# Lower Yuba River Accord

# Fisheries Agreement Technical Brief

#### INTRODUCTION

The proposed Lower Yuba River Accord (Yuba Accord) includes three separate but related proposed agreements: (1) a Fisheries Agreement, (2) a Water Purchase Agreement, and (3) Conjunctive Use Agreements. This Technical Brief summarizes the essential points of the Fisheries Agreement. For more information on the other agreements comprising the Yuba Accord, please visit www.ycwa.com.

The Fisheries Agreement is the result of two years of science-based efforts by fisheries and environmental interests and local, state, and federal agencies. It will require Yuba County Water Agency (YCWA) to operate the Yuba River Development Project (Yuba Project) in a new manner to maintain instream flows in the lower Yuba River specified in seven different flow schedules based on different water year types. These flows are designed to provide a level of protection for anadromous fish in the lower Yuba River equal to or better than current requirements. When coupled with additional flows released as part of the Water Purchase Agreement and other restoration actions, the Fisheries Agreement will provide a significantly improved level of protection for Yuba River fisheries resources.

#### FISHERIES AGREEMENT IMPLEMENTATION

Instream Flow Schedules

The Fisheries Agreement instream flow requirements for the lower Yuba River will be based on a new water year index (the North Yuba Index¹) specific to the Yuba Accord and the Fisheries Agreement. Six flow schedules, plus Conference Year rules for 1-in-100 critically dry years, were developed to ensure appropriate river flows for the various hydrologic year classes, as presented in **Table 1**. Based on the 78-year hydrologic period of record for the lower Yuba River, the approximate probability of occurrence of each flow schedule is shown in **Table 2**.

YCWA also will provide an additional 30,000 acre-feet of water not shown in Table 1 during Schedule 6 years by operating a groundwater substitution program through the Conjunctive Use Agreements. Through the Yuba Accord, YCWA will provide payments to participating local irrigation districts/mutual water companies to offset standby and operating costs associated with making groundwater available in the driest year classes. This operation will be consistent with YCWA's Groundwater Management Plan and within the safe yield of the groundwater aquifer. (Please see the Conjunctive Use Agreements Technical Brief for additional information.)

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



#### TERM OF CONJUNCTIVE USE AGREEMENTS

The Conjunctive Use Agreements are scheduled to go into effect in late 2006 and continue through 2015. YCWA and the participating members will consider extending the term of the Conjunctive Use Agreements into the term of the long-term YCWA Federal Energy Regulatory Commission Federal Power Act license for the Yuba Project (i.e., in or after 2016) after determining that such an extension would not impair YCWA's ability to meet Yuba County water supply demands.

#### INTEGRATION WITH OTHER, ONGOING YUBA ACCORD PROCESSES

#### 2006 Pilot Program

YCWA, DWR, and Reclamation plan to implement a pilot transfer program during the 2006 water year based on the instream flow requirements in the Fisheries Agreement, and the transfer accounting rules in the Water Purchase Agreement, as modified to accommodate the pilot program concept. Parties to the Fisheries Agreement also plan to implement a pilot fisheries program during the 2006 water year. Parties to Fisheries and Water Purchase agreements will collaborate in developing this 2006 pilot program, including applicable environmental compliance.

#### Potential Feather River Diversion Facility

The instream flow requirements in the Fisheries Agreement were developed, in part, based on the need to meet current and anticipated water supply demands within Yuba County through 2016. YCWA believes that if demands continue to increase within the county after 2016, flows in the lower Yuba River may need to do "double duty" (i.e., flows first will be used to improve habitat for lower Yuba River fisheries, and then some of the flows will be diverted near the confluence of the Yuba and Feather rivers as necessary for urban and agricultural use only within Yuba County). To prepare for this possibility, YCWA is considering a new Feather River Diversion Facility in the event it determines that operation of such a facility would assist YCWA in making water supplies available to meet growing water supply needs within Yuba County. The Yuba Accord does not require construction of any such facility. However, if YCWA elects to pursue construction of a new diversion facility in the future, projectspecific environmental review will be required. For the moment, other parties to the Fisheries and Water Purchase agreements reserve judgment on a potential Feather River Diversion Facility until the comprehensive environmental compliance process has been completed for the Yuba Accord.

#### Agreements Approval

The parties to the Yuba Accord are now working on a joint Environmental Impact Report/Environmental Impact Statement required by the California Environmental Quality Act and the National Environmental Policy Act, and additional reviews required by the state and federal Endangered Species Acts. Based on results of these steps, participating members will determine whether to approve and execute the agreements. Subject to the foregoing, and subject to approval and execution of the Fisheries Agreement and Water Purchase Agreement (expected in late 2006), SWRCB approval of amendments of Water Right Decision 1644, and other related matters, YCWA and the participating members plan to execute the Conjunctive Use Agreements.

# River Management Team and Fisheries Studies

The Fisheries Agreement will establish a River Management Team (RMT) that will include representatives of the participants in the Fisheries Agreement and the parties to the Transfer Agreement. The RMT will provide YCWA with input on lower Yuba River operations, flow release scheduling, and expenditures for fisheries studies and other related activities. Using revenues generated by the water transfer program, YCWA will provide \$6 million to fund a River Management Fund (RMF), contributing approximately \$550,000 annually. In addition, the California

Table 1. Yuba Accord Fisheries Agreement - Lower Yuba River Monthly Instream Flow Requirements (in cubic feet per second, unless otherwise indicated)

	Schedule	OCT 1-31	NOV 1-30	-	-	FEB 1-29		THE RESIDENCE AND ADDRESS.		MAY					AUG		Total Annual
								1-15	16-30	1-15	16-31	1-15	16-30	1-31 1	1-31	1-30	Volume (acre-feet)
Wet		500	500	500	500	500	700	1,000	1,000	2,000	2,000	1,500	1,500	700	600	500	574,200
	2	500	500	500	500	500	700	700	800	1,000	1,000	800	500	500	500	500	429,066
	3	500	500	500	500	500	500	700	700	900	900	500	500	500	500	500	398,722
	4	400	500	500	500	500	500	600	900	900	600	400	400	400	400	400	361,944
Y	5	400	500	500	500	500	500	500	600	600	400	400	400	400	400	400	334,818
Dry	6	350	350	350	350	350	350	350	500	500	400	300	150	150	150	350	232,155

- · Indicated flows at the Marysville gauge represent average volumes for the specified time period. Actual flows may vary from the indicated flows according to established criteria.
- Indicated Schedule 6 flows at the Marysville gauge do not include an additional 30,000 acre-feet available from groundwater substitution to be allocated according to established criteria.

	OCT NOV		DEC	JAN	FEB	MAR APR		PR 🗼	MAY		JUN		JUL	AUG	SEP	Total Annual
Schedule	1-31	1-30	1-31	1-31	1-29	1-31	1-15	16-30	1-15	16-31	1-15	16-30	1-31	1-31	1-30	Volume (acre-feet)
A	700	700	700	700	700	700	700	**	**	**	**	**	**	**	700	**
В	600	600	550	550	550	550	600	**	**	**	**	**	**	**	500	1 A A

- . Schedule A flows at the Smartville gauge are to be used concurrently with Schedules 1, 2, 3, and 4 flows at Marysville.
- . Schedule B at the Smartville gauge are to be used concurrently with Schedules 5 and 6 flows at Marysville.
- \*\* During the summer months, flow requirements at the (downstream) Marysville gauge will always control, so no Schedule A or Schedule B flows were developed for May August. Flows at the Smartville gauge will equal or exceed flows at Marysville.

Table 2. Yuba Accord Fisheries Agreement — Predicted Occurrence of Each Flow Schedule

Department of Fish and Game (CDFG) and YCWA will make in-kind contributions (labor and materials) of not less than \$50,000 per year (CDFG) and \$15,000 per year (YCWA). Finally, YCWA has committed \$300,000 for restoration pilot programs for the lower Yuba River<sup>2</sup>.

\$	chedule	Perce	nt Occur	rence	Cu	nulative Occurr	епсе
	in the second		56%	1	3 3	56%	
	2		22%		315-5	78%	
	3		7%		A DEL	85%	
	4		5%			90%	
	. 5		5%		10 / No.	95%	R ()
300	6		4%	S.		99%	

- · Remaining 1% are "Conference Years" (i.e., driest years).
- Based on 78-year hydrologic period of record for the lower Yuba River.

The RMF will fund a program of monitoring and evaluation studies regarding specific elements of the Fisheries Agreement. These efforts will include core studies to assess conditions of individual fish, fish populations, and the fish community. Additional studies will address specific objectives based on priority stressors for anadromous salmonids in the lower Yuba River. Finally, specific restoration pilot projects will be funded by the RMF. Technical working groups from the RMT will develop and oversee these studies and restoration actions.

<sup>&</sup>lt;sup>2</sup> Under a separate agreement between YCWA and CDFG, YCWA also will use revenue from these transfers for a process to construct a new fish screen at the South Canal diversion facility.



#### TERM OF FISHERIES AGREEMENT

The instream flow requirements contained in the Fisheries Agreement will begin in 2006 under a one-year pilot program. This program will allow the participants in the Yuba Accord to complete a joint Environmental Impact Report/Environmental Impact Statement (EIR/EIS), in compliance with state and federal laws, and to secure all of the necessary permits and approvals to implement the Yuba Accord. The Yuba Accord's instream flow requirements will commence in late 2006, and will continue through the term of the Fisheries Agreement and when the Federal Energy Regulatory Commission (FERC) issues a new long-term Federal Power Act license to YCWA for the Yuba Project (unless modified by FERC when it issues the new license).

#### FERC RELICENSING

One of the potential future benefits of the Fisheries Agreement for all participants is building a strong basis of collaborative effort and high-quality information for the future FERC relicensing process. Through the Fisheries Agreement, the participants will obtain a credible data-set to serve as the basis for attempting to develop a consensus proposal for the instream flow requirements for the long-term YCWA FERC Federal Power Act license. If such consensus is reached, the participants will jointly submit the consensus proposal to the SWRCB and FERC, and ask that it be included in the State Water Resources Control Board (SWRCB) Clean Water Act section 401 water quality certification and in the new FERC license.

# INTEGRATION WITH OTHER, ONGOING YUBA ACCORD PROCESSES

# 2005 Lower Yuba River Operations

YCWA is continuing to work closely with parties to the Fisheries Agreement regarding ongoing operations on the lower Yuba River. YCWA, the resources agencies, and other key stakeholders in the Yuba Accord process will likely convene a "preliminary RMT" as a venue for discussion and collaboration on lower Yuba River operations and fisheries issues. Specific topics to be addressed by the group will include planning for the 2005 water transfer, planning for RMT operations, and crafting initial study plans for core and focused studies on the lower Yuba River for studies to be implemented during the 2006 pilot program and early years of the Yuba Accord.

### 2006 Pilot Program

YCWA, DWR, and Reclamation plan to implement a pilot transfer program during the 2006 water year based on the instream flow requirements in the Fisheries Agreement, and the transfer accounting rules in the Water Purchase Agreement, as modified to accommodate the pilot program concept. Parties to the Fisheries Agreement also plan to implement a pilot fisheries program during the 2006 water year. Parties to the Fisheries and Water Purchase agreements will collaborate in developing this 2006 pilot program, including applicable environmental compliance.

#### Agreement Approval

The parties to the Yuba Accord are now working on a joint EIR/EIS required by the California Environmental Quality Act and the National Environmental Policy Act, and additional reviews required by the state and federal Endangered Species Acts. Based on results of these steps, participants in the Fisheries Agreement will determine whether to approve and execute the agreement. Subject to the foregoing, and subject to approval and execution of the Conjunctive Use Agreements and Water Purchase Agreement (expected in late 2006), SWRCB approval of amendments of Water Right Decision 1644, and other related matters, the involved participants plan to execute the Fisheries Agreement.

