In recent years, acquired water to meet Level 4 needs have averaged between 70 to 80 TAF. Any water acquired under the Proposed Project/Action or an alternative for refuge-related purposes would be used to help meet Reclamation’s obligations under the CVPIA to provide Incremental Level 4 refuge water supply. Water supplies to wildlife refuges along the Sacramento River corridor would not be adversely affected, and would benefit from long-term water transfers to the CVP/SWP system implemented under the Proposed Project/Action (see Chapter 5 for a detailed description of water transfer programs and operations).

² The refuges specified in the CVPIA are mainly located along the axes of the Sacramento and the San Joaquin Valleys (see Chapter 12 for a list of these specified refuges).

³ Environmental documentation has already been prepared that addresses the overall impacts of acquiring full Level 4 supplies at the refuges, the conveyance of water to the refuges, and use of water on the refuges. The overall impacts of implementing the CVPIA, including providing Level 4 water supplies to the refuges, were addressed in a Final Programmatic EIS (Reclamation and USFWS 1999) and environmental assessments/initial studies (EA/IS). These documents addressed both the conveyance of water to the Sacramento Valley and San Joaquin Valley Wildlife Refuges (Reclamation 1997a; Reclamation 1997b; Reclamation 1997c; Reclamation 1997d; Reclamation and CDFG 2003) and the use of water on these refuges (Reclamation 1997c; Reclamation *et al.* 2001a; Reclamation *et al.* 2001b; Reclamation and USFWS 2001). Therefore, the analysis in this EIR/EIS with respect to refuge water supplies is focused solely on the potential impacts of Reclamation acquiring water to help meet Incremental Level 4 refuge needs.

DWR would enter into individual agreements with the SWP contractors. These agreements would specify the terms and conditions, including allocations and financing arrangements for the acquisition of this water supply. Component 2 water would be purchased by the SWP, with costs distributed among all contractors, and normally allocated to the 29 SWP contractors in proportion to their Table A⁴ percentages. Component 3 and 4 water also would be made available to the SWP contractors and normally allocated in proportion to Table A percentages, but individual contractor participation in the water purchases would be optional.

As previously discussed, total annual water deliveries extending through 2015 could range from a minimum of 60 TAF of Component 1 water to a maximum of 200 TAF, which would include up to an additional 140 TAF of Component 2, 3 and 4 water, depending on annual hydrologic conditions. After 2015, the Water Purchase Agreement would provide only a guaranteed supply of 20 TAF, which would be characterized as Component 1 water for EWA purposes. It is anticipated that the Component 1 water that would be provided after 2015 would be pumped primarily during the July through September period. Because of the uncertainties associated with future conditions and changed uses of this water in the Yuba Region (e.g. FERC license conditions for the Yuba Project) and the CVP/SWP system (e.g., other projects on the planning horizon, CVP/SWP operational constraints) the amounts of additional Component 1 water and of any Component 2, 3 and 4 water that would be available for delivery through the remaining term of the Water Purchase Agreement (i.e., 2016 through 2025) cannot be definitively determined at this time. However, after 2015, if additional supplies were available, then the next 40 TAF/yr would be Component 1 water (up to a total of 60 TAF/yr), and additional water above that amount would be used for CVP and SWP purposes. Recognizing the types of conditions and constraints that could be in place after 2015, it is assumed that Component 1, 2, 3 and 4 water deliveries to the CVP/SWP potentially could range from a “lower boundary” of 20 TAF up to an “upper boundary” that could include full Yuba Accord deliveries. The first 40 TAF of any additional supplies above the 20 TAF would be allocated to Component 1 water deliveries. Any additional supplies above this 40 TAF would be allocated to Components 2, 3 and 4.

As described above, this approach was taken to describe the broadest spectrum of potential hydrologic changes that could occur as a result of water deliveries under a range of potential future conditions after 2015. However, it is recognized that only 20 TAF would be guaranteed after 2015.

Water Transfer Accounting

YCWA, Reclamation and DWR would coordinate the scheduling, notification and operations for released transfer water. On April 10 of each year, the parties to the Water Purchase Agreement would discuss the schedule for the Component 1, 2, 3, and 4 water that YCWA would provide to Reclamation and DWR during that water year. The final schedule would be determined no later than May 21 of each year that a water transfer would occur. Delivered water would include the amount of released water that could be subsequently diverted at the

⁴ The SWP contracts between DWR and individual state water contractors define several classifications of water available for delivery under specific circumstances. All classifications are considered “project water” and the amount of each contract is specified in “Table A”. Table A is an exhibit to the SWP contracts, and Table A amounts are used to define each contractor’s proportion of the available water supply that DWR will allocate and deliver to that contractor.

CVP/SWP Delta pumping facilities, plus the associated carriage water necessary to support these diversions. Water deliveries will occur only when the Delta is in “balanced conditions.”⁵

For impact assessment purposes in this document, several assumptions have been made to characterize the accounting mechanisms and CVP/SWP operations (e.g., available pumping capacity, backing-up water, reservoir refill criteria and modeling hierarchy) related to the Proposed Project/Action Alternative. The full suite of modeling assumptions⁶ is described in Appendix D. Specific assumptions of key importance that relate to the characterization of the Proposed Project/Action Alternative and CVP/SWP Delta operations are discussed below.

Yuba Accord transfer water would be conveyed through the Banks and Jones pumping plants when the Delta is in balanced conditions, and would be constrained by the available permitted pumping capacity, downstream channel capacity, restrictions imposed by SWRCB required response plans, and the export-to-inflow (E/I) ratio (unless YCWA elects to pay for carriage water costs⁷).

Characterization of “Backing-Up” Water for Impact Assessment Purposes

Under the Yuba Accord Alternative, Oroville Reservoir may be used to re-regulate released transfer water from the lower Yuba River. Releases from Oroville Dam also may need to be adjusted to maintain minimum flows in the lower Feather River and water supplies to Feather River water right holders. The timing of released transfer water from the lower Yuba River is determined by the proposed instream flow requirements and the proposed target operating line for New Bullards Bar Reservoir in the Fisheries Agreement. However, the export of released transfer water from the South Delta depends on Delta conditions and available pumping capacity at the Banks and Jones pumping plants. When Delta conditions constrain the export of increases in Yuba River flow at the Marysville Gage (relative to the basis of comparison), it may be possible for the SWP to reduce storage releases from Oroville Reservoir, resulting in an increase of storage for a later release and export.

Oroville Reservoir releases from storage can be reduced if Feather River flows are greater than the flow requirement below the Thermalito Afterbay Outlet, but upstream of the confluence of the Feather and Yuba rivers, and reservoir storage is below flood control levels.

⁵ Balanced conditions exist when the only water flowing into the Delta is that amount needed to meet Delta standards, required Delta outflow, in-Delta consumptive uses, and CVP/SWP project exports. Under balanced conditions all in-basin water demands are being met and the CVP and SWP are storing (or releasing) and exporting water in a manner that does not allow water above that needed to meet Delta standards to leave the Delta (CALFED Website 2000). When balanced conditions do not exist, the Delta is in “excess conditions”.

⁶ Assumptions were developed through an iterative process involving collaboration with Reclamation and DWR. Although these efforts attempted to characterize the assumptions as accurately as possible for incorporation into available modeling tools, they are not intended for application to day-to-day real-time operations of the CVP/SWP system, which are considerably more complex than that which can be represented by the currently available modeling tools. Therefore, the assumptions described above, and further discussed in Appendix D, are designed to address project considerations related to CVP/SWP operations and fisheries protections in the Delta for planning purposes associated with the development of this EIR/EIS.

⁷ Consistent with other recent Reclamation and DWR projects, it is assumed that a 20 percent carriage water cost would be applied to the total transfer volume for any increase in Delta exports.

Delta Facilities and Pumping Sequencing

For impact analysis purposes in this EIR/EIS, the following assumptions have been regarding the pumping of water made available by the Yuba Accord flow schedules. When possible, DWR would plan to move Component 1 water through the Banks Pumping Plant using the EWA dedicated capacity available during July through September. Initial division of pumping of Component 2, Component 3 and Component 4 water would be split equally between the CVP Jones Pumping Plant (50 percent) and SWP Banks Pumping Plant (50 percent), using the remaining capacity that may be available at each facility. However, surplus capacity available for transfers varies considerably with hydrologic conditions. The CVP has little surplus capacity, except under drier hydrologic conditions. The SWP has greatest surplus capacity in dry and critical years, less under average conditions, and some surplus in wetter years when demands may be lower because contractors have alternate supplies.

Recognizing that the CVP's Jones Pumping Plant frequently operates at capacity, Reclamation and DWR would share pumping responsibilities according to the provisions described in the Coordinated Operations Agreement (COA) and authorized by the JPOD permit (see Chapter 5). Pumping would subsequently be adjusted if there is insufficient capacity at one pumping plant and spare capacity at the other pumping plant.

Reservoir Refill Considerations

Hydrologic changes resulting from stored water transfers that could impact the ability of the CVP and SWP to divert water are not experienced at the time water is transferred. Rather, these impacts can occur when the reservoir storage vacated by the transfer is refilled, which frequently occurs in the winter or spring following the transfer. In balanced conditions, while the CVP and SWP may be diverting water to storage or releasing water for export, the amount available for diversion or export could be reduced, if at the same time a non-project reservoir (e.g., New Bullards Bar Reservoir) is filling storage previously vacated by a stored water transfer. Reservoir refill criteria generally include daily accounting of reservoir refill to determine injury to other legal users of water, including the CVP and SWP (SWRCB 2002). If the refill occurs when the Delta is in excess conditions, then the refill would have no effect on the CVP and SWP and refill criteria would not be triggered (CALFED Website 2000).

In response to changes in instream flow requirements (i.e., Yuba Accord flow schedules instead of RD-1644 Interim requirements) and New Bullards Bar Reservoir refill conditions, lower Yuba River flows under the basis of comparison may be higher than flows under the Yuba Accord Alternative during some months. To maintain sufficient flows into the Delta when New Bullards Bar Reservoir is refilling, releases from upstream CVP/SWP reservoirs (i.e., Oroville) could be increased or Delta exports could be reduced, depending on hydrologic conditions. Consistent with the approach discussed during the Yuba Accord settlement negotiations, modeled New Bullards Bar Reservoir refill impacts are addressed by either: (1) increasing releases from project storage (i.e., Oroville Reservoir) during wet, above normal and below normal years; or (2) reducing Delta exports during dry and critical years, or essentially decreasing San Luis Reservoir storage and creating a "debt". For modeling purposes "refill" impacts that result in a reduction in pumping at Banks or Jones pumping plants, or a reduction in storage in project reservoirs (e.g., Oroville) would be offset by the first positive increment of released transfer water that is exported (i.e., water credited to Component 1, 2, 3 or 4 would be reduced by the refill impact from the previous month). If the Yuba Accord flows are lower than the baseline flow during the spring, then the payback of the "debt" is assumed to occur during the same year as a result of increased flows during the summer. Conversely, if Yuba Accord

flows are lower than the baseline flow during later months, then the assumed payback may not occur until the following year. Recognizing the limitations of a monthly model and the inherent complexities associated with calculating actual refill repayment schedules that would occur under real-time operations, the description presented above represents a general characterization of how refill considerations would be addressed. Specific details regarding reservoir refill accounting measures and repayment of potential refill impacts are based on the procedures defined in the 2004 DWR/EWA - Yuba 2004 Transfer Agreement, with the modifications identified in Exhibit 5 of the Water Purchase Agreement (see Appendix B2, Exhibit 5).

As previously described, YCWA may decide to enter into agreements with individual Member Units under which each Member Unit would arrange for its respective water users to reduce their use of surface water diversions by amounts to be determined by YCWA and the Member Units during the water accounting year, and to pump equivalent amounts of groundwater from approved wells as replacement supplies for the groundwater substitution component of the water transfer. Member Units would monitor and record groundwater pumping volumes, which would be provided to YCWA for incorporation into the master accounting procedure (see Appendix B2, Exhibit 4).

Upon completion of transfer activities for a given year, water that has been determined to be delivered transfer water would be credited to one of the four water components according to the priorities and accounting provisions in the Water Purchase Agreement. To further facilitate the accounting process, the contracting parties would establish regular coordination procedures to allow for the exchange of operational planning and hydrologic information during the transfer periods.

3.2.1.4 WATER PURCHASE AGREEMENT REVENUES

Besides funding fisheries studies and the conjunctive use program, the Yuba Accord Alternative also would provide revenues for flood control and other improvement activities in Yuba County. The history of flooding in Yuba County, including the most recent floods in 1986 and 1997, is discussed in Section 1.1.1.3. YCWA estimates the Yuba Accord Alternative would provide 8-year revenues that could range from about \$30 million to \$70 million, depending on the actual hydrology, with less revenue if there is a wet sequence and more if there is a dry sequence. Payment provisions and potential revenues associated with Component 1, 2, 3 and 4 water that could be provided by the Yuba Accord Alternative are presented in **Table 3-5**.

A significant portion of these revenues may be used for flood control projects in Yuba County. However, any flood control or water supply improvement project that would be funded or carried out by YCWA would be separate from the Yuba Accord Alternative, and would undergo independent environmental review.

Table 3-5. Overview of Payment Provisions and Water Purchase Agreement Revenues Associated with the Yuba Accord Alternative

	Payment Provisions	Range of Water Pricing Rates (\$ per acre-foot)	Range of Potential Water Transfer Amounts (TAF per year)
Component 1 Water	<input type="checkbox"/> One payment of \$30.9 million within 60 days of effective date of the Water Purchase Agreement	N/A	60
Component 2 Water	<input type="checkbox"/> Based on annual deliveries, but dependent on water availability in dry and critical water years	\$50 to \$62.50	15 to 30
Component 3 Water	<input type="checkbox"/> Based on annual deliveries, but dependent on water availability in below normal, dry and critical water years	\$75 to \$125	Up to 40
Component 4 Water	<input type="checkbox"/> Based on annual deliveries, but dependent on water availability in wet, above normal, below normal, dry and critical water years	\$25 to \$125	Up to 70
Source: Appendix B2, Water Purchase Agreement			

3.2.1.5 RESERVOIR OPERATIONS AND PLANNING

Besides operating New Bullards Bar Reservoir to meet flow requirements, the reservoir also would be operated to meet the target operating line and minimum carry-over storage targets. Table A-14, Attachment A of Appendix D presents various operational changes for the various alternatives.

CARRY-OVER STORAGE TARGETS

YCWA operates New Bullards Bar Reservoir to meet end-of-September carry-over storage operational targets. These targets designed to ensure that instream flow requirements and anticipated surface water deliveries to YCWA member units will be met during the next year. The carry-over storage requirement is a drought protection measure. Reservoir carry-over storage is used to make up the difference between the available surface water supply and system demands (diversion demands, instream flow requirements, and system operational losses) under dry conditions. The drought protection level is designed to provide full instream flow requirements and 50 percent of diversion requirements during the following water year, if that water year were to have the specified return period. YCWA will impose deficiencies of up to 50 percent on surface water deliveries to its Member Units to meet the carry-over storage in New Bullards Bar Reservoir.

The Yuba Accord Alternative would not change the criteria for establishing the minimum carry-over storage for New Bullards Bar Reservoir. Because of changes in surface water deliveries, operation of the reservoirs would take into account the Conjunctive Use Agreements, conference year provisions and flow requirements of the Fisheries Agreement, the actual volume of carry-over storage under the Yuba Accord Alternative during any given year would be different than under the Existing Condition. However, the target of meeting irrigation demand in 1 in 100 years in a year following a dry year, as described for the Existing Condition in Section 2.2.3.1, would remain under the Yuba Accord Alternative.

FLOOD CONTROL OPERATIONS

The Yuba Accord Alternative would not change the Existing Condition flood control operations of the Yuba Project.

HYDROPOWER GENERATION

Under the 1966 Power Purchase Contract between PG&E and YCWA, PG&E receives the entire electrical output of the Yuba Project in exchange for certain payments (for defeasance of the bonds for the Yuba Project and operations and maintenance). The Power Purchase Contract defines a “Critical Line”⁸ water storage target line. Critical Line levels for New Bullards Bar Reservoir during each month of the year are presented in **Table 3-6**. Under the Power Purchase Contract, PG&E has a right to require YCWA to release stored reservoir water down to the Critical Line each month. However, New Bullards Bar Reservoir storage is allowed to exceed the monthly power storage Critical Line when releases would result in Englebright Reservoir releases exceeding the combined capacity of Narrows I and Narrows II powerhouses, causing reductions in total system power generation. Additional details regarding hydropower operations on the lower Yuba River are described in Section 2.2.6 and in Chapter 7.

Table 3-6. New Bullards Bar Reservoir Operational Storage Targets (TAF)

Target	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Inactive (Dead Pool)	234	234	234	234	234	234	234	234	234	234	234	234
Critical Line	660	645	645	600	600	685	825	930	890	830	755	705
Accord Target Line	650	650	650	600	650	750	850	960	890	820	705	650
Flood Envelope	796	796	796	796	796	796	896	966	966	966	966	910

Under the Power Purchase Contract, if the reservoir level during a given month is not on target to reach the specified end-of-month Critical Line, PG&E may call for additional releases through the New Colgate Powerhouse to adjust reservoir operations so that storage reaches the Critical Line by the end of the month. Conversely, if reservoir storage is at or below the Critical Line, PG&E is entitled to call for only limited generation (15 to 35 percent of full production, depending on the month).

In recent years, PG&E has not called for operation to the Critical Line during the winter months, because it has been in the interests of both PG&E and YCWA to operate storage in New Bullards Bar Reservoir more adaptively, based on watershed conditions and other factors. To provide assurance that this more flexible operation would not result in significant lost hydropower generation at the New Colgate Powerhouse due to increased spills resulting from maintaining storage amounts higher than the Critical Line, PG&E and YCWA would agree under the Yuba Accord Alternative to operate storage between two target storage lines: (1) the Critical Line as a minimum target storage; and (2) an “Accord Target Line” that would be a target upper storage amount.

⁸ For the complete 1966 Power Purchase Contract definition of the “Critical Line”, or maximum end-of-month storage amount, see Chapter 5.

Through extensive modeling simulations of the Yuba Project the Accord Target Line was developed. This winter target operation for New Bullards Bar Reservoir storage is a compromise between retaining water in storage to protect against later dry conditions, and evacuating storage to avoid later wet conditions that could require bypasses of water past the powerhouses (spills). During wetter years (based on reservoir storage and the forecast of available water expected to flow into New Bullards Bar Reservoir), the reservoir would be operated to the Critical Line. During drier years (also based on reservoir storage and the forecast of available water expected to flow into New Bullards Bar Reservoir), the reservoir would be operated to the Accord Target Line.

The effect of these changes to the Power Purchase Contract would be a formal protocol that would resemble the type of operational decisions that YCWA and PG&E have made each year during the past decade. This change to the Power Purchase Contract would require approval by the California Public Utilities Commission (CPUC), either under a formal hearing process or under an Advice Letter process. Based on preliminary modeling by YCWA and PG&E, it is not anticipated that an adverse impact would occur to PG&E ratepayers. Review by the CPUC would likely be undertaken in 2007.

It is anticipated that hydroelectric generation patterns under the Proposed Project/ Action and alternatives would not differ substantially from existing generation patterns. The Accord Target Line would only affect operations under the Proposed Project/ Action, and, as described above, would largely confirm existing operational practice for reservoir operations. Although there are different regulatory flow requirements for the various project alternatives, the total annual reservoir throughput (water captured and released) would not vary substantially from past practice. Additionally, New Colgate Powerhouse is operated as a “peaking” facility (generation occurs during only a few hours per day), and releases from New Bullards Bar Reservoir via the New Colgate Powerhouse are subsequently reregulated at Englebright Reservoir. Under current operations, the New Colgate Powerhouse may operate for more, fewer, or irregular hours on any given day in response to power market demands, with the total water throughput on a weekly basis necessary to maintain minimum flow requirements as the only constraint on operations.

3.2.1.6 OTHER PERTINENT PROJECTS AND AGREEMENTS

For modeling purposes, the following projects are considered as part of either the current or future conditions.

WHEATLAND PROJECT

YCWA has received approval of \$3.15 million in grant funding from DWR for the Wheatland Project. The purpose of the Wheatland Project is to extend YCWA surface water delivery facilities to WWD (YCWA 2002). Farmers within WWD currently use only groundwater for irrigation. Construction of the canal and delivery of surface water will increase in-lieu groundwater recharge annually by the volume (up to about 40 TAF) of surface water that will be delivered. It is anticipated that construction for Phase I of the project will begin in 2007 and that water deliveries will begin in 2008 (pers. comm., Winchester 2006).

When the Wheatland Project is completed, water will be diverted from the Yuba River at Daguerre Point Dam and conveyed via the South Main Canal to the WWD's service area in southern Yuba County. Diverted water will be provided either through direct diversion of the natural flow of the Yuba River, or during dry periods, through rediversion of stored water

released from New Bullards Bar Reservoir. Once these water deliveries begin, irrigation demands under future baseline conditions will increase by approximately 40 TAF per year above the demands that currently are in place (i.e., Existing Condition). Therefore, although not directly related to the Yuba Accord Alternative, the Wheatland Project will change Yuba Project irrigation demand patterns. To accurately characterize baseline conditions used for impact assessment purposes in this EIR/EIS, Wheatland Project demands are represented differently in modeling assumptions used to simulate existing and future conditions (for additional detail, see Chapter 5 and Appendix D).

FREEMPORT REGIONAL WATER PROJECT

East Bay Municipal Utility District (EBMUD) and Sacramento County Water Agency (SCWA), in coordination with Reclamation and the City of Sacramento, agreed to jointly pursue development of a regional project to divert water from the Sacramento River. The Freeport Regional Water Project Final EIS/EIR was certified in 2004 and a ROD was issued in 2005. The Freeport Regional Water Authority (FRWA), a joint powers agency formed under state law by EBMUD and SCWA, will construct and operate the Freeport Regional Water Project to meet water supply needs in EBMUD and Sacramento County.

SACRAMENTO VALLEY WATER MANAGEMENT PROGRAM

The Sacramento Valley Water Management Program (SVWMP) is a collaborative regional strategy that consists of multiple water management projects and actions to ensure that local water needs are fully met while helping to enhance operational flexibility of the CVP and SWP to meet contractual obligations and regulatory requirements including flow-related water quality objectives, and to improve water supplies in the Delta and throughout California. The participants include DWR, Reclamation, Sacramento Valley water users, and South of Delta water users. The SVWMP was developed to help resolve water quality and water rights issues arising from the need to meet the flow-related water quality objectives of the 1995 WQCP.

Implementation of the SVWMP will be in two-phases: (1) a Short-term Program; and (2) a Long-term Program. The Short-term Program has been developed and is currently undergoing environmental evaluation. A Long-term Program has yet to be identified.

The work plan for the Short-term Program lists approximately 40 water management projects and evaluations in the Sacramento River watershed that could help provide water for local water uses, CVP and SWP water supply needs, and environmental needs. The Short-term Program proposes to generate additional water supplies to help meet increasing demands in the Sacramento Valley, and to enhance the operational flexibility of the CVP and SWP to meet contractual obligations and regulatory requirements including flow-related water quality objectives and to improve water supply. The Short-term Program would make additional water available through its conjunctive use and reservoir reoperation projects (water management projects) and transfer of water made available by upstream users (defined in the Short-term Settlement Agreement) to relieve a portion of the CVP and SWP burden of maintaining water quality objectives in the Delta. CVP and SWP water currently dedicated to maintenance of those water quality objectives would be diverted to Downstream Water Users and ultimately be used for consumptive uses within the CVP and SWP service areas. The Short-term Program would be implemented during a 10-year period, with an initial augmentation of water up to 50 TAF in the first year, and maximum augmentation of water up to 185 TAF during full

implementation. As much as 60 percent of the water could go to SWP contractors and as much as 40 percent to CVP contractors.

YCWA is a signatory to the Sacramento Valley Water Management Agreement (SVWMA), and has committed to provide 15 TAF per year through groundwater substitution for the Short-term Program.⁹ While it is uncertain at this time whether the SVWMP or a similar program will be implemented in the future, it is possible that such implementation will occur. The analysis in this Draft EIR/EIS that concerns future conditions does not attempt to quantify potential future SVWMP operations and associated changes in Delta outflow and Delta exports. However, given YCWA's commitment to the program, evaluation of potential impacts to the Yuba groundwater basin does account for local groundwater substitution pumping that might occur under the SVWMP.

SOUTH DELTA IMPROVEMENTS PROGRAM

The CALFED ROD (CALFED 2000) identifies the SDIP as an action included in its Programmatic EIS/EIR to address regional and local water supply needs, as well as the needs of the aquatic environment. The SDIP is a series of proposed actions designed to improve water quality and protect salmon in the south Delta while allowing the SWP to operate more effectively.

The SDIP includes a phased approach to physical and structural improvements as well as operational changes that, together, represent a balanced approach to meeting California's water needs (Reclamation and DWR 2005). Physical and structural components in Stage 1 include: (1) replacement of seasonal rock barriers with permanent operable gates at up to four locations in the south Delta, which would protect salmon and improve water levels and water quality; and (2) conducting dredging at key locations in the south Delta, which would improve flows in Delta channels and provide better access to irrigation water. The operational component, which would be Stage 2, is designed to optimize the use of the Delta to convey CVP and SWP export water by modifying operations to increase pumping at the SWP Banks Pumping Plant at the head of the California Aqueduct. At this time, the permitted diversion limit into the SWP Clifton Court Forebay is 6,680 cfs¹⁰. However, operational changes proposed by the SDIP would increase the maximum diversion limit (from 6,680 cfs to 8,500 cfs) at the SWP Banks Pumping Plant to provide more water for communities, businesses and agricultural users south of the Delta when it is environmentally sound to do so (Reclamation and DWR 2005).

Stage 1 is designed to address the physical/structural improvements, including the new operable gates, dredging and agricultural modifications. At the end of Stage 1, it is anticipated that a decision document (Notice of Determination (NOD)/ROD) would be issued for the physical/structural component of the project. After the Stage 1 decision, it is anticipated that Stage 2 would address the proposed operational component to increase water deliveries south of the Delta, and most likely would involve preparation of supplemental environmental documentation (Reclamation and DWR 2005). Reclamation and DWR issued a Final EIS/EIR in

⁹ YCWA's commitment to the SVWMP Short-term Program (i.e., up to 15 TAF annually via groundwater substitution) is a separate action unrelated to the Proposed Yuba Accord.

¹⁰ Clifton Court Forebay and Banks Pumping Plant operate under a nationwide permit issued by the Corps under Section 10 of the Rivers and Harbors Act. Under this permit, the maximum diversion rates into Clifton Court Forebay are 13,870 AF daily and 13,250 AF per day over a 3-day average (equivalent to 6,680 cfs). From December 15 to March 15, diversions may be increased by one-third of the San Joaquin River flow at Vernalis, provided that flows at Vernalis exceed 1,000 cfs. During this period the maximum diversion rate is 8,500 cfs.

December 2006, and are expected to issue a NOD/ROD for the physical and structural component of the project during 2007.

For impact assessment purposes, the Proposed Project/Action and alternatives are analyzed for a maximum diversion limit into the SWP Clifton Court Forebay of 6,680 cfs under the CEQA scenarios. Under the NEPA scenarios, the Proposed Project/Action and alternatives are analyzed with a diversion limit of 8,500 cfs. The impact analysis, therefore, considers a full range of possible future conditions. Inclusion of the 8,500 cfs diversion limit in the No Action Alternative does not imply that Stage 2 of the SDIP will be implemented.

CVP AND SWP COORDINATED OPERATIONS AGREEMENT

The COA concerning operations of the CVP and SWP establishes an accounting system to ensure that the projects meet applicable requirements. The COA for operations of the CVP and SWP was signed in 1986 (DWR Website 2003; Reclamation and DWR 1986), replacing earlier similar agreements between the United States and California. The COA specifies how the CVP and SWP will operate to meet all project requirements and objectives without adversely affecting the rights of other parties. The COA identifies two basic conditions for operational purposes: (1) balanced water conditions, and (2) excess water conditions. Balanced water conditions occur when releases from upstream reservoirs plus unregulated flow equal the water supply needed to meet Sacramento Valley in-basin uses plus exports. During balanced water conditions, storage releases required to meet the Sacramento Valley in-basin uses are made 75 percent from the CVP and 25 percent from the SWP. If unstored water is available for export during balanced conditions, this water is allocated 45 percent to the SWP and 55 percent to the CVP.

Excess water conditions occur when the Delta inflows (combined releases from upstream reservoirs and unregulated flow) are greater than the flows needed to meet the in-basin uses plus exports. Under these conditions, flow through the Delta is adequate to meet all needs and no coordinated operation between the CVP and SWP is required.

The COA does not cover all circumstances that occur in Delta operations (including water quality requirements in the 1995 WQCP, biological opinions, the EWA Program and other requirements). The CVP and SWP are making accommodations for these new requirements now. The requirements of the COA were fully considered during development of the alternatives for this EIR/EIS.

ENVIRONMENTAL WATER ACCOUNT PROGRAM

The EWA Program is a key component of CALFED's Water Management Strategy. The EWA Program is a cooperative management program designed to provide protection to the at-risk native fish species primarily in the Bay/Delta Estuary, but also to some extent in areas upstream of the Delta, through environmentally beneficial changes in the operations of the CVP and SWP, at no uncompensated water costs to CVP and SWP water users. When taken together with other aspects of the CALFED Bay/Delta Program (e.g., Ecosystem Restoration Program Plan (ERPP), the EWA Program provides part of the resources required for the protection of critical fish species of the Bay/Delta estuary and provides assurances that the water supplies of the CVP and SWP will not be reduced to provide that protection (DWR Website 2003). Protective actions for at-risk native fish species include modifying Delta export pumping and augmenting instream flows and Delta outflows. Beneficial changes in CVP and SWP operations

include changing the timing of some flow releases from storage and the timing of water exports from the Delta pumping plants to coincide with periods of greater or lesser vulnerability of various fish species to environmental conditions in the Delta. The timing of the protective actions and operational changes vary from year to year, depending on many factors, such as hydrology and real-time monitoring, that indicate fish presence at or near the pumps or in streams tributary to the Delta.

The CALFED ROD and the EWA Operating Principles Agreement give five federal and state agencies the responsibility for implementing the EWA. Of these five agencies, the three “management agencies,” USFWS, NMFS, and CDFG, have primary responsibility for exercising biological judgments to recommend which CVP/SWP operational changes and other actions would be beneficial to the protection and recovery of the at-risk fish species. Reclamation and DWR, the two “project agencies” under the EWA Program, implement the recommended CVP/SWP operational changes proposed by the management agencies and cooperate with the management agencies in administering EWA by acquiring, transferring, exchanging, source shifting, selling, borrowing, banking, and conveying EWA water assets. Reclamation, DWR, USFWS, NMFS and CDFG, collectively referred to as the “EWA Agencies,” cooperate in the decisions to implement protective measures for fish and day-to-day operational management of EWA assets.

The EWA Program acquires water to replace project water supply reduced by the environmentally beneficial changes in CVP and SWP operations. The EWA Program obtains its water “assets” by acquisition from willing sellers (water transfers) and through operational flexibility of Delta facilities. The EWA Program also can use CVP and SWP storage and conveyance facilities to the extent that extra capacity is available. Allowing flexibility to acquire and manage EWA assets differently each year increases the EWA agencies’ capability for responding to varying hydrologic conditions. Actions that may be taken to protect and benefit fish include: (1) pumping reductions to protect fish in the Delta; and (2) upstream fish actions such as instream flow enhancements to help facilitate fish population recovery (Reclamation *et al.* 2003). The EIS/EIR for the existing EWA Program was completed in January 2004. The March 2004 ROD/NOD for the existing EWA Program EIS/EIR documented the EWA Agencies’ decision to implement the Flexible Purchase Alternative. The Flexible Purchase Alternative allows the EWA Agencies to purchase up to 600 TAF of water per year, although the EWA Agencies typically acquire 200 to 300 TAF annually, except in wet years or years with high fisheries needs (Reclamation *et al.* 2003). Actual purchases depend on the year type, EWA funding, and amounts that sellers are willing to transfer in a given year (Reclamation *et al.* 2003).

The existing EWA Program will sunset on December 31, 2007. Currently, DWR and Reclamation plan to temporarily extend the existing EWA Program, and they are in the process of completing supplemental environmental documentation for this extension of the program that is anticipated to be released by the end of 2007. This supplemental documentation is expected to be for a continuation of the existing EWA Program (or some elements of it) for up to another 4 years. The continuation of EWA Program as a long-term management tool also is being considered by the EWA Agencies¹¹. While it is uncertain at this time whether a long-term

¹¹ As part of these potential long-term management considerations, Reclamation and DWR are conducting a comprehensive review of the EWA Program, taking into account the recently observed changes in Delta fish populations and the uncertainty of the nature of future actions to benefit at-risk Delta fish.

EWA Program or a program equivalent to the EWA will be implemented in the future, or what the elements of such a program will be, the best assumption that can be made at this time is that the EWA Program or an equivalent program will continue, with conditions similar to those for the existing EWA Program. For this reason, the analyses in this EIR/EIS that concern future conditions assume that a long-term EWA Program or a program equivalent to the EWA will be implemented, with conditions similar to those for the existing EWA program, and this EIS/EIR identifies the Delta fish protection actions at the CVP and SWP pumping facilities as “the EWA Program or an equivalent program.” Implementation of a long-term EWA Program or a program equivalent to the EWA is included in the quantitative cumulative analysis (see Appendix D).

DELTA-MENDOTA CANAL/CALIFORNIA AQUEDUCT INTERTIE

The Delta-Mendota Canal/California Aqueduct Intertie (CVP/SWP Intertie) would consist of the construction and operation of a pumping plant and pipeline connections between the Delta-Mendota Canal and the California Aqueduct. The CVP/SWP Intertie would be used in a number of ways to achieve multiple benefits, including: (1) meeting current water supply demands; (2) allowing for the maintenance and repair of the CVP Delta export and conveyance facilities; and (3) providing operational flexibility to respond to emergencies related to both the CVP and the SWP.

Currently, the average daily pumping capacity at the Jones Pumping Plant is limited to a maximum of 4,600 cfs, which is the existing capacity of the upper Delta-Mendota Canal and its intake channel. However, because of conveyance capacity limitations in the lower Delta-Mendota Canal and other factors, pumping at the Jones Pumping Plant is almost always less than 4,600 cfs. Delta-Mendota Canal conveyance capacity is affected by: (1) subsidence; (2) canal siltation and deposition; (3) the amount, timing, and location of water deliveries from the Delta-Mendota Canal; (4) facility design; and (5) other factors. By connecting the upper Delta-Mendota Canal with the California Aqueduct, the CVP/SWP Intertie would allow year-round CVP Jones pumping up to 4,600 cfs, subject to all applicable export pumping restrictions for water quality and fisheries protections. CVP Jones capacity would remain limited to its existing authorized pumping capacity of 4,600 cfs. This project was included in Reclamation’s OCAP and a Draft EIS is expected to be available in October 2007.

MODIFIED FLOW ALTERNATIVE

While the No Project and No Action alternatives include future flow regimes based on RD-1644, the Modified Flow Alternative represents a scenario in which RD-1644 would not remain in effect. Instead, instream flow requirements would be based on YCWA’s voluntary implementation of the RD-1644 Interim flows (which are similar to the flows in a minimum flow proposal made by YCWA during the RD-1644 hearings), modified to include Conference Year requirements for the driest one percent of water years.

3.2.1.7 FISHERY PROTECTION MEASURES

The instream flow requirements for the Modified Flow Alternative are based on the RD-1644 Interim requirements, which also are the requirements for the Existing Condition (see Table 2-1). The provisions for conference years that are in the Yuba Accord Alternative also are included in the Modified Flow Alternative.

3.2.1.8 YCWA'S CONJUNCTIVE USE AND GROUNDWATER MANAGEMENT

Under the Modified Flow Alternative, the operating assumptions for YCWA's conjunctive use and groundwater management activities would be the same as for the Existing Condition. The volume of groundwater pumped under the No Project and No Action alternatives would be different than the volume of water pumped under the Modified Flow Alternative. Those differences are presented in Chapter 6.

Additionally, the Modified Flow Alternative assumes that WWD would be receiving 40 TAF of surface water per year through the Wheatland Project. Delivery of this surface water would allow for in-lieu groundwater recharge of similar volumes of water.

3.2.1.9 TRANSFERS AND REVENUE

Under the Modified Flow Alternative, water transfers and water transfer revenues would approximate those for the Existing Condition.

3.2.1.10 RESERVOIR OPERATIONS CRITERIA

Under the Modified Flow Alternative, reservoir operations criteria would be the same as for the Existing Condition.

3.2.1.11 OTHER PERTINENT PROJECTS

For modeling and impact assessment purposes, other projects considered as part of either the current or future condition under the Modified Flow Alternative would be the same as those listed above for the Yuba Accord Alternative.

3.2.2 NO PROJECT ALTERNATIVE

The No Project Alternative describes current environmental conditions plus potential operational and environmental conditions that may occur in the near-term foreseeable future (2007 through 2025) if the Proposed Project/Action or other alternative were not implemented. For CEQA purposes, the No Project Alternative is characterized by conditions that would be different from the Existing Condition.

The two primary differences between the Existing Condition and the No Project Alternative are:

- ❑ The instream flow schedules would be the RD-1644 Long-term requirements rather than the RD-1644 Interim requirements.
- ❑ The Wheatland Canal would be operational, increasing diversions at Daguerre Point Dam by approximately 40 TAF, thereby increasing in-lieu groundwater recharge in Yuba County by a similar volume.

These two differences would affect the ability of YCWA to continue to transfer stored surface water and therefore to generate a revenue stream for continued investment in flood control and water supply projects. Each of the differences and the impacts are described below.

3.2.2.1 FISHERIES PROTECTION AND ENHANCEMENT

RD-1644 requires YCWA, in conjunction with CDFG and USFWS, to monitor the effects of flow fluctuations that may occur as a result of Yuba Project operations to ensure that Chinook salmon and steelhead in the lower Yuba River are adequately protected from redd dewatering

or stranding. The instream flow requirements and the fisheries studies of the No Project Alternative are described below.

INSTREAM FLOW REQUIREMENTS

Under the No Project Alternative, RD-1644 Long-term flow requirements would be implemented in the lower Yuba River. These requirements are presented in Table 3-7.

Table 3-7. State Water Resources Control Board Revised Water Right Decision 1644 Long-term Flow Requirements

Period	Wet, Above Normal, and Below Normal Years ^a (cfs)		Dry Years ^a (cfs)		Critical Years ^a (cfs)		Extreme Critical Years ^a (cfs)	
	Smartville Gage	Marysville Gage	Smartville Gage	Marysville Gage	Smartville Gage	Marysville Gage	Smartville Gage	Marysville Gage
Sept15 – Oct 14	700	250	500	250	400	250	400	250
Oct. 15 – Apr 20	700	500	600	400	600	400	600	400
Apr 21 – Apr 30	--	1,000	--	1,000	--	1,000	--	500
May 1 – May 31	--	1,500	--	1,500	--	1,100	--	500
Jun 1	--	1,050	--	1,050	--	800	--	500
Jun 2	--	800	--	800	--	800	--	500
Jun 3 – Jun 30	--	800	--	800	--	800	--	500
Jul 1	--	560	--	560	--	560	--	500
Jul 2	--	390	--	390	--	390	--	390
Jul 3	--	280	--	280	--	280	--	280
Jul 4 – Sep 14	--	250	--	250	--	250	--	250

^a Water year classifications are defined by the Yuba River Index, which is based on DWR's forecast of unimpaired flow of the Yuba River at Smartville published in DWR's Bulletin 120. Wet years are defined as years when the Yuba River Index > 1,230 TAF, above normal years are years when the Yuba River Index > 990 TAF, below normal years are years when the Yuba River Index > 790 TAF, dry years are years when the Yuba River Index > 630 TAF, critical years are years when the Yuba River Index < 630 TAF, extreme critical years are years when the Yuba River Index < 540 TAF.

--" Indicates no flow standard requirement

FISHERIES STUDIES

YCWA would continue to conduct the fisheries monitoring studies and reporting required by RD-1644. However, because the higher RD-1644 Long-term instream flow requirements would impose greater operational constraints on the Yuba Project and, thus, eliminate YCWA's ability to participate in stored surface water transfers, the No Project Alternative would not generate any water transfer revenues. Therefore, YCWA would not be able to establish the RMT or RMF, and could not undertake the fisheries monitoring and habitat enhancement projects that would be implemented under the Yuba Accord Alternative.

3.2.2.2 CONJUNCTIVE USE AND GROUNDWATER MANAGEMENT

Although the higher RD-1644 Long-term lower Yuba River instream flow requirements would preclude YCWA from participating in stored surface water transfers, groundwater substitution transfers likely would still occur under the No Project Alternative. The volumes of water pumped for groundwater substitution transfers would be within sustainable levels.

The groundwater management described under the Existing Condition would be the same under the No Project Alternative with the exceptions of an increase in in-lieu groundwater recharge of approximately 40 TAF annually as a consequence of the assumed completion of the Wheatland Project and probable greater pumping levels to mitigate deficiencies in surface water supplies.

3.2.2.3 WATER TRANSFERS AND REVENUE

As stated above, as a consequence of operating New Bullards Bar Reservoir to meet the RD-1644 Long-term instream flow requirements, YCWA would no longer be able to make stored surface water transfers. Groundwater substitution transfers could occur on a level that is sustainable for the basin. See Chapter 6 for a discussion of sustainable extraction rates.

Without stored surface water transfers, YCWA would not have a revenue stream to invest in continued flood control management, and future water supply projects could not be funded from surface water transfers.

3.2.2.4 OTHER PERTINENT PROJECTS

The number of other projects included as part of the characterization of existing and future conditions for the No Project Alternative is relatively limited. For modeling and impact assessment purposes, the Wheatland Project is the only additional project that would occur under the No Project Alternative, relative to the Existing Condition.

3.2.3 NO ACTION ALTERNATIVE

The key elements and activities (e.g., implementation of the RD-1644 Long-term instream flow requirements and implementation of the Wheatland Project) described above for the No Project Alternative would be the same for the No Action Alternative (Table 3-1). However, as required by NEPA, the No Action Alternative assumes that 2025 conditions would be in place, which would be different from the 2007 conditions assumed for the CEQA No Project Alternative. Although implementation of the RD-1644 Long-term instream flow requirements would occur under both the No Project and No Action alternatives, the resultant model outputs for both scenarios is different because of variations in the way existing and future YCWA, Reclamation and DWR operations are characterized (see Appendix D). Additional differences between the No Project Alternative and the No Action Alternative involve the number of other reasonably foreseeable future projects that are on the planning horizon, which are included in the analytical assumptions used for modeling purposes and discussed below.

3.2.3.1 OTHER PERTINENT PROJECTS

For modeling and impact assessment purposes, other projects included in the characterization of the No Action Alternative include:

- Environmental Water Account
- South Delta Improvements Program
- Freeport Regional Water Project
- CVP/SWP Intertie

Descriptions of these projects are presented above in Section 3.2.1.6.

3.3 SUMMARY COMPARISON OF ALTERNATIVES

A summary comparison of the key elements and activities associated with each of the alternatives is presented in **Table 3-8**.

Table 3-8. Summary Comparison of Key Elements and Implementation Activities Associated with the Alternatives Considered in the Proposed Yuba Accord EIR/EIS

	No Project Alternative	No Action Alternative	Proposed Project/Action Alternative	Modified Flow Alternative
Lower Yuba River Instream Flow Requirements				
Lower Yuba River instream flow requirements	RD-1644 Long-term	RD-1644 Long-term	Yuba Accord Alternative Flows	RD-1644 Interim plus Conference Year provisions
River Management Team and River Management Fund				
River Management Team and River Management Fund	No	No	Yes	No
Lower Yuba River long-term fisheries monitoring, studies, and enhancement program	No	No	Yes Budgeted to cost \$6 million which will come from the Yuba Accord Alternative revenues	No
YCWA and Member Units Conjunctive Use Program				
Integrated operations using surface water and groundwater supplies	Yes	Yes	Yes Yuba Accord Alternative Conjunctive Use Agreements	Yes
Water conservation and water use efficiency measures	Individual Member Unit measures	Individual Member Unit measures	Yuba Accord Alternative revenue to supplement individual Member Unit measures	Individual Member Unit measures
Conversion of diesel groundwater pump motors to electric-powered motors	Under SVWMP	Under SVWMP	Under both SVWMP and Yuba Accord Alternative	Under SVWMP
Water Transfers to Downstream Water Users (Outside Yuba County)				
Provision of water assets to EWA or an equivalent program for protection of Delta fisheries	No stored surface water transfers, some groundwater substitution transfers ^a	No stored surface water transfers, some groundwater substitution transfers ^a	Commitment of 60 TAF on average, per year (Component 1 water) ^b	Yes
Supplemental dry year water supply source for state and federal water contractors	No stored surface water transfers, some groundwater substitution transfers only ^a	No stored surface water transfers, some groundwater substitution transfers only ^a	Up to 140 TAF annually (Component 2, 3 and 4 water) ^b	Yes
^a Under the No Project and No Action alternatives, YCWA would not be able to participate in the EWA Program or to provide supplemental stored transfer water to federal and state contractors, because of the higher carry-over storage requirements that would result from the RD-1644 Long-term instream flow requirements.				
^b Provided that hydrologic conditions and available pumping capacity at the CVP and SWP facilities allow for water transfers to occur in the Delta.				

3.4 ALTERNATIVES CONSIDERED AND ELIMINATED FROM DETAILED EVALUATION

This section describes alternatives considered, but eliminated from detailed analysis, based on the project objectives and purpose and need.

3.4.1 ALTERNATIVES CONSIDERED DURING SETTLEMENT NEGOTIATIONS LEADING TO DEVELOPMENT OF THE YUBA ACCORD ALTERNATIVE

The development of the proposed agreements that comprise the Yuba Accord Alternative (Proposed Project/Action) was a collaborative process that occurred over a period of almost three years. The process of negotiations that culminated in the Yuba Accord Alternative is described in detail in Appendix C.

The following paragraphs contain a brief summary of the negotiation process. The stakeholders who participated in the development of the Yuba Accord Alternative's proposed agreements included most of the fisheries, water-user, and regulatory entities that are concerned with water flows in the lower Yuba River and downstream to the Delta, and with uses of Yuba Project water.

The Yuba Accord Alternative was developed to attempt to settle the pending litigation over the RD-1644 instream flow requirements for the lower Yuba River. Stakeholders and other participants in these discussions began with the principal objectives and criteria that would be necessary for any settlement of the pending litigation. The objectives and criteria developed through that process were ultimately carried forward as the objectives described in Chapter 1 of this EIR/EIS.

The initial discussions in this process focused on the development of a set of flow schedules for the lower Yuba River. As discussed in detail in Appendix C, development of these flow schedules included several relevant biological and hydrological considerations, including a "stressor analysis," in which the various life stages of the fish species of concern were prioritized and the stressors on these life stages were weighted. Flow schedules were developed for wetter years to maximize fisheries benefits and minimize these stressors, and for drier years to maintain fisheries benefits and minimize the stressors to the extent possible. In addition to attempting to maximize fisheries benefits and minimize stressors, development of the flow schedules considered water supply demands for water from the lower Yuba River and the hydrological constraints on the Yuba Project and the lower Yuba River, including flood control requirements and hydroelectric power generation commitments. This process also included development of a new hydrological index that could be used to determine flow schedules that most closely match the hydrological conditions in the lower Yuba River.

After development of the flow schedules, other technical working teams of the stakeholders: (1) developed the proposed Fisheries Agreement, under which YCWA would commit to implement the flow schedules and other important biological provisions; (2) developed the proposed Conjunctive Use and Water Purchase agreements; and (3) adjusted these proposed agreements so that they together would form a complete and consistent package. In many instances, elements or concepts of one proposed agreement needed to be carefully tailored to avoid inconsistencies with elements of another proposed agreement; in other instances, the path to resolving an issue brought forth by a party to one agreement resulted in new or modified elements in another agreement.

Throughout the nearly three-year process that ultimately resulted in the Yuba Accord Alternative, all of the stakeholders were able to both represent their own interests and perspectives, and to work together to achieve the proposed agreements. To address all of the diverse interests, different approaches, alternatives, concepts, and changes were described, discussed, debated, evaluated, and either incorporated into the Proposed Project/Action Alternative or discarded. For example, during development of the proposed flow schedules,

more than two dozen different proposed flow schedule combinations were evaluated by the technical team, and a dozen combinations of proposed operational rules were evaluated before agreement was reached on rules for supplemental surface water transfers. Notification and reporting requirements (and associated key dates) in each of the proposed agreements were developed after multiple revisions were made to accommodate all of the interests, to provide operational flexibility and to correspond to relevant dates in the other proposed agreements. The penalty and remedy provisions in each of the agreements were developed from lists of several different potential provisions.

In total, a multitude of different combinations of possible flow requirements, constraints on Yuba Project operations, and other relevant factors were evaluated and considered before the final Yuba Accord Alternative was developed. During the entire process that led to the development of the Yuba Accord Alternative, the various participants and technical teams remained mindful of the initial suite of objectives of the process. As a result, alternatives that were eliminated were rejected because they were technically insufficient, failed to meet a key interest of one or more of the stakeholders, or failed to meet one or more of the initial objectives of the process.

3.4.2 CONSIDERATION OF ALTERNATIVE FLOW SCHEDULES

As discussed in Section 3.4.1, development of the Yuba Accord Alternative's flow schedules occurred through a collaborative, science-based and iterative process that involved over three years of analysis, discussions, modeling, and drafting, during which hundreds of different flow schedules and operations scenarios were considered. As a result of this process, the Yuba Accord Alternative is believed to best balance the competing needs of the fishery species in the lower Yuba River and demands for other uses of Yuba River water. No other consensus-based flow schedule alternative is analyzed in this EIR/EIS, because: (1) any such alternative was likely already considered and ultimately rejected by the technical team that developed the Yuba Accord Alternative flow schedules; (2) it was either not technically feasible or would not meet one or more of the project objectives; or (3) it would not be accepted as a settlement of the pending RD-1644 litigation by one or more of the parties involved in that litigation.

3.4.3 OTHER SUBSTANTIAL MODIFICATIONS TO ONE OR MORE OF THE YUBA ACCORD AGREEMENTS

The Yuba Accord Alternative consists of three proposed agreements that were developed after extensive negotiations among the numerous interested parties over a period of several years. Because the three proposed agreements contain many interrelated provisions, modifying any or one proposed agreement almost certainly would require related modifications to one or both of the other proposed agreements. Because any such changes would require new, protracted negotiations among all or many of the parties to the proposed agreements, and because such new negotiations might not result in any new consensus, alternatives based on substantial modifications of any the proposed agreements are not analyzed in this EIR/EIS.

3.5 PREFERRED ALTERNATIVE

Title 40 of the Code of Federal Regulations (CFR), Section 1502.14(e) requires federal agencies to identify an agency-preferred alternative which would best meet the purpose of and need for the action, as defined in the environmental documentation. As stated in Reclamation's NEPA Handbook(Reclamation 2000), "*...defining the preferred alternative does not define Reclamation's*

final decision. However, it is intended to provide the public with notification of what the agency considers to be the best alternative, based on the information available" (Reclamation 2000).

Reclamation has determined that the Yuba Accord Alternative is the preferred alternative due to: (1) the lower environmental impacts of the Proposed Project/Action; and (2) its ability to best achieve the project's purpose and need. The environmental impacts associated with the Yuba Accord Alternative and the other action alternatives considered in this EIR/EIS are summarized in Table ES-1 of the Executive Summary and are detailed in the individual resource chapters (see Chapters 5 through 20). Section 1.1 presents an overview of the project objectives and purpose and need, and **Table 3-9** presents a summary of the Proposed Project/Action and the alternatives' ability to meet the project objectives and purpose and need for the project. Based on consideration of this information and the analyses presented in this EIR/EIS, Reclamation has determined that the Yuba Accord Alternative is the preferred alternative.

Table 3-9. Comparison of the Alternatives' Ability to Meet the Project Objectives and Purpose and Need

	No Project Alternative	No Action Alternative	Proposed Project/Action Alternative	Modified Flow Alternative
Yuba County Water Agency Project Objectives				
Provide a level of protection for lower Yuba River fisheries equivalent to or greater than the requirements of SWRCB RD-1644	Yes	Yes	Yes	No
Improve Yuba County water supply management and reliability through the implementation of a comprehensive conjunctive use program and water use efficiencies	No	No	Yes	Limited
Provide revenues to fund Yuba Accord actions (e.g., conjunctive use, RMT) and Yuba County flood control, water supply and other projects, including but not limited to, constructing a new fish screen at the South Canal Diversion	No	No	Yes	Limited
Implement a lower Yuba River long-term fisheries monitoring, studies and enhancement program	No	No	Yes	No
Bureau of Reclamation Purpose and Need				
Protection of Delta fisheries (through acquisition of EWA Program assets via the Water Purchase Agreement)	No	No	Yes	Limited
Improve federal water contractor water supply reliability	No	No	Yes	Limited
California Department of Water Resources Project Objectives^a				
Provide assets for the EWA program to assist in the protection and recovery of listed Delta-dependent fish species	No	No	Yes	Limited
Improve state water contractor water supply reliability	No	No	Yes	Limited
^a DWR is participating as a cost-share agency in the preparation of environmental compliance documentation and would rely upon the analyses in this EIR/EIS for purposes of decision-making related to the agency's decisions regarding execution of the Water Purchase Agreement with YCWA and separate agreements with Reclamation and State Water Contractors (Tier 2 and Tier 3 agreements, respectively).				

3.6 ENVIRONMENTALLY SUPERIOR OR PREFERABLE ALTERNATIVE

Section 15126.6(e)(2) of the California Code of Regulations state that CEQA requires the identification of the environmentally superior alternative, and specify that if the environmentally superior alternative is the "no project" alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. CEQ regulations (40 CFR §1505.2(b)) for implementing NEPA requires that, in cases where an EIS has been prepared, the decision-making document (i.e., ROD) must specify the alternative or alternatives which were considered to be environmentally preferable. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative that best protects, preserves, and enhances historic, cultural and natural resources(Council on Environmental Quality Website 2007). Defining the environmentally preferable alternative in this Draft EIR/EIS does not define YCWA's and Reclamation's final decision-making for the project, but it is intended to provide the public with notification of what the agency considers to be the environmentally preferable alternative, based on the information available (Reclamation 2000).

YCWA, as the CEQA lead agency, and Reclamation, as the NEPA lead agency, have both determined that the Yuba Accord Alternative is environmentally superior to the Modified Flow Alternative and the No Project Alternative, based on the CEQA/NEPA analyses of each of the alternatives' potentially significant environmental impacts, which are summarized above in Table ES-1 and presented in the individual resource chapters.