

## CHAPTER 5

### REVISIONS TO THE DRAFT EIR/EIS

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The information presented in this chapter describes the revisions that have been made to the Draft EIR/EIS. These changes are minor modifications and clarifications to the Draft EIR/EIS, and do not change the environmental impact conclusions in the Final EIR/EIS. The majority of the changes are made to ensure the accuracy of the document.

To indicate that text has been removed from the document, the words that have been deleted are identified by a solid line through the text. The words in italics indicate that new text has been added. The revisions to the Draft EIR/EIS are listed by chapter and page number. None of these changes constitute a substantial change to the project, as defined by CEQA.

#### 5.1 EXECUTIVE SUMMARY

- Page ES-7: The first paragraph under Environmental Impacts/Consequences is revised as follows:

This EIR/EIS includes analytical sections for the following ~~17~~16 resource categories: surface water supply and management, groundwater resources, power production and energy consumption, flood control, surface water quality, fisheries and aquatic resources, terrestrial resources, recreation, visual resources, cultural resources, air quality, land use, socioeconomics, growth inducement, environmental justice, and Indian Trust Assets.

- Some of the information presented on pages ES-14 to ES-16 in Table ES-1 was mislabeled, and did not correctly reflect the information that was presented in Chapter 9 of the Draft EIR/EIS. The analyses in Chapter 9 of the Draft EIR/EIS (e.g., pages 9-60, 9-89 to 9-90, 9-118, 9-147, 9-176 to 9-177, 9-206, 9-235) acknowledged that carriage water would be used to maintain salinity and chloride concentrations in the Delta. Section 9.5 (pages 9-264 to 9-265) of the Draft EIR/EIS also described how carriage water would be used as a protective measure to maintain water quality in the Delta. Therefore, as discussed in Chapter 9 of the Draft EIR/EIS, any potentially significant impacts to salinity and chloride concentrations in the Delta as a result of implementing one of the action alternatives would be avoided or minimized. To more accurately present the information in Table ES-1, the labeling of impacts for several of the locations that evaluated salinity and chloride concentrations under the action alternatives, relative to the bases of comparison, are changed from “LTS” to “LSM”. Additionally, carriage water also would likely be used to maintain Delta conditions under the CEQA No Project Alternative, relative to the CEQA Existing Condition. However, it is not the responsibility of this project to mitigate for potential impacts that would be caused by other actions that are unrelated to the Proposed Yuba Accord and, thus, where appropriate, the labeling of impacts for the CEQA No Project Alternative, relative to the CEQA Existing Condition, in Table ES-1 are changed from “LTS” to “PS”.

Because the information contained in Table ES-1 of the Draft EIR/EIS also is used in this Final EIR/EIS, the changes in labeling of impacts that have been made to reflect these changes are presented in Table 1-2 of the Final EIR/EIS.

## 5.2 CHAPTER 1 – INTRODUCTION

- Page 1-1: The sentence in the middle of the second paragraph is revised as follows:

~~and~~ Reclamation and the California Department of Water Resources (DWR) have a goal to obtain water for the CALFED Bay/Delta Program (CALFED) to use for protection and restoration of Sacramento-San Joaquin Delta (Delta) fisheries and for improvements in statewide water supply reliability, including supplemental water for the Central Valley Project (CVP) and the State Water Project (SWP).

- Page 1-21: In response to Comment SA1-1, the second paragraph on page 1-21 is revised as follows:

~~CDFG is a CEQA responsible agency and trustee agency involved in the Fisheries Agreement process. CDFG would have the decision making responsibility of approving and implementing the Fisheries Agreement, including participating on the RMT. YCWA also would pursue coordination and consultation with CDFG for California Endangered Species Act (CESA) compliance.~~

*CDFG is a CEQA Responsible Agency and Trustee Agency involved in the Fisheries Agreement process. CDFG would have the decision-making responsibility of approving and implementing the Fisheries Agreement, and would participate on the River Management Team (RMT). CDFG would also be acting as a CEQA Responsible Agency when issuing any permit that might be required under the California Endangered Species Act (CESA).*

## 5.3 CHAPTER 2 – ENVIRONMENTAL SETTING AND CEQA EXISTING CONDITION/NEPA AFFECTED ENVIRONMENT

- Throughout Chapter 2, the reference (~~Reynolds et al. 1993~~) is replaced with (*DWR and Reclamation 2004*).
- Page 2-2: Figure 2-1 is revised, and is included in Chapter 6 of this Final EIR/EIS as Figure 6-1.
- Page 2-18: The last sentence of the final paragraph on page 2-18 is revised as follows:

Since 2002, routine fish surveys have registered sharp declines in several pelagic (open-water) species, including the delta smelt, a species listed as a threatened species under the federal and state Endangered Species Acts ~~provided in Chapters 4 and 5~~.

## 5.4 CHAPTER 3 – PROPOSED PROJECT/ACTION AND ALTERNATIVES

- Page 3-6: The following new sentence is added at the end of the first paragraph in Section 3.2.1.1:

*The latest draft of the proposed Fisheries Agreement is included in the Final EIR/EIS as Appendix M1.*

- Page 3-6: In response to Comment SA3-5a (see Chapter 4) and to provide clarification regarding the status of the Feather River Point of Diversion/Rediversion that was proposed in the draft Fisheries Agreement, the following text has been added to Section

3.2.1.1 of the Draft EIR/EIS. This additional text is inserted after the second paragraph in Section 3.2.1.1:

*A YCWA proposed petition for a Feather River Point of Diversion/Rediversion near the confluence of the lower Yuba River and the Feather River is described in Section 4.1.3 of the draft Fisheries Agreement that is included in Appendix B to the Draft EIR/EIS (see Draft EIR/EIS, Appendix B, page B-21.) However, after preparation of this draft agreement YCWA, Reclamation and DWR decided not to pursue this facility as part of the Yuba Accord Alternative. Therefore, this facility is not described or analyzed in this EIR/EIS.*

- Page 3-10: The first sentence of Section 3.2.1.2 is changed as follows:

*YCWA would enter into individual Conjunctive Use Agreements with ~~any each of the~~ participating Member Units: These participating Member Units could include some or all of the following Member Units: BWD, BVID, DCMWC, HIC, RWD, SYWD, and WWD. Alternatively, YCWA may decide instead to enter into annual agreements with some or all of these participating Member Units, which would be similar to the proposed Conjunctive Use Agreements but each only for one year, for the groundwater-substitution programs necessary to satisfy YCWA's obligations under the Fisheries and Water Purchase Agreements, and for any additional groundwater-substitution transfers that would be agreed to by YCWA and the Member Units. "Participating members" in the following paragraphs refer to the Member Units that have annual or longer-term conjunctive-use agreements with YCWA that are in effect for the year in question.*

- Page 3-12: The typographical error in the last sentence of the third full paragraph (i.e., no period at the end of the sentence) has been corrected.
- Page 3-12: The fourth full paragraph is revised as follows:

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

- Page 3-23: The following new Section 3.2.1.6 is added immediately before the old Section 3.2.1.6:

### ***3.2.1.6 PHASED WATER PURCHASE AGREEMENT***

*As a result of the August 31, 2007 draft interim remedies order in the NRDC v. Kempthorne litigation, Reclamation has decided to delay completion of its ESA compliance for the Proposed Project/Action, and to wait to complete its ROD for the Proposed Project/Action until the ESA re-consultations for OCAP are completed. Until Reclamation issues its ROD, the Yuba Accord Alternative therefore would be implemented with just YCWA and DWR being parties to the Water Purchase Agreement. During this first phase, DWR and Reclamation would not execute the Tier 2 Agreement, and Reclamation would not execute its Tier 3 Agreements with CVP contractors. The same amount of Component 1 water still would go to the EWA Program. For Components 2, 3 and 4 water, DWR still would execute Tier 3 agreements with SWP contractors, and DWR also would execute water-purchase agreements with interested CVP contractors. The latest draft of the Water Purchase Agreement for this first phase is included in the Final EIR/EIS as Appendix M2.*

*After Reclamation issues its ROD, Reclamation would consider joining the Water Purchase Agreement. If Reclamation were to decide to join the Water Purchase Agreement, then, during this second phase of the Yuba Accord Alternative, YCWA, DWR and Reclamation all would be*

parties to the Water Purchase Agreement, DWR and Reclamation would execute the Tier 2 Agreement, and Reclamation and the CVP contractors would execute their Tier 3 agreements, as described in Section 3.2.1.3

Even with this proposed phasing, the Fisheries Agreement and YCWA's obligations to maintain the lower Yuba River flows that are specified by the agreement would not change. Similarly, none of the Yuba Project operations or lower Yuba River flows that are described in the Draft EIR/EIS for the Yuba Accord Alternative would change. The effects of this phasing on the Delta Region and Export Service Area are discussed in Section 3.2 of the Final EIR/EIS.

- ❑ Pages 3-23: The heading "~~**3.2.1.6, OTHER PERTINENT PROJECTS AND AGREEMENTS**~~" is changed to "**3.2.1.7, OTHER PERTINENT PROJECTS AND AGREEMENTS**".
- ❑ Page 3-27: The last full sentence of the last paragraph on page 3-27 is revised as follows:  
The continuation of *the* EWA Program as a long-term management tool also is being considered by the EWA Agencies<sup>11</sup>.
- ❑ Page 3-28: The second to last sentence in the carryover paragraph on page 3-28 is revised as follows:  
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 EIR/EIS identifies the Delta fish protection actions at the CVP and SWP pumping facilities as "the EWA Program or an equivalent program."
- ❑ Page 3-28: The heading "Modified Flow Alternative" is changed to "**3.2.2, MODIFIED FLOW ALTERNATIVE**".
- ❑ Pages 3-28 to 3-29: Section numbers 3.2.1.7 through 3.2.1.11 are changed to "3.2.1 through 3.2.5".
- ❑ Pages 3-29 to 3-31: "3.2" in all of the section numbers on these pages are changed to "3.3".
- ❑ Page 3-31: The heading "**3.3, SUMMARY OF COMPARISON OF ALTERNATIVES**" is changed to "**3.4, SUMMARY OF COMPARISON OF ALTERNATIVES**".
- ❑ Pages 3-32 to 3-34: "3.4" in all of the section numbers on these pages are changed to "3.5".
- ❑ Page 3-34: The heading "**3.5, PREFERRED ALTERNATIVE**" is changed to "**3.6, PREFERRED ALTERNATIVE**".
- ❑ Page 3-36: The heading "**3.6, ENVIRONMENTALLY SUPERIOR OR PREFERABLE ALTERNATIVE**" is changed to "**3.7, ENVIRONMENTALLY SUPERIOR OR PREFERABLE ALTERNATIVE**".
- ❑ Page 3-11: In Section 3.2.1.2 of the Draft EIR/EIS, the following text has been added after the second sentence in the fourth paragraph to describe the protective measures that would be implemented to ensure that the aquifer is maintained at sustainable levels:

The principal means of doing so would be through YCWA's and DWR's Groundwater Monitoring and Reporting Program that would be implemented as part of the Proposed Project/Action. The Groundwater Monitoring and Reporting Program includes the following three components: (1) groundwater transfer monitoring and reporting specifications; (2) a groundwater pumping operations plan; and (3) a third-party impacts action plan. A summary of each component is presented below, and the complete Groundwater Monitoring and Reporting Program is presented in Exhibit 3 to the Water Purchase Agreement, which is in Appendix M2.

### **Groundwater Monitoring**

In cooperation with DWR, YCWA has monitored Yuba County groundwater conditions for many years, and many aspects of the groundwater resources are well known. YCWA and DWR have worked cooperatively to develop a groundwater transfer monitoring and reporting program specific to Yuba County for past groundwater substitution water transfers. YCWA has also developed a Groundwater Management Plan (GMP), which was adopted on March 1, 2005 pursuant to Water Code Sections 10750 et seq. The GMP formalizes a monitoring program that includes measuring water levels in wells that are part of a dedicated monitoring well network, a plan to expand the network, annual reporting provisions and other groundwater monitoring activities. Since 2005, YCWA has constructed eight additional groundwater monitoring wells for this program (see DWR, Memorandum Report, "Monitoring Well Construction Technical Assistance," April 2007). Information gathered from the activities specified in the GMP, along with the activities described in Exhibit 3 to the Water Purchase Agreement, will be used to assess effects of groundwater pumping on groundwater resources, and to provide reasonable assurances that any water pumped and accounted for as part of any groundwater substitution is in lieu of surface water delivered by YCWA to its Member Units. YCWA will continue to work with DWR and the Member Units to identify and resolve any new groundwater monitoring issues.

### **Groundwater Pumping Operations Plan**

The Groundwater Pumping Operations Plan in Exhibit 3 to the Water Purchase Agreement sets forth the procedures by which the total amount of water to be transferred will be determined. These amounts include Components 1, 2, 3 and 4 water. A portion of the water will be from surface water and a portion may be provided through groundwater substitution pumping. YCWA will determine the amount of water to be provided through groundwater substitution pumping (in consultation with the Member Units) by: (1) estimating the amount of surface water that will be transferred for the year by operation to the flow schedules in the Fisheries Agreement and the September 30 target New Bullards Bar Reservoir storage level; (2) determining the amount of water from groundwater substitution pumping that Member Units can make available through wells of farmers who are willing to participate in the program and whose farms are located within a participating Member Unit; and (3) determining the amount of water that can be pumped within the safe yield of the basin without contributing to long-term overdraft and without resulting in significant unmitigated impacts to other groundwater users in the basin.

The procedures that will be used to determine the amount of water that can be pumped within the safe yield of the basin without contributing to long-term overdraft, and without resulting in any significant unmitigated third-party ("Third Party" or "Third Parties") impacts to other groundwater users in the basin will be determined by the groundwater pumping operations plan. The monitoring plan will be used to obtain information from which the determination will be made of the condition of the groundwater basin in the spring of the year during which groundwater substitution pumping is planned. Based on this condition, YCWA will determine the expected response of the basin to the proposed pumping for that year and the resulting condition of the basin at the conclusion of the pumping. Determination of the expected condition

*at the conclusion of the pumping will be made by examining the historic response of the basin during previous years when pumping occurred and by examining the recovery of the basin during pumping years and successive years, and by comparing these basin responses with the planned pumping. Analysis of the historical responses of the basin to pumping will be used to develop empirical relationships between pumping and basin drawdown and recovery. These empirically derived relationships will be the formulas that will be used to determine the basin response to the proposed pumping.*

*The determination of the basin response to the proposed pumping will result in an estimated basin condition at the end of pumping and an estimated condition for the spring of the next year. This estimated condition will be compared to historical groundwater levels in the basin. In 1991, YCWA and Member Units completed a groundwater substitution transfer to provide water to other parts of California under the Governor's Emergency Drought Water Bank in response to a severe statewide drought. The groundwater levels that occurred in the fall of 1991 at the end of pumping did not result in any overdraft of the groundwater basin or any significant unmitigated Third-Party impacts. Groundwater levels had been lower than these levels during the 1980's, but the extent of effects of these lower levels on groundwater users in the basin is not well known. Therefore, the fall 1991 groundwater levels will be used for comparison with the estimated condition of the basin that will result from the proposed groundwater pumping under the Yuba Accord Alternative.*

*If the estimated levels are above the fall 1991 levels, then significant unmitigated Third-Party impacts will not be expected. If the estimated levels are below the fall 1991 levels, then further examination of potential impacts and consultation with the participating Member Units and the GMP Water Advisory Group<sup>1</sup> will be required. Even if the determination is that estimated levels resulting from proposed pumping will be above the fall 1991 levels, the participating Member Units still will be consulted, and each participating Member Unit must individually approve the proposed pumping in its area or such pumping will not occur. If the amount of proposed pumping that will not cause fall groundwater levels to drop below 1991 levels cannot be confirmed using the procedures described above, then a lower amount of pumping that satisfies the conditions of this section will be determined using these procedures. The YCWA Board reserves the right to restrict the maximum amount of groundwater substitution pumping and the right to resolve any disputes in the Water Advisory Group regarding maximum amount of groundwater pumping.*

*If for any year the total amount of groundwater pumping that is determined to be acceptable under this section is less than the total amount of Components 1, 2 and 3 water that is provided for in the Agreement, minus the amount of surface water to be transferred, then YCWA may either: (1) use additional surface water through supplemental surface water transfer to provide Components 1, 2 and 3 water; or (2) advise DWR that the total unmet amount of Components 1, 2 and 3 water will not be provided during the present year and instead will be owed to the Buyers and repaid in a manner detailed in the Water Purchase Agreement.*

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<sup>1</sup> The GMP Water Advisory Group is a group that was formed under the GMP to provide input and guidance on groundwater issues. The GMP Water Advisory Group comprises representatives from local groundwater users, including municipal water purveyors, Member Units, reclamation districts and others. Groundwater substitution pumping that would result in levels near the fall 1991 levels will occur only if the Member Units and the GMP Water Advisory Group agree to allow such pumping.

### **Third-Party Impacts Action Plan**

The Third-Party Impacts Action Plan describes actions that will be undertaken by YWCA and Member Units to respond to impacts to Third Parties that occur because of groundwater substitution pumping for transfers under this Agreement. Third Parties include local groundwater users that could be affected by fluctuations in groundwater levels because of the pumping of such groundwater substitution water. YCWA and the participating Member Units agree that prompt responses to and mitigation of potential impacts to Third Parties are an important requirement for YCWA's present and future groundwater substitution transfers.

A series of steps will be taken to ensure that the groundwater substitution component of the Yuba Accord Alternative does not cause significant, unmitigated impacts to Third Parties. Under the action plan, groundwater substitution pumping must not produce significant unmitigated impacts on Third Parties, impacts must be identified and mitigated as quickly as possible, and there must be ongoing, open communications with affected Third Parties. Because not all potential impacts can be known in advance, this plan provides a process for responding to concerns expressed by local groundwater users who believe that their water-production facilities are being or will be impacted by groundwater substitution pumping under the Yuba Accord Alternative. Upon either YCWA or the Member Unit receiving notification of a potential Third-Party impact, YCWA or the Member Unit will immediately notify the other party of the nature of the potential impact. The Member Unit will promptly (within one day) contact the Third Party and obtain all available information regarding the nature and extent of the potential impact, and provide that information to YCWA. The Member Unit also will regularly update YCWA on the status of the Member Unit's response.

If the Third Party is not within the boundaries of any participating Member Unit of YCWA, then YCWA will either: (1) determine if it is evident that the Third Party is in close proximity to the groundwater-production facilities within a participating Member Unit, and designate the Member Unit or Member Units responsible for responding to the potential impact; or (2) consult with an Advisory Group<sup>2</sup> concerning which Member Unit or Member Units should be designated for responding to the potential impact.

After the Third Party has been contacted and the relevant information regarding the potential impact has been received, the participating Member Unit will develop an approach (subject to approval by YCWA) to: (1) determine whether the Third Party has actually been impacted by groundwater pumping by the Member Unit, and, if so; (2) mitigate for the impact. YCWA will be available to provide assistance to the Member Unit in developing the foregoing approach. YCWA and the Member Unit will consult with the applicable Advisory Group in developing the approach referred to in this section.

YCWA will resolve any dispute concerning implementation of this action plan, including which participating Member Unit will be responsible for mitigating a potential impact, whether it is reasonably likely that there was a Third-Party impact, and the measures to be taken by the Member Unit to mitigate the impact. If a Member Unit fails to carry out its responsibilities under this action plan, then YCWA will be authorized (but not required) to perform the responsibilities of the Member Unit and recover its reasonable costs in doing so from the Member

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<sup>2</sup> As a contractual condition of a Member Unit participating in the groundwater substitution component of this Agreement and the Yuba River Accord, the Member Unit will identify a contact person or persons who will be responsible for initially responding to a notification of a potential Third-Party impact, and take the other action specified in this section. The contact persons for the Member Units will also serve on a Yuba Groundwater Substitution Program Advisory Group ("Advisory Group") for either the area north of the Yuba River or the area south of the Yuba River.

*Unit, including deducting these costs from payments due the Member Unit for the groundwater substitution transfer. YCWA will consult with the applicable Advisory Group in carrying out its responsibilities under this section.*

*It is the intention of this action plan that: (1) any Third-Party impact that is reasonably likely to have been caused by implementation of the groundwater substitution program will be promptly and substantially mitigated; (2) as to any Third-Party impact that is not reasonably likely to have been caused by implementation of the groundwater substitution program, the Third Party will be provided information to reasonably demonstrate the reasons that there were no impacts; and (3) YCWA, the participating Member Units and the Advisory Group will be involved in the implementation of this action plan. Actions that will be taken to mitigate an impact include, but are not limited to, deepening of the impacted Third Party's well or lowering of pump bowls, cessation of pumping in the area of the impacted well, and providing a temporary or permanent alternative water supply to the Third Party.*

## **5.5 CHAPTER 4 – OVERVIEW OF ANALYTICAL APPROACH**

- Page 4-18: The following text is inserted under a new heading titled, **4.11, ADDITIONAL ANALYSES OF THE YUBA ACCORD ALTERNATIVE BECAUSE OF PHASING:**

*Chapter 3.2 of the Final EIR/EIS discusses the effects of phasing the Yuba Accord Alternative.*



## 5.6 CHAPTER 5 – SURFACE WATER SUPPLY AND MANAGEMENT

□ Pages 5-50 and 5-51 of Table 5-32 is revised as follows:

**Table 5-32. Breakdown of Annual Water Transfer Components for the Yuba Accord Alternative**

Year	SVI Year Type	CEQA Yuba Accord Alternative								NEPA Yuba Accord Alternative							
		SWP Alloc.	CVP Alloc.	C1	C2	C3A	C3B	C4	Total	SWP Alloc.	CVP Alloc.	C1	C2	C3A	C3B	C4	Total
		%	%	TAF	TAF	TAF	TAF	TAF	TAF	%	%	TAF	TAF	TAF	TAF	TAF	TAF
1922	AN	94%	86%	60				9	69	78%	92%	60				9	69
1923	BN	95%	72%	60				8	68	85%	64%	40					40
1924	C	14%	0%	60	30	40		21	151	14%	0%	60	30	40		12	142
1925	D	40%	43%	60	15		35		110	38%	48%	60	15	40			135
1926	D	73%	15%	36	15	15			66	67%	8%	41	15	15			71
1927	W	93%	78%	83					83	80%	86%	79					79
1928	AN	77%	66%	61				16	77	73%	72%	77					77
1929	C	24%	6%	60	30	40		20	150	24%	0%	46	30	40		20	136
1930	D	68%	33%	43	15	40		5	103	65%	31%	52	15	40		5	112
1931	C	23%	3%	47	13				60	22%	4%	47	13				60
1932	D	31%	14%	58	15	39			112	28%	17%	58	15	39			112
1933	C	31%	0%	60	30	40		25	155	29%	4%	60	30	40		25	155
1934	C	34%	11%	60	30	40		18	148	33%	12%	60	30	40		18	148
1935	BN	94%	35%	48					48	89%	36%	60			5		65
1936	BN	91%	55%	60				9	69	83%	51%	76					76
1937	BN	86%	41%	60			11		71	72%	39%	60			16		76
1938	W	93%	100%	62					62	77%	100%	62					62
1939	D	90%	58%	59	15		40	35	149	84%	68%	60	15			76	151
1940	AN	94%	52%	60			21		81	84%	62%	83				3	86
1941	W	92%	86%	48					48	80%	93%	60				4	64
1942	W	93%	87%	71					71	86%	95%	55					55
1943	W	89%	85%	24					24	78%	92%	58					58
1944	D	96%	45%	60	15		40	47	162	92%	52%	46	15			75	136
1945	BN	94%	75%	75					75	86%	73%	61					61
1946	BN	94%	64%	59					59	88%	77%	36					36
1947	D	68%	41%	60	15		40	88	203	67%	39%	60	15		40	90	205
1948	BN	69%	66%	77					77	66%	77%	104				7	111
1949	D	54%	64%	60	15			97	172	52%	71%	59	15		40	26	140
1950	BN	80%	30%	60		17			77	74%	34%	60		16			76
1951	AN	95%	71%	56					56	87%	78%	56					56
1952	W	92%	99%	40					40	80%	100%	56					56
1953	W	93%	74%	55					55	87%	81%	55					55
1954	AN	95%	70%	124					124	88%	84%	73				69	142
1955	D	37%	46%	60	15		40	37	152	35%	45%	48	15	40		35	138
1956	W	93%	75%	73					73	82%	82%	72				2	74
1957	AN	82%	78%	60				10	70	76%	83%	60				10	70
1958	W	93%	97%	22					22	82%	99%	59					59
1959	BN	80%	72%	77					77	78%	74%	61				18	79
1960	D	54%	32%	0	15	40		16	71	53%	31%	1	15	40		35	91
1961	D	57%	61%	60	15			253	328	57%	62%	60	15		40	193	308
1962	BN	84%	66%	88					88	79%	92%	88					88
1963	W	93%	75%	55					55	82%	96%	55					55
1964	D	78%	48%	0	15			64	79	76%	61%	43	15			75	133
1965	W	82%	83%	104					104	74%	87%	113				32	145
1966	BN	95%	67%	42					42	87%	77%	30					30
1967	W	93%	99%	30					30	79%	99%	83					83
1968	BN	86%	78%	30					30	79%	82%	45					45
1969	W	92%	100%	81					81	81%	100%	69					69

**Table 5-32. Breakdown of Annual Water Transfer Components for the Yuba Accord Alternative (continued)**

Year	SVI Year Type	CEQA Yuba Accord Alternative								NEPA Yuba Accord Alternative							
		SWP Alloc.	CVP Alloc.	C1	C2	C3A	C3B	C4	Total	SWP Alloc.	CVP Alloc.	C1	C2	C3A	C3B	C4	Total
		%	%	TAF	TAF	TAF	TAF	TAF	TAF	%	%	TAF	TAF	TAF	TAF	TAF	TAF
1970	W	93%	72%	109					109	87%	79%	73				38	111
1971	W	93%	71%	77					77	87%	84%	60				17	77
1972	BN	68%	68%	72					72	66%	76%	60				25	85
1973	AN	94%	78%	83					83	83%	86%	60				9	69
1974	W	93%	80%	24					24	83%	89%	55					55
1975	W	93%	77%	25					25	84%	93%	55					55
1976	C	75%	15%	60	30	40		24	154	75%	24%	0					0
1977	C	3%	3%	13					13	3%	5%	60	30	28			118
1978	AN	94%	99%	57					57	75%	99%	56					56
1979	BN	94%	78%	55					55	80%	67%	55					55
1980	AN	92%	87%	56					56	79%	95%	56					56
1981	D	87%	74%	42	15			75	132	81%	78%	13	15			75	103
1982	W	93%	98%	79					79	80%	100%	67					67
1983	W	92%	99%	0					0	83%	99%	0					0
1984	W	93%	78%	16					16	84%	86%	27					27
1985	D	94%	59%	30	15			53	98	90%	69%	0					0
1986	W	85%	72%	99					99	73%	65%	125					125
1987	D	68%	41%	60	15		40	35	150	67%	31%	60	15	40		35	150
1988	C	11%	10%	51	30	30			111	11%	1%	51	30	30			111
1989	D	81%	40%	0	15		14		29	80%	43%	39	15		15		69
1990	C	23%	0%	60	30	40		105	235	22%	0%	60	30	40		66	196
1991	C	20%	12%	60	30	40		7	137	20%	13%	60	30	40		7	137
1992	C	37%	33%	36	30				66	35%	23%	33	30				63
1993	AN	94%	69%	57					57	81%	85%	58					58

Note: CVP allocations are for South of Delta agricultural contractors.  
Transfer volumes as simulated using environmental impact modeling tools.

## 5.7 CHAPTER 6 – GROUNDWATER RESOURCES

- In response to comments received on the Draft EIR/EIR (see the response to Comment LA2-1 in Chapter 4), the following text has been added to the end of Section 6.4 on page 6-90 of the Draft EIR/EIS:

*To protect groundwater resources that may be affected by the Proposed Project/Action, the following measures have been incorporated into the project to continue to maintain the quality of groundwater resources in the North Yuba and South Yuba basins.*

- *Mitigation Measure 6-1: A Groundwater Monitoring and Reporting Program will be implemented to minimize and/or avoid potential impacts to local groundwater users in the Yuba Region*
- *Mitigation Measure 6-2: A Third-Party Impacts Action Plan will be implemented to minimize and/or avoid potential impacts to local groundwater users in the Yuba Region*

*A full description of each mitigation measure, including the implementation commitments that are described in Exhibit 3 to the Water Purchase Agreement, is provided in Section 6.2.1 and in Appendix M2 of the Final EIR/EIS.*

## 5.8 CHAPTER 9 – SURFACE WATER QUALITY

- Related to the changes in labeling of impacts described in Table ES-1 of the Draft EIR/EIS (see Section 5.2 above), text was added to several of the analytical sections in Chapter 9 of the Draft EIR/EIS that evaluated changes in salinity and chloride concentrations in the Delta to provide additional clarification regarding the use of protective measures to maintain Delta conditions. The analyses in Chapter 9 of the Draft EIR/EIS (e.g., pages 9-60, 9-89 to 9-90, 9-118, 9-147, 9-176 to 9-177, 9-206, 9-235) acknowledged that carriage water would be used to maintain salinity and chloride concentrations in the Delta. Section 9.5 (pages 9-264 to 9-265) of the Draft EIR/EIS also described how carriage water would be used as a protective measure to maintain water quality in the Delta. Therefore, as discussed in Chapter 9 of the Draft EIR/EIS, any potentially significant impacts to salinity and chloride concentrations in the Delta as a result of implementing one of the action alternatives would be avoided or minimized.

For those evaluations that addressed salinity and chloride concentrations in the Delta for Water Code purposes, the text in Chapter 9 of the Draft EIR/EIS is revised as follows:

While refined modeling studies conducted for years showing impacts under the simplified modeling assumptions indicate that, despite more detailed examination, there could still be impacts, it is anticipated that real-time operational changes (*see Section 9.5*) would further reduce impacts to a level that would not unreasonably affect Delta water quality.

For those evaluations that addressed salinity and chloride concentrations in the Delta for CEQA/NEPA purposes, the text in Chapter 9 of the Draft EIR/EIS is revised as follows:

While refined modeling studies conducted for years showing impacts under the simplified modeling assumptions indicate that, despite more detailed examination, there could still be impacts, it is anticipated that real-time operational changes (*see Section 9.5*) would further reduce impacts to less than significant levels...

Additionally, carriage water also would likely be used to maintain Delta conditions under the CEQA No Project Alternative, relative to the CEQA Existing Condition. However, it is not the responsibility of this project to identify, or make commitments of mitigation for potential impacts that would be caused by other actions that are unrelated to the Proposed Project/Action and other action alternatives evaluated in the Draft EIR/EIS. It also cannot be assumed that other actions under the CEQA No Project Alternative would implement a similar type of mitigation. Therefore, where appropriate, the labeling of these impacts for the CEQA No Project Alternative, relative to the CEQA Existing Condition, in Table ES-1 is changed from "LTS" to "PS". For consistency purposes in Chapter 9 of the Draft EIR/EIS, text in Section 9.2.7.1 that relates to the evaluations of salinity and chloride concentrations for the CEQA No Project Alternative, relative to the CEQA Existing Condition, is modified as follows:

While refined modeling studies conducted for years showing impacts under the simplified modeling assumptions indicate that, despite more detailed examination, there could still be impacts, ~~it is anticipated that real time operational changes would further reduce impacts to less than significant levels.~~ Therefore, the CEQA No Project Alternative, relative to the CEQA Existing

Condition, would have a ~~less than~~ *potentially* significant impact on Delta water quality.

## 5.9 CHAPTER 10 – FISHERIES AND AQUATIC RESOURCES

- ❑ Throughout Chapter 10, the reference (~~SWRCB 1994~~) is replaced with (*CDFG Website 2007*).
- ❑ Throughout Chapter 10, the reference (~~IEP 2007~~) is replaced with (*CALFED Website 2007*).
- ❑ Throughout Chapter 10, the reference (~~WWWCO website~~) is replaced with (*DWR Website 2007*).
- ❑ Throughout Chapter 10, the reference (~~CDFG 1994~~) has been removed.
- ❑ Throughout Chapter 10, the reference (~~Hurley 1975~~) has been removed.
- ❑ Page 10-44: In response to Comment SA1-6, the first paragraph under Section 10.1.6.2 on page 10-44 is revised as follows:

~~The California Endangered Species Act (CESA, Fish and Game Code Sections 2050 to 2089) establishes various requirements and protections regarding species listed as threatened or endangered under state law. California's Fish and Game Commission is responsible for maintaining lists of threatened and endangered species under CESA. CESA prohibits the "take" of listed and candidate (petitioned to be listed) species (Fish and Game Code Section 2080) "Take" under California law means to "...hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch capture, or kill..." (Fish and Game Code Section 86).~~

*CESA, Fish and Game Code Sections 2050 to 2089 contains various provisions to protect species listed as threatened or endangered species under the act. Section 2080 prohibits the take of any threatened or endangered species, except as authorized by the act. Such authorization may be by an incidental-take statement under Section 2080.1, an Incidental Take Permit under Section 2081, a permit, memorandum of understanding or plan under Section 2081.1, or a Natural Community Conservation Plan under Section 2835. Section 86 of the Fish and Game Code defines "take" to mean "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." California's Fish and Game Commission is responsible for establishing the lists of threatened and endangered species under CESA and for adding species to these lists and removing species from these lists.*

- ❑ Page 10-400: The first paragraph under Section 10.3, Cumulative Impacts, is revised as follows:
- For analytical purposes of this EIR/EIS, the projects that are considered well defined and "reasonably foreseeable" are described in Chapter ~~2021~~, Cumulative Impacts.
- ❑ Page 10-400: The second paragraph under Section 10.3, Cumulative Impacts, is revised as follows:

Although most of the proposed projects described in Chapter ~~2021~~ could have project-specific impacts that will be addressed in future project-specific environmental documentation, future implementation of these projects is not expected to result in cumulative impacts to regional water supply operations, or water-related and water

dependent resources that also could be affected by the Proposed Project/Action or alternatives (see Chapter 2021).

- Page 10-401: The last sentence of Section 10.3, Cumulative Impacts, is revised as follows:  
These projects are described in Chapter 20-21 and qualitatively addressed below.

## 5.10 CHAPTER 11 – TERRESTRIAL RESOURCES

- Throughout Chapter 11, the reference (~~Detrich 1980~~) is replaced with (*Detrich 1980, as cited in DWR 2005*).
- Throughout Chapter 11, the reference (~~DWR 1988~~) is replaced with (*YCWA et al. 2005*).
- Throughout Chapter 11, the reference (~~Gittens 1968~~) is replaced with (*Gittens 1968, as cited in DWR 2005*).
- Throughout Chapter 11, the reference (~~Lehman 1979~~) is replaced with (*Lehman 1979, as cited in DWR 2005*).
- Page 11-45: The second sentence under Section 11.2.3 on page 11-45 and Section 11.2.4 on page 11-57 has been revised as follows in response to Comment I1-2:

Because the assessment methodologies are primarily community based, potential ~~affects~~ *effects* on vegetative communities are assumed to also apply to those plant and wildlife species that could potentially utilize or reside within those communities.

## 5.11 CHAPTER 14 – CULTURAL RESOURCES

- Throughout Chapter 14, the reference (~~Baldrica 2000~~) is replaced with (*Reclamation et al. 2003*).
- Throughout Chapter 14, the reference (~~Deal 1980~~) is replaced with (*Reclamation et al. 2003*).
- Throughout Chapter 14, the reference (~~Hines 1987~~) is replaced with (*DWR 2001*).
- Throughout Chapter 14, the reference (~~Riddell and Olsen 1966~~) is replaced with (*Reclamation et al. 2003*).
- Page 14-6: The first sentence of the first paragraph under Existing Cultural Resources is revised as follows:

Many prehistoric and/or ethnographic sites ~~were have been~~ recorded along the banks of the lower Sacramento River. ~~in 1934 by R.F. Heizer, who~~ *Many of these sites have been described ~~them~~ as burial mounds ~~which had that have~~ been partially or completely leveled for agriculture or other development (~~Heizer 1934~~).*

## 5.12 CHAPTER 20 – INDIAN TRUST ASSETS

- Throughout Chapter 20, the reference (~~Meals 1978~~) is replaced with (*Reclamation et al. 2003*).

### 5.13 CHAPTER 21 – CUMULATIVE IMPACTS

- Page 21-6: A typographical error in Table 21-1 on page 21-6 has been corrected as follows:

54f	YCWA Flood Control Operations Obligations
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### 5.14 CHAPTER 23 – CONSULTATION AND COORDINATION

- Pages 23-4 and 23-5: In response to Comment SA1-8, the text on page 23-4 and 23-5, paragraphs 4 and 5 has been revised as follows:

~~The CESA (CDFG Code Section 2050 et. seq.) establishes state policy to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that state agencies should not approve projects that jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. Unlike the federal ESA, under CESA there are no mandated state agency consultation procedures. For projects that would affect a species that is federally and state listed, compliance with ESA satisfies CESA if CDFG determines that the federal incidental take authorization is consistent with CESA (CDFG Section 2080.1). For projects that would result in take of a state listed species, the project proponent must apply for a take permit under CDFG Section 2081(b).~~

~~YCWA and Reclamation have had numerous meetings with CDFG (see Section 23.2.7), where discussions focused on determining the scope of work, identifying listed and proposed species potentially affected by the Proposed Project/Action, as well as developing a suitable approach for assessing the potential effects of the action on listed and proposed species and their habitat. Upon review of the Proposed Project/Action and associated mitigation measures (where applicable), CDFG will issue a written finding based upon it's determination of whether the Proposed Project/Action would jeopardize the continued existence of any listed species or result in the destruction or adverse modification of habitat essential to the continued existence of the species. The written finding will also include CDFG's determination of whether the Proposed Project/Action would result in any taking of an endangered or threatened species incidental to the Proposed Project/Action (Fish and Game Code Section 2081).~~

*CESA (Fish and Game Code Sections 2050 to 2089) establishes state policy to conserve, protect, restore, and enhance any threatened or endangered species and its habitat. CESA contains various provisions to protect species listed as threatened or endangered species under the act. Section 2080 prohibits the take of any threatened or endangered species, except as authorized by the Act. Such authorization may be by an Incidental Take Statement under Section 2080.1; an Incidental Take Permit under Section 2081; a permit, memorandum of understanding or plan under Section 2081.1, or a Natural Community Conservation Plan under Section 2835.*

*Unlike the federal ESA, under CESA there are no mandated state agency consultation procedures. However, CEQA requires notice to responsible and trustee agencies regarding the preparation of EIRs and allows for meetings to expedite consultation (California Code of Regulations, Title 14, Section 15082). YCWA and Reclamation have had numerous meetings with CDFG (see Section 23.2.7), where discussions focused on determining the scope of work, identifying listed and proposed species potentially affected by the Proposed Project/Action, as well*

as developing a suitable approach for assessing the potential effects of the action on listed and proposed species and their habitat. If CDFG issues any permit under CESA for the Proposed Project/Action, then, in issuing the permit, CDFG will be acting as a CEQA Responsible Agency and will independently consider the EIR prepared by YCWA (California Code of Regulations, Title 14, Section 15096).

## 5.15 CHAPTER 25 – REFERENCES

### 5.15.1 GENERAL EDITS

- The following reference: ~~(Jones & Stokes 2003)~~ is revised to read as *(Reclamation and Freeport Regional Water Authority 2003)*.

~~Jones & Stokes. 2003. Freeport Regional Water Project. Volume 1: Draft Environmental Impact Report/Environmental Impact Statement. July 2003. Prepared by Jones & Stokes Associates. Available at <http://www.freeportproject.org>.~~

*Reclamation and Freeport Regional Water Authority. 2003. Volume 1: Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Freeport Regional Water Project. July 2003. Prepared by Jones & Stokes Associates. Available at <http://www.freeportproject.org>.*

- The following reference: ~~(USFWS 2004)~~ is revised to read as *(USFWS 2005)*:

*USFWS. 2004–2005. Long-Term Central Valley Project and State Water Project Operations Criteria and Plan Biological Opinion for Delta Smelt.*

### 5.15.2 EXECUTIVE SUMMARY

- The following references are added at the top of Page 25-1 under a new heading, *Executive Summary*:

*Council on Environmental Quality. 2007. NEPA's Forty Most Asked Questions. Available at <http://www.nepa.gov/nepa/regs/40/40p3.htm>. Accessed on June 12, 2007.*

*Reclamation. 2000. Public Review Draft National Environmental Policy Act Handbook.*

*Reclamation, DWR, USFWS, NMFS, and CDFG. 2003. Environmental Water Account Draft Environmental Impact Statement/Environmental Impact Report. State Clearinghouse No. 1996032083.*

### 5.15.3 CHAPTER 2 – ENVIRONMENTAL SETTING AND THE CEQA EXISTING CONDITION/NEPA AFFECTED ENVIRONMENT

- The following reference: ~~Reynolds, F. L., T. Mills, R. Benthin, and A. Low. 1993. Central Valley Anadromous Fisheries and Associated Riparian and Wetlands Areas Protection and Restoration Action Plan. Draft.~~ is removed and is replaced with: *DWR and Reclamation. 2004. Administrative Draft Sacramento Valley Water Management Program Short-Term Program Environmental Impact Statement/Environmental Impact Report.*

### 5.15.4 CHAPTER 10 – FISHERIES AND AQUATIC RESOURCES

- ❑ The following reference: (~~SWRCB. 1994. Technical Report, Lower American Court Reference.~~) is removed and is replaced with: CDFG. 2007. *Sacramento River Late-Fall Chinook Salmon*. Website. <http://www.dfg.ca.gov/hcpb/species/ssc/sscfish/>.
- ❑ The following references are removed:
  - ~~CDFG. 1994. Central Valley Anadromous Sport Fish Annual Run Size, Harvest, and Population Estimates, 1967 through 1991. Inland Fisheries Technical Report, Third Draft. Sacramento, CA.~~
  - ~~Hurley, G. V. 1975. The Reproductive Success and Early Growth of Smallmouth Bass, *Micropterus Dolomieu* Lacepede, at Baie Du Dore, Lake Huron, Ontario. Toronto, Canada: University of Toronto.~~
- ❑ The following references are added:
  - CALFED. 2007. Website. Souza, K.; Hieb, K.; Fleming, K.; Bryant, M.; Baxter, R. *Apparent Growth Rates of Pelagic Fishes and Relationship to Abundance (2.b.)*
  - CDFG and YCWA. 1965. *Stream Flow Release Agreement between Yuba County Water Agency and the California Department of Fish and Game*. September 2, 1965.
  - DWR. 2007. *WOMT Summary 3/6/2007*. *WOMT Meeting Notes – Website [www.water.ca.gov/calfedops/womt/2007/03\\_06\\_2007\\_summary.pdf](http://www.water.ca.gov/calfedops/womt/2007/03_06_2007_summary.pdf)*
  - Federal Power Commission. 1966. *Federal Power Commission Order Amending License for YCWA Project No. 2246*.
  - NMFS. 2005. *Final Biological and Conference Opinion for the Proposed Yuba River Development Project License Amendment for FERC License No. 2246 and its Effects on Central Valley Spring-run Chinook Salmon and Central Valley Steelhead*

### 5.15.5 CHAPTER 11 – TERRESTRIAL RESOURCES

- ❑ The following reference: ~~Detrich, P. J. 1980. Pit 3,4,5 Bald Eagle Study. United States Department of Agriculture, Forest Service, Redding, California. Unpublished Report.~~ is removed and is replaced with: Detrich, P. J. 1980. *As cited in DWR. 2005. Application for New License Oroville Facilities FERC Project No. 2100 Volume IV PDEA Appendices Part 1 - Appendices A,B,C,D,E,F.*
- ❑ The following reference: ~~DWR. 1988. Initial Study for the Transfer of Water From the Yuba County Water Agency to the Department of Water Resources of the State of California. Redding, CA.~~ is removed and is replaced with: YCWA *et al.* 2005. *Environmental Analysis for the Proposed Temporary Transfer of Water from the Yuba County Water Agency, Yuba River Development Project to the California Department of Water Resources CALFED Environmental Water Account Project/2005 Dry Year Water Purchase Program*
- ❑ The following reference: ~~Gittens, E. F. 1968. A Study on the Status of the Bald Eagle in Nova Scotia. M.S. Thesis, Acadia University, Wolfville, Nova Scotia.~~ is removed and is replaced with: Gittens. 1968. *As cited in DWR. 2005. Application for New License Oroville Facilities FERC Project No. 2100 Volume IV PDEA Appendices Part 1 - Appendices A,B,C,D,E,F.*



- ❑ The following reference: ~~Lehman, R. N. 1979. A Survey of Selected Habitat Features of 95 Bald Eagle Nests in California. Prepared for CDFG Wildlife Management Branch, Administrative Report 79-1. Sacramento. 23 pp. is removed and is replaced with: Lehman, R. N. 1979. As cited in DWR. 2005. Application for New License Oroville Facilities FERC Project No. 2100 Volume IV PDEA Appendices Part 1 - Appendices A,B,C,D,E,F.~~

### 5.15.6 CHAPTER 14 – CULTURAL RESOURCES

- ❑ The following reference: ~~Baldrica, M. 2000. Pendola Fire Salvage Time Sale. Ms. 05-17-1398, on file with the Tahoe National Forest Downieville Ranger District, Camptonville, California.~~ is removed and is replaced with: *Reclamation, DWR, USFWS, NMFS, and CDFG. 2003. Environmental Water Account Draft Environmental Impact Statement/Environmental Impact Report. State Clearinghouse No. 1996032083.*
- ❑ The following reference: ~~Deal, K. 1980. Elbow Timber Sale. Ms. 05-17-287, on file at the Tahoe National Forest, Downieville Ranger District, Camptonville, California.~~ is removed and is replaced with: *Reclamation, DWR, USFWS, NMFS, and CDFG. 2003. Environmental Water Account Draft Environmental Impact Statement/Environmental Impact Report. State Clearinghouse No. 1996032083.*
- ❑ The following reference: ~~Hines, P.W. 1987. Lake Oroville State Recreation Area, Statewide Resources Management Plan, Project 118 151-1, 1986-1987. MS on file at the Department of Parks and Recreation, Cultural Heritage Division, Sacramento.~~ is removed and is replaced with: *DWR. 2001. Initial Information Package, Relicensing of the Oroville Facilities. FERC License Project No. 2100.*
- ❑ The following reference: ~~Riddell, F. and Olsen. 1966. New Bullards Bar Reservoir Archaeological Reconnaissance. On file with the Tahoe National Forest Downieville Ranger District, Camptonville, California.~~ is removed and is replaced with: *Reclamation, DWR, USFWS, NMFS, and CDFG. 2003. Environmental Water Account Draft Environmental Impact Statement/Environmental Impact Report. State Clearinghouse No. 1996032083.*
- ❑ The following reference: ~~Heizer, R. F. 1934. Archaeological Site Survey Records for CA-SAC 26, 28, 29, 30, 41, 42, 43, 44, 46~~ is removed.

### 5.15.7 CHAPTER 20 – INDIAN TRUST ASSETS

- ❑ The following reference: ~~Meals, H. 1978. Bullards Bar Trail. Ms. 05-17-208, on file at the Tahoe National Forest, Downieville Ranger District, Camptonville.~~ is removed and is replaced with: *Reclamation, DWR, USFWS, NMFS, and CDFG. 2003. Environmental Water Account Draft Environmental Impact Statement/Environmental Impact Report. State Clearinghouse No. 1996032083.*

### 5.16 APPENDIX B – PROPOSED LOWER YUBA RIVER ACCORD AGREEMENTS

- ❑ Some of the provisions of the Lower Yuba River Fisheries Agreement have been amended since the Draft EIR/EIS was issued in June 2007. Although the final provisions of the Fisheries Agreement are still being negotiated and likely will not be finalized until the agreement is executed, the modifications that have been discussed by the parties involved to date are included in Appendix M1 of the Final EIR/EIS.

- ❑ Some of the provisions of the Water Purchase Agreement have been amended since the Draft EIR/EIS was issued in June 2007. Although the final provisions of the Water Purchase Agreement are still being negotiated and likely will not be finalized until the agreement is executed, the modifications that have been discussed by the parties involved to date are included in Appendix M2 of the Final EIR/EIS.

### **5.17 APPENDIX D – MODELING TECHNICAL MEMORANDUM**

- ❑ Page A-18: The sentence in the middle of the last paragraph is revised as follows:  
This step has been taken ~~to~~so that the Smartville flow requirement controls New Bullards Bar Reservoir operations when appropriate.
- ❑ Page A-25: The sentence in the middle of the second paragraph under Section A.4.4, Yuba Accord Alternative is revised as follows:  
In the first 8 years of the agreement (~~2007~~2008 through December 31, 2015), Reclamation and DWR would purchase 60 TAF per year of Component 1 water, for a total of 480 TAF.

### **5.18 APPENDIX F1 – SURFACE WATER SUPPLY AND MANAGEMENT MODEL OUTPUT**

- ❑ Tables F1-3, F1-11, F1-19, F1-27, F1-28, F1-43, and F1-51 of Appendix F1 are revised to read as follows:

**ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE CEQA YUBA ACCORD ALTERNATIVE  
COMPARED TO THE CEQA NO PROJECT ALTERNATIVE**

**Table F1-3. CVP South-of-Delta Water Service Contractor and Refuge Deliveries**

Year Type	Deliveries (TAF)											
	CEQA No Project Alternative			CEQA Yuba Accord Alternative			Change (CEQA Yuba Accord Alternative-CEQA No Project Alternative)			Percent Change (CEQA Yuba Accord Alternative-CEQA No Project Alternative)		
	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge
Wet	1,508	142	289	1,508	142	289	0	0	0	0%	0%	0%
Above Normal	1,318	137	289	1,318	137	289	0	0	0	0%	0%	0%
Below Normal	1,157	128	289	1,155	128	289	-2	0	0	0%	0%	0%
Dry	871	112	284	860	112	284	-11	0	0	-1%	0%	0%
Critical	405	83	243	382	83	243	-23	0	0	-6%	0%	0%
All Years	1,093	123	280	1,086	123	280	-7	0	0	-1%	0%	0%

**ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE CEQA MODIFIED FLOW ALTERNATIVE  
COMPARED TO THE CEQA NO PROJECT ALTERNATIVE**

**Table F1-11. CVP South-of-Delta Water Service Contractor and Refuge Deliveries**

Year Type	Deliveries (TAF)											
	CEQA No Project Alternative			CEQA Modified Flow Alternative			Change (CEQA Modified Flow Alternative-CEQA No Project Alternative)			Percent Change (CEQA Modified Flow Alternative-CEQA No Project Alternative)		
	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge
Wet	1,508	142	289	1,508	142	289	0	0	0	0%	0%	0%
Above Normal	1,318	137	289	1,318	137	289	0	0	0	0%	0%	0%
Below Normal	1,157	128	289	1,155	128	289	-2	0	0	0%	0%	0%
Dry	871	112	284	860	112	284	-11	0	0	-1%	0%	0%
Critical	405	83	243	382	83	243	-23	0	0	-6%	0%	0%
All Years	1,093	123	280	1,086	123	280	-7	0	0	-1%	0%	0%

**ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE CEQA YUBA ACCORD ALTERNATIVE COMPARED TO THE CEQA EXISTING CONDITION**

**Table F1-19. CVP South-of-Delta Water Service Contractor and Refuge Deliveries**

Year Type	Deliveries (TAF)											
	CEQA Existing Condition			CEQA Yuba Accord Alternative			Change (CEQA Yuba Accord Alternative-CEQA Existing Condition)			Percent Change (CEQA Yuba Accord Alternative-CEQA Existing Condition)		
	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge
Wet	1,516	142	289	1,508	142	289	-8	0	0	-1%	0%	0%
Above Normal	1,329	137	289	1,318	137	289	-11	0	0	-1%	0%	0%
Below Normal	1,165	128	289	1,155	128	289	-10	0	0	-1%	0%	0%
Dry	869	112	284	860	112	284	-9	0	0	-1%	0%	0%
Critical	389	83	243	382	83	243	-7	0	0	-2%	0%	0%
All Years	1,095	123	280	1,086	123	280	-9	0	0	-1%	0%	0%

**ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE CEQA MODIFIED FLOW ALTERNATIVE COMPARED TO THE CEQA EXISTING CONDITION**

**Table F1-27. CVP South-of-Delta Water Service Contractor and Refuge Deliveries**

Year Type	Deliveries (TAF)											
	CEQA Existing Condition			CEQA Modified Flow Alternative			Change (CEQA Modified Flow Alternative-CEQA Existing Condition)			Percent Change (CEQA Modified Flow Alternative-CEQA Existing Condition)		
	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge
Wet	1,516	142	289	1,508	142	289	-8	0	0	-1%	0%	0%
Above Normal	1,329	137	289	1,318	137	289	-11	0	0	-1%	0%	0%
Below Normal	1,165	128	289	1,155	128	289	-10	0	0	-1%	0%	0%
Dry	869	112	284	860	112	284	-9	0	0	-1%	0%	0%
Critical	389	83	243	382	83	243	-7	0	0	-2%	0%	0%
All Years	1,095	123	280	1,086	123	280	-9	0	0	-1%	0%	0%

**ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE CEQA NO PROJECT ALTERNATIVE COMPARED TO THE CEQA EXISTING CONDITION**

**Table F1-28. CVP South-of-Delta Water Service Contractor and Refuge Deliveries**

Year Type	Deliveries (TAF)											
	CEQA Existing Condition			CEQA No Project Alternative			Change (CEQA No Project Alternative-CEQA Existing Condition)			Percent Change (CEQA No Project Alternative-CEQA Existing Condition)		
	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge
Wet	1,516	142	289	1,508	142	289	-8	0	0	-1%	0%	0%
Above Normal	1,329	137	289	1,318	137	289	-11	0	0	-1%	0%	0%
Below Normal	1,165	128	289	1,157	128	289	-8	0	0	-1%	0%	0%
Dry	869	112	284	871	112	284	2	0	0	0%	0%	0%
Critical	389	83	243	405	83	243	17	0	0	4%	0%	0%
All Years	1,095	123	280	1,093	123	280	-2	0	0	0%	0%	0%

**ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE NEPA YUBA ACCORD ALTERNATIVE COMPARED TO THE NEPA NO ACTION ALTERNATIVE**

**Table F1-43. CVP South-of-Delta Water Service Contractor and Refuge Deliveries**

Year Type	Deliveries (TAF)											
	NEPA No Project Alternative			NEPA Yuba Accord Alternative			Change (NEPA Yuba Accord Alternative-NEPA No Project Alternative)			Percent Change (NEPA Yuba Accord Alternative-NEPA No Project Alternative)		
	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge
Wet	1,619	143	289	1,619	143	289	0	0	0	0%	0%	0%
Above Normal	1,435	140	288	1,435	140	288	0	0	0	0%	0%	0%
Below Normal	1,215	129	289	1,213	129	289	-2	0	0	0%	0%	0%
Dry	924	115	284	912	115	284	-12	0	0	-1%	0%	0%
Critical	411	82	239	388	82	239	-23	0	0	-6%	0%	0%
All Years	1,165	124	280	1,158	124	280	-7	0	0	-1%	0%	0%

**ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE NEPA MODIFIED FLOW ALTERNATIVE  
COMPARED TO THE NEPA NO ACTION ALTERNATIVE**

**Table F1-51. CVP South-of-Delta Water Service Contractor and Refuge Deliveries**

Year Type	Deliveries (TAF)											
	NEPA No Project Alternative			NEPA Modified Flow Alternative			Change (NEPA Modified Flow Alternative-NEPA No Project Alternative)			Percent Change (NEPA Modified Flow Alternative-NEPA No Project Alternative)		
	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge	Ag	M&I	Refuge
Wet	1,619	143	289	1,619	143	289	0	0	0	0%	0%	0%
Above Normal	1,435	140	288	1,435	140	288	0	0	0	0%	0%	0%
Below Normal	1,215	129	289	1,213	129	289	-2	0	0	0%	0%	0%
Dry	924	115	284	912	115	284	-12	0	0	-1%	0%	0%
Critical	411	82	239	388	82	239	-23	0	0	-6%	0%	0%
All Years	1,165	124	280	1,158	124	280	-7	0	0	-1%	0%	0%

### **5.19 APPENDIX F4 – GATAER MODEL OUTPUT**

- ❑ Page 1336 (for all comparative modeling scenarios): The headings for columns 2, 3, 6 and 7 in the delta smelt salvage projections model output are revised to indicate *median salvage* for each alternative, not ~~average salvage~~.

### **5.20 APPENDICES J AND K – ESA COMPLIANCE AND FISH AND WILDLIFE COORDINATION ACT COMPLIANCE**

- ❑ Because Reclamation would not participate in the first phase of the Yuba Accord Alternative and because YCWA does not anticipate needing to apply for any incidental-take authorization under CESA for the Yuba Accord Alternative, Appendices J and K are deleted. Any required compliance with the statutes covered by these appendices will be described in subsequent documents prepared by Reclamation or YCWA.

## **CHAPTER 6**

### **MITIGATION, MONITORING AND REPORTING PROGRAM/ ENVIRONMENTAL COMMITMENTS PLAN**

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#### **6.1 INTRODUCTION**

CEQA (Public Resources Code, Section 21081.6) requires that when a CEQA lead agency makes a finding that changes, or alterations have been required in or incorporated into the project to mitigate or avoid the significant effects on the environment, and the CEQA lead agency approves the project, then the CEQA lead agency also must adopt a mitigation monitoring and reporting program for the project. This program must ensure compliance with mitigation measures during project implementation. A reporting program consists of written compliance review and guarantees that the approving agency is informed of compliance. A monitoring program consists of a project oversight process and guarantees that compliance is checked regularly.

Although not expressly required by NEPA, CEQ directs all federal agencies to include in an EIS the appropriate means to mitigate any adverse environmental impacts (40 CFR 1502.14(f), 1502.16(h)). The final ROD must state whether all practicable means to avoid or minimize environmental harm were adopted and include a monitoring and enforcement plan for any proposed mitigation (40 CFR 1505.2(c)).

YCWA is the lead agency and project proponent for CEQA compliance purposes and Reclamation is the lead agency and project proponent for NEPA compliance purposes. For the Proposed Project/Action (i.e., Yuba Accord Alternative), YCWA would be responsible for implementing the actions and commitments that are identified in the MMRP/ECP for the Yuba Region. Because DWR is a CEQA responsible agency and would be a participant in the first phase (see Final EIR/EIS, Chapter 3) of implementing the Yuba Accord Alternative, DWR would be responsible for implementing the actions and commitments described in the MMRP/ECP that relate to the EWA Program (or an equivalent program) and SWP operations. If Reclamation decides to participate in the second phase (see Final EIR/EIS, Chapter 3) of the Yuba Accord Alternative, then Reclamation would be responsible for implementing measures related to CVP operations.

##### **6.1.1 PURPOSE AND OBJECTIVES OF THE MITIGATION MONITORING AND REPORTING PROGRAM/ENVIRONMENTAL COMMITMENTS PLAN**

YCWA, Reclamation and DWR developed this chapter to guide mitigation compliance before, during and after implementation of the Proposed Project/Action, as required by CEQA and NEPA. Project approvals include environmental protection and mitigation measures to minimize or eliminate potentially adverse impacts to the project study area. These measures are described in the Draft EIR/EIS and in Chapter 5 of the Final EIR/EIS.

If the Proposed Project/Action is approved, then compliance monitoring and evaluation will be performed by YCWA, Reclamation or DWR, as indicated in the description of each measure. The objectives of this MMRP/ECP are to provide the following:



- ❑ Compliance requirements for the environmental protection and mitigation measures specified in the Draft EIR/EIS and Chapter 5 of the Final EIR/EIS;
- ❑ A reference document containing the environmental protection and mitigation measures for the Proposed Project/ Action;
- ❑ A list of lead agency and responsible agency contacts; and
- ❑ The timing of mitigation measure implementation.

### 6.1.2 PROJECT LOCATION

The project study area includes those regions that might benefit from or potentially be affected by implementation of the Proposed Project/ Action, which would involve changes in Yuba Project operations and water management of the lower Yuba River. As described in the Draft EIR/EIS, the project study area includes: (1) Yuba Project facilities and the lower Yuba River; (2) the YCWA Member Units and their service areas; (3) local groundwater basins; (4) CVP and SWP storage reservoirs and rivers downstream of these reservoirs; and (5) the Delta. Additionally, San Luis Reservoir and areas served by downstream CVP/SWP contractors (the Export Service Area) are considered. Therefore, the geographic areas influenced by implementation of the Proposed Project/ Action are described and evaluated in the following four primary regions:

- ❑ Yuba Region
- ❑ CVP/SWP Upstream of the Delta Region
- ❑ Delta Region
- ❑ Export Service Area

YCWA would release water from New Bullards Bar Reservoir and through Englebright Reservoir into the lower Yuba River to: (1) implement the flow schedules under the Yuba Accord Alternative; and (2) provide Yuba Accord transfer water to Reclamation and DWR. Reclamation and DWR would receive and convey Yuba Accord transfer water from YCWA in the Sacramento River and the Delta, and potentially may store a portion of this water in San Luis Reservoir before delivering it to the federal and state water contractors in the Export Service Area (**Figure 6-1**).

### 6.1.3 PROJECT DESCRIPTION

The Yuba Accord Alternative is the result of over two years of work and discussions by Yuba River stakeholders 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. The Yuba Accord Alternative includes three separate but interrelated proposed agreements that would protect and enhance fisheries resources in the lower Yuba River, increase local supply reliability, and provide Reclamation and DWR with increased operational flexibility for protection of Delta fisheries resources through the EWA Program and provision of supplemental dry-year water supplies to federal and state water contractors. These proposed agreements, which are in Appendix B and discussed in detail in Chapter 3 of the Draft EIR/EIS, are:



Figure 6-1. Project Study Area

- ❑ *Principles of Agreement for Proposed Lower Yuba River Fisheries Agreement* (Fisheries Agreement);
- ❑ *Principles of Agreement for Proposed Conjunctive Use Agreements* (Conjunctive Use Agreements); and
- ❑ *Principles of Agreement for Proposed Long-term Transfer Agreement* (Water Purchase Agreement).

YCWA, SYRCL, TU, TBI, FOR, CDFG, USFWS, and NMFS developed the Fisheries Agreement. The Fisheries Agreement is the cornerstone of the Yuba Accord Alternative. The Fisheries Agreement contains proposed new instream flow schedules 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 instream-flow requirements of RD-1644. Under the Yuba Accord Alternative, YCWA also proposes to execute and implement 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. Some 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 analysis in the Draft EIR/EIS for the Yuba Accord Alternative is based on the concept that the Yuba Accord water transfer amounts would be shared equally between the CVP and SWP, and thereafter would be divided among the respective projects' contractors. 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 Yuba Accord transfer water, up to 100 percent of the total amount of such water, 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 transfer water in that year.

During the course of the preparation of the Draft EIR/EIS for the Proposed Yuba Accord, some circumstances related to water supplies and water delivery in Northern California have changed, and some of those changes may have implications for the Yuba Accord Alternative. These changed circumstances are discussed in Chapter 3 of the Final EIR/EIS.

#### **6.1.4 SUMMARY OF PROJECT PURPOSE, NEED, AND OBJECTIVES**

The purpose of the Yuba Accord Alternative is to resolve instream flow issues in a way that protects and enhances lower Yuba River fisheries, increases local water supply reliability, and protects Delta resources. Additionally, YCWA has a goal of providing revenues for local flood control and water supply projects. As a state agency party to the Yuba Accord Alternative,

DWR also would be involved in the purchase of Yuba Project water for use in the EWA Program (or an equivalent program), and for SWP state water contractor supplies. If Reclamation decides to participate, it would be involved with DWR in the purchase of Yuba Accord transfer for CVP federal water contractor supplies. Meeting the objectives of protecting and enhancing the Yuba River fisheries also is intended to resolve all or almost all of the pending litigation challenging RD-1644.

Various signatories and participants in the Yuba Accord Alternative, as a consequence of their various authorities, may prioritize the above objectives differently. For example, Reclamation and DWR are seeking to enable a long-term acquisition of water for the Delta, for use in the EWA Program or an equivalent program, and to improve water supply reliability for state and federal water contractors. NMFS, USFWS and CDFG are seeking to protect and enhance lower Yuba River fisheries resources and aquatic habitat. YCWA and its participating Member Units are seeking to: (1) protect local water supply reliability; (2) protect the Yuba River fisheries in a way that will settle the litigation challenging RD-1644; and (3) provide a revenue stream to support needed flood control and water-resource improvements in Yuba County.

### **6.1.5 RESPONSIBLE PARTIES**

YCWA, Reclamation, and DWR are responsible for implementation of the environmental commitments and mitigation measures identified in this MMRP/ECP. YCWA, as the CEQA lead agency, would be primarily responsible for MMRP/ECP elements that apply to the Yuba Region. DWR, as a CEQA responsible agency for the Proposed Yuba Accord, would be responsible for the MMRP/ECP elements that relate to the EWA Program and SWP operations. If Reclamation decides to participate in the Yuba Accord, then Reclamation would be responsible for the MMRP/ECP elements that relate to CVP operations.

## **6.2 ENVIRONMENTAL PROTECTION AND MITIGATION MEASURES**

Environmental commitments are measures or practices adopted by a project proponent to reduce or avoid adverse effects that could result from project operations. The following sections describe the environmental commitments, including impact avoidance or mitigation measures that will be implemented by YCWA, Reclamation or DWR to ensure no significant impacts result from the Proposed Yuba Accord.

The lead and responsible agencies have adopted these measures and incorporated them as part of the Proposed Project/Action (i.e., Yuba Accord Alternative) in compliance with applicable federal, state, and local policies or regulations that apply to the project activities. These measures will ensure that the Yuba Accord Alternative will minimize or avoid potentially significant environmental impacts, to the extent feasible. These measures include YCWA monitoring commitments that were developed during the preliminary planning and design phases of the Yuba Accord, and mitigation and monitoring commitments identified by Reclamation and DWR in the Final EWA EIS/EIR (Reclamation *et al.* 2004).

The CEQA Environmental Checklist identifies the conditions under which a project's evaluation may rely upon an earlier analysis of potential impacts. An earlier analysis of a project may be relied upon if the potential impacts were within the scope of the previous analysis, and the impacts were adequately addressed.

Reclamation, DWR, USFWS, NMFS and CDFG (Reclamation *et al.* 2003) completed an environmental analysis of the EWA Program, including characterization of probable water transfer volumes from YCWA. EWA agencies acquire and manage assets to maximize benefits to at-risk native fish species, but asset management can change river flows, Delta outflows and the amount of seasonal wetlands within agricultural areas. The manner in which the EWA agencies apply, acquire, and manage assets will be monitored to ensure that EWA fisheries benefit objectives are met while potential adverse impacts to other species and their habitats, because of EWA actions, are minimized or avoided. To address these considerations, compliance and effectiveness monitoring components (Mitigation Plan) were identified in the Final EWA EIS/EIR (Reclamation *et al.* 2004). Data associated with EWA monitoring efforts are used to support adaptive management decisions that could change how some assets are managed should the overall goals of the EWA Program related to fish species, habitats, and terrestrial species not be met. Because the EWA Mitigation Plan identified several environmental protection and mitigation measures related to the YCWA component of EWA acquisitions (e.g., the Yuba Accord Alternative), these EWA measures also have been incorporated into this MMRP/ECP, and are discussed below.

A summary of the proposed environmental protection and mitigation measures described in this MMRP/ECP are provided in **Table 6-1**.

The mitigation measures identified in Table 6-1 and described in the Draft EIR/EIS are designed to reduce impacts to less-than-significant levels. YCWA, Reclamation and DWR also participate in other activities and programs that serve to protect or enhance the natural environment within their respective project and service areas. These activities include involvement in lower Yuba River flow monitoring activities and annual adult salmonid escapement surveys.

In addition to the activities in the Yuba Region, the Yuba Accord Alternative would have the ability to allocate more water for the Delta and for CVP wildlife refuges. These environmental commitments would not be mitigation for potential impacts resulting from the Yuba Accord Alternative, but they would support fisheries management activities in the project study area.

In the Draft EIR/EIS, the analyses showed that implementation of the Yuba Accord Alternative would have the potential to cause significant environmental impacts on some resources. Additionally, some of the commentors that provided comments on the Draft EIR/EIS also requested additional information about the protective measures built into the project to minimize or avoid these impacts. The mitigation measures and environmental commitments for each potentially affected resource are described here.

**Table 6-1. Summary of Mitigation Measures and Environmental Commitments Incorporated into the Proposed Project/Action (Yuba Accord Alternative)**

<b>Mitigation Measures/ Environmental Commitments</b>	<b>Implementing Agency</b>	<b>Timing</b>
<b>GROUNDWATER RESOURCES</b>		
Mitigation Measure 6-1. A Groundwater Monitoring and Reporting Program will be implemented to minimize and/or avoid potential impacts to local groundwater users in the Yuba Region	YCWA, DWR and the Member Units	Before, during and after groundwater transfer
Mitigation Measure 6-2: A Third-Party Impacts Action Plan will be implemented to minimize and/or avoid potential impacts to local groundwater users in the Yuba Region	YCWA and the Member Units	Before, during and after groundwater transfer
<b>WATER QUALITY</b>		
Mitigation Measure 9-1. Carriage water will be used to maintain salinity and chloride concentrations in the Delta	Reclamation <sup>1</sup> and DWR	During transfer
Mitigation Measure 9-2. YCWA operational flexibility will be utilized to ensure that refilling of the reservoir will not adversely affect water quality in the Delta	YCWA	Continuous, year-round
<b>FISHERIES AND AQUATIC RESOURCES</b>		
Environmental Commitment 10-1: The RMT 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	YCWA, CDFG, NMFS, USFWS, Reclamation, and SYRCL (Collectively the RMT)	Continuous and year-round over the duration of the project
<ul style="list-style-type: none"> <li>• RMT Monitoring Measure 1: VAKI RiverWatcher Fish Monitoring</li> </ul>	YCWA/RMT	Continuous, year-round
<ul style="list-style-type: none"> <li>• RMT Monitoring Measure 2: Proposed Lower Yuba River Chinook Salmon Escapement Survey</li> </ul>	YCWA/RMT	Annually from October through December
<ul style="list-style-type: none"> <li>• RMT Monitoring Measure 3: Develop in-river salmonid production indices by monitoring the downstream movement of juvenile salmonids in the lower Yuba River using rotary screw traps</li> </ul>	YCWA/RMT	Continuous, year-round
Environmental Commitment 10-2: EWA mitigation plan for protecting Delta fisheries resources - continuation of actions identified by the Delta Smelt Working Group	Reclamation <sup>1</sup> and DWR	Continuous, year-round
Environmental Commitment 10-3: EWA mitigation plan for protecting Delta fisheries resources - continuation of actions identified by the Water Operations Management Team	Reclamation <sup>1</sup> and DWR	Continuous, year-round
<b>AIR QUALITY</b>		
Mitigation Measure 15-1. Provide certification documentation to Reclamation and DWR indication that groundwater pumping sources would not increase emissions, to ensure that no net impacts to air quality would occur.	YCWA and approved by Reclamation <sup>1</sup> and DWR	Annually, if groundwater substitution operations occur
<sup>1</sup> To become effective as part of the second phase of the Yuba Accord Alternative (see Chapter 3).		

## 6.2.1 GROUNDWATER RESOURCES

*Mitigation Measure 6-1: A Groundwater Monitoring and Reporting Program will be implemented to minimize and/or avoid potential impacts to local groundwater users in the Yuba Region*

**Action/Commitment:** For past groundwater substitution water transfers, YCWA and DWR developed a Groundwater Transfer Monitoring and Reporting Program specific to Yuba County. YCWA has also developed a GMP, which was adopted in March 2005 pursuant to Water Code Sections 10750 *et seq.* Since 2005, YCWA has constructed eight additional groundwater monitoring wells for this program (see DWR, Memorandum Report, "Monitoring Well Construction Technical Assistance," April 2007). Information gathered from the activities specified in the GMP, along with the activities described in this exhibit, will be used to assess effects of groundwater pumping on groundwater resources in the Yuba Region. YCWA will continue to work with DWR and the Member Units to identify and resolve any new groundwater monitoring issues.

**Responsible Parties:** YCWA, with assistance from DWR and the Member Units

**Location:** Yuba Region (North Yuba and South Yuba basins)

**Timing:** Before, during and after groundwater transfers

**Monitoring:** Groundwater monitoring activities in the Yuba Region would involve:

(1) The water levels in selected production wells geographically dispersed throughout each Member Unit participating in the groundwater substitution program will be measured by the Member Unit before the initial pumping for each year during which a groundwater substitution transfer will take place. Selection of these wells will be by mutual agreement by DWR and Yuba, in consultation with the Member Unit. Upon termination of pumping for the year, the water levels will be measured by the Member Units, and such measurements will continue on a monthly basis until water levels have recovered to the pre-pumping levels, or have stabilized. In no case will water-level measurements be required following spring high water levels in the year following the year of the groundwater substitution pumping. The Member Units will provide the water-level readings to YCWA within 15 days of each reading.

(2) To supplement the GMP-specified monitoring program, water levels in each monitoring well in the YCWA network will be measured at least every two months by YCWA in each year

during which a groundwater substitution transfer is to take place, commencing no later than April. Upon termination of pumping, the monitoring well water levels will be measured, and such measurements will continue on a monthly basis until water levels have recovered to the pre-pumping levels, or have stabilized. In no case will water-level measurements be required following spring high water levels in the year following the year of the groundwater substitution pumping. DWR and YCWA will cooperate in obtaining these measurements.

(3) Readings of flow meters on the discharges of the wells will be recorded every month during the pumping period by Member Units for each production well. In addition, electric meter readings and fuel consumption for diesel pumps will be recorded by the Member Units, and made available to YCWA upon request. The quantities of water pumped between successive readings will be calculated by Member Units and reported to YCWA.

(4) Electrical Conductivity (EC) will be measured for water pumped from selected production wells at the initiation of pumping (or as soon thereafter as practicable), two months after the initial EC measurements and at the termination of pumping.

(5) For selected production wells (to be identified before the monitoring plan is finalized) near YCWA monitoring wells, drawdown analyses (of distance and time) will be completed, and comparisons made to monitoring well water levels.

**Reporting Requirements:** All monitoring data will be reported on a semi-monthly basis, and in an annual final summary report prepared by YCWA that will evaluate the impacts of the groundwater substitution pumping transfer program for that year. The final report will include water-level contour maps for the groundwater basin showing initial water levels and final, recovered water levels.

**Description of Activities:** See above for a description of the groundwater monitoring activities that would be implemented when groundwater substitution transfers are occurring.

Using data obtained from the monitoring activities, YCWA will determine the amount of water that can be pumped within the safe yield of the basin without contributing to long-term overdraft, and without resulting in any significant unmitigated third-party impacts to other groundwater users in the basin. Section 1 of Exhibit 3 to the Water Purchase Agreement (see Appendix M of this Final EIR/EIS) describes the monitoring plan that will be used to obtain information from which the determination will be made of the condition of the groundwater basin in the spring of the year during which groundwater



substitution pumping is planned. Based on this condition, YCWA will determine the expected response of the groundwater basin to the proposed pumping for that year and the resulting condition of the basin at the conclusion of the pumping. Determination of the expected condition at the conclusion of the pumping will be made by examining the historic response of the basin during previous years when pumping occurred and by examining the recovery of the basin during pumping years and successive years, and by comparing these basin responses with the planned pumping. Analysis of the historical responses of the basin to pumping will be used to develop empirical relationships between pumping and basin drawdown and recovery. These empirically derived relationships will be the formulas that will be used to determine basin response to the proposed pumping.

**Effectiveness Criteria:**

The determination of the groundwater basin response to the proposed pumping will result in an estimated basin condition at the end of pumping and an estimated condition for the spring of the next year. This estimated condition will be compared to historical groundwater levels in the basin. In 1991, YCWA and the Member Units completed a groundwater substitution transfer to provide water to other parts of California under the Governor's Emergency Drought Water Bank in response to a severe statewide drought. The groundwater levels that occurred in the fall of 1991 at the end of pumping did not result in any overdraft of the groundwater basin or any significant unmitigated third-party impacts. Groundwater levels had been lower than these levels during the 1980's, but the extent of effects of these lower levels on groundwater users in the basin is not well known. Therefore, the fall 1991 groundwater levels will be used for comparison with the estimated condition of the basin that will result from the proposed groundwater pumping under the Yuba Accord Alternative.

If the estimated levels are above the fall 1991 levels, then significant unmitigated third-party impacts will not be expected. If the estimated levels are below the fall 1991 levels, then further examination of potential impacts and consultation with the Member Units and the GMP Water Advisory Group (discussed below) will be required.

The GMP Water Advisory Group is a group that was formed under the GMP to provide input and guidance on groundwater issues. The GMP Water Advisory Group comprises representatives from local groundwater users, including municipal water purveyors, Member Units, reclamation districts and others. Groundwater substitution pumping that would result in levels near the fall 1991 levels will occur only if the Member Units and the GMP Water Advisory Group agree to allow such pumping. Even if the determination is that estimated levels

resulting from proposed pumping will be above the fall 1991 levels, the Member Units still will be consulted, and each Member Unit must individually approve the proposed pumping in its area or such pumping will not occur. If the amount of proposed pumping that will not cause fall groundwater levels to drop below 1991 levels cannot be confirmed using the procedures described above, then a lower amount of pumping that satisfies the conditions of this section will be determined using these procedures.

The monitoring requirements and the associated adaptive management strategy discussed above together will reduce any potential unforeseeable impacts occurring as a result of transfers to less than significant levels. Under the Yuba Accord Alternative, YCWA also would implement the adaptive management program for future planning of transfers based on the changing conditions of the basin during previous transfers. If necessary, the adaptive management program would change the volumes and locations of future groundwater-substitution pumping to avoid adverse impacts to the basin and other groundwater users in the basin.

***Mitigation Measure 6-2: A Third-Party Impacts Action Plan will be implemented to minimize and/or avoid potential impacts to local groundwater users in the Yuba Region***

**Action/Commitment:**

The purpose of this Third-Party Impacts Action Plan is to describe actions that will be undertaken by YCWA and the Member Units to respond to impacts to third parties that occur because of groundwater substitution pumping for transfers under the Water Purchase Agreement. Third parties include local groundwater users that could be affected by fluctuations in groundwater levels because of the pumping of such groundwater substitution water. YCWA and the Member Units agree that prompt responses to and mitigation of potential impacts to third parties are an important requirement for YCWA's present and future groundwater substitution transfers.

The action plan includes a series of steps that will be taken to ensure that the groundwater substitution component of the Water Purchase Agreement does not cause significant, unmitigated impacts to third parties. Under this action plan, groundwater substitution pumping must not produce significant unmitigated impacts on third parties, impacts must be identified and mitigated as quickly as possible, and there must be ongoing, open communications with affected third parties. Because not all potential impacts can be known in advance, this plan provides a process for responding to concerns expressed by local groundwater users who believe that their water-production facilities are being or will be impacted by groundwater

substitution pumping under the Water Purchase Agreement that is part of the Yuba Accord Alternative.

**Responsible Parties:** YCWA and the Member Units

As a contractual condition of a Member Unit participating in the groundwater substitution component of the Water Purchase Agreement, the Member Unit will identify a contact person or persons who will be responsible for initially responding to a notification of a potential third-party impact, and take the other action specified in this section. The contact person for a Member Unit will be the person designated by the Member Unit.

The responsibilities of YCWA will be carried out by the General Manager, or by a person designated by the General Manager. The contact persons for the Member Units will also serve on a Yuba Groundwater Substitution Program Advisory Group ("Advisory Group") for either the area north of the Yuba River or the area south of the Yuba River.

**Location:** Yuba Region

**Timing:** Before, during and after groundwater substitution transfer

**Monitoring:** Upon either YCWA or the Member Unit receiving notification of a potential third-party impact, YCWA or the Member Unit will immediately notify the other party of the nature of the potential impact. The Member Unit will promptly (within one day) contact the third party and obtain all available information regarding the nature and extent of the potential impact, and provide that information to YCWA. The Member Unit also will regularly update YCWA on the status of the Member Unit's response.

If the third party is not within the boundaries of any Member Unit of YCWA, then YCWA will either: (a) determine if it is evident that the third party is in close proximity to the groundwater-production facilities within a Member Unit that are involved in the groundwater substitution program, and designate the Member Unit or Member Units responsible for responding to the potential impact; or (b) consult with the Advisory Group concerning which Member Unit or Member Units should be designated for responding to the potential impact.

**Reporting Requirements:** No specific reporting requirements

**Description of Activities:** It is the intention of this action plan that: (a) any third-party impact that is reasonably likely to have been caused by implementation of the groundwater substitution program will be promptly and substantially mitigated; (b) as to any third-party

impact that is not reasonably likely to have been caused by implementation of the groundwater substitution program, the third party will be provided information to reasonably demonstrate the reasons that there were no impacts; and (c) YCWA, the Member Units and the Advisory Group will be involved in the implementation of the action plan.

After the third party has been contacted and the relevant information regarding the potential impact has been received, the Member Unit will develop an approach (subject to approval by YCWA) to: (a) determine whether the third party has actually been impacted by groundwater pumping by the Member Unit, and, if so; (b) mitigate for the impact. YCWA will be available to provide assistance to the Member Unit in developing the foregoing approach. YCWA and the Member Unit will consult with the applicable Advisory Group in developing the approach.

Actions that will be taken to mitigate an impact include, but are not limited to, deepening of the impacted third party's well or lowering of pump bowls, cessation of pumping in the area of the impacted well, and providing a temporary or permanent alternative water supply to the third party.

**Effectiveness Criteria:**

Groundwater transfers should not result in unmitigated third party impacts or cause overdraft.

YCWA will resolve any dispute concerning implementation of this action plan, including which Member Unit will be responsible for mitigating a potential impact, whether it is reasonably likely that there was a third-party impact, and the measures to be taken by the Member Unit to mitigate the impact. If a Member Unit fails to carry out its responsibilities under this action plan, then YCWA will be authorized (but not required) to perform the responsibilities of the Member Unit and recover its reasonable costs in doing so from the Member Unit, including deducting these costs from payments due the Member Unit for the groundwater substitution transfer. YCWA will consult with the applicable Advisory Group in carrying out its responsibilities described in Exhibit C to the Water Purchase Agreement (see Appendix M of this Final EIR/EIS).

## 6.2.2 SURFACE WATER QUALITY

Pursuant to the provisions originally identified for the EWA Program (Reclamation *et al.* 2003), the following protective measures have been incorporated into the project to continue with standard operating procedures and to improve the water quality to users in and south of the Delta.

*Mitigation Measure 9-1: Carriage water will be used to maintain salinity and chloride concentrations in the Delta*

<b>Action/Commitment:</b>	Carriage water includes water supplemental to transferable water volumes that provides for any incidental loss of transferable water volumes or increases Delta outflows in association with water transfer events, for the purpose of maintaining or enhancing water quality. As an example, if an entity like the EWA Program (or an equivalent program), wanted to pump 80 AF of water from the Delta, then the entity would have to buy 100 AF of water. The 100 AF of water would be provided as inflow to the Delta and 20 AF of this water would be used to increase Delta outflow to ensure that chloride concentrations would not increase due to the 80 AF of increased pumping from the Delta.
<b>Responsible Parties:</b>	Reclamation and DWR
<b>Location:</b>	Delta Region
<b>Timing:</b>	During transfer
<b>Monitoring:</b>	In the last two years, Reclamation and DWR have developed a method of using DSM2 on a real time basis to estimate the amount of carriage water needed in that year to pump EWA water (or any other water supply including SWP water users, the CVP, and other entities purchasing water upstream from the Delta) without causing an increase in chloride concentration in the Delta.
<b>Reporting Requirements:</b>	Yearly
<b>Description of Activities:</b>	Reclamation's and DWR's work over the past few years indicates that the carriage water percentage required to maintain Delta water quality can range from 0 to 25 percent, or more. Given these newly developed techniques, the EWA can purchase water upstream from the Delta, but for every acre-foot purchased, 0 to 25 percent or more of that acre-foot must be dedicated to increase Delta outflow. The remainder may be pumped at the CVP/SWP pumping plants without causing any increase in chloride concentrations within the Delta due to the EWA Program.
<b>Effectiveness Criteria:</b>	Potential increases in concentrations in the Delta due to increased SWP and CVP pumping of EWA water during the summer months would not occur because of the utilization of carriage water to ensure no significant changes in Delta water quality during the periods of increased pumping.

*Mitigation Measure 9-2: YCWA operational flexibility will be utilized to ensure that refilling of the reservoir will not adversely affect water quality in the Delta and export service areas south of the Delta*

<b>Action/Commitment:</b>	Refill conditions in New Bullards Bar Reservoir generally occur during February and March. During this time, YCWA has the operational flexibility to ensure that refilling of the reservoir will not adversely affect water quality in a manner that could potentially impact beneficial uses in the Delta and export service areas south of the Delta.
<b>Responsible Parties:</b>	YCWA
<b>Location:</b>	New Bullards Bar Reservoir and the Delta Region
<b>Timing:</b>	Continuously, year-round over the duration of the project
<b>Monitoring:</b>	If it is anticipated that reductions in lower Yuba River flow during the refill period would impact water quality conditions in the Delta, then YCWA would apply a water accounting procedure to determine the volume of water that would have been stored in the reservoir during the winter refill period. The amount of water foregone will be accounted for and repaid by YCWA via the refill accounting mechanisms described in Appendix E2, Exhibit 5.
<b>Reporting Requirements:</b>	No specific reporting requirements
<b>Description of Activities:</b>	The refilling of New Bullards Bar Reservoir would be based on conditions beginning in January of the current water year.
<b>Effectiveness Criteria:</b>	Concentration levels of any state or federal criteria pollutants do not increase due to implementation of the Yuba Accord Alternative.

### 6.2.3 FISHERIES AND AQUATIC RESOURCES

*Environmental Commitment 10-1: The RMT 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*

<b>Action/Commitment:</b>	The Yuba Accord would provide for the continuation of the RMT and the River Management Fund (RMF). The RMT is composed of representatives from YCWA, CDFG, NMFS, USFWS, Reclamation, and SYRCL, and is charged with providing a forum for consensus-based decisions and actions for management of the lower Yuba River. 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.
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Upon implementation of the Yuba Accord the RMT would oversee various environmental actions for the lower Yuba River, including consulting on various operational decisions, operation of water temperature gages, the planning of fisheries monitoring and studies, and habitat enhancement measures. The specific duties of the RMT are further specified in Sections 5.2 and 5.3 of the Fisheries Agreement. The RMF, which is administered by the RMT, would be funded by YCWA (\$6 million for fisheries monitoring and studies) to finance a long-term fishery monitoring, study, and enhancement program for the lower Yuba River. The purposes of the RMT are specified in Section 5.3 of the Fisheries Agreement, and include:

- Evaluating the condition of fish resources in the lower Yuba River;
- Evaluating the viability of lower Yuba River fall-run Chinook salmon, as well as the lower Yuba River populations of the Central Valley steelhead Distinct Population Segment (DPS) and the spring-run Chinook salmon Evolutionarily Significant Unit (ESU);
- Evaluating the effectiveness of implementation of the Lower Yuba River Accord flow schedules on the condition and viability of lower Yuba River fish resources;
- Implementing habitat improvement and non-flow enhancement actions and activities;
- Implementing flow-based enhancement actions; for example, purchasing water for flows above the flows required by implementation of the Accord flow schedules;
- Retaining expert advise for specific technical questions;
- Retaining expert(s) for disputed 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

**Responsible Parties:** YCWA, CDFG, NMFS, USFWS, Reclamation, DWR, and SYRCL

**Location:** New Bullards Bar Reservoir and the lower Yuba River

**Timing:** Continuously, year-round over the duration of the project; the timing of each monitoring activity will vary depending on when species-specific life stages are present in the lower Yuba River

**Monitoring:** Monitoring activities include both core studies that will be undertaken for the entire duration of the Yuba Accord Alternative, and focused studies that will be undertaken to provide additional insights into specific issues or areas of concern. Core studies will include, but are not limited to:

- Collection of water temperature data;
- VAKI RiverWatcher fish monitoring;
- Chinook Salmon Escapement Survey; and
- Monitoring downstream movement of juvenile salmonids using rotary screw traps.

Focused studies may include, but are not limited to:

- Juvenile salmonid habitat use;
- Age-specific survival rates; and
- Salmonid genetic analysis.

Additional criteria for core and focused studies are included in Appendix A to the Fisheries Agreement.

**Reporting Requirements:** Requirements are dependent on monitoring and/or management strategies

**Description of Activities:** The RMT will conduct regular meetings to review monitoring data, completed and ongoing fisheries actions in the lower Yuba River, and to advise YCWA to make additional instream flows depending on water availability for the purposes of meeting fisheries resources needs.

**Effectiveness Criteria:** Through communication with regulatory and management agencies, use reporting mechanisms to determine whether current flow fluctuation and reduction criteria adequately protect Chinook salmon and steelhead redds from dewatering and fry from stranding or isolation. Effectiveness criteria also would be developed in coordination with the RMT.

*Environmental Commitment 10-2: EWA mitigation plan for protecting Delta fisheries resources - continuation of actions identified by the Delta Smelt Working Group*

**Action/Commitment:** EWA agencies acquire and manage assets to maximize benefits to at-risk native fish species, but asset management can change river flows and Delta outflows. The manner in which the EWA agencies apply, acquire, and manage assets will continue to be monitored to ensure that EWA fish benefit objectives are being



met while adverse effects to other species and their habitats because of EWA actions (or an equivalent program) are being minimized or avoided.

- Responsible Parties:** The DSWG consists of experts on delta smelt biology and is comprised of representatives from the following agencies: (1) CDFG; (2) USFWS; (3) Reclamation; (4) DWR; and (5) EPA. The responsibilities of each EWA agency may include data collection, analysis, interpretation, findings, and recommendations for changing EWA water asset acquisition and management strategies.
- Location:** Delta Region
- Timing:** Continuous, year-round; the Delta Smelt Working Group (DSWG) generally convenes at least once a month, or more as necessary.
- Monitoring:** Monitoring programs in place under this category include the Fall Midwater Trawl Survey, 20-mm survey, Delta smelt larva survey, Summer Towntnet Survey and the Spring Kodiak trawl. Data collected and reviewed as part of EWA monitoring efforts is used to support adaptive management decisions that could change how some assets are managed should the overall goals of the EWA program related to fish species, habitats, and terrestrial species not be met.
- Reporting Requirements:** Requirements dependent on monitoring and/or management strategies
- Description of Activities:** The purpose of the DSWG is to take actions to protect delta smelt in a proactive manner prior to salvage events at the CVP and SWP export pumping facilities in the Delta. Reclamation and/or DWR are responsible for monitoring the criteria established in the Delta Smelt Risk Assessment matrix (DSRAM) and reporting back to the USFWS and the DSWG if DSRAM criteria are triggered, which would necessitate a meeting to determine whether to recommend changes in CVP/SWP water project operations (referred to as a “fish action”).

#### ***Delta Smelt***

As described in the EWA EIR/EIS (Reclamation *et al.* 2004), delta smelt are vulnerable to entrainment at the CVP and SWP export facilities.

The EWA agencies initiate pumping reductions after recommendations from the Data Assessment Team (DAT)<sup>1</sup>, which uses data from various fish surveying methods and distribution indicators such as year-type hydrology, rate of export pumping, salvage estimates, location of X2, water quality, water flows and temperature, to assess population and distribution. These multiple data sources are used because salvage estimates alone are a less effective sampling method for larval and early juvenile fish (pers. comm., Poage 2003). The EWA agencies also use these data to determine the effectiveness of EWA actions taken to protect delta smelt. The EWA agencies have incorporated measures into the EWA program to protect and facilitate the recovery of delta smelt. EWA agencies will avoid increased exports when delta smelt are vulnerable by monitoring fish proximity to the Delta pumps.

The EWA agencies will specifically monitor salvage numbers during July before the export of any EWA water. Monitoring data from several surveying methods will be used to estimate population of various life-stages of delta smelt. For adult fish, these tools include the fall and spring mid-water trawls, beach seining, the Chipps Island trawl, and estimation of gonadal development. For larval delta smelt, these methods will include light trapping and 20-mm surveys. For juvenile fish, these methods will include the 20-mm and summer tow-net surveys (pers. comm., Poage 2003). The EWA agencies will utilize data collected from these surveys to monitor delta smelt recovery after EWA measures have been implemented.

#### *Anadromous Salmonids*

The EWA agencies have incorporated measures into the EWA for protection of salmon and steelhead in the Delta and upstream rivers. Many programs monitor the presence of adult and juvenile salmonids in the Sacramento River and the Delta (CALFED 2003). The EWA agencies utilize data collected from these surveys to monitor abundance, escapement, spawning distributions, and juvenile stranding. The EWA agencies use salvage estimates at the Delta export facilities to adhere to biological opinions and permits for Project operations.

**Effectiveness Criteria:** As described in Reclamation (2004), the EWA agencies initiate fish actions based on a range of data collected in the Delta and upstream rivers. If a fish action is taken, the EWA agencies and

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<sup>1</sup> The DAT is an open forum of people representing multiple government agencies (EWA agencies, EPA, Western), water districts (CCWD, Westlands Water District, and Santa Clara Valley Water District), and environmental interest groups (Environmental Defense, The Bay Institute). It reviews information on the distribution and abundance of fish, CVP and SWP operations, and Delta water quality (Reclamation *et al.* 2004).

the DSWG will then follow up on the action to attempt to ascertain its effectiveness of protecting delta smelt and anadromous salmonids. The EWA agencies rely upon the same data used to initiate a fish action to monitor the effectiveness of EWA actions on delta smelt. The EWA agencies also use data from several sources to decide when and how to take fish actions to protect salmon and steelhead in the Delta and upstream rivers. Fisheries biologists collect data on fish passage through the Delta from the catch of juvenile salmon, and various monitoring stations measure environmental parameters, such as flow, water temperature, precipitation, and turbidity. The EWA agencies use this information to trigger closures of the Delta Cross Channel gates and alter export pumping patterns. This information also is used to monitor the effectiveness of EWA actions.

***Environmental Commitment 10-3: EWA mitigation plan for protecting Delta fisheries resources - continuation of actions identified by the Water Operations Management Team***

<b>Action/Commitment:</b>	The EWA agencies, in collaboration with the CALFED Science Program (including the Interagency Ecological Program [IEP]), collect, synthesize, and apply scientific information relevant to the biological needs and population dynamics of anadromous and Delta fish species and to factors affecting the health and function of the Bay-Delta ecosystem. Annual EWA actions and assets are tracked closely throughout the year by the EWA program partners through the DAT and the Water Operations Management Team (WOMT).
<b>Responsible Parties:</b>	Reclamation, USFWS, NMFS, DWR and CDFG
<b>Location:</b>	Delta Region
<b>Timing:</b>	Continuous, year-round
<b>Monitoring:</b>	Water operations monitoring includes those IEP monitoring program elements that generate data and information used in managing CVP and SWP water project operations. Reservoir releases, Delta export levels, and operation of the Delta cross channel gates are all part of water project operations. Water operations monitoring programs include Delta flow and water temperature monitoring and database management, Sacramento and Chipps Island fish trawl surveys, CVP and SWP fish salvage programs.
<b>Reporting Requirements:</b>	No specific reporting requirements
<b>Description of Activities:</b>	Implementation of possible actions related to CVP/SWP water project operations utilize the decision-making process in place for the existing EWA Program (which may continue or be revised for

an equivalent program in the future). EWA actions are taken following discussions involving biologists, project operators, and stakeholders on the DAT, using all available information and the criteria outlined in the decision trees for salmonids and delta smelt (Reclamation *et al.* 2004). The DAT and the DSWG consider incidental take at the pumps, in-stream and Delta environmental conditions, distribution and abundance of the fish species (as indicated by a variety of sampling programs), and, if appropriate, formulate a recommendation for modification of project operations to reduce adverse effects on fish (a “fish action”). Recommendations are taken to the WOMT for discussion and final approval at the management level of the EWA agencies (DWR, Reclamation, CDFG, USFWS and NMFS). Based on an evaluation of this recommendation and the supporting information, the agencies may implement a “fish action,” either as recommended or with adjustments. Although the goal of WOMT is to achieve consensus on decisions, the individual agencies retain their authorized roles and responsibilities.

**Effectiveness Criteria:** Annual accomplishments include the successful completion of all monitoring programs. Successful near-real time reporting of data on water conditions (e.g., flows and temperature) and fish distributions to the DAT and WOMT for use in managing water project operations (CALFED Bay-Delta Program 2006).

#### 6.2.4 AIR QUALITY

**Mitigation Measure 15-1:** *Provide certification documentation to Reclamation and DWR indicating that groundwater pumping sources would not increase emissions, to ensure that no net impacts to air quality would occur*

**Commitment:** To ensure that no net impact air quality would result from groundwater substitution pumping in addition to deficiency pumping during extremely dry years, YCWA will provide to the EWA agencies (i.e., Reclamation and DWR) a statement, with appropriate supporting documentation, demonstrating that the total volume of groundwater to be pumped within Yuba County can be conducted using pumping sources that will not contribute to a air quality impacts. In addition, if the EWA agencies obtain water from groundwater substitution, the EWA agencies and willing sellers would work together to implement one, or a combination, of the following mitigation measures that is appropriate to reduce impacts to a less-than-significant level. The mitigation measures will be implemented within the willing seller’s air district.

EWA agencies will require willing sellers to use electric or propane-fueled pumps. For each propane-fueled pump, a diesel engine within the district that is not a part of the EWA must be

replaced with a propane or electric pump to 'offset' the emissions from the project-related pump.

EWA agencies will require the willing sellers to purchase offsets to compensate for producing project-related emissions.

<b>Responsible Parties:</b>	YCWA, and approved by Reclamation and DWR
<b>Location:</b>	Yuba Region (Sacramento Valley Air Basin - Feather River Air Quality Management District)
<b>Timing:</b>	Monthly, if groundwater substitution operations occur, over the duration of the project
<b>Monitoring:</b>	<p>Verify that water pumped for groundwater substitution transfers either would be obtained: (1) from electric-powered motors; or (2) from diesel-powered motors operating according to an emission offset. YCWA would obtain readings from the groundwater pump flow meters through monthly reports from the participating Member Unit wells during groundwater substitution operations.</p> <p>Certification shall be furnished to the Technical Committee, pursuant to the requirements of the Yuba Accord agreements. During the implementation of groundwater substitution transfers under the Yuba Accord Alternative, YCWA would participate in close monitoring of the groundwater basin. As stated in the EWA Final EIS/EIR released in January 2004, future groundwater transfers to the EWA require an established measurement and monitoring program for groundwater levels and storage, groundwater quality, land subsidence, and groundwater and surface water interactions (Reclamation <i>et al.</i> 2004).</p>
<b>Reporting Requirements:</b>	YCWA would note the type of power used for the groundwater substitution operations pumping. Member Units utilizing a diesel-powered motor would be required to show that a diesel engine (likely a diesel-powered ditch pump) that normally would have been in use, instead is not being used, thereby providing an emission offset.
<b>Description of Activities:</b>	During the implementation of the Yuba Accord Alternative, if monitoring results indicate any potential short-term significant impacts, YCWA would implement a rapid response program to mitigate the impacts. Under the Yuba Accord Alternative, YCWA also would implement the adaptive management program for future planning of transfers based on the changing conditions of the basin during previous transfers. The adaptive management program would change the location and volume of transfer pumping to avoid adverse impacts to the basin and other groundwater users in the basin.
<b>Effectiveness Criteria:</b>	No net impacts to air quality.

## CHAPTER 7

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## CHAPTER 8

### LIST OF PREPARERS

**Table 8-1. List of Agency Representatives Who Contributed to the Preparation of the Final EIR/EIS**

<b>Yuba County Water Agency</b>	
Curt Aikens	General Manager
Thomas Johnson	Independent Consultant
<b>Bureau of Reclamation</b>	
Mike Heaton	Deputy Regional Resources Manager
Tim Rust	Program Manager
Tammy LaFramboise	Environmental Specialist
<b>Department of Water Resources</b>	
Teresa Geimer	Chief of Water Supply and Transfers Branch
Curtis Spencer	Principal Engineer
Bob Aldridge	State Water Project Analysis Office

**Table 8-2. List of Persons Primarily Responsible for the Preparation of the Final EIR/EIS**

<b>HDR Surface Water Resources, Inc.</b>	
Paul Bratovich	Vice President/Principal Fisheries Biologist/Project Manager
George "Buzz" Link	Vice President/Principal Engineer
Bill Smith	Principal Engineer
Dianne Simodynes	Senior Environmental Scientist/Project Manager
Amanda O'Connell	Associate Environmental Planner
Carolyn Bragg	Environmental Planner
Kelli Angell	Environmental Scientist
Padma Paan	Engineer
Carol Brown	Senior Administrative Assistant
Debra Hoek	Administrative Assistant
<b>MWH Americas, Inc.</b>	
Steve Grinnell	Water Resources Engineer
Andy Draper	Water Resources Engineer
Jeffrey Weaver	Water Resources Engineer
Sevim Onsoy	Hydrogeologist
<b>Bartkiewicz, Kronick and Shanahan Law Offices, P.C.</b>	
Alan Lilly	Legal Counsel
Paul Bartkiewicz	Legal Counsel
<b>PacificComm</b>	
Rich Golb	Public Information

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# APPENDIX M1

## FINAL DRAFT OF LOWER YUBA RIVER FISHERIES AGREEMENT

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*(showing changes from draft Principles of Agreement, Lower Yuba River Fisheries Agreement, in Appendix B of Draft EIR/EIS)*

# Lower Yuba River Fisheries Agreement

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## 1. INTRODUCTION

### 1.1 *Parties*

The Parties to this Agreement are: Yuba County Water Agency; California Department of Fish & Game; and the following non-governmental organizations: South Yuba River Citizens League; Friends of the River; Trout Unlimited; and The Bay Institute.

### 1.2 *Purpose of Agreement*

This Lower Yuba River Fisheries Agreement applies to the Yuba Project as it affects the Lower Yuba River during the term of this Agreement.

1.2.1. Scope and Purpose of Agreement. This Agreement will be used to resolve and dismiss the litigation brought by certain Parties challenging the State Water Resources Control Board's Revised Water-Right Decision 1644 (RD-1644). The Parties agree that this Agreement fairly, reasonably and appropriately resolves the instream-flow, flow-fluctuation and water-temperature issues that have been raised in the litigation regarding RD-1644.

The Parties intend that their monitoring and data-collection actions will produce a useful database for the proceedings of the Federal Energy Regulatory Commission regarding the relicensing of YCWA's FERC License for the Yuba Project, which expires in 2016. The Parties also intend that this monitoring and data-collection be used to evaluate the biological provisions of this Agreement.

1.2.2. Issues Outside Scope of Agreement. This Agreement does not address or resolve the requirements in paragraph 8 on pages 180-181 of RD-1644 regarding fish losses at the North Canal or the South Canal, the requirements in RD-1644 regarding local districts' water rights, or any litigation concerning such requirements. These issues will be resolved through separate agreements and, if necessary, separate proceedings.

Except as provided in section 5.4.9, this Agreement does not address or resolve any issues that may arise during the FERC proceeding regarding the relicensing of YCWA's FERC License for the Yuba Project. This Agreement does not address or resolve any issues that may arise in FERC proceedings concerning projects in the Upper Yuba River basin, specifically, the Yuba Bear-NID, Drum-Spaulding, and South Feather Power Project relicensings.

This Agreement does not address or resolve any issues that may arise during or in separate proceedings, forums, or venues involving the Lower Yuba River, for example, the Upper Yuba River Studies Program (fish passage at Englebright Dam) or the

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Daguerre Dam Fish Passage Improvement Project. This Agreement does resolve the issues regarding the amendments to RD-1644 that are described in Section 4.1 and the issues covered in Section 5.

1.3 *Yuba Accord*

YCWA has developed the Yuba Accord, which consists of this Agreement and several other elements. The other elements of the Yuba Accord are: (a) ~~any necessary~~ ~~Conjunctive Use Agreements, under which YCWA and Member Units will implement~~ programs to conjunctively use available surface water and groundwater supplies to ensure that local water supplies are not reduced to implement the Yuba Accord; (b) the ~~Water Purchase Agreement between YCWA and DWR, under which YCWA will transfer~~ water, including water made available by the instream-flow schedules in the Fisheries Agreement, to DWR, and DWR will make payments to YCWA that YCWA will use to make payments to the River Management Fund, to Member Units under ~~any~~ ~~Conjunctive Use Agreements, and to fund flood-control and water-supply projects in Yuba County;~~ and (c) an agreement, memorandum of understanding or similar document with PG&E amending or regarding the PG&E/YCWA Power Purchase Contract so that YCWA can implement the Fisheries Agreement, the ~~Water Purchase Agreement and any~~ ~~Conjunctive Use Agreements.~~ All of these elements of the Yuba Accord must be in place for any of the elements of the Yuba Accord to go into effect.

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1.4 *NEPA/CEQA Compliance*

The Parties’ approvals of this Agreement are based in part on their review of the statements and analyses in the EIR/EIS that has been prepared, certified and approved for the Yuba Accord.

2. **DEFINITIONS**

“ADR” means alternative dispute resolution.

“Agreement” means this Lower Yuba River Fisheries Agreement. This Agreement sometimes is referred to as the “Fisheries Agreement.”

“CDFG” means the Department of Fish and Game of the State of California.

“CEQA” means the California Environmental Quality Act.

“Conference Year” mean a Water Year for which the North Yuba Index is less than 500 TAF, as described in Exhibit 2.

“Conjunctive Use Agreements” mean the agreements described in section 4.3.

“CVP” means the Central Valley Project, which is operated by Reclamation.

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“DWR” means the Department of Water Resources of the State of California

“EIR/EIS” means the environmental impact report/environmental impact statement that YCWA and Reclamation have prepared for the Yuba Accord.

“Exhibit” and “exhibit” refer to exhibits to this Agreement, unless the context clearly indicates otherwise.

“FERC” means the Federal Energy Regulatory Commission.

“FERC License” means the license that was issued to YCWA by FERC for the operation of the Yuba Project and any amendments to that license that FERC has made or makes during the term of this license. The term of this license expires on April 30, 2016.

“FERC Annual License” means one or more annual licenses issued by FERC to YCWA for the operation of the Yuba Project following the expiration of the term of the FERC License.

“FERC Long-Term License” means the long-term license that FERC will issue to YCWA for the operation of the Yuba Project following the expiration of the term of the FERC License and the last FERC Annual License.

“FOR” means Friends of the River.

“Force Majeure Event” mean any of the *force majeure* events described in section 6.4.1.

“Groundwater Substitution Program” means a program in which water users in Yuba County will pump groundwater, or reduce water demands through fallowing, in lieu of receiving surface water from YCWA, and an equivalent amount of surface water then will be released from Englebright Dam to flow down the Lower Yuba River to the Feather River for a water transfer for uses outside of Yuba County.

“Groundwater Substitution Program” does not include groundwater pumping made for other purposes, including, but not limited to, pumping made to reduce deficiencies in deliveries of surface water to water users in Yuba County that is not made in connection with a water transfer for use outside of Yuba County.

“Lower Yuba River” means the Yuba River from Englebright Dam to the Yuba River-Feather River confluence.

“Material Violation of Agreement Flow Schedules” is defined in section 6.1.1.

“Member Unit” means “Member Unit” as defined in section 2(g) of the Yuba Act.

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“Narrows II Powerhouse Full Flow Bypass” means the action described in the NOAA Fisheries Biological Opinion for the Yuba Project (FERC No. 2246) dated November 4, 2005, at pages 5-7, and in FERC’s Order Modifying and Approving Amendment of License for the Yuba Project dated November 22, 2005, at pages 5-6.

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“NEPA” means the National Environmental Policy Act.

“NGOs” means SYRCL, FOR, TU and TBI.

“NOAA Fisheries” means the United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service

“Non-Material Violation of Agreement Flow Schedules” is defined in section 6.2.1.

“North Yuba Index” is defined in Exhibit 4.

“Operations Group” means the River Management Team Operations Group described in section 5.2.

“Parties” mean YCWA, CDFG, SYRCL, FOR, TU and TBI. Parties sometimes are referred to in this Agreement as the “Parties to this Agreement.”

“PG&E” means the Pacific Gas and Electric Company.

“PG&E/YCWA Power Purchase Contract” means the contract dated May 13, 1966 between PG&E and YCWA regarding the operation of the Yuba Project for hydroelectric power generation.

“Planning Group” means the River Management Team Planning Group described in section 5.2.

“RD-1644” means Revised Water Right Decision 1644, adopted by the SWRCB on July 16, 2003.

“Reclamation” means the United States Department of the Interior, Bureau of Reclamation.

“Regulatory Change Event” means any of the regulatory change events described in section 6.4.2.

“River Management Fund” or “RMF” means the fund described in section 5.3.

“River Management Team” or “RMT” means the team described in section 5.2.

“RMT Participants In RMF Issues” means the Parties to this Agreement, NOAA Fisheries and USFWS.

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“Schedule” and “Schedules” mean the flow schedules in Exhibit 1.

“Section” and “section” refer to sections of this Agreement, unless the context clearly indicates otherwise.

“Short-Term Phase 8 Bay-Delta Settlement Agreement” means the “Short-Term Agreement to Guide Implementation of Short-Term Water Management Actions to Meet Local Water Supply Needs and to Make Water Available to the SWP and CVP to Assist in Meeting the Requirements of the 1995 Water Quality Control Plan and to Resolve Phase 8 Issues,” effective March 24, 2003, or a similar agreement.

“Significant Change” in the assumed operating assumptions for the Yuba Project is defined in Exhibit 10.

“Surface Water Supplemental Transfer” means a transfer of surface water from storage in New Bullards Bar Reservoir for use outside of Yuba County, where: (a) the transferred water is not part of a Lower Yuba River flow that is reasonably needed to meet the requirements in section 5.1.1 or section 5.1.5 (or operational buffers for such requirements); (b) the release of water from storage in New Bullards Bar Reservoir is in addition to releases reasonably needed to reach a September 30 storage target of 650,000 acre-feet, and instead causes the September 30 New Bullards Bar Reservoir storage to be less than 650,000 acre-feet; and (c) the transfer is not part of a Groundwater Substitution Program.

“SWRCB” means the California State Water Resources Control Board.

“SWP” means the State Water Project, which is operated by DWR. The SWP also is known as the “State Water Facilities,” as defined in Water Code section 12934, subdivision (d).

“SYRCL” means the South Yuba River Citizens League.

“TBI” means The Bay Institute.

“Technical Variation of Agreement Flow Schedules” is defined in section 6.2.5.

“Technical Working Group” means the River Management Team Technical Working Group described in section 5.2.

“TU” means Trout Unlimited.

“USFWS” means the United States Department of the Interior, Fish and Wildlife Service.

**Deleted:** “Transfer Agreement” means the long-term transfer agreement among YCWA, DWR and Reclamation that is described in section 4.2.¶

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“Water Purchase Agreement” “means the long-term water-purchase agreement between YCWA and DWR that is described in section 4.2.

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“Water Year” means a 12-month period from an October 1 through the following September 30.

“YCWA” means the Yuba County Water Agency.

“YFA” means this Lower Yuba River Fisheries Agreement.

“Yuba Act” means the Yuba County Water Agency Act, California Statutes 1959, Chapter 788, as amended.

“Yuba Project” means FERC Project No. 2246, which sometimes is called the “Yuba River Development Project” or the “Yuba River Project.”

“Yuba Accord” means the Lower Yuba River Accord described in section 1.3.

### **3. TERM OF FISHERIES AGREEMENT**

#### ***3.1 Term of Lower Yuba River Fisheries Agreement***

This Agreement will become effective once the conditions precedent, described in Section 4, have been satisfied. The term of this Agreement then will be from the effective date until FERC issues a new FERC Long-Term License for the Yuba Project, unless this Agreement is terminated earlier pursuant to section 6.1.5 or section 6.1.7.

### **4. CONDITIONS PRECEDENT**

This Agreement will become effective when all of the following conditions have been met.

#### ***4.1 State Water Resources Control Board Actions***

This Agreement will not become effective unless and until the SWRCB adopts, without any substantial modifications, all of YCWA’s petitions to change to YCWA’s water rights permits and RD-1644 that are described in this Section 4.1.

The Parties understand that the SWRCB may reject or modify some or all of the proposed changes in these petitions. If the SWRCB rejects or substantially modifies any of these proposed changes, then the Parties will make a good faith effort to try to reach agreement on appropriate revisions to this Agreement to accommodate the rejections or modifications made by the SWRCB. However, if the Parties do not reach such agreement, then this Agreement will not go into effect.

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4.1.1. Revisions To RD-1644 Instream Flow Requirements. This Agreement will not become effective unless and until the SWRCB adopts an order granting, without any substantial modifications, YCWA's petition to the SWRCB to make the changes described in this section, and the order: (a) amends paragraph 1 on pages 173-176 and Appendix 1 of RD-1644 to make the changes that are shown in Exhibits 7, 8 and 9; (b) deletes paragraphs 2, 3 and 10 on pages 176-179 and 181-183 of RD-1644; and (c) finds that implementing the order, the amendment of YCWA's FERC License described in section 4.1.2 and this Agreement provide a level of protection for fishery resources in the Lower Yuba River during the term of this Agreement that is equivalent to or better than that which RD-1644 would provide.

While the SWRCB will maintain its lawful authority over YCWA's water rights, nothing in this Agreement will be construed as limiting or expanding that authority, and all Parties will retain their rights to disagree, object to or challenge any attempted exercise of that authority.

4.1.2. Amendment of YCWA's FERC License. ~~(This condition precedent, which was described in earlier drafts of this Agreement, has been satisfied.)~~

4.1.3. Feather River Point of Diversion/Rediversion. This ~~condition precedent, which was described in earlier drafts of this Agreement, has been deleted from this Agreement and no longer is a condition precedent in this Agreement.~~ YCWA retains its rights to pursue a Feather River diversion facility and to re-divert Yuba Project water from the Feather River at this facility after the end of the term of this Agreement.

4.1.4. Changes To Implement Water Purchase Agreement. This Agreement will not become effective unless and until the SWRCB adopts an order granting, without any substantial modifications, YCWA's petition to the SWRCB to amend YCWA's water-right Permit 15026, to add, during the term of the Water Purchase Agreement, the SWP and CVP points of diversion/rediversion and places of use that are necessary to implement the Water Purchase Agreement. This Agreement also will not become effective unless and until the SWRCB includes in its order approving this petition: (a) all mitigation measures for the Water Purchase Agreement identified in the EIR/EIS (except for any mitigation measures that YCWA finds, and CDFG and the NGO's concur, are infeasible under section 15091(a)(3) of the CEQA Guidelines) that concern matters within the SWRCB's jurisdiction, and (b) a specific reservation of jurisdiction to add, amend, revise, supplement, or delete terms and conditions in the order described in the preceding sentence regarding the Water Purchase Agreement, where the order approving this petition and reserving jurisdiction requires the SWRCB to review its order regarding the Water Purchase Agreement before May 2016 or during the Clean Water Act section 401 process for the new FERC Long-Term License, whichever is earlier, to determine whether, and if so, how, to exercise this jurisdiction, after notice to interested parties and an opportunity for a hearing. CDFG's and the NGOs' concurrence described in the preceding sentence shall not be unreasonably withheld.

**Deleted:** Agreement will not become effective unless and until YCWA's FERC License has been amended to include the new ramping rate criteria that are specified in section 3.2.2 of the Draft Biological Assessment for Yuba Project (FERC No. 2246) dated September 2003 and transmitted by FERC to NOAA Fisheries on October 10, 2003.

**Deleted:** will not become effective unless and until the SWRCB adopts, without any substantial modifications, YCWA's petition to the SWRCB to amend YCWA's water rights Permits 15026, 15027 and 15030 to add an authorized point of diversion/rediversion on the Lower Yuba River near its confluence with the Feather River near Marysville or on the Feather River downstream of this confluence (but still in Yuba County), so that YCWA may divert and red divert water at this location to provide surface water for municipal, industrial and irrigation uses in Yuba County. Because this petition has been analyzed in the EIR/EIS only at a programmatic level, the preceding YCWA petition asks: (a) the SWRCB to approve this petition only at a programmatic level; (b) that the SWRCB's order approving the petition specify that no diversions or rediversions of water at this location may occur until: (i) a project-specific environmental impact report/environmental impact statement has been certified and approved; (ii) YCWA has filed a request with the SWRCB for approval of the plans for the facilities to divert and red divert water at this location; (iii) the SWRCB has given all interested parties opportunities to review and comment on these plans; and (iv) the SWRCB has approved these plans; and (c) that no diversions or rediversions of water be authorized to occur at this proposed facility before April 30, 2016. If the SWRCB approves this petition or otherwise authorizes diversions or ... [1]

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**4.2 Water Purchase Agreement**

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This Agreement also will not become effective unless and until: (i) YCWA, ~~and DWR~~ execute the Water Purchase Agreement; and (ii) the Water Purchase Agreement goes into effect. YCWA will advise the other Parties to this Agreement in writing when these events have occurred.

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**4.3 Conjunctive Use Agreements**

This Agreement also will not become effective unless and until YCWA executes Conjunctive Use Agreements with a sufficient number of YCWA's Member Units so that YCWA can meet its obligations under this Agreement and Water Purchase Agreement. However, YCWA may determine that it does not need to execute any Conjunctive Use Agreements for this Fisheries Agreement to become effective, and that YCWA instead will execute agreements with Member Units for the Groundwater Substitution Program at later dates, as necessary for that program. YCWA will advise the other parties to this Agreement in writing when either a sufficient number of Conjunctive Use Agreements have been executed, or YCWA has determined that it does not need to execute any Conjunctive Use Agreements, for this Fisheries Agreement to become effective.

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**4.4 Agreement, Memorandum of Understanding or Similar Document With PG&E**

This Agreement also will not become effective unless and until YCWA executes an agreement, memorandum of understanding or similar document with PG&E to make the necessary amendments to, or understandings regarding, the 1966 YCWA/PG&E Power Purchase Contract so that YCWA can implement this Agreement, the Water Purchase Agreement and any necessary Conjunctive Use Agreements. YCWA will advise the other parties to this Agreement in writing when this agreement, memorandum of understanding or similar document with PG&E has been executed.

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**4.5 Incidental Take Authorization**

(This condition precedent, which was described in earlier drafts of this Agreement, has been satisfied.)

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**5. OBLIGATIONS OF PARTIES**

**5.1 Lower Yuba River Instream Flows**

5.1.1. Specific Flow Schedule. Except as otherwise provided in this Agreement, YCWA will comply with the Schedule 1-6 and A-B instream flow requirements in Exhibit 1 (plus the 30,000 acre-feet of additional water in Schedule 6 Water Years that is described in section 5.1.3) during all times while this Agreement is in effect. The instream flow requirements in these schedules will be maintained as measured by a five-day running average of the mean daily stream flows with instantaneous flows never less than 90

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percent of the applicable flow requirements specified in the schedules. In addition, instantaneous flows will not be less than the applicable flow requirements specified in the schedules for more than 48 consecutive hours unless CDFG concurs to a longer period of time, which may not exceed 5 days. During the parts of September of Schedule A Water Years when the Narrows II Powerhouse is shut down for normal maintenance and the Narrows II Powerhouse Full Flow Bypass is not available for operation, the Smartville Gage requirements will be 700 cfs or the full release capacity of the Narrows 1 Powerhouse at the Englebright Reservoir level that occurs at that time, whichever is less. The specific flow schedule that will be implemented at any time will be determined by the value of the North Yuba Index and the rules in Exhibit 2, with the adjustments described in Exhibit 3 (if applicable). The North Yuba Index is defined in Exhibit 4. The procedure for calculating the North Yuba Index is described in Exhibit 5. Based on the historical hydrological record, it is predicted that Schedules 1 through 6 and Conference Years will be in effect for approximately the percentages of time listed in Exhibit 6.

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5.1.2. Right To Request Specific Performance Of Flow Schedules. Each Party to this Agreement will have the right to ask a court of competent jurisdiction to order YCWA to specifically perform its obligations under this Agreement. This right will include the rights to ask the court to issue a temporary restraining order, a preliminary injunction or a final injunction after entry of judgment. YCWA will not oppose such a request on the grounds that any other Party lacks standing, failed to join necessary parties or has adequate remedies at law.

Consistent with the portion of section 7.8 regarding the location of execution of this Agreement, each Party agrees that any action requesting specific performance of this Agreement may be filed in Yuba County or Sacramento County. In any such action, any Party may file a motion under California Code Civil Procedure section 394, provided that: (a) such motion is filed within 30 days of the filing of the initial action; and (b) in lieu of requesting a transfer of the action to another county, such motion instead requests that the action remain in the original county but that the chairperson of the Judicial Council assign a disinterested judge from a neutral county to hear the action. For the purposes of any such motion under Code of Civil Procedure section 394, the Parties further agree that Alameda, Marin, Nevada, Sacramento and Yuba Counties are not neutral counties from which a disinterested judge may be assigned.

5.1.3. Groundwater-Substitution Program. YCWA will operate a groundwater-substitution program in Water Years when Schedule 6 is in effect, which will result in an additional 30,000 acre-feet of water not shown in Schedule 6 flowing in the Lower Yuba River at the Marysville Gage during the portions of such Water Years when this water is transferable to the Water Purchase Agreement transferees. Subject to the preceding requirement of transferability, the River Management Team, through a decision by its Planning Group, will determine the flow schedule for the 30,000 acre-feet during each Schedule 6 Water Year. This flow schedule will be set to achieve maximum fish benefit during the transfer period.

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5.1.4. Temporary Alteration of Flow Schedule. The River Management Team (through a decision by its Planning Group) may decide to temporarily alter the applicable instream flow requirements in Schedules 1 through 6 at any time during the term of this Agreement, so long as the agreed-to instream flows comply with the applicable requirements of YCWA’s FERC license and YCWA’s water-right permits.

Any agreed upon alterations to the instream flows must: (a) occur only during March through October; (b) not cause decreases from the flows specified in Schedules 1 through 6 of more than 20%; (c) not shift water from the amounts specified in Schedules 1 through 6 by more than 6 weeks; (d) not reduce the amount of stored water remaining in New Bullards Bar Reservoir at the end of the calendar year during which the temporary alteration occurs below the amount that would occur without the temporary alteration; and (e) not result in a net decrease in the total amount of water released for the applicable schedule of instream flow requirements for the calendar year. The process in section 6.6.3 will apply to any RMT decision to temporarily alter schedules. Absent River Management Team consensus, no changes to applicable instream flow requirements in Schedules 1 through 6 will occur while this Agreement is in effect.

5.1.5. Conference Years. During Conference Years, YCWA will operate the Yuba Project so that: (a) flows in the Lower Yuba River comply with the instream flow requirements in YCWA’s FERC License, except that YCWA will not pursue any of the flow reductions authorized by article 33(c) of that license, plus any additional instream flows agreed to by the River Management Team’s Planning Group; and (b) total diversions at Daguerre Point Dam (including Browns Valley Irrigation District’s diversions into its Pumpline Canal) do not exceed 250,000 af/yr.

If Conference Year conditions are present or imminent, then YCWA, in consultation with the Member Units, will prepare a strategic management plan that will state affirmative steps that YCWA and the Member Units will undertake to ensure total diversions do not exceed 250,000 af/yr. YCWA will submit this plan to the River Management Team as soon as practicable after the determination that Conference Year conditions are present or imminent. YCWA will provide the RMT with any updates that YCWA makes to this plan, and YCWA will provide the RMT with monthly reports on the implementation of this plan. YCWA will manage this plan. YCWA will ensure implementation and enforcement of the plan’s requirements through its contracts with the Member Units.

5.1.6. Operations Assumptions and Parameters for Defining Future Significant Changes. YCWA’s commitment to provide the instream flows in Exhibit 1 is based on the assumption that the Yuba Project will be operated consistent with Exhibit 10. The Parties acknowledge that a Significant Change in YCWA operations under this Agreement may be required because of a Force Majeure Event or a Regulatory Change Event. Absent such a Significant Change, YCWA will operate the Yuba River Project according to this Agreement and the terms of its water rights permits.

If YCWA must make any Significant Change in the assumed operations parameters described in Exhibit 10 because of a Force Majeure Event or a Regulatory Change Event,

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then the River Management Team will work to try to develop an alternative consensus flow schedule. In such circumstances, Section 6.4 will apply.

(“Significant Changes” in assumed operations parameters are defined in Exhibit 10.)

5.1.7. Surface Water Supplemental Transfers. If YCWA makes any Supplemental Surface Water Transfer, then YCWA will make the same amount of water available for supplemental instream flows in the Lower Yuba River, which will be on a schedule set by the River Management Team. For example, if YCWA makes a Supplemental Surface Water Transfer of 10,000 acre-feet, then YCWA will make an additional 10,000 acre-feet available for supplemental instream flows in the Lower Yuba River during the same calendar year. The flow schedule for the water involved in the Supplemental Surface Water Transfer will be set to achieve maximum fish benefit during the transfer period. The flow schedule for the additional water made available for supplemental instream flows will be set to achieve maximum fish benefit, even if some such supplemental instream flows do not occur during the transfer period.

If YCWA makes a Supplemental Surface Water Transfer, then, during the following year, the North Yuba Index will be calculated by adding the amounts of the Supplemental Surface Water Transfer and the associated supplemental instream flows to the New Bullards Bar Reservoir September 30 Active Storage (as defined in Exhibit 4). This provision will ensure that Supplemental Surface Water Transfers and associated supplemental instream flows will not result in the implementation of a higher number (i.e., lower flow) flow schedule during the following year.

If YCWA intends to make a Supplemental Surface Water Transfer in a given year, then on April 10 of the relevant year it will provide a preliminary indication of the supplemental transfer. On May 1 of the relevant year, YCWA will provide a refinement of the preliminary transfer indication. This May 1 refinement will include a draft implementation schedule, after consultation with the River Management Team, for the Supplemental Surface Water Transfer. Unless otherwise agreed to by the River Management Team, the implementation schedule for the transfer will become final no later than May 15 of the relevant year.

5.1.8. Supplemental Flows For Groundwater Substitution Programs: If YCWA operates any Groundwater Substitution Program, then the following criteria will apply to such program:

- Schedule 1 years: All supplemental transfer flows that occur as part of the Groundwater Substitution Program will be scheduled to occur on or after July 1. The total of such supplemental transfer flows plus the Exhibit 1 flows (700 cfs in July) will not exceed the June Exhibit 1 flows (1,500 cfs) or the actual flow at the Marysville Gage on June 30, whichever is greater.
- Schedule 2, 3, 4 and 5 years: Up to 10 percent of the Groundwater Substitution Program’s total transfer volume may be scheduled by the River Management

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Team to flow between the end of the higher spring flows (which end on May 31 in Schedule 2 and 3 years, and on May 15 in Schedule 4 and 5 years) and the latest day on which the transfer may be allowed to start (based on Delta and other conditions), even though such water may not be transferable under the Water Purchase Agreement. No more than 10 percent of the Groundwater Substitution Program's total transfer volume will be at risk of not being transferable. The remainder of the total transfer volume will be scheduled during the period when the water will be transferable.

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- Schedule 6 years: The entire Groundwater Substitution Program transfer volume will be scheduled to flow during the transferable period under the Water Purchase Agreement. The schedule for such flows will be developed in consultation with the River Management Team. The flow schedule will be set to achieve maximum fish benefit during the transfer period.

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YCWA also will make additional water available for supplemental flows during Schedule 4 and 5 years according to the following criteria:

- Schedule 4 years: 10 percent of the Groundwater Substitution Program total transfer volume (if any), or 9,000 acre-feet, whichever is less, will be provided for supplemental fisheries flows, to be scheduled for any time after May 1 by the River Management Team. Some or all of this water may not be transferable under the Water Purchase Agreement. At the discretion of the RMT, some or all of this water for supplemental fisheries flows may be scheduled to flow before May 1.

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- Schedule 5 years: 10 percent of the Groundwater Substitution Program total transfer volume (if any), or 6,000 acre-feet, whichever is less, will be provided for supplemental fisheries flows, to be scheduled for any time after May 1 by the River Management Team. Some or all of this water may not be transferable under the Water Purchase Agreement. At the discretion of the RMT, some or all of this water for supplemental fisheries flows may be scheduled to flow before May 1.

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If YCWA intends to implement a Groundwater Substitution Program during a given year, then on or before April 10 of the relevant year it will provide a preliminary indication of the amount of water that will be transferred as part of the program, and it will prepare a preliminary schedule of the supplemental Lower Yuba River flows that will be used to implement the program after consultation with the River Management Team. On May 1 of the relevant year, YCWA will provide a refinement of the preliminary transfer indication and prepare an update to the flow schedule. If the applicable flow schedule is Schedule 4 or Schedule 5, and if the River Management Team elects to allocate some or all of the 10 percent of the Groundwater Substitution Program total transfer volume described in the immediately preceding paragraph, then that water will be included in the updated flow schedule and will be provided by YCWA. If the final Groundwater Substitution Program amount is less than the amount planned for in the May 1 update and

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the some or all of the additional water that is required by this section already has been released, then that additional water will not be counted for as part of the Groundwater Substitution Program amount.

Unless otherwise agreed to by the River Management Team, the implementation schedule for the Groundwater Substitution Program will become final no later than May 15 of the relevant year, unless the applicable flow schedule, as determined by Exhibits 2-5, changes after May 15 because of a change in the North Yuba Index.

For all flow schedule years, any Groundwater Substitution Program or surface-water transfer made by YCWA under the Short-Term Phase 8 Bay-Delta Settlement Agreement will be scheduled pursuant to the rules for transfers under that agreement, and any such transfers by Member Units will be subject to the rules for those transfers. Such transfers by YCWA or Member Units will not be subject to the above rules in this Agreement for Surface Water Supplemental Transfers or Groundwater Substitution Programs.

## 5.2 River Management Team

The River Management Team will consist of a Planning Group and an Operations Group. The Planning Group will include representatives of each Party to this Agreement and the Water Purchase Agreement, NOAA Fisheries, USFWS and PG&E. The Operations Group will include one representative each of: (a) YCWA; (b) PG&E; (c) CDFG, NOAA Fisheries and USFWS, where the one representative will rotate between these three agencies; (d) the NGO's; and (e) DWR and Reclamation, where one representative will rotate between these two agencies.

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The Planning Group will hold regularly scheduled meetings with prior notification of agenda items, and it may hold special meetings as needed. The Planning Group's authority will be limited to the actions described in section 5.2.1.

The Operations Group will meet and hold conference calls as necessary to carry out the actions listed in section 5.2.2. The Operations Group's authority will be limited to the actions described in section 5.2.2.

If necessary to carry out its functions, the Planning Group may convene a Technical Working Group, which will include such members as the Planning Group may appoint. Each Planning Group principal representative may designate one or more secondary representative or representatives who may participate in the Planning Group discussion of a given issue. Each Operations Group member may designate at their discretion additional technical experts to participate in the Operations Group's discussions of issues.

### 5.2.1. Planning Group Actions

The Planning Group may take any of the following actions:

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1. set the flow schedule for the 30,000 acre-feet of Groundwater Substitution Program water that will occur in Schedule 6 years;
2. decide to temporarily alter the applicable instream flow requirements in Schedules 1-6, subject to the conditions described in Section 5.1.4, if necessary or appropriate for the aquatic resources, Yuba Project operations or maintenance, or SWP or CVP operations or maintenance;
3. decide, in Schedule 5 years, to adjust the Marysville Gage instream-flow requirements to 400 cfs during all or part of the period from October 1 until the February Bulletin 120 forecasts are available, when it is authorized to do so under Exhibit 3.
4. schedule additional instream flows during Conference Years;
5. schedule any water made available for supplemental instream flows in connection with a Supplemental Surface Water Transfer (as specified in section 5.1.7);
6. schedule any water made available for supplemental instream flows in connection with a Groundwater Substitution Program (as specified in section 5.1.8);
7. determine the planned operations of the upper and lower outlets from New Bullards Bar Dam into the New Colgate Penstock and any temperature adjustment device that is constructed at Englebright Dam;
8. develop and implement studies of Lower Yuba River fish or fish habitat, monitoring of flows or water temperatures, or fry studies.
9. make decisions to spend money in the River Management Fund for any authorized purpose;
10. designate a fiscal agent for the RMF; and
11. comment on YCWA's plans for Narrows I and II Powerhouse maintenance outages.

Only the Parties to this Agreement, NOAA Fisheries and the USFWS will participate in making formal decisions on Planning Group actions 1 through 11 above. Decisions on these actions will be made by unanimous consent of the parties and entities named in the preceding sentence, and section 6.6 of this Agreement, which details a specific alternative dispute resolution process, will apply as necessary. Parties to this Agreement, NOAA Fisheries and the USFWS will consult with DWR, Reclamation and PG&E on these actions as necessary and appropriate through the RMT Planning Group process.

The RMT Participants In RMF Issues will select five mutually agreeable fisheries experts and five mutually agreeable mediators for the purposes of dispute resolution, as described in section 6.6. For both selection processes, the RMT Participants In RMF Issues will take into account candidates' cost, skill, and demonstrated record of success in resolving similar disputes. Either list of five experts may be modified as necessary, but only upon unanimous written consent of the RMT Participants In RMF Issues.

Any agreement on Planning Group action 2 or 3 (temporary flow alterations) will be presented to the Chief of the Division of Water Rights of the SWRCB. If the Chief of the Division of Water Rights does not object to the alterations within 10 calendar days, the alterations will remain in effect.

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Subject to the preceding provisions, any Party may take any action that it is authorized to take that does not violate this Agreement or any applicable regulatory requirement.

### 5.2.2. Operations Group Actions

The Operations Group will provide specific guidance to YCWA for YCWA's implementation of:

1. the flow schedule set by the Planning Group for the 30,000 acre-feet of Groundwater Substitution Program water during Schedule 6 years;
2. any temporary alterations in the applicable instream flow requirements in Schedules 1-6 that have been agreed to by the Planning Group;
3. any additional instream flows during Conference Years that have been scheduled by the Planning Group;
4. any supplemental instream flows that have been scheduled by the Planning Group in connection with a Supplemental Surface Water Transfer or a Groundwater Substitution Program;
5. any Planning Group decisions regarding the operations of the upper and lower outlets from New Bullards Bar Dam into the New Colgate Penstock or any temperature adjustment device that is constructed at Englebright Dam; and
6. any other recommendations or directions from the Planning Group to the Operations Group.

The Operations Group will act only upon unanimous consent of all of its members and in the absence of such unanimous consent will act pursuant to section 6.7, which details a specific dispute resolution process. Any agreement on Operations Group action 2 (temporary flow alterations) will be presented to the Chief of the Division of Water Rights of the SWRCB. If the Chief of the Division of Water Rights does not object to the alterations within 10 calendar days, the alterations will remain in effect.

Subject to the preceding provisions, any Party may take any action that it is authorized to take that does not violate this Agreement or any applicable regulatory requirement.

Parties to this Agreement acknowledge that the Operations Group's actions and efforts are time sensitive and will often be made in real-time or close to real-time situations. To participate and add value to the Operations Group, the NGOs will receive \$25,000 from the River Management Fund per year to contract with an independent consultant who will participate on their behalf and provide the required expertise in technical matters relevant to the tasks of the Operations Group. This assistance is intended to benefit all Parties to this Agreement and all Operation Group participants by improving the ability of the NGOs to meaningfully contribute to decisions through the term of this Agreement.

### 5.3 *River Management Fund*

5.3.1. YCWA Funding of Ongoing Studies and Data Collection. YCWA will continue to directly fund certain data collection activities and studies on the Lower Yuba River.

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Specifically, YCWA will continue to fund the collection of flow and water temperature data required by paragraph 5 on page 179 of RD-1644. Additionally, YCWA will continue to fund and conduct the redd dewatering and fry stranding studies required by paragraph 7 on page 180 of RD-1644, through the completion of the study plan that has been submitted to the SWRCB.

5.3.2. YCWA Funding of RMF. YCWA also will provide annual funding to the River Management Fund (RMF). The RMF will consist of two separate accounts: (a) the “General Account;” and (b) the “Restoration Projects Account.” Money from the General Account may be used for any of the purposes described in section 5.3.4. Money from the Restoration Projects Account may be used only for the purposes, and according to the rules, described in Exhibit 12.

YCWA will make a one-time contribution of \$300,000 to the RMF, Restoration Projects Account.

YCWA will contribute \$550,000 per year to the RMF, General Account. This annual contribution amount and the following in-kind contributions together make a total estimated budget of \$628,500 per year for core monitoring and focused studies, reduced by: (a) in-kind contributions of \$50,000 per year or more (average) from CDFG; (b) in-kind contributions of \$15,000 per year or more (average) from YCWA; and (c) average savings of \$15,000 per year over the term of this Agreement from discontinuing the Chinook salmon carcass surveys in the Lower Yuba River upstream of Daguerre Point Dam after 2010. If YCWA’s documented in-kind contributions are less than an average of \$15,000 per year, then YCWA will contribute additional funds to the RMF, General Account, equal to the difference between average contributions of \$15,000 per year and the actual value of YCWA’s documented in-kind contributions. If the RMT Participants In RMF Issues decide that the Chinook salmon carcass surveys in the Lower Yuba River upstream of Daguerre Point Dam should not be discontinued after 2010, then YCWA will contribute additional funds to the RMF, General Account, in a total amount equal to the total amount of the anticipated savings from discontinuing these surveys that did not occur because these surveys were not discontinued. CDFG will make documented in-kind contributions of \$50,000 per year or more (average). In-kind contributions from YCWA and CDFG may be in the form of labor, materials, or equipment, and must be documented as costs that otherwise would be paid from the RMF, General Account.

If necessary to start core monitoring or focused studies, YCWA will make additional contributions to the RMF, General Account, during the first year that this Agreement is in effect. If YCWA makes any such additional contributions, then its contribution to the RMF, General Account, during the last year that this Agreement is in effect will be reduced by the amount of such additional contributions. YCWA will make all of these contributions to the RMF from its revenues under the Water Purchase Agreement. As long as this Agreement and the Water Purchase Agreement both are in effect, in the event of breach of the Water Purchase Agreement by the Water Purchase Agreement transferees, YCWA will continue to make the agreed payments to the River Management

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Fund, General Account, while it pursues its contractual remedies against the Water Purchase Agreement transferees.

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5.3.3. Participants in RMF Decisions. Only the Parties to this Agreement, NOAA Fisheries and the USFWS will participate in making RMF decisions. Such decisions will be made by unanimous consent of all such parties and entities, or will be made pursuant to section 6.6, which details a specific alternative dispute resolution process.

5.3.4. Purpose of RMF. To ensure reasonable and prudent disbursement of funds, the RMT will adopt a structure for fund allocation based on specific prioritized goals for monitoring, studies, actions and activities. Money from the RMF may be spent for any of the following actions:

1. monitoring and evaluating the effectiveness of the implementation of the Lower Yuba River Accord, including flow schedules, Conference Year flows and the Water Purchase Agreement;
2. evaluating the condition of fish resources in the Lower Yuba River;
3. evaluating the viability of Lower Yuba River fall-run Chinook salmon and any subpopulations of the Central Valley steelhead and spring-run Chinook salmon Evolutionarily Significant Units (ESUs) that may exist in the Lower Yuba River;
4. implementing habitat improvement and non-flow enhancement actions and activities;
5. purchasing water for instream flows in the Lower Yuba River above the flows specified in Exhibit 1;
6. retaining expert advice for specific technical questions;
7. retaining an expert or experts for dispute resolution processes; and
8. paying local shares of grant-funded projects for fish or fish habitat in the Lower Yuba River, specifically to facilitate unique grant matching opportunities.

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Some of these actions are described in more detail in Appendix A.

5.3.5. Geographic Scope of RMF. Funds from the RMF will only be used for projects in the Lower Yuba River (i.e., downstream of Englebright Dam), unless the RMT Participants In RMF Issues unanimously approve using funds from the RMF in another area.

5.3.6. Activities Excluded from RMF. Funds from the RMF will not be used towards studies pertaining to groundwater basin dynamics, groundwater/surface water interactions or any other study related to the sustainability of groundwater transfers, unless the RMT Participants In RMF Issues unanimously approve using funds from the RMF for such studies. Funds from the RMF will not be used to comply with section 5.3.1.

5.3.7. Recording Responsibilities for RMF Supported Studies. The RMT Participants In RMF Issues will maintain a record that is updated at least yearly, which states: (1) each study conducted; (2) year or years conducted; (3) purpose of study; (4) the data collected, and (5) whether any dispute between members existed regarding study protocol or data.

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Section 6.8 details a specific dispute resolution process for possible study protocol and data protocol disputes. These ongoing records will be submitted to FERC at appropriate times (e.g., concurrent with YCWA’s Notice of Intent to file a new license application and at the expiration of this Agreement, and at other agreed upon times) in report format prepared collectively by the RMT Participants In RMF Issues. These reports will only contain data and the additional information described in this paragraph and not interpretations or conclusions. To the extent permitted by applicable law, RMT Participants In RMF Issues will support these submissions in the future FERC relicensing.

5.3.8. RMF Fiscal Agent and Reporting. The RMT Participants In RMF Issues will meet at least yearly to make RMF allocation decisions. The initial fiscal agent for the RMF will be YCWA. The RMT Participants In RMF Issues may designate a different fiscal agent at any time during the term of this Agreement. At the RMT Planning Group’s yearly budget and allocation meeting, the fiscal agent will make an annual reporting of accounts, including actual expenditures, anticipated expenditures, and unspent allocations. This reporting will include accountings of YCWA’s and CDFG’s in-kind contributions under Section 5.3.2.

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5.3.9. RMF Multi-year Studies. The RMT Participants In RMF Issues may approve, in one action, annual funding for several years for a multi-year project. If these participants cannot reach agreement on how to allocate funds during any year, and if timely dispute resolution cannot be achieved, then YCWA may spend money from this fund for ongoing studies regarding fish or fish habitat in the Lower Yuba River, provided that such ongoing studies are supported, or were supported in the past, by these participants. Otherwise the yearly budget sum (or the net after supported allocations are made) will roll over to the next year.

5.3.10. RMF Balance Cap. If the RMF balance reaches three times the annual contribution specified above, then the RMT Participants In RMF Issues will prepare a plan within six months to spend the excess balance. If the RMF Participants In RMF Issues cannot reach consensus on this issue, then a fisheries expert (selected at random from the list of fisheries experts described in section 5.2.1) will develop a plan to spend the excess balance, which will be consistent with this Agreement and the “Lower Yuba River Accord, River Management Fund, Monitoring and Evaluation Guidelines” document that has been prepared. YCWA will suspend making any contributions to this fund that would cause its balance to exceed three times the annual contribution specified above; provided that YCWA will deposit the suspended contribution or contributions in the RMF when the plan described in this section is completed.

5.3.11. RMF Remainder Balance. If a remainder balance exists in either account of the RMF at the termination or expiration of this Agreement and the RMT Participants In RMF Issues cannot determine an acceptable plan for using this remainder balance, then the independent panel of fisheries experts (described in section 5.2.1) existing at that time will determine an appropriate use of any remainder balance of the River Management Fund, which will be consistent with this Agreement and the “Monitoring and Evaluation

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Guidelines” document. This section will survive the termination or expiration of this Agreement.

5.3.12. RMF Ongoing Studies at Termination or Expiration. At the termination or expiration of this Agreement, the RMT Participants In RMF Issues will seek to ensure that ongoing studies that are being funded by the RMF are completed.

5.3.13. Additional CEQA/NEPA Compliance. Any projects that are funded by the RMF and not analyzed in the EIR/EIS will be subject to all applicable requirements of CEQA and NEPA.

**5.4 Miscellaneous**

5.4.1. Duty to Cooperate. The Parties will cooperate in the implementation of this Agreement. The Parties and members of the River Management Team will cooperate in conducting studies, performing monitoring, and conducting all other activities within their control and statutory or regulatory authorities related to implementation of this Agreement and River Management Team tasks.

5.4.2. Duty to Support YCWA Petitions To SWRCB. All of the Parties to this Agreement will actively support before the SWRCB YCWA’s petition to change its water-right permits and RD-1644 that is described in section 4.1.1. However, the Parties’ support for these changes and their obligations under this Agreement are expressly conditioned on the SWRCB finding that the provisions of this Agreement and the proposed changes to YCWA’s water-right permits together will provide a level of protection for fishery resources in the Lower Yuba River equivalent to or better than the level of protection that would be provided by RD-1644.

5.4.3. Ramping Rate Commitments. YCWA will comply with the flow ramping requirements that are specified in its existing FERC License for the Yuba Project, which include the flow ramping requirements that are described in FERC’s November 22, 2005 Order Modifying and Approving Amendment of License for the Yuba Project, at page 11.

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5.4.4. Grant Funding Commitments. In coordination with the RMT, YCWA will continue to diligently pursue grant funding for the Narrows II Powerhouse Intake Extension Project at Englebright Dam. The other Parties to this Agreement will make best reasonable efforts to support and assist YCWA in its pursuit of grant funding for this project, for example, with letters of support regarding submitted grant applications. YCWA will provide a progress report on these efforts in its annual report to the SWRCB.

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5.4.5. Monitoring Commitments. YCWA will install and operate automated water temperature recorders in the Lower Yuba River and collect the water-temperature data required by paragraph 5 on page 179 of RD-1644. YCWA will include this data in the reports that it prepares and submits to the SWRCB, as required by paragraph 6 on page

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180 of RD-1644. The costs to install and operate such recorders will not be paid from the River Management Fund.

5.4.6. Studies of Fish and Fish Habitat in Lower Yuba River. All Parties to this Agreement will disclose, and coordinate the development and scoping of, any studies regarding or related to fish or fish habitat in the Lower Yuba River with the River Management Team's Planning Group, and will provide the results of these studies (including all raw data) to all of the other Parties, NOAA Fisheries and USFWS. In the spirit of collaboration, as non-parties to this Agreement but participants in the River Management Team, NOAA Fisheries and USFWS agree to disclose and coordinate the development and scoping of any studies regarding or related to fish or fish habitat in the Lower Yuba River with the RMT's Planning Group, and to provide the results of these studies (including all raw data) to all of the Parties to this Agreement.

5.4.7. Redd Dewatering and Fry Stranding Study. YCWA will disclose and coordinate its present redd dewatering and fry stranding studies (which are required by paragraph 7 on page 180 of RD-1644) with the River Management Team's Planning Group, and will provide the results of these studies (including all raw data) to DFG, the NGO's, NOAA Fisheries and USFWS. After YCWA provides these results to these parties, a Technical Working Group of the RMT will develop any appropriate additional data collection procedures, work for additional studies, analysis, conclusions and recommendations.

5.4.8. Temperature Device Operations. The Planning Group of the River Management Team will determine the planned operations of the existing upper and lower outlets from New Bullards Bar Dam into the New Colgate Penstock, and of any new temperature adjustment device that is constructed at the Narrows II Powerhouse. The Operations Group of the River Management Team will provide specific guidance to YCWA for YCWA's implementation of the Planning Group's final decisions regarding the operations of the existing upper and lower outlets from New Bullards Bar Dam into the New Colgate Penstock and any new temperature adjustment device that is constructed at the Narrows II Powerhouse.

5.4.9. FERC Relicensing. All of the Parties to this Agreement will work together cooperatively and in good faith, using the flow schedules and associated rules in Exhibits 1-5 to this Agreement as a starting point, and using all of the data that will be collected on the Lower Yuba River over the next decade, to try to develop a consensus proposal for the Lower Yuba River instream-flow requirements for YCWA's FERC Long-Term License for the Yuba River Development Project. If such consensus is reached, then the parties will jointly submit the consensus proposal to the SWRCB and FERC and ask that it be included in the SWRCB's Clean Water Act section 401 certification and in the new FPA license. If such consensus is not reached, then any party to this Agreement may ask FERC, and the SWRCB in its Clean Water Act section 401 process, to order any Lower Yuba River instream-flow requirements that the party believes are appropriate, and any party may make any associated legal arguments that it believes are appropriate. Whether or not such consensus is reached, any Party may make any arguments during the FERC

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relicensing that it believes are appropriate on any issues besides issues regarding Lower Yuba River instream-flow requirements and issues on which consensus was reached.

YCWA will not contend or bring any claim that this Agreement or the Water Purchase Agreement limits, restrains, or otherwise controls FERC’s licensing authority, or that the continued supply and delivery of water made available under this Agreement or the Water Purchase Agreement is a law regarding the control, appropriation, use or distribution or water used in irrigation or for municipal or other uses, as such term is used in section 27 of the Federal Power Act.

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5.4.10. Annual Report On Implementation Of YFA. YCWA will include reports on implementation of this Agreement in its annual reports to the SWRCB.

5.4.11. Plans For Narrows I and II Powerhouse Maintenance Outages. YCWA will advise the River Management Team regarding any planned maintenance outages of the Narrows I and II Powerhouses and consider any RMT comments regarding these planned outages.

5.4.12 Dismissal of Lawsuits Challenging RD-1644. YCWA, SYRCL, FOR, TU and TBI will file request for dismissals (without prejudice) of their lawsuits against the SWRCB regarding RD-1644 within 30 days after all of the following events have occurred: (a) the SWRCB has adopted all of the orders described in Section 4.1 and these orders have become final and no longer subject to legal challenges; (b) the SWRCB has expressly made a finding that implementing the Agreement will provide a level of protection for fishery resources in the Lower Yuba River that is equivalent to or better than that which RD-1644 would provide; (c) the EIR/EIS for the CEQA/NEPA review of the Accord has been certified and is no longer subject to legal challenges; (d) all of the other conditions precedent in Section 4 have occurred; and (e) all Member Units of YCWA and any other parties that filed lawsuits regarding RD-1644 will file requests for dismissals (without prejudice) of their lawsuits concurrently with the filing of requests for dismissals by YCWA, SYRCL, FOR, TU and TBI.

## **6. TERMINATION AND WITHDRAWAL, FORCE MAJEURE EVENTS AND REGULATORY CHANGES AND DISPUTE RESOLUTION**

### ***6.1 Termination and Withdrawal***

6.1.1. Material Violation Of Agreement Flow Schedules. A “Material Violation of Agreement Flow Schedules” is defined as any failure of YCWA to meet any applicable instream-flow requirements described in sections 5.1.1, 5.1.3 and 5.1.5 for a period of 10 consecutive calendar days, except for any of the following:

- a. a failure to meet these requirements because of a Force Majeure Event or a Regulatory Change Event;

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- b. a failure to meet these requirements because of an action taken by, or implemented at the request of, the RMT Planning Group or Operations Group;
- c. a failure to meet these requirements because of a gauge re-rating or other action taken by the U.S. Geological Survey after the time at which the failure to meet these requirements occurred;
- d. ~~(this clause no longer applies, because~~ the Narrows II Powerhouse Full Flow Bypass ~~has been completed)~~;
- e. a failure to meet these requirements because of planned maintenance or construction activities, when the deviation from these requirements has been approved in advance in writing by the Chief of the Division of Water Rights of the SWRCB;
- f. a failure to meet these requirements because of an action that was, or actions that were, beyond YCWA's control; and
- g. a failure to meet these requirements on any day on which there is a Technical Variation of Agreement Flow Schedules.

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(Paragraph f. above does not include actions taken by PG&E to operate the Yuba Project during times when YCWA has authorized PG&E to operate the Yuba Project.)

6.1.2. Notice Of Material Violation Of Agreement Flow Schedules. If any Party to this Agreement besides YCWA believes that there has been a Material Violation of Agreement Flow Schedules, then that Party will so notify all other Parties to this Agreement in writing. Such notice will include all of the Party's reasons for believing that there has been a Material Violation Of Agreement Flow Schedules. YCWA then will have 15 days to respond to the notice. If YCWA disagrees with the notifying Party, then YCWA's response will state all of the reasons for YCWA's disagreement. Within 20 days after such response, the disputing Parties and any other interested Parties will meet at least once to use their best efforts to try to resolve the dispute. If, after such notice and response and any subsequent meetings or discussions among the Parties to this Agreement, the dispute remains unresolved, then any Party to this Agreement may exercise any remedies that it has under section 6.1.3.

6.1.3. Determinations Of A Material Violation Of Agreement Flow Schedules. If the procedures described in section 6.1.2 have been followed for an alleged Material Violation of Agreement Flow Schedules and a dispute remains regarding whether or not such a Material Violation of Agreement Flow Schedules occurred, then any Party to this Agreement may notify the Chief of the Division of Water Rights of the SWRCB that such Party believes that a Material Violation of Agreement Flow Schedules has occurred and ask the Chief of the Division of Water Rights to determine whether a Material Violation of Agreement Flow Schedules actually has occurred. The Party or Parties submitting such a request will include with the request copies of all of the notices and responses that were prepared under section 6.1.2 and any other relevant material.

6.1.4. Remedy For Material Violation of Agreement Flow Schedules. If the Parties to this Agreement agree, or the Chief of the Division of Water Rights of the SWRCB determines, that a Material Violation of Agreement Flow Schedules has occurred, then

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YCWA will make a one-time payment of \$100,000 to the RMF, General Account, in addition to the payments to the RMF that YCWA is required to make under section 5.3.2, and in addition to the payments required by section 6.2.4. YCWA's obligation to make payments under this section will be reduced by the amount of any payment that YCWA must make under Water Code section 1052 for the same day. (If YCWA already has made a payment to the RMF under this section when it makes a payment under Water Code section 1052 for the same day, then YCWA's obligation to make future payments to the RMF will be reduced by the amount of such payment under section 1052.)

For any Material\_Violation of Agreement Flow Schedules that occurs any time during the May through October control period, in addition to making the payment described in this section, YCWA also will provide an amount of water for supplemental instream flows in the Lower Yuba River equal to the difference in volume between the amount of water required to flow in the Lower Yuba River under any applicable instream-flow requirements described in sections 5.1.1, 5.1.3 and 5.1.5 and the amount of water that actually flowed in the Lower Yuba River on the days on which the Material Violation of Agreement Flow Schedules occurred. The RMT Participants In RMF Issues will determine the schedule for such supplemental instream flows.

6.1.5. Withdrawal or Termination Because Of CDFG Obligations. When required to fulfill a statutory or regulatory responsibility, CDFG may suspend participation or, if necessary, withdraw from this Agreement, without first using the ADR procedures of this Agreement. However, before suspending participation or withdrawing, CDFG will provide timely notice to all Parties of the need for such suspension or withdrawal, and will make good-faith efforts to work with the other Parties to reach agreement on modifications to this Agreement that would allow the Agreement to remain in effect. If CDFG withdraws from this Agreement under this section, then YCWA may, but is not required to, terminate this Agreement among the remaining Parties. YCWA may make such termination by notifying the other Parties in writing that YCWA has taken such action. However, YCWA may take such action only after first providing the other Parties to this Agreement with notice of its intent to terminate this Agreement and allowing a 30-day period to meet and confer. If this Agreement terminates, then each Party to this Agreement will have full and adequate opportunity to challenge or defend in court any change that the SWRCB makes to YCWA's permits after or as a result of such termination, and no Party will assert that any such challenge or defense is barred or limited by any statute of limitation (including, but not limited to Water Code section 1126), laches, res judicata or collateral estoppel.

6.1.6. No Other Early Terminations. In no circumstance other than under section 6.1.5 or section 6.1.7 will this Agreement terminate early.

6.1.7 Option Of Withdrawal. Any Party to this Agreement may exercise an option to withdraw at its discretion from this Agreement: (a) before May 1, 2016, if a second Material Violation of Agreement Flow Schedules has occurred; or (b) for any reason on or after May 1, 2016. However, if such withdrawal occurs, then this Agreement will remain in effect among the remaining Parties. If all Parties to this Agreement besides

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YCWA and CDFG withdraw under this section, and if CDFG withdraws under this section or section 6.1.5, then this Agreement will terminate. If such termination occurs, then the last sentence of section 6.1.5 will apply.

6.1.8. Option Of Withdrawal Relating To Resolution of South Screen Issue. Any signatory to this Agreement may exercise an option to withdraw from this Agreement because resolution of the South Screen issue has not occurred, has been substantially delayed, or is reasonably expected to not occur or be substantially delayed. However, if such withdrawal occurs, then this Agreement will remain in effect among the remaining Parties.

**6.2 Remedies For Material and Non-Material Violations Of Agreement Flow Schedules**

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6.2.1. Non-Material Violation Of Agreement Flow Schedules. A “Non-Material Violation of Agreement Flow Schedules” is defined as any failure of YCWA to meet any applicable instream-flow requirements described in sections 5.1.1, 5.1.3 and 5.1.5 for any period less than 10 consecutive calendar days, except for any of the following:

- a. a failure to meet these requirements because of a Force Majeure Event or a Regulatory Change Event;
- b. a failure to meet these requirements because of an action taken by the RMT Planning Group or Operations Group;
- c. a failure to meet these requirements because of a gauge re-rating or other action taken by the U.S. Geological Survey after the time at which the failure to meet these requirements occurred;
- d. ~~(this clause no longer applies, because~~ the Narrows II Powerhouse Full Flow Bypass ~~has been~~ completed);
- e. a failure to meet these requirements because of planned maintenance or construction activities, when the deviation from these requirements has been approved in advance in writing by the Chief of the Division of Water Rights of the SWRCB;
- f. a failure to meet these requirements because of an action that was, or actions that were, beyond YCWA’s control; and
- g. a failure to meet these requirements on any day on which there is a Technical Variation of Agreement Flow Schedules.

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(Paragraph f. above does not include actions taken by PG&E to operate the Yuba Project during times when YCWA has authorized PG&E to operate the Yuba Project.)

6.2.2. Remedies For Material and Non-Material Violations Of Agreement Flow Schedules. In the event of a Material or Non-Material Violation of Agreement Flow Schedules, YCWA will make a monetary payment to the River Management Fund, General Account (in addition to all payments required by section 5.3.2), in an amount agreed to by the Parties to this Agreement or determined using the process described in section 6.2.3. If YCWA does not make any payment into the River Management Fund

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that is required by this section 6.2.2 and the following section 6.2.3 within 30 days after the amount of such payment is agreed to or determined, then interest on that amount will begin to accrue at the rate of interest that YCWA receives on funds in the Local Agency Investment Fund plus the rate of 2 percent per annum (but no higher than any maximum interest rate that YCWA by law may pay) until the payment is made.

6.2.3. Determination Of Non-Material Violation of Agreement Flow Schedules. If any Party believes that there has been a Non-Material Violation of Agreement Flow Schedules, then that Party will notify all of the other Parties to this Agreement in writing. Such notice will include all of the Party’s reasons for believing that a violation has occurred. YCWA will have 15 calendar days to respond to the notice. If YCWA disagrees with the notifying Party, then YCWA’s response will state all of the reasons for YCWA’s disagreement. If, after such notice and response and any subsequent discussions and meetings among the Parties to this Agreement, a dispute remains as to whether or not there has been a Non-Material Violation of Agreement Flow Schedules, then the Parties will randomly select one individual from a previously and mutually agreed upon list of five mediators (described in section 5.2.1). The selected mediator will hold at least one meeting with the disputing Parties (any other interested Party to this Agreement may attend) and attempt to resolve the dispute. If the dispute is not resolved by the end of the meeting or meetings, then the selected mediator will issue a binding opinion resolving the dispute within 15 days after the last meeting.

6.2.4. Payments For Material or Non-Material Violation of Agreement Flow Schedules. For any Material or Non-Material Violation of Agreement Flow Schedules of Agreement Flow Schedules, YCWA will make a payment into the River Management Fund, General Account, in addition to the payments described in section 5.3.2. For each day during which such a violation occurs, the amount of the payment will be \$100 times the number of percentage points by which the actual flow was less than the required flow, up to a maximum of \$1,000. For example, if the applicable five-day running average requirement on a particular day was 1,000 cfs and the actual five-day running average on that particular day was 970 cfs, then the payment for that day would be \$300. (970 cfs is 30 cfs, or 3 percentage points of 1,000, less than 1,000.) As a second example, if the applicable requirement on a particular day was 400 cfs and the actual lowest instantaneous flow on that day was 336 cfs, then the payment for that day would be \$600. (90% of 400 = 360; 336 is 24 cfs, or 6 percentage points of 400, less than 360.) In no case will the payment for any one day exceed \$1,000. For any Material Violation of Agreement Flow Schedules, YCWA will make both the payment required by this section and the payment required by section 6.1.4. YCWA’s obligation to make payments under this section will be reduced by the amount of any payment that YCWA must make under Water Code section 1052 for the same day. (If YCWA already has made a payment to the RMF under this section when it makes a payment under Water Code section 1052 for the same day, then YCWA’s obligation to make future payments to the RMF will be reduced by the amount of such payment under section 1052.)

6.2.5. Technical Variations of Agreement Flow Schedules. ~~(In earlier drafts, this section concerned “Technical Variations of Agreement Flow Schedules,” which could occur only~~

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before the Narrows II Powerhouse Full Flow Bypass was in operation. Because this bypass now is in operation, this section has been deleted from this Agreement.)

6.2.6. Remedies For Technical Variations Of Agreement Flow Schedules. (For the reasons discussed in section 6.2.5, this section has been deleted from this Agreement.)

6.2.7. Determination Of Technical Variation of Agreement Flow Schedules. (For the reasons discussed in section 6.2.5, this section has been deleted from this Agreement.)

6.2.8. Payments For Technical Variation of Agreement Flow Schedules. (For the reasons discussed in section 6.2.5, this section has been deleted from this Agreement.)

6.2.9 Provision Of Make-up Water For Non-Material Violation of Agreement Flow Schedules. For any Non-Material Violation of Agreement Flow Schedules that occurs any time during the May through October control period, in addition to making the payments described in section 6.2.4, YCWA also will provide an amount of water for supplemental instream flows in the Lower Yuba River equal to the difference in volume between the amount of water required to flow in the Lower Yuba River under any applicable instream-flow requirements described in sections 5.1.1, 5.1.3 and 5.1.5 and the amount of water that actually flowed in the Lower Yuba River on the days on which Non-Material Violations of Agreement Flow Schedules occurred. The RMT Participants In RMF Issues will determine the schedule for such supplemental instream flows.

6.2.10. No Effect On CDFG's Remedies Under California Endangered Species Act. Nothing in this Agreement will affect CDFG's remedies under the California Endangered Species Act (California Fish and Game Code §§ 2050-2115.5).

6.3 Non-payment by Water Purchase Agreement Transferees

In the event of non-payment by the Water Purchase Agreement transferees to YCWA of any amount of money due to YCWA under the Water Purchase Agreement, the Parties to this Agreement may use the process described in section 6.5 to consider modifications to YFA flow schedules. However, the SWRCB must approve any proposed modifications to YFA flow schedules before they will go into effect and YCWA may not unilaterally request relief from, amend or terminate this Agreement because of such non-payment.

6.4 Force Majeure or Regulatory Change Events

6.4.1. Force Majeure Event. A Force Majeure Event is defined as an event, including but not limited to, a natural event, a labor or civil disruption, or a breakdown or failure of a Yuba Project, PG&E, Corps of Engineers or U.S. Geological Survey component or facility, where the event: (a) is in the Yuba River watershed or directly affects a component of PG&E's electricity transmission system, (b) is reasonably beyond YCWA's control, and (c) significantly affects YCWA's ability to comply with any provision of this Agreement. No party will be liable to any other Party for breach of this Agreement due to such a Force Majeure Event. For the purposes of this Agreement,

Deleted: is defined as any failure of YCWA to meet any applicable instream-flow requirements described in sections 5.1.1, 5.1.3 and 5.1.5 during the part of September of any Schedule 1, 2 or 3 Water Year

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- &#x2022; a failure to meet these requirements because of a Force Majeure Event or a Regulatory Change Event;
&#x2022; a failure to meet these requirements because of an action taken by the RMT Planning Group or Operations Group;
&#x2022; a failure to meet these requirements because of a gauge re-rating or other action taken by the U.S. Geological Survey after the time at which the failure to meet these requirements occurred;
&#x2022; a failure to meet these requirements because of planned maintenance or construction activities, when the deviation from these requirements has been approved in advance in writing by the Chief of the Division of Water Rights of the SWRCB; and
&#x2022; a failure to meet these requirements because of an action that was, or actions that were, beyond YCWA's control.

(Paragraph e. above does not include actions taken by PG&E to operate the Yuba Project during times when YCWA has authorized PG&E to operate th

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Force Majeure Events do not include events that just affect the operations of SWP or CVP facilities and do not also directly affect Yuba Project operations.

6.4.2. Regulatory Change Event. A Regulatory Change Event is defined as a new court order or regulatory action (including, but not limited to, a regulatory action under the federal Endangered Species Act or the California Endangered Species Act) that requires YCWA to make a Significant Change in YCWA's operations of the Yuba Project. A regulatory change in or regarding the Delta that is not specifically directed to YCWA, or that does not specifically require YCWA to make any Significant Change in YCWA's operations of the Yuba Project, is not a Regulatory Change Event for the purposes of this Agreement.

6.4.3. Force Majeure Event or Regulatory Change Event That Is 365 Days or Less. In the event of a Force Majeure Event or a Regulatory Change Event that affects YCWA's operations of the Yuba Project or YCWA's ability to comply with section 5.1.1, 5.1.3 or 5.1.5 for 365 days or less, the RMT will work to try to reach consensus, as needed, on an alternative flow schedule for the relevant time period. If the RMT cannot reach a consensus solution, then it will adhere to the ADR procedure in Section 6.4.5 to attempt to resolve the dispute and find a consensus solution.

If the underlying event is expected to exist 365 days or less, and the Parties still have not reached consensus after using the ADR procedures in section 6.4.5, then any Party to this Agreement may ask a court of competent jurisdiction (subject to the rules in the second paragraph of section 5.1.2) to determine whether the underlying event is a Force Majeure Event or Regulatory Change Event that triggers the need for an alternative flow schedule. If the court determines the underlying event is not such a triggering event, then the relevant instream-flow requirements specified in section 5.1.1, 5.1.3 or 5.1.5 will continue to be implemented. If the court determines that the underlying event is such a triggering event, then it will determine the appropriate relief. In this case, this Agreement will remain in effect, but subject to the court's order.

6.4.4. Force Majeure Event or Regulatory Change Event That Is More Than 365 days. If a Force Majeure Event or a Regulatory Change Event is expected to continue more than 365 days, or if the underlying event was expected to occur for 365 days or less but actually then continues for more than 365 days, then the Parties will attempt to reach consensus on an alternative flow schedule for the relevant time period, and, if necessary follow the ADR procedure described in section 6.4.5. In addition, any proposed relief on which the Parties have reached consensus will be submitted to the SWRCB for its review and approval.

If the Parties still have not reached consensus after using the ADR procedures described in section 6.4.5, then any Party to this Agreement may ask a court of competent jurisdiction (subject to the rules in the second paragraph of section 5.1.2) to determine whether the underlying event is a Force Majeure Event or Regulatory Change Event that triggers the need for an alternative flow schedule. If the court determines the underlying event is not such a triggering event, then the relevant instream-flow requirements

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specified in section 5.1.1, 5.1.3 or 5.1.5 will continue to be implemented. If the court determines that the underlying event is such a triggering event, then it will determine the appropriate relief. In this case, this Agreement will remain in effect, but subject to the court's order and the court's order will be submitted to the SWRCB for its review.

Any request of a Party under this section 6.4.4 for relief from the instream-flow requirements specified in section 5.1.1, 5.1.3 or 5.1.5 will be limited to a request for interim relief, with the relief to terminate when the SWRCB issues an order regarding the new instream-flow requirements that should apply in light of the Force Majeure Event or Regulatory Change Event.

The Parties intend that when the SWRCB issues a subsequent order regarding the applicable instream-flow requirements that should apply in light of the Force Majeure Event or Regulatory Change Event it will supersede any court order for interim relief.

If the SWRCB issues such an order, then any Party to this Agreement may challenge the SWRCB order in court (subject to the rules in the second paragraph of section 5.1.2), however, no Party may withdraw from this Agreement and it will not terminate. In any court proceeding involving a challenge to such an SWRCB order, no Party will assert that any such challenge is barred or limited by any statute of limitation (including, but not limited to Water Code section 1126), laches, res judicata or collateral estoppel.

6.4.5. Dispute Resolution—ADR For Sections 6.4.3 and 6.4.4. If YCWA's performance under this Agreement is affected by a Force Majeure Event or Regulatory Change Event, then YCWA will notify the other Parties to this Agreement in writing within 5 days after becoming aware of any such event. Such notice will: (a) identify the event; (b) estimate the anticipated period that the event will affect YCWA's performance under this Agreement; (c) state the measures that YCWA has taken or proposes to take to address the event; and (d) state the estimated timetable for implementation of such measures. The Parties to this Agreement then will meet and confer within 5 days of receipt of such notice. If any Party makes a request for mediation under this section 6.4.5 to assist in resolving the problem presented because of the change in condition, parameter, assumption, knowledge, or circumstance, then the Parties will use their best efforts to negotiate a temporary or permanent change to this Agreement as needed, undertake these ADR provisions, and try to resolve the problem presented without electing to invoke sections 6.4.3 or 6.4.4.

The costs to engage a mediator or fishery expert under these disputes, who will be randomly selected from the previously mutually agreed upon list or lists, will be divided on a pro rata sharing of costs. Each Party will bear their own costs to participate in this ADR procedure for these disputes. If mediation is not successful and the Parties cannot agree on how to resolve the problem within 10 days of the notice, then the relevant provisions of section 6.4.3 or 6.4.4 will apply.

**6.5 Dispute Resolution—General ADR for River Management Team**

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For all disputes involving the RMT, regardless of category, Parties and members of the River Management Team (Planning and Operations Groups) will adhere to the following process. Each Party or member with authority to participate in making the applicable decision will make reasonable efforts to reach consensus on every matter relevant to the decision. Consensus is defined as unanimous consent of all such Parties and members. If such a Party or member does not agree with a decision proposed by another such Party or member, then the disagreeing Party or member will propose an alternative to resolve the matter. If such Parties or members still are unable to agree on one or more matters, then any non-agreeing Party or member will provide notice to the entire group (Planning Group and/or Operations Group, as relevant) as soon as possible, and not later than 5 days after attempting to resolve the matter, that a dispute exists and specifying in reasonable detail the nature of such dispute and steps taken to date to resolve the dispute.

Within 20 days after the notice of a dispute, the disputing Parties and members (and any other interested Parties) will meet at least once to use their best efforts to try to resolve the dispute. At the end of the meeting or meetings, if the dispute remains unresolved, the Parties and members will submit the dispute to non-binding mediation. However, this provision does not apply to Operations Group disputes (see section 6.7) and River Management Team disputes solely regarding study protocol or data collection (see section 6.8), as discussed below. All Parties and members will make all reasonable good faith and best efforts to promptly schedule and attend such meetings and devote the needed time and resources to resolve any dispute in lieu of mediation.

## **6.6 Dispute Resolution—Planning Group**

6.6.1. Disputes Regarding Planning Group Actions 5 and 6. For disputes regarding Planning Group actions 5 and 6, if the RMT Participants In RMF Issues cannot resolve the dispute, then they will ask the SWRCB to resolve the dispute.

6.6.2. Disputes Regarding Planning Group Actions 7-10. If after 20 days to meet and confer, the RMT Participants In RMF Issues have not reached consensus on a disputed matter related to a decision on any action described in Planning Group actions 7-10, then the parties will submit the dispute to non-binding mediation, within 25 days after the initial notice of dispute.

Within 30 days after the initial notice of dispute, the RMT Participants In RMF Issues will randomly select one individual from the previously and mutually agreed upon list of five fishery biology experts. The selected expert will hold at least one meeting with the disputing parties (other interested parties may attend) and attempt to resolve the dispute. If the dispute is not resolved at the end of the meeting or meetings, then the selected expert will issue a non-binding opinion to try to resolve the dispute, within 60 days of the initial notice of dispute, unless additional time is requested by the expert and the RMT Participants In RMF Issues unanimously agree to the additional time. Unless otherwise agreed, the RMT Participants In RMF Issues will implement promptly any final agreement reached after consideration of the opinion issued, subject to applicable law. If 90 days after the initial dispute is noticed (plus any additional time requested and

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approved) the RMT Participants In RMF Issues have not resolved the dispute, then the dispute will be resolved as follows.

- (1) For disputes regarding Planning Group actions 7 and 8, the expert opinion that sought to resolve the dispute and any minority opinion that captures the disagreement with the expert opinion and a narrative explaining the two opinions and the process used to reach them will be submitted to the SWRCB along with a request that the Chief of the Division of Water Rights resolve the matter by selecting between the expert and minority opinion.
- (2) For disputes involving Planning Group action 9, the expert opinion will be implemented.

In no circumstance will a dispute under this section result in termination of, or any Party's withdrawal from, this Agreement. Fees and costs of such fishery expert or mediator under this section will be paid from the River Management Fund. Each RMT Participant In RMF Issues will bear its own costs for participation in these ADR procedures.

The issue of allocating any remainder River Management Fund balance will be determined under section 5.3.11, and not under this section 6.6.2.

6.6.3. Disputes Regarding Planning Group Actions 1-4. If after 20 days to meet and confer the RMT Participants In RMF Issues have not reached consensus on a disputed matter related to a decision on any action described in Planning Group actions 1-4, then the RMT Participants In RMF Issues will submit the dispute to non-binding mediation, within 25 days after the initial notice of dispute.

Within 30 days after the initial notice of dispute, the RMT Participants In RMF Issues will randomly select one individual from the previously and mutually agreed upon list of five mediators. The selected mediator will hold at least one meeting with the disputing parties (other interested parties may attend) and attempt to resolve the dispute. If the dispute is not resolved at the end of the meeting or meetings, then the selected mediator will issue a non-binding opinion to try to resolve the dispute, within 60 days of the initial notice of dispute. For such disputes, no extensions for the opinion will be allowed. Unless otherwise agreed, the RMT Participants In RMF Issues will implement promptly any final agreement reached after consideration of the opinion issued, subject to applicable law.

If 65 days after the initial dispute is noticed the RMT Participants In RMF Issues have failed to resolve the dispute, then the matter will be resolved as follows.

- (1) For Planning Group action 1: the 30,000 acre-feet of Groundwater Substitution Program water will be allocated to flow during the portions of June through August in which such water is transferable, with the allocation of the 30,000 acre-feet being made in proportion to the applicable Schedule 6 flows;

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(2) For Planning Group action 2, 3 or 4: the action will not occur.

In no circumstance will a dispute under this section 6.6.3 result in termination of, or any Party's withdrawal from, this Agreement. Fees and costs of such mediation in this category will be paid from the River Management Fund. Each Party will bear its own costs for participation in the ADR procedures. For any matter in Section 6.6 for which the parties are to randomly select a fisheries expert, the relevant parties instead may unanimously agree to randomly select a mediator, and for any matter for which the parties are to randomly select a mediator, they instead may unanimously agree to randomly select a fisheries expert.

### **6.7 Dispute Resolution—Operations Group**

The Operations Group will not have the authority to refuse to recommend implementation of Planning Group directions, unless implementation will occur during the "delivery season" from June 1 to November 1. The Operations Group will strive for consensus during the winter season. During the "delivery season," the Operations Groups will determine how to recommend implementation of Planning Group directions based on consensus.

However, Parties to this Agreement and other River Management Team members acknowledge that the Operations Group has discretion to determine how to recommend implementation of Planning Group directions. Parties and RMT members further acknowledge that the Operations Group will be exercising this discretion often on a real-time or close to real-time basis. Moreover, because of YCWA's ultimate responsibility for Yuba Project operations, the ultimate decision for implementation of Operation Group actions rests with YCWA's discretion. In the absence of consensus among participants, YCWA will take the appropriate actions to implement the applicable Planning Group decision to the fullest extent possible. Whenever possible (and the Parties expect that it will be possible most of the time), YCWA will provide notice of the proposed appropriate action and allow a 24-hour window for other members to reply or object before it acts. In the event that consensus does not exist on a given matter and YCWA unilaterally takes action as a last resort, the Operations Group will subsequently prepare an annual report for the Planning Group summarizing: (a) the dispute, (b) the final action taken, (c) any minority opinions, and (d) proposals for avoiding the dispute in the next planning and operations decision-making cycle. Best efforts will be made to implement a proposal to avoid future disputes.

In no circumstance will a dispute under this section result in termination of, or any Party's withdrawal from, this Agreement, unless section 6.1.5 or section 6.1.7 applies.

### **6.8 Dispute Resolution—River Management Team Study Protocols or Data Protocols**

The Parties to this Agreement intend that their monitoring and data-collection actions will produce a useful database for the FERC relicensing and to evaluate the biological

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provisions of this Agreement. If the dispute-resolution provisions in sections 6.5 and 6.6.2 do not resolve disputes regarding study protocols or data-collection protocols or data collection, then any RMT participant may request that its disagreement with, or dispute regarding, a study or data-collection protocol or data collection for a study or data collection that is being funded or is going to be funded by the RMT be recorded.

During the future FERC relicensing, a RMT participant's disagreement with or dispute regarding the study protocol or data-collection protocol or a particular study or monitoring effort conducted under the RMT's responsibility during the term of this Agreement will be limited to the disagreements or disputes that the member previously raised, unless a participant makes a reasonable showing that the accepted scientific approach regarding the relevant protocol has materially changed in the time between when the original disagreement or dispute was raised and the FERC relicensing. This paragraph applies only to study protocols and data collection protocols, and not to issues regarding the interpretation or significance of data collected under those protocols, or to data collection, or to any other issue a RMT participant may wish to comment on in the FERC relicensing.

## 7. GENERAL PROVISIONS

7.1. Representation By Counsel. This Agreement is entered into freely and voluntarily. The Parties acknowledge that they have been represented by counsel of their own choice, or that they have had the opportunity to consult with counsel of their own choosing, in the negotiations that preceded the execution of this Agreement and in connection with its preparation and execution. Each of the Parties executes this Agreement with full knowledge of its significance and with the express intent of effecting its legal consequences.

7.2. Entire Agreement. This Agreement constitutes the entire agreement between the Parties pertaining to the settlement of disputes and obligations between them. This Agreement supersedes all prior and contemporaneous agreements, representations and/or obligations concerning those obligations, which are merged into this Agreement. This Agreement is made on the understanding that each term is in consideration and support of every other term, and each term is a necessary part of the entire agreement.

7.3. Applicable Law. This Agreement will be construed under and will be deemed to be governed by the laws of the State of California and of the United States, without giving effect to any principles of conflicts of law if such principles would operate to construe this Agreement under the laws of any other jurisdiction.

7.4. Construction of Agreement. This Agreement is the product of negotiation and preparation by and among the Parties and their attorneys. Therefore, the Parties acknowledge and agree that this Agreement will not be deemed to have been prepared or drafted by any one Party or another. Accordingly, the normal rule of construction to the

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effect that any ambiguities are to be resolved against the drafting party will not be employed in the interpretation of this Agreement.

7.5. Modification of Agreement. No supplement, modification, waiver, or amendment of this Agreement will be binding unless executed in writing by the Party against whom enforcement of such supplement, modification, waiver or amendment is sought.

7.6. Counterparts of Agreement. This Agreement may be signed in any number of counterparts by the Parties hereto, each of which will be deemed to be an original, and all of which together will be deemed one and the same instrument. This Agreement, if executed in counterparts, will be valid and binding on a party as if fully executed all on one copy. Counterpart executions may be made by facsimile.

7.7. Signatories' Authority. The signatories to this Agreement on behalf of all of the Parties hereto warrant and represent that they have authority to execute this Agreement and to bind the Parties on whose behalf they execute this Agreement.

7.8. Effective Date and Location of Execution of Agreement. The Parties hereto deem this Agreement to be signed and of binding legal effect as of the date on which the conditions precedent requirements in Section 4 have been satisfied and last signatory hereto has signed this Agreement. CDFG and the NGOs will execute and enter into this Agreement by signing it in Sacramento County, and this Agreement will be deemed to have been executed in Sacramento County.

7.9. Notices to Parties. Except as otherwise provided, all notices required under or regarding this Agreement will be made in writing addressed as provided in the Party address list attached hereto as Exhibit 11. Such notices will be sent to all Parties still in existence by first-class mail or comparable method of distribution. For purposes of this Agreement, a notice will be effective 7 days after the date on which it is mailed or otherwise distributed. When this Agreement requires notice in less than 7 days, notice will be provided by personal service, telephone, facsimile or electronic mail and will be effective when provided. The Parties will provide notice of any change in the authorized representatives designated in Exhibit 11, and YCWA will maintain the current distribution list of such representations, including addresses, telephone numbers, facsimile numbers and email addresses.

7.10. Federal and State Agency Obligations. Nothing in this Agreement is intended to limit the authority of the federal participants in any provision of this Agreement or the California Resource Agency Parties to fulfill their responsibilities under federal or state law. Moreover, nothing in this Agreement is intended to limit or diminish the legal obligations and responsibilities of the federal participants or the California Resource Agency Parties in any provision of this Agreement. Nothing in this Agreement is intended or will be construed to require the obligation, appropriation or expenditure of any money from the Treasury of the State of California. The Parties acknowledge that CDFG is a state agency and will not be required under this Agreement to expend any

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appropriated funds unless and until an authorized officer of CDFG affirmatively acts to commit such expenditures as evidenced in writing.

7.11. Successors and Assigns. This Agreement will apply to, and be binding on, the Parties and their successors and assigns. Upon completion of a succession or assignment, the initial Party no longer will be a party to this Agreement. A transferring or assigning Party will provide notice to the other Parties at least 30 days prior to completing such transfer or assignment.

7.12. No Partnership. Except as otherwise expressly set forth herein, this Agreement does not and will not be deemed to make any Party the agent for or partner of any other Party.

7.13. No Precedent. This Agreement is made upon the express understanding that it constitutes a negotiated resolution of the resolved issues stated in Section 1.2. Nothing in this Agreement is intended or will be construed as a precedent with regard to any other proceeding.

7.14. No Effect on YCWA's Water Rights. The only rights granted to the Parties to this Agreement by this Agreement are those expressly set forth in this Agreement. YCWA's maintenance of the instream flows under this Agreement will not confer any appropriative, public trust or other right on any person or entity. Nothing in this Agreement is intended or will be construed to act as a forfeiture, diminution or impairment of any water right of YCWA. The use of water to maintain instream flows under this Agreement will not be evidence of, or be used to try to demonstrate, either the existence of surplus water or the lack of beneficial use of water during the term of this Agreement.

7.15. No Admission. No Party will be deemed to have approved, admitted, accepted, or other otherwise consented to any operation, management, valuation, or other principle underlying or supposed to underlie any of this Agreement's resolved issues, except as expressly provided herein. Nothing in this Agreement will be construed as an admission by any Party that such Party has obligations relative to the protection of fishery or other resources or the maintenance of water quality standards. Similarly, nothing in this Agreement will be construed to, or used in an effort to attempt to, demonstrate that any of the Parties has surplus water or water which is not being beneficially used by such Party.

7.16. No Waiver. Except as to the matters addressed in this Agreement, no Party will be deemed to have waived or compromised any of its rights that may be available under state or federal law, and no Party will be deemed to have waived or compromised any legal arguments regarding the SWRCB's authority over YCWA's water rights permits. The waiver at any time by any Party of any of its rights under this Agreement with respect to any default or breach will not be deemed to be a waiver with respect to any other default or breach.

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Date: YUBA COUNTY WATER AGENCY

By \_\_\_\_\_

Date: CALIFORNIA DEPARTMENT OF FISH AND GAME

By \_\_\_\_\_

Date: SOUTH YUBA RIVER CITIZENS LEAGUE

By \_\_\_\_\_

Date: FRIENDS OF THE RIVER

By \_\_\_\_\_

Date: TROUT UNLIMITED

By \_\_\_\_\_

Date: THE BAY INSTITUTE

By \_\_\_\_\_

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## Appendix A

### Actions That May Be Funded From River Management Fund

#### Exhibits

1. Instream Flow Requirements
2. Flow Schedule Year Types
3. Dry Year Storage Adjustment To Instream-Flow Requirements
4. Definition of the North Yuba Index
5. Procedure for Calculating the Forecasted Total Annual Inflow Into New Bullards Bar Reservoir To Calculate North Yuba Index
6. Predicted Occurrences of Flow Schedules
7. Proposed Changes To RD-1644, Pages 173-176, Paragraph 1 of Order to YCWA (Track Changes)
8. Proposed Changes To RD-1644, Pages 173-176, Paragraph 1 of Order to YCWA ("Clean" Draft)
9. Changes To Appendix 1 Of RD-1644
10. Yuba River Development Project, Operating Assumptions for Yuba River Fisheries Agreement
11. Addresses of Representatives of Lower Yuba River Fisheries Agreement Parties
12. River Management Fund Restoration Account

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## Appendix A

### ACTIONS THAT MAY BE FUNDED FROM RIVER MANAGEMENT FUND

The RMF will be used to fund actions in two broad categories: (1) monitoring and evaluation actions; and (2) habitat improvement actions and activities. Monitoring and evaluation may be categorized as either core monitoring or focused studies. The Technical Working Group of the RMT has developed a document titled “*Lower Yuba River Accords, River Management Fund, Monitoring and Evaluation Guidelines*” that outlines the framework for the Yuba Accord monitoring and evaluation program. Habitat improvement may be further segregated into non-flow and flow augmentation actions or activities. The River Management Fund also may be used to: (1) retain expert advice for specific technical questions; and (2) retain an expert or experts for dispute resolution process.

#### MONITORING AND EVALUATION ACTIONS

##### Core Monitoring

Core monitoring should achieve at least one of the following objectives: (1) evaluate the effectiveness of implementation of the Yuba Accord, including the Fisheries Agreement flow schedules and the Water Purchase Agreement; (2) obtain data required to evaluate the condition of lower Yuba River fish resources; and (3) evaluate the viability of Lower Yuba River fall-run Chinook salmon and any subpopulations of the Central Valley steelhead and spring-run Chinook salmon ESUs that may exist in the Lower Yuba River.

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Core monitoring activities could include, but are not necessarily limited to, estimation of: anadromous salmonid annual escapement (e.g., VAKI, carcass surveys); spawning distribution (redd surveys); abundance and timing of juvenile downstream movement (rotary screw trapping); or juvenile salmonid growth (individual tagging).

The core monitoring program will be developed to assess the condition of individual fish, fish populations and the fish community and the viability of anadromous salmonid populations, and to evaluate the effectiveness of implementation of the Yuba Accord in benefiting the fish resources of the Lower Yuba River. The Technical Team is currently developing draft guidelines to provide a framework for identifying and prioritizing monitoring and evaluation actions to be funded by the RMF. The guidelines being developed are intended to encompass the suite of potential attributes identified for assessing the condition and viability of Lower Yuba River fish resources, and evaluating the effectiveness of implementation of the Yuba Accord in benefiting these resources. The monitoring and evaluation program is anticipated to assess and evaluate a subset of the attributes under development, reflecting a selection process that eliminates those components that are not appropriate or cannot be readily measured through monitoring and evaluation. The attributes presented in the monitoring and evaluation program are

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intended to provide an initial framework and guidelines for developing the Yuba Accord monitoring and evaluation program.

Core monitoring studies and evaluation activities also will be designed to be relevant to future regulatory processes, including FERC relicensing. The specific core monitoring objectives and studies initially will be identified and developed by the Technical Working Group of the RMT.

#### Focused Studies

Focused studies may be conducted to provide additional insights into specific issues or areas of concern, to provide guidance or feedback for specific habitat improvement actions, or to provide guidance or feedback for specific adaptive management actions.

Examples of focused studies include, but are not necessarily limited to, juvenile salmonid habitat use, age-specific survival rates, in-river harvest or salmonid genetic analyses.

Focused studies also may be designed to provide baseline information or additional insights for future regulatory processes, including FERC relicensing. Specific objectives for focused studies initially will be identified and developed by the Technical Working Group, and ultimately by the RMT Planning Group.

#### *HABITAT IMPROVEMENT ACTIONS*

Habitat improvement actions potentially include a multitude of activities that address ecosystem functions needed to support healthy habitats which, in turn, support Lower Yuba River fish resources. Water quality, water quantity, channel/instream complexity, presence of off-channel habitat and riparian vegetation all contribute to fish resource health. Specific habitat improvement actions will be directed towards improving one, or several, of these or other features in the Lower Yuba River.

Habitat improvement actions will be prioritized based on factors such as their anticipated benefits to instream fisheries production (i.e., their effect on ameliorating previously identified and prioritized anadromous salmonid stressors) and permanence of the improvement action. Each habitat improvement action will have well-defined goals and objectives and will incorporate a monitoring and evaluation plan, as appropriate, developed to determine the effectiveness of the habitat improvement action in attaining specified goals and objectives. Specific habitat improvement actions, and their goals and objectives, initially will be identified and developed by the Technical Working Group, and ultimately by the RMT Planning Group. Habitat improvement actions will be categorized in two areas: (1) non-flow actions; and (2) flow augmentation.

#### *Non-Flow Actions*

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The non-flow actions category is intended to encompass habitat improvement activities that physically alter Lower Yuba River in-channel or riparian habitats without augmenting streamflows. Non-flow actions may include, but are not necessarily limited to, instream habitat improvements (e.g., spawning gravel augmentation, large woody debris placement), riparian vegetation restoration, and off-channel (e.g., floodplain and side-channel) habitat creation.

*Flow Augmentation*

Flow augmentation includes purchases of water for flow augmentation in the Lower Yuba River. The total volume of any water that is purchased and the allocation of such water will be specified by the RMT, and will have pre-specified goals and objectives (e.g., increase juvenile transport flows, increase spring-run Chinook salmon spawning flows).

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### Exhibit 1. Instream Flow Requirements.

#### Marysville Gage (cfs)

Schedule	OCT		NOV	DEC	JAN	FEB	MAR	APR		MAY		JUN	JUL	AUG	SEP	Total Annual Volume (AF)	
	1-15	16-31	1-30	1-31	1-31	1-29	1-31	1-15	16-30	1-15	16-31	1-15	16-30	1-31	1-31		
1	500	500	500	500	500	500	700	1000	1000	2000	2000	1500	1500	700	600	500	574200
2	500	500	500	500	500	500	700	700	800	1000	1000	800	500	500	500	500	429066
3	500	500	500	500	500	500	500	700	700	900	900	500	500	500	500	500	396722
4	400	400	500	500	500	500	500	600	900	900	600	400	400	400	400	400	361944
5	400	400	500	500	500	500	500	500	600	600	400	400	400	400	400	400	334818
6	350	350	350	350	350	350	350	350	500	500	400	300	150	150	350	350	232155

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

#### Smartville Gage (cfs)

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

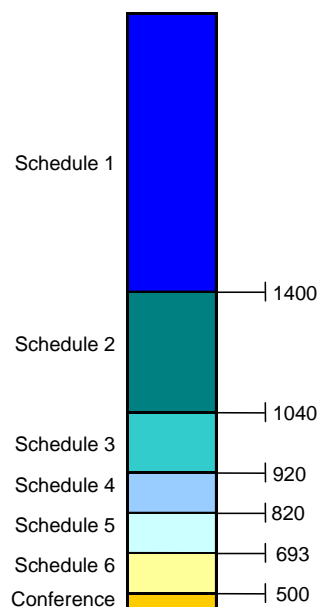
\* Schedule A used with Schedules 1, 2, 3 and 4 at Marysville.  
 \* Schedule B used with Schedules 5 and 6 at Marysville.

## Exhibit 2

### FLOW SCHEDULE YEAR TYPES BASED ON THE NORTH YUBA INDEX FOR ESTABLISHING REQUIRED FLOWS IN THE LOWER YUBA RIVER FISHERIES AGREEMENT

The water year hydrologic classification for the Yuba River to determine the flow requirements of Yuba County Water Agency's water right permits shall be based on the North Yuba Index. Determinations of a year's flow schedule year type shall be made in February, March, April, and May and for any subsequent updates.

Flow Schedule Year Type	North Yuba Index Thousand Acre-Feet (TAF)
<b>Schedule 1</b> .....	Equal to or greater than 1400
<b>Schedule 2</b> .....	Equal to or greater than 1040 and less than 1400
<b>Schedule 3</b> .....	Equal to or greater than 920 and less than 1040
<b>Schedule 4</b> .....	Equal to or greater than 820 and less than 920
<b>Schedule 5</b> .....	Equal to or greater than 693 and less than 820
<b>Schedule 6</b> .....	Equal to or greater than 500 and less than 693
<b>Conference Year</b> .....	Less than 500



### **Exhibit 3. Dry Year Storage Adjustments To Instream-Flow Requirements**

- In some dry years with Schedule 5 instream-flow requirements, the September 30 New Bullards Bar Reservoir storage may be very low.
- To ensure sufficient carryover storage in the event of a subsequent very dry year, a dry-year storage adjustment will be made.
- The dry-year storage adjustment will be made as follows:
  - If the September 30 New Bullards Bar Reservoir storage is less than 400,000 acre-feet, then the Marysville Gage instream-flow requirement will be 400 cfs from October 1 until the next February Bulletin 120 forecasts are available.
  - If the September 30 New Bullards Bar Reservoir storage is less than 450,000 acre-feet but greater than or equal to 400,000 acre-feet, then, the River Management Team may decide to adjust the Marysville Gage instream-flow requirement to 400 cfs from October 1 until the next February Bulletin 120 forecasts are available.
  - When the next February Bulletin 120 forecasts are available, the instream-flow requirements will be based on those forecasts.

## EXHIBIT 4

### DEFINITION OF THE NORTH YUBA INDEX

The North Yuba Index is an indicator of the amount of water available in the North Yuba River at New Bullards Bar Reservoir that can be utilized to achieve flows on the Lower Yuba River through operations of New Bullards Bar Reservoir. The index is comprised of two components: (1) active storage in New Bullards Bar Reservoir at the commencement of the current water year and; (2) total inflow to New Bullards Bar Reservoir for the current water year, including diversions from the Middle Yuba River and Oregon Creek to New Bullards Bar Reservoir. The following is the definition of the index and the procedure for determining the index for each water year.

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$$\text{North Yuba Index} = Sa^{\text{NBB}} + I^{\text{NBB}}$$

Where:

$$Sa^{\text{NBB}} = \text{New Bullards Bar Reservoir Active Storage}$$

The New Bullards Bar Reservoir Active Storage for determining the current year North Yuba Index equals the actual recorded amount of water in storage in New Bullards Bar Reservoir on September 30<sup>th</sup> of the previous water year minus the Federal Energy Regulatory Commission Project License minimum pool amount of 234,000 acre-ft.

and:

$$I^{\text{NBB}} = \text{Forecasted Total Annual Inflow To New Bullards Bar Reservoir}$$

The Forecasted Total Annual Inflow To New Bullards Bar Reservoir shall be based on actual inflow to date to New Bullards Bar Reservoir, including the diversions from the Middle Yuba River and Oregon Creek plus forecasted inflow for the remainder of the water year, where such forecast is based on the Department of Water Resources 50%-exceedance forecast of unimpaired flow contained in Bulletin-120 at the beginning of each month from February until May or June, with periodic updates. The procedure for determining the Forecasted Total Annual Inflow To New Bullards Bar Reservoir is described in Exhibit 5, which is entitled "*Procedure for Calculating the Forecasted Total Annual Inflow Into New Bullards Bar Reservoir*".

Determination of the North Yuba Index for a water year shall be made based on 50%-exceedance estimates of unimpaired runoff as published in California Department of Water Resources Bulletin 120 beginning in February and updated in March, April and May, and any subsequent updates. The year type for the preceding water year shall remain in effect until the initial forecast of unimpaired runoff for the current year is available.



**Exhibit 5**  
**Procedure for Calculating the Forecasted Total Annual Inflow Into**  
**New Bullards Bar Reservoir To Calculate North Yuba Index**

The forecasted total inflow into New Bullards Bar Reservoir shall be calculated starting in February and updated periodically, but no less than monthly, until May. If a June updated Bulletin 120 forecast or any post May 1 update is published by the Department of Water Resources, then an updated forecast of total inflow to New Bullards Bar Reservoir shall be calculated as described below.

The forecasted total inflow into New Bullards Bar Reservoir is based on two main components: (1) the actual measured inflow into New Bullards Bar Reservoir to date; plus (2) the Bulletin 120 based calculation of forecasted inflow for the remainder of the water year. The following formula shall be used to calculate the forecasted total inflow to New Bullards Bar Reservoir (NBBR):

$$I^{NBB} \text{ (TAF)} = \text{Total Actual Inflow to NBBR from October 1 to the end of Month}^{i-1} + \text{Forecasted Inflow from the beginning of Month}^i \text{ to September 30}$$

*(Month<sup>i-1</sup> is the previous month and Month<sup>i</sup> is the current month)*

Where:

**Total actual inflow to NBBR** is the calculated inflow based on a daily summation of inflow for the month as follows:

$$\text{Total Actual Inflow to NBBR (TAF)} = \text{Monthly change in stored water (TAF)} + \text{Monthly outflow (TAF)}$$

and where:

The forecasted inflow from the beginning of Month<sup>i</sup> to September 30 is calculated using statistically derived linear coefficients applied to the measured inflow into New Bullards Bar reservoir and the Bulletin 120 published 50%-exceedance forecasts of unimpaired flow of the Yuba River at Goodyears Bar and at Smartville, and for the time periods identified in the following table:

**Table 1. Coefficients For the Calculation of Forecasted New Bullards Bar Inflow (AF)**

Forecast Month	Forecasted For:	Constant (C)	Total Actual Inflow to NBBR (C1)	Bulletin 120 Forecasted Smartville (C2)	Bulletin 120 Forecasted Goodyear's Bar (C3)
<b>February</b>	February	-2,146	0.01424	0.52533	
	March	-3,221	0.02458	0.54787	
	April-July	-30,416	0.01413	0.62473	-0.24081
	August-September	-	0.01593	0.64037	
<b>March</b>	March	-23,495	0.00596	0.55386	
	April-July	-31,134	0.01237	0.62162	-0.23266
	August-September	-	0.01473	0.59396	
<b>April</b>	April-July	-30,665	0.00547	0.61332	-0.19623
	August-September	-	0.01409	0.53241	
<b>May</b>	April-July	-31,652	0.01033	0.61645	-0.22353
	August-September	-	0.01298	0.50071	

*For all subsequent forecast updates the May coefficients shall be used, with the forecasted Goodyears Bar runoff equaling 0.273 times the current forecasted Yuba River unimpaired flow at Smartville.*

The following procedure shall be used to calculate the Forecasted New Bullards Bar Inflow:

The general formula for Forecasted New Bullards Bar Inflow is:

$$\text{Forecasted NBB Inflow}^i = \text{February NBB Inflow} + \text{March Inflow} + \text{April-July Inflow} + \text{August-September Inflow}$$

Formula terms are only applicable as shown in Table 1. As an example, the March forecast does not include a term for forecasted February NBB Inflow. The following formulas shall be used to calculate the terms of the formula above using the corresponding coefficients from Table 1 (*Note terms are calculated in AF and the result is converted to TAF for use in the calculation of the Forecasted Total Inflow to New Bullards Bar ( $I^{NBB}$  (TAF))*):

$$\text{February NBB Inflow} = C + C1 \times \text{Total Actual Inflow to NBB} + C2 \times \text{Forecasted Smartville}^{(\text{February})}$$

$$\text{March NBB Inflow} = C + C1 \times \text{Total Actual Inflow to NBB} + C2 \times \text{Forecasted Smartville}^{(\text{March})}$$

$$\text{April - July Inflow} = C + C1 \times \text{Total Actual Inflow to NBB} + C2 \times \text{Forecasted Smartville}^{(\text{April - July})} + C3 \times \text{Forecasted Goodyears Bar}^{(\text{April - July})}$$

$$\text{August - September Inflow} = C1 \times \text{Total Actual Inflow to NBB} + C2 \times \text{Forecasted Smartville}^{(\text{August - September})}$$

(“Forecasted Smartville” is the DWR forecast for “Yuba River at Smartville Plus Deer Creek”)

The May calculation of Forecasted NBB Inflow and subsequent updated calculations shall be reduced by the actual NBB inflow between April 1 and the calculation date.

**Example calculation of the North Yuba Index for February 1, 2003:**

*Excerpt from February 2003 DWR Bulletin -120:*

**FEBRUARY 1, 2003 FORECASTS  
APRIL-JULY UNIMPAIRED RUNOFF**

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet					
	HISTORICAL			FORECAST		
	50 Yr Avg	Max of Record	Min of Record	Apr-Jul Forecasts	Pct of Avg	80 % Probability Range
<b>Yuba River</b>						
North Yuba below Goodyears Bar	286	647	51	240	84%	
Yuba River at Smartville Plus Deer Creek	1,044	2,424	200	900	86%	510-1,560

**FEBRUARY 1, 2003 FORECASTS (CONT'D)**  
**WATER YEAR UNIMPAIRED RUNOFF**

Unimpaired Runoff in 1,000 Acre-Feet													
HISTORICAL			DISTRIBUTION								FORECAST		
50 Yr Avg	Max of Record	Min of Record	Oct Thru Jan*	Feb	Mar	Apr	May	Jun	Jul	Aug & Sep	Water Year Forecasts	Pct of Avg	80% Probability Range
564	1,056	102											
2,459	4,926	369	675	255	300	360	380	130	30	30	2,160	88%	1,510-3260

\*Unimpaired runoff in prior months based on measured flows

From the published Bulletin-120 information, and from historical gaged date for New Bullards Bar Reservoir, the North Yuba Index can be calculated as follows:

- 1) The end-of-September 2002 New Bullards Bar Reservoir Storage (from USGS gage number 11413515) is 532,088 acre-feet.
- 2) From end-of-October, November, December, and January New Bullards Bar storage figures and monthly reservoir releases (from USGS gages 11413510 and 11413520), the total inflow to New Bullards Bar between October 1, 2002 and January 31, 2003 is 387,302 acre-feet.
- 3) Using the B-120 information and the inflow to date, the forecasted February inflow is calculated as follows:

$$\text{Inflow} = C + C1*(\text{Oct-Jan Inflow}) + C2*(\text{B120 Forecasted Flow at Smartville for February})$$

$$\text{Forecasted February Inflow} = -2,146 + 0.01424 (387,302) + 0.52533 (255,000) = 137,328 \text{ acre-feet}$$

- 4) The forecasted March inflow is calculated as follows:

$$\text{Inflow} = C + C1*(\text{Oct-Jan inflow}) + C2*(\text{B120 Forecasted Flow at Smartville for March})$$

$$\text{Forecasted March Inflow} = -3,221 + 0.02458 * (387,302) + 0.54787 * 300,000 = 170,660 \text{ acre-feet}$$

- 5) The forecasted April-July inflow is calculated as follows:

$$\text{Inflow} = C + C1*(\text{Oct-Jan Inflow}) + C2*(\text{B120 Forecasted Flow at Smartville for April-July}) + C3*(\text{Forecasted Flow at Goodyear's Bar for April-July})$$

$$\text{Forecasted April-July Inflow} = -30,416 + 0.01413 * (387,302) + 0.62473 * (900,000) + -0.24081 * (240,000) = 479,519 \text{ acre-feet}$$

- 6) The August and September inflows are calculated as follows:

$$\text{Inflow} = C1*(\text{Oct-Jan Inflow}) + C2*(\text{Forecasted flow at Smartville for August and September})$$

$$\text{Forecasted August and September Inflow} = 0.01593 * (387,302) + 0.64037 * (30,000) = 25,381 \text{ acre-feet}$$

Exhibit 5, p. 3

7) The North Yuba Index for 2003, as calculated for February 1, 2003, is:

Active NBB Storage + Actual Inflow (Oct – Jan) +forecasted Feb Inflow + forecasted Mar Inflow + forecasted Apr-Jul Inflow + forecasted Aug-Sept Inflow =

(532,088-234,000) + 387,302 + 137,328 + 170,660 + 479,519 + 25,381 = 1,498,278 acre-feet = **Index Number of 1498 which is a Schedule 1 year**

**Example calculation of the North Yuba Index for May 1, 1999:**

Excerpt from May 1999 DWR Bulletin -120:

**May 1, 1999 FORECASTS  
APRIL-JULY UNIMPAIRED RUNOFF**

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet					
	HISTORICAL			FORECAST		
	50 Yr Avg	Max of Record	Min of Record	Apr-Jul Forecasts	Pct of Avg	80 % Probability Range
<b>Yuba River</b>						
North Yuba below Goodyears Bar	286	647	51	330	115%	
Yuba River at Smartville Plus Deer Creek	1,029	2,424	200	1,200	117%	1,090-1,360

**May 1, 1999 FORECASTS (CONT'D)  
WATER YEAR UNIMPAIRED RUNOFF**

Unimpaired Runoff in 1,000 Acre-Feet													
HISTORICAL			DISTRIBUTION								FORECAST		
50 Yr Avg	Max of Record	Min of Record	Oct Thru Jan*	Feb *	Mar *	Apr *	May	Jun	Jul	Aug & Sep	Water Year Forecasts	Pct of Avg	80% Probability Range
564	1,056	102											
2,337	4,926	369	720	520	350	305	510	310	75	55	2,845	122%	2,720-3,030

\*Unimpaired runoff in prior months based on measured flows

From this information and historic information, the North Yuba Index can be calculated as follows:

- 1) The end-of-September 1998 New Bullards Bar Reservoir Storage (from USGS gage number 11413515) is 708,904 acre-feet.
- 2) From end-of-October, November, December, January, February, March and April New Bullards Bar storage and monthly reservoir releases (from USGS gages 11413510 and 11413520), the total inflow to New Bullards Bar between October 1, 1998 and April 30 1999 is 1,098,591 acre-feet.
- 3) Using the B-120 information and the inflow to date the forecasted April - July inflow is calculated as follows:

Inflow = C + C1\*(Oct-April Inflow) + C2\*(B120 Forecasted Flow at Smartville for April-July) + C3\*(Forecasted Flow at Goodyear's Bar for April-July)

Forecasted April-July Inflow =  $-31,652 + 0.01033 * (1,098,591) + 0.61645 * (1,200,000) + 0.22353 * (55,000) = 707,142$  acre-feet.

- 4) The August and September inflows are calculated as follows:

Inflow =  $C1 * (\text{Oct-April Inflow}) + C2 * (\text{Forecasted flow at Smartville for August and September})$

Forecasted August and September Inflow =  $0.01298 * (1,098,591) + 0.50071 * (55,000) = 41,799$  acre-feet

- 5) The North Yuba Index for May 1, 1999, is calculated as follows:

Active NBB Storage + Actual Inflow (Oct – April) + forecasted Apr-Jul Inflow + forecasted Aug-Sept Inflow – Actual April Inflow =

$(708,904 - 234,000) + 1,098,591 + 707,142 + 41,799 - 182,647 = 2,139,789$  acre-feet = **Index Number of 2140 which is a Schedule 1 year**

**Exhibit 6. Predicted Occurrences of Flow Schedules**

<b>Schedule</b>	<b>North Yuba Index (TAF)</b>	<b>Percent Occurrence</b>	<b>Cumulative</b>
1	≥1,400	56%	56%
2	1,040 to 1,400	22%	78%
3	920 to 1,040	7%	85%
4	820 to 920	5%	90%
5	693 to 820	5%	95%
6	500 to 693	4%	99%
Conference	<500	1%	100%

**Exhibit 7. Proposed Changes To RD-1644, Pages 173-176, Paragraph 1 of Order to YCWA (Track Changes)**

**Yuba County Water Agency**

Permits 15026, 15027, and 15030 of Yuba County Water Agency are amended to include the following terms:

1. For the protection of fish and other public trust resources in the lower Yuba River, permittee shall release or bypass sufficient water to maintain the following instream flows in the lower Yuba River. The minimum flow requirements shall be maintained as measured by a 5-day running average of average daily streamflows with instantaneous flows never less than 90 percent of the specified flow requirements.

- a. Effective immediately upon adoption of this order, streamflow shall be maintained at or above the flows specified in the following table as measured at the USGS gaging installations at Marysville and Smartville:

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[Replace with table on page 4]

<del>Deleted: Long-Term Instream Flow Requirements</del>							
<del>Deleted: Periods</del> ... [1]							
<del>Deleted: Smartville Gage</del> ... [2]							
<del>Deleted: Sept. 15 - Oct 14</del> ... [3]							
<del>Deleted: Oct 15 - Apr 20</del> ... [4]							
<del>Deleted: Apr 21 - Apr 30</del> ... [5]							
<del>Deleted: May 1 - May 31</del> ... [6]							
<del>Deleted: Jun 1</del> ... [7]							
<del>Deleted: Jun 2</del> ... [8]							
<del>Deleted: Jun 3 - Jun 30</del> ... [9]							

b. For purposes of this order, wet, above normal, below normal, dry, ~~critical~~ and conference water year types in the table above are as defined in the North Yuba ~~Index~~. (See Appendix 1.) Determinations of water year classifications shall be made each year within 5 days for the release of the February 1, March 1, April 1, and May 1 forecasts of unimpaired flow of the Yuba River at Smartville published in California Department of Water Resources Bulletin 120 and any subsequent forecast published by the Department of Water Resources. The final year type for the preceding water year shall remain in effect until the February 1 forecast for the current year is available. If the water year type classification would change based on information available from any Department of Water Resources forecast, then the flow requirements in effect from the time the forecast is available shall remain in effect until the following forecast becomes available. Any changes in flows due to a change in water year classification shall be made in accordance with the criteria specified in permittee's Federal Power Act license.

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~~Deleted: Jul 2~~ ... [11]  
~~Deleted: Jul 3~~ ... [12]  
~~Deleted: Jul 4 - Sept. 14~~ ... [13]  
~~Deleted: \*\*"Extreme Critical" year classifications is defined as: Equal to or less than 540 TAF on the Yuba River Index scale.~~  
~~Deleted: and...River... Extreme critical water years are defined as years when the Yuba River Index is predicted to be less than 540 thousand acre-feet....condition 3 on pages 177 and 178 of Decisio~~ ... [14]



c.

**Deleted:** In order to avoid potential aggravation of the electrical energy crisis in California present in early 2001, the flows specified above in part "a". of this term shall come into effect on April 21, 2006. In the interim period, streamflow shall be maintained at or above the flows specified in the following table as measured at the USGS gaging installations at Marysville and Smartville.

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**Instream Flow Requirements**

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Period	Wet & Above Normal Years (cfs)		Below Normal Years (cfs)		Dry Years (cfs)	
	Smartville Gage	Marysville Gage	Smartville Gage	Marysville Gage	Smartville Gage	Marysville Gage
Sep15-Oct 14	700	250	550	250	500	250
Oct 15-Apr 20	700	500	700	500	600	400
Apr21-Apr 30	--	1,000	--	800	--	400
May1-May 31	--	1,500	--	1,000	--	500
Jun 1	--	1,050	--	800	--	400
Jun 2-Jun 30	--	800	--	800/500	--	400
Jul 1	--	560	--	560	--	280
Jul 2	--	390	--	390	--	250
Jul 3	--	280	--	280	--	250
Jul 4-Sep 14	--	250	--	250	--	250
Period	Critical Years (cfs)		Conference Years			
	Smartville Gage	Marysville Gage				
Sep 15-Oct 1	400	150				
Oct 1-Oct 14	400	250				
Oct 15-Apr 20	600	350				
Apr 21	--	280				
Apr22-Apr30	--	270				
May 1-May 31	--	270				
Jun 1-July 2	--	(See Note.2)				
July 3-Sep 14	--	100				

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**Table Notes:**

1. June 2 - June 15/June 16 - June 30.

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2. The interim instream flow requirements for June 1-30 of critical years shall be 245 cfs pursuant to the provisions of the agreement between Yuba County Water Agency and the Department of Fish and Game dated September 2, 1965, except if a lower flow is allowed pursuant to the provisions of the 1965 agreement. The minimum flow on July 2 shall be 70 percent of the flow on July 1.

3. The instream flow requirements for conference years shall be the applicable requirements specified in the agreement between Yuba County Water Agency and the Department of Fish and Game dated September 2, 1965, without the reductions authorized by section 1.6 of that agreement.

c. If, at any time during the term of the Lower Yuba River Fisheries Agreement among the Yuba County Water Agency, the California Department of Fish and Game, the South Yuba Citizens League, Friends of the River, Trout Unlimited and the Bay Institute, that agreement is terminated early (before the Federal Energy Regulatory Commission issues a new long-term license for the Yuba Development Project), then the following instream-flow requirements shall go into effect:

Marysville Gage (cfs)

Schedule	OCT		NOV	DEC	JAN	FEB	MAR	APR		MAY		JUN		JUL	AUG	SEP
	1-15	16-31	1-30	1-31	1-31	1-29	1-31	1-15	16-30	1-15	16-31	1-15	16-30	1-31	1-31	1-30
1	500	500	500	500	500	500	700	1000	1000	2000	2000	1500	1500	700	600	500
2	500	500	500	500	500	500	700	700	800	1000	1000	800	500	500	500	500
3	500	500	500	500	500	500	500	700	700	900	900	500	500	500	500	500
4	400	400	500	500	500	500	500	600	900	900	600	400	400	400	400	400
5	400	400	500	500	500	500	500	500	600	600	400	400	400	400	400	400
6	350	350	350	350	350	350	350	350	500	500	400	300	150	150	150	350

Smartville Gage (cfs)

Schedule	OCT		NOV	DEC	JAN	FEB	MAR	APR		MAY		JUN		JUL	AUG	SEP
	1-15	16-31	1-30	1-31	1-31	1-29	1-31	1-15	16-30	1-15	16-31	1-15	16-30	1-31	1-31	1-30
A	700	700	700	700	700	700	700	700	-	-	-	-	-	-	-	700
B	600	600	600	550	550	550	550	600	-	-	-	-	-	-	-	500

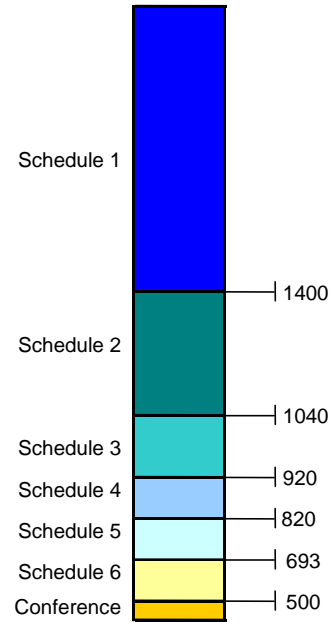
\* Schedule A used with Schedules 1, 2, 3 and 4 at Marysville.  
 \* Schedule B used with Schedules 5 and 6 at Marysville.

Conference Year: applicable schedules specified in agreement between Yuba County Water Agency and the Department of Fish and Game dated September 2, 1965, without the reductions authorized by section 1.6 of that agreement.

The applicable schedules in these instream-flow requirements shall be determined by the following values of the North Yuba Index, subject to the following dry year storage adjustment:

Flow Schedule	North Yuba Index
Year Type	Thousand Acre-Feet (TAF)

- Schedule 1..... Equal to or greater than 1400
- Schedule 2..... Equal to or greater than 1040 and less than 1400
- Schedule 3..... Equal to or greater than 920 and less than 1040
- Schedule 4..... Equal to or greater than 820 and less than 920
- Schedule 5..... Equal to or greater than 693 and less than 820
- Schedule 6..... Equal to or greater than 500 and less than 693
- Conference Year..... Less than 500



Dry Year Storage Adjustment

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- In some dry years with Schedule 5 instream-flow requirements, the September 30 New Bullards Bar Reservoir storage may be very low.
- To ensure sufficient carryover storage in the event of a subsequent very dry year, a dry-year storage adjustment will be made.
- The dry-year storage adjustment will be made as follows:
  - If the September 30 New Bullards Bar Reservoir storage is less than 400,000 acre-feet, then the Marysville Gage instream-flow requirement will be 400 cfs from October 1 until the next February Bulletin 120 forecasts are available.
  - If the September 30 New Bullards Bar Reservoir storage is less than 450,000 acre-feet but greater than or equal to 400,000 acre-feet, then, the Chief of the Division of Water Rights may, after receiving a request from permittee and giving other interested parties an opportunity to comment,

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adjust the Marysville Gage instream-flow requirement to 400 cfs from October 1 until the next February Bulletin 120 forecasts are available.

- When the next February Bulletin 120 forecasts are available, the instream-flow requirements will be based on those forecasts.

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d. All of the preceding instream-flow requirements will be superseded and replaced by the instream-flow requirements in the new long-term Federal Power Act license that the Federal Energy Regulatory Commission issues for the Yuba River Development Project, when that new license goes into effect.

**Exhibit 8. Proposed Changes To RD-1644, Pages 173-176, Paragraph 1 of Order to YCWA (“Clean” Draft)**

**Yuba County Water Agency**

Permits 15026, 15027, and 15030 of Yuba County Water Agency are amended to include the following terms:

1. For the protection of fish and other public trust resources in the lower Yuba River, permittee shall release or bypass sufficient water to maintain the following instream flows in the lower Yuba River. The minimum flow requirements shall be maintained as measured by a 5-day running average of average daily streamflows with instantaneous flows never less than 90 percent of the specified flow requirements.
  - a. Effective immediately upon adoption of this order, streamflow shall be maintained at or above the flows specified in the following table as measured at the USGS gaging installations at Marysville and Smartville:

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### Instream Flow Requirements

Period	Wet & Above Normal Years (cfs)		Below Normal Years (cfs)		Dry Years (cfs)			
	Smartville Gage	Marysville Gage	Smartville Gage	Marysville Gage	Smartville Gage	Marysville Gage		
Sep15-Oct 14	700	250	550	250	500	250		
Oct 15-Apr 20	700	500	700	500	600	400		
Apr21-Apr 30	--	1,000	--	800	--	400		
May1-May 31	--	1,500	--	1,000	--	500		
Jun 1	--	1,050	--	800	--	400		
Jun 2-Jun 30	--	800	--	800/500'	--	400		
Jul 1	--	560	--	560	--	280		
Jul 2	--	390	--	390	--	250		
Jul 3	--	280	--	280	--	250		
Jul 4-Sep 14	--	250	--	250	--	250		
Period	Critical Years (cfs)		Conference Years					
	Smartville Gage	Marysville Gage	(See Note 3)					
Sep 15-Oct 1	400	150					(See Note 3)	
Oct 1-Oct 14	400	250						
Oct 15-Apr 20	600	350						
Apr 21	--	280						
Apr22-Apr30	--	270						
May 1-May 31	--	270						
Jun 1-July 2	--	(See Note 2)						
July 3-Sep 14	--	100						

**Table Notes:**

1. June 2 - June 15/June 16 - June 30.
2. The interim instream flow requirements for June 1-30 of critical years shall be 245 cfs pursuant to the provisions of the agreement between Yuba County Water Agency and the Department of Fish and Game dated September 2, 1965, except if a lower flow is allowed pursuant to the provisions of the 1965 agreement. The minimum flow on July 2 shall be 70 percent of the flow on July 1.
3. The instream flow requirements for conference years shall be the applicable requirements specified in the agreement between Yuba County Water Agency and the Department of Fish and Game dated September 2, 1965, without the reductions authorized by section 1.6 of that agreement.
  - b. For purposes of this order, wet, above normal, below normal, dry, critical and conference water year types in the table above are as defined in the North Yuba Index. (See Appendix 1.) Determinations of water year classifications shall be made each year within 5 days for the release of the February 1, March 1, April 1, and May 1 forecasts of unimpaired flow of the Yuba River at Smartville published in California Department of Water Resources Bulletin 120 and any subsequent forecast published by the Department of Water Resources. The final year type for the preceding water year shall remain in effect until the February 1 forecast for the current year is available. If the water year type classification would

change based on information available from any Department of Water Resources forecast, then the flow requirements in effect from the time the forecast is available shall remain in effect until the following forecast becomes available. Any changes in flows due to a change in water year classification shall be made in accordance with the criteria specified in permittee's Federal Power Act license.

- c. If, at any time during the term of the Lower Yuba River Fisheries Agreement among the Yuba County Water Agency, the California Department of Fish and Game, the South Yuba Citizens League, Friends of the River, Trout Unlimited and the Bay Institute, that agreement is terminated early (before the Federal Energy Regulatory Commission issues a new long-term Federal Power license for the Yuba River Development Project), then the following instream-flow requirements shall go into effect:

Marysville Gage (cfs)

Schedule	OCT		NOV	DEC	JAN	FEB	MAR	APR		MAY		JUN		JUL	AUG	SEP
	1-15	16-31	1-30	1-31	1-31	1-29	1-31	1-15	16-30	1-15	16-31	1-15	16-30	1-31	1-31	1-30
1	500	500	500	500	500	500	700	1000	1000	2000	2000	1500	1500	700	600	500
2	500	500	500	500	500	500	700	700	800	1000	1000	800	500	500	500	500
3	500	500	500	500	500	500	500	700	700	900	900	500	500	500	500	500
4	400	400	500	500	500	500	500	600	900	900	600	400	400	400	400	400
5	400	400	500	500	500	500	500	500	600	600	400	400	400	400	400	400
6	350	350	350	350	350	350	350	350	500	500	400	300	150	150	150	350

Smartville Gage (cfs)

Schedule	OCT		NOV	DEC	JAN	FEB	MAR	APR		MAY		JUN		JUL	AUG	SEP
	1-15	16-31	1-30	1-31	1-31	1-29	1-31	1-15	16-30	1-15	16-31	1-15	16-30	1-31	1-31	1-30
A	700	700	700	700	700	700	700	700	-	-	-	-	-	-	-	700
B	600	600	600	550	550	550	550	600	-	-	-	-	-	-	-	500

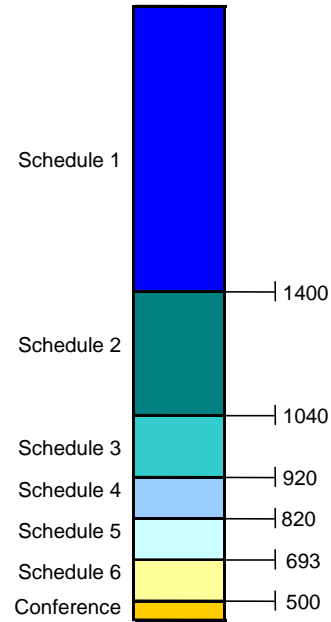
\* Schedule A used with Schedules 1, 2, 3 and 4 at Marysville.  
 \* Schedule B used with Schedules 5 and 6 at Marysville.

Conference Year: applicable schedules specified in agreement between Yuba County Water Agency and the Department of Fish and Game dated September 2, 1965, without the reductions authorized by section 1.6 of that agreement.



The applicable schedules in these instream-flow requirements shall be determined by the following values of the North Yuba Index, subject to the following dry year storage adjustment:

Flow Schedule Year Type	North Yuba Index Thousand Acre-Feet (TAF)
<b>Schedule 1</b> .....	Equal to or greater than 1400
<b>Schedule 2</b> .....	Equal to or greater than 1040 and less than 1400
<b>Schedule 3</b> .....	Equal to or greater than 920 and less than 1040
<b>Schedule 4</b> .....	Equal to or greater than 820 and less than 920
<b>Schedule 5</b> .....	Equal to or greater than 693 and less than 820
<b>Schedule 6</b> .....	Equal to or greater than 500 and less than 693
<b>Conference Year</b> .....	Less than 500



#### Dry Year Storage Adjustment

- In some dry years with Schedule 5 instream-flow requirements, the September 30 New Bullards Bar Reservoir storage may be very low.
- To ensure sufficient carryover storage in the event of a subsequent very dry year, a dry-year storage adjustment will be made.
- The dry-year storage adjustment will be made as follows:
  - If the September 30 New Bullards Bar Reservoir storage is less than 400,000 acre-feet, then the Marysville Gage instream-flow requirement will be 400 cfs from October 1 until the next February Bulletin 120 forecasts are available.
  - If the September 30 New Bullards Bar Reservoir storage is less than 450,000 acre-feet but greater than or equal to 400,000 acre-feet, then, the Chief of the Division of Water Rights may, after receiving a request from

permittee and giving other interested parties an opportunity to comment, adjust the Marysville Gage instream-flow requirement to 400 cfs from October 1 until the next February Bulletin 120 forecasts are available.

- When the next February Bulletin 120 forecasts are available, the instream-flow requirements will be based on those forecasts.
  
- d. All of the preceding instream-flow requirements will be superseded and replaced by the instream-flow requirements in the new long-term Federal Power Act license that the Federal Energy Regulatory Commission issues for the Yuba River Development Project, when that new license goes into effect.

**Exhibit 9. Changes To Appendix 1 Of RD-1644**

**APPENDIX 1  
DEFINITION OF YUBA RIVER INDEX**

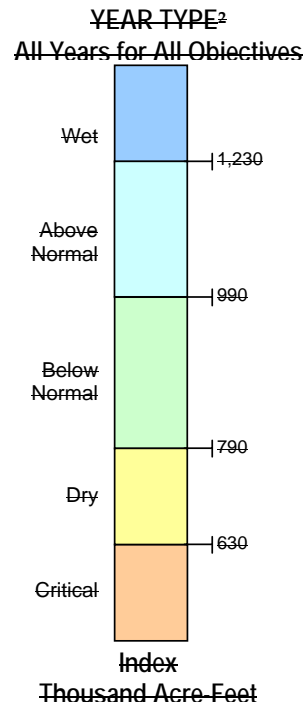
The water year hydrologic classification for the Yuba River shall be determined by the following equation:

$$\text{INDEX} = 0.5\text{-X} + 0.3\text{-Y} + 0.2\text{-Z}$$

- Where
- X** = Current year's April-July Yuba River unimpaired runoff
  - Y** = Current year's October-March Yuba River unimpaired runoff
  - Z** = Previous year's index.<sup>2</sup>

The Yuba River unimpaired runoff for the current water year (October 1 of the preceding calendar year through September 30 of the current calendar year), as published in California Department of Water Resources Bulletin 120, is a forecast of the unimpaired flow of the Yuba River at Smartville. Preliminary determinations of a year's classification shall be made in February, March, and April, with the final determination in May. These preliminary determinations shall be based on hydrologic conditions to date plus forecasts of future runoff, assuming normal precipitation for the remainder of the water year.

<b>Classification</b>	<b>Index Thousand Acre-Foot (TAF)</b>
<b>Wet</b> .....	Equal to or greater than 1,230
<b>Above Normal</b> ....	Greater than 990 and less than 1,230
<b>Below Normal</b> ....	Equal to or less than 990 and greater than 790
<b>Dry</b> .....	Equal to or less than 790 and greater than 630
<b>Critical</b> .....	Equal to or less than 630



<sup>2</sup> A cap of 1,400 TAF is imposed on the previous year's index to account for required flood-control reservoir releases during wet years.

<sup>3</sup> The year type for the preceding water year will remain in effect until the initial forecast of unimpaired runoff for the current year is available.

**DEFINITION OF THE  
NORTH YUBA INDEX**

The North Yuba Index is an indicator of the amount of water available in the North Yuba River at New Bullards Bar Reservoir that can be utilized to achieve flows on the Lower Yuba River through operations of New Bullards Bar Reservoir. The index is comprised of two components: (1) active storage in New Bullards Bar Reservoir at the commencement of the current water year; and (2) total inflow to New Bullards Bar Reservoir for the current water year, including diversions from the Middle Yuba River and Oregon Creek to New Bullards Bar Reservoir. The following is the definition of the index and the procedure for determining the index for each water year.

---

$$\text{North Yuba Index} = \text{Sa}^{\text{NBB}} + \text{I}^{\text{NBB}}$$

Where:

$$\text{Sa}^{\text{NBB}} = \text{New Bullards Bar Reservoir Active Storage}$$

The New Bullards Bar Reservoir Active Storage for determining the current year North Yuba Index equals the actual recorded amount of water in storage in New Bullards Bar Reservoir on September 30<sup>th</sup> of the previous water year minus the Federal Energy Regulatory Commission Project License minimum pool amount of 234,000 acre-ft.

and:

$$\text{I}^{\text{NBB}} = \text{Forecasted Total Annual Inflow To New Bullards Bar Reservoir}$$

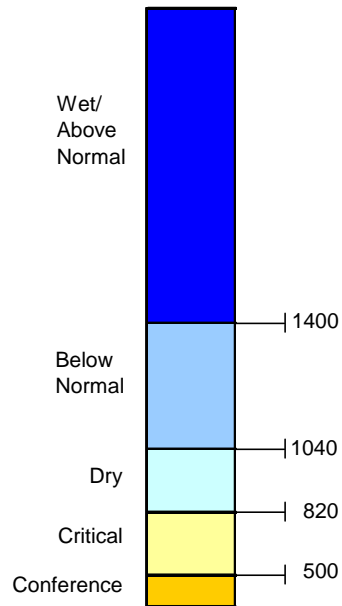
The Forecasted Total Annual Inflow To New Bullards Bar Reservoir shall be based on actual inflow to date to New Bullards Bar Reservoir, including the diversions from the Middle Yuba River and Oregon Creek plus forecasted inflow for the remainder of the water year, where such forecast is based on the Department of Water Resources 50%-exceedance forecast of unimpaired flow contained in Bulletin-120 at the beginning of each month from February until May or June, with periodic updates. The procedure for determining the Forecasted Total Annual Inflow To New Bullards Bar Reservoir is described in the section of this document entitled "*Procedure for Calculating the Forecasted Total Annual Inflow Into New Bullards Bar Reservoir*".

Determination of the North Yuba Index for a water year shall be made based on 50%-exceedance estimates of unimpaired runoff as published in California Department of Water Resources Bulletin 120 beginning in February and updated in March, April and May, and any subsequent updates. The year type for the preceding water year shall remain in effect until the initial forecast of unimpaired runoff for the current year is available.

**YUBA RIVER WATER YEAR CLASSIFICATIONS  
 BASED ON THE NORTH YUBA INDEX  
 FOR ESTABLISHING REQUIRED FLOWS**

The water year hydrologic classification for the Yuba River to determine the minimum instream flow requirements of Yuba County Water Agency's water right permits shall be based on the North Yuba Index. Determinations of a year's classification shall be made in February, March, April, and May and for any subsequent updates.

<u>Year Type</u> <u>Classification</u>	<u>North Yuba Index</u> <u>Thousand Acre-Feet (TAF)</u>
<b>Wet and Above Normal</b> .....	Equal to or greater than 1400
<b>Below Normal</b> .....	Equal to or greater than 1040 and less than 1400
<b>Dry</b> .....	Equal to or greater than 820 and less than 1040
<b>Critical</b> .....	Equal to or greater than 500 and less than 820
<b>Conference Year</b> .....	Less than 500



**Procedure for Calculating the Forecasted Total Annual Inflow Into  
New Bullards Bar Reservoir**

The forecasted total inflow into New Bullards Bar Reservoir shall be calculated starting in February and updated periodically, but no less than monthly, until May. If a June updated Bulletin 120 forecast or any post May 1 update is published by the Department of Water Resources, then an updated forecast of total inflow to New Bullards Bar Reservoir shall be calculated as described below.

The forecasted total inflow into New Bullards Bar Reservoir is based on two main components: (1) the actual measured inflow into New Bullards Bar Reservoir to date; plus (2) the Bulletin 120 based calculation of forecasted inflow for the remainder of the water year. The following formula shall be used to calculate the forecasted total inflow to New Bullards Bar Reservoir (NBBR):

$$I^{NBB} \text{ (TAF)} = \text{Total Actual Inflow to NBBR from October 1 to the end of Month}^{i-1} + \text{Forecasted Inflow from the beginning of Month}^i \text{ to September 30}$$

*(Month<sup>i-1</sup> is the previous month and Month<sup>i</sup> is the current month)*

Where:

**Total actual inflow to NBBR** is the calculated inflow based on a daily summation of inflow for the month as follows:

$$\text{Total Actual Inflow to NBBR (TAF)} = \text{Monthly change in stored water (TAF)} + \text{Monthly outflow (TAF)}$$

and where:

The forecasted inflow from the beginning of Month<sup>i</sup> to September 30 is calculated using statistically derived linear coefficients applied to the measured inflow into New Bullards Bar reservoir and the Bulletin 120 published 50%-exceedance forecasts of unimpaired flow of the Yuba River at Goodyears Bar and at Smartville, and for the time periods identified in the following table:

**Table 1. Coefficients For the Calculation of Forecasted New Bullards Bar Inflow (AF)**

Forecast Month	Forecasted For:	Constant (C)	Total Actual Inflow to NBBR (C1)	Bulletin 120 Forecasted Smartville (C2)	Bulletin 120 Forecasted Goodyear's Bar (C3)
<b>February</b>	February	-2,146	0.01424	0.52533	
	March	-3,221	0.02458	0.54787	
	April-July	-30,416	0.01413	0.62473	-0.24081
	August-September	-	0.01593	0.64037	
<b>March</b>	March	-23,495	0.00596	0.55386	
	April-July	-31,134	0.01237	0.62162	-0.23266
	August-September	-	0.01473	0.59396	
<b>April</b>	April-July	-30,665	0.00547	0.61332	-0.19623
	August-September	-	0.01409	0.53241	
<b>May</b>	April-July	-31,652	0.01033	0.61645	-0.22353

Exhibit 9, p. 4

August-September	-	0.01298	0.50071
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For all subsequent forecast updates the May coefficients shall be used, with the forecasted Goodyears Bar runoff equaling 0.273 times the current forecasted Yuba River unimpaired flow at Smartville.

The following procedure shall be used to calculate the Forecasted New Bullards Bar Inflow:

The general formula for Forecasted New Bullards Bar Inflow is:

$$\text{Forecasted NBB Inflow}^j = \text{February NBB Inflow} + \text{March Inflow} + \text{April-July Inflow} + \text{August-September Inflow}$$

Formula terms are only applicable as shown in Table 1. As an example, the March forecast does not include a term for forecasted February NBB Inflow. The following formulas shall be used to calculate the terms of the formula above using the corresponding coefficients from Table 1 (Note terms are calculated in AF and the result is converted to TAF for use in the calculation of the Forecasted Total Inflow to New Bullards Bar ( $I^{NBB}$  (TAF)):

$$\text{February NBB Inflow} = C + C1 \times \text{Total Actual Inflow to NBB} + C2 \times \text{Forecasted Smartville}^{(\text{February})}$$

$$\text{March NBB Inflow} = C + C1 \times \text{Total Actual Inflow to NBB} + C2 \times \text{Forecasted Smartville}^{(\text{March})}$$

$$\text{April - July Inflow} = C + C1 \times \text{Total Actual Inflow to NBB} + C2 \times \text{Forecasted Smartville}^{(\text{April - July})} + C3 \times \text{Forecasted Goodyears Bar}^{(\text{April - July})}$$

$$\text{August - September Inflow} = C1 \times \text{Total Actual Inflow to NBB} + C2 \times \text{Forecasted Smartville}^{(\text{August - September})}$$

("Forecasted Smartville" is the DWR forecast for "Yuba River at Smartville Plus Deer Creek")

The May calculation of Forecasted NBB Inflow and subsequent updated calculations shall be reduced by the actual NBB inflow between April 1 and the calculation date.

**Example calculation of the North Yuba Index for February 1, 2003:**

Excerpt from February 2003 DWR Bulletin -120:

**FEBRUARY 1, 2003 FORECASTS  
APRIL-JULY UNIMPAIRED RUNOFF**

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet					
	HISTORICAL			FORECAST		
	50 Yr Avg	Max of Record	Min of Record	Apr-Jul Forecasts	Pct of Avg	80 % Probability Range
Yuba River						
North Yuba below Goodyears Bar	286	647	51	240	84%	
Yuba River at Smartville Plus Deer Creek	1,044	2,424	200	900	86%	510-1,560

**FEBRUARY 1, 2003 FORECASTS (CONT'D)  
WATER YEAR UNIMPAIRED RUNOFF**

Unimpaired Runoff in 1,000 Acre-Feet													
HISTORICAL			DISTRIBUTION								FORECAST		
50 Yr Avg	Max of Record	Min of Record	Oct Thru Jan*	Feb	Mar	Apr	May	Jun	Jul	Aug & Sep	Water Year Forecasts	Pct of Avg	80% Probability Range
564	1,056	102											
2,459	4,926	369	675	255	300	360	380	130	30	30	2,160	88%	1,510-3260

\*Unimpaired runoff in prior months based on measured flows

From the published Bulletin-120 information, and from historical gaged date for New Bullards Bar Reservoir, the North Yuba Index can be calculated as follows:

- 1) The end-of-September 2002 New Bullards Bar Reservoir Storage (from USGS gage number 11413515) is 532,088 acre-feet.
- 2) From end-of-October, November, December, and January New Bullards Bar storage figures and monthly reservoir releases (from USGS gages 11413510 and 11413520), the total inflow to New Bullards Bar between October 1, 2002 and January 31, 2003 is 387,302 acre-feet.

- 3) Using the B-120 information and the inflow to date, the forecasted February inflow is calculated as follows:

$$\text{Inflow} = C + C1 * (\text{Oct-Jan Inflow}) + C2 * (\text{B120 Forecasted Flow at Smartville for February})$$

$$\text{Forecasted February Inflow} = -2,146 + 0.01424 (387,302) + 0.52533 (255,000) = 137,328 \text{ acre-feet}$$

- 4) The forecasted March inflow is calculated as follows:

$$\text{Inflow} = C + C1 * (\text{Oct-Jan inflow}) + C2 * (\text{B120 Forecasted Flow at Smartville for March})$$

$$\text{Forecasted March Inflow} = -3,221 + 0.02458 * (387,302) + 0.54787 * 300,000 = 170,660 \text{ acre-feet}$$

- 5) The forecasted April-July inflow is calculated as follows:

$$\text{Inflow} = C + C1 * (\text{Oct-Jan Inflow}) + C2 * (\text{B120 Forecasted Flow at Smartville for April-July}) + C3 * (\text{Forecasted Flow at Goodyear's Bar for April-July})$$

$$\text{Forecasted April-July Inflow} = -30,416 + 0.01413 * (387,302) + 0.62473 * (900,000) + -0.24081 * (240,000) = 479,519 \text{ acre-feet}$$

- 6) The August and September inflows are calculated as follows:

$$\text{Inflow} = C1 * (\text{Oct-Jan Inflow}) + C2 * (\text{Forecasted flow at Smartville for August and September})$$

$$\text{Forecasted August and September Inflow} = 0.01593 * (387,302) + 0.64037 * (30,000) = 25,381 \text{ acre-feet}$$

Exhibit 9, p. 6



7) The North Yuba Index for 2003, as calculated for February 1, 2003, is:

Active NBB Storage + Actual Inflow (Oct – Jan) + forecasted Feb Inflow + forecasted Mar Inflow + forecasted Apr-Jul Inflow + forecasted Aug-Sept Inflow =

(532,088-234,000) + 387,302 + 137,328 + 170,660 + 479,519 + 25,381 = 1,498,278 acre-feet = **Index Number of 1498 which is a Wet/Above Normal year**

**Example calculation of the North Yuba Index for May 1, 1999:**

Excerpt from May 1999 DWR Bulletin -120:

**May 1, 1999 FORECASTS  
APRIL-JULY UNIMPAIRED RUNOFF**

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet					
	HISTORICAL			FORECAST		
	50 Yr Avg	Max of Record	Min of Record	Apr-Jul Forecasts	Pct of Avg	80 % Probability Range
<b>Yuba River</b>						
North Yuba below Goodyears Bar	286	647	51	330	115%	
Yuba River at Smartville Plus Deer Creek	1,029	2,424	200	1,200	117%	1,090-1,360

**May 1, 1999 FORECASTS (CONT'D)  
WATER YEAR UNIMPAIRED RUNOFF**

Unimpaired Runoff in 1,000 Acre-Feet													
HISTORICAL			DISTRIBUTION								FORECAST		
50 Yr Avg	Max of Record	Min of Record	Oct Thru Jan*	Feb *	Mar *	Apr *	May	Jun	Jul	Aug & Sep	Water Year Forecasts	Pct of Avg	80% Probability Range
564	1,056	102											
2,337	4,926	369	720	520	350	305	510	310	75	55	2,845	122%	2,720-3,030

\*Unimpaired runoff in prior months based on measured flows

From this information and historic information, the North Yuba Index can be calculated as follows:

- 1) The end-of-September 1998 New Bullards Bar Reservoir Storage (from USGS gage number 11413515) is 708,904 acre-feet.
- 2) From end-of-October, November, December, January, February, March and April New Bullards Bar storage and monthly reservoir releases (from USGS gages 11413510 and 11413520), the total inflow to New Bullards Bar between October 1, 1998 and April 30 1999 is 1,098,591 acre-feet.
- 3) Using the B-120 information and the inflow to date the forecasted April - July inflow is calculated as follows:  

$$\text{Inflow} = C + C1 * (\text{Oct-April Inflow}) + C2 * (\text{B120 Forecasted Flow at Smartville for April-July}) + C3 * (\text{Forecasted Flow at Goodyear's Bar for April-July})$$

Exhibit 9, p. 7

Forecasted April-July Inflow =  $-31,652 + 0.01033 * (1,098,591) + 0.61645 * (1,200,000) + -0.22353 * (55,000) = 707,142$  acre-feet.

4) The August and September inflows are calculated as follows:

Inflow =  $C1 * (\text{Oct-April Inflow}) + C2 * (\text{Forecasted flow at Smartville for August and September})$

Forecasted August and September Inflow =  $0.01298 * (1,098,591) + 0.50071 * (55,000) = 41,799$  acre-feet

5) The North Yuba Index for May 1, 1999, is calculated as follows:

Active NBB Storage + Actual Inflow (Oct – April) + forecasted Apr-Jul Inflow + forecasted Aug-Sept Inflow – Actual April Inflow =

$(708,904 - 234,000) + 1,098,591 + 707,142 + 41,799 - 182,647 = 2,139,789$  acre-feet = **Index Number of 2140 which is a Wet/Above Normal year**

**Exhibit 10**  
**Yuba River Development Project**  
**Operating Assumptions for Yuba River Fisheries Agreement**

**Introduction**

The flow schedules and operations parameters described in Exhibits 1-5 of the Yuba River Fisheries Agreement (YFA) are based on a set of assumed Operating Assumptions for the Yuba River Development Project (YRDP) during: (a) water-management or base-flow operations; (b) storm-runoff operations; and (c) flood-control operations.

These Operating Assumptions, and Significant Changes to these Operating Assumptions, are described in this Exhibit 10.

**Definitions**

- Base Flow/Water Management Operations
- Storm Runoff Operations
- Flood Control Operations
- Operations for PG&E Power Purchase Contract (PPC) Obligations
- Significant Changes to Operating Assumptions

Definitions of Base Flow/Water Management Operations, Storm Runoff Operations and Flood Control Operations utilize the language in YCWA's pending application for FERC license amendment. The pertinent language states:

**“With the exception of emergencies, releases required by U.S. Army Corps of Engineers flood control criteria, releases required to maintain a flood control buffer or for other flood control purposes, bypasses of uncontrolled flows into Englebright Reservoir, uncontrolled spilling, or uncontrolled flows of tributary streams downstream of Englebright Dam, Licensee shall make reasonable efforts to operate New Bullards Bar Reservoir and Englebright Reservoir to avoid fluctuations in the flow of the lower Yuba River downstream of Englebright Dam, and daily changes in project operations affecting releases or bypasses of flow from Englebright Dam shall be continuously measured at the USGS gage at Smartville, and shall be made in accordance with the following conditions: [list of conditions follow]”**

Base Flow/Water Management Operations:

Base Flow/Water Management Operations include all operations except operations: (a) during emergencies, (b) when releases are required by U.S. Army Corps of Engineers flood control criteria or to maintain a flood control buffer in New Bullards Bar Reservoir or for other flood control purposes, or (c) when bypasses of uncontrolled flows into Englebright Reservoir, uncontrolled spilling, or uncontrolled flows of tributary streams downstream of Englebright Dam are occurring.

### Storm Runoff Operations:

Storm Runoff Operations include all operations while bypasses of uncontrolled flows into Englebright Reservoir, uncontrolled spilling, uncontrolled flows of tributary streams downstream of Englebright Dam are occurring.

### Flood Control Operations:

Flood Control Operations include all operations when: (a) releases are required by U.S. Army Corps of Engineers flood control criteria; (b) releases or other actions are required or requested by the U.S. Army Corps of Engineers under its flood-control authority or by the the Department of Water Resources (DWR)/ U.S. Army Corps of Engineers Flood Control Joint Operations Center; (c) releases are required to maintain a flood-control buffer, or for other flood-control purposes, between September 15 and June 1; and (d) emergencies requiring substantial changes in project operations are occurring.

### Operations Guidelines

#### Base Flow/Water Management Operations

Base Flow Operations shall be conducted under the following guidelines:

1. Starting approximately September 1, releases will be set at the rates necessary to meet the controlling instream-flow requirement, which is at either the Marysville Gage or the Smartville Gage, plus any additional amount that is required for diversions.
  - a. These diversions include fall base irrigation diversions and diversions for fall rice decomposition/duck water field flooding. Fall rice decomposition/duck field flooding typically starts in late September to early October and goes through mid November, and includes a ramp up to a maximum diversion rate of between 450 to 550 cfs. Diversions then ramp down during November and December as field flooding requirements decrease. When Wheatland Water District comes on line, this maximum diversion rate is not expected to exceed the historic range of 450 cfs to 550 cfs.
  - b. After the completion of fall field flooding, releases under Base Flow/Water Management Operations drop down to the amounts necessary to meet the controlling minimum instream flow requirement or the requirements in the PPC as amended and pursuant to recent historical practice.
2. During approximately January through March, there normally are minimal diversions at Daguerre Point Dam, and Base Flow/Water Management Operations are set to maintain the releases necessary to meet the controlling instream flow requirement or the requirements in the PPC as amended and pursuant to recent historical practice.

3. Starting about April 1, Base Flow/Water Management Operations are conducted to:
  - a. Meet the controlling minimum instream flow requirements.
  - b. Supply sufficient water for the diversions necessary to meet water-supply contract requirements.
  - c. Meet the requirements of the PPC as amended and pursuant to recent historical practice.
  - d. Meet a September 30 New Bullards Bar Reservoir storage target of 650,000 acre-feet.
4. Base Flow/Water Management Operations will be subject to the flow-fluctuation and ramping criteria in YCWA's pending application for FERC license amendment.

#### Storm Runoff Operations

Storm Runoff Operations shall be conducted under the following guidelines:

1. Storm Runoff Operations occur during the storm season, which typically occurs between October and May, but can extend into other periods during the year if there are any unusual storm events. Storm Runoff Operations target Englebright Reservoir operations, because Englebright Reservoir is the control point for releasing water into the lower Yuba River.
2. Specific Storm Runoff Operations decisions are highly dependent on the following factors:
  - a. Amount and elevations of snowpack.
  - b. Storm forecasted precipitation and snow level.
  - c. Future storm forecasts.
  - d. PG&E generation schedule.
  - e. Time of year, amount of water in New Bullards Bar Reservoir and relation of New Bullards Bar Reservoir water storage to flood-control requirements.
3. Storm Runoff Operations guidelines for Englebright Reservoir are:
  - a. Maintain an Englebright target base reservoir elevation of about 517 feet (above sea level).
  - b. Maintain Englebright Reservoir storage elevation above 514 feet.
  - c. Maintain Englebright outflow at a generally constant rate until Englebright Reservoir water-surface elevation reaches 523 feet, unless a large storm is forecasted.
  - d. If Englebright Reservoir water-surface elevation reaches 523 feet and still is increasing, or if a major storm is forecasted, then increase Englebright outflow, through Narrows 1 Powerhouse or Narrows 2 Powerhouse or a combination of

both powerhouses, at a ramping rate target of 200 cfs per hour, until Englebright elevation stops increasing.

- e. When a storm event ends, and runoff starts to subside, decrease Englebright outflow at a target rate of 100 cfs per hour when the reservoir level drops to elevation 520 feet, with a target of returning to base releases when elevation reaches 517 feet.
- f. If Englebright reservoir elevation increases at a rate greater than 0.5 foot per hour, then higher ramp-up and ramp-down rates, up to the maximum allowable rate of 500 cfs per hour, and up to the maximum capacities of the Narrows 1 and Narrows 2 Powerhouses, may be utilized to attempt to stabilize the reservoir and prevent or reduce spills.

- 4. Storm Runoff Operations will not be subject to the flow-fluctuation and ramping criteria in YCWA's pending application for FERC license amendment.

### Flood Control Operations

Flood Control Operations shall be conducted under the following guidelines:

Flood Control Operations are generally dictated by the Corps flood operations criteria or the Flood Control Joint Operations Center operated by DWR and the Corps. Flood operations are designed to protect life, property and the dams from actual and anticipated major flood events. Flood flow releases from Englebright and New Bullards Bar Reservoirs are controlled by the following requirements and criteria:

- 1. Corps flood control operations requirements as defined by the flood operations manual or direction from the Corps and include:
  - a. encroachment into the New Bullards Bar Reservoir flood pool or anticipated encroachment into the flood pool from a forecasted storm; and
  - b. ramping rates and spill gate operations criteria from the Corps flood operations manual or direction from the Corps.
- 2. Department of Water Resources (DWR), Department of Flood Management or Joint Flood Control Center directives.
- 3. Prereleases from New Bullards Bar Reservoir in advance of a forecasted major flood storm to reduce peak flood flows or to avoid or reduce encroachment into the flood pool during the storm.
- 4. Creating a flood pool buffer in New Bullards Bar Reservoir to avoid unnecessary flood-control releases operations during a typical storm for that time of the year.

5. At the end of Flood Control Operations, flows shall be returned to Storm Runoff Operations or Base Flow/Water Management Operations as soon as practicable.
6. Flood Control Operations will not be subject to the flow-fluctuation and ramping criteria in YCWA's pending application for FERC license amendment.

#### Operations for PPC Obligations

Current practice of releases to meet requirements in the 1966 YCWA/PG&E Power Purchase Contract as amended for the Accord include the following:

- Reservoir elevation target maximum of 705 TAF in January, providing that sufficient water is available;
- Reservoir elevation target of maximum 720 TAF in February, providing that sufficient water is available;
- Reservoir elevation target of maximum 790 TAF in March, providing that sufficient water is available;
- Reservoir elevation target of maximum 890 TAF in April, providing that sufficient water is available;
- No minimum monthly generation targets.

#### Significant Changes to Operating Assumptions

A Significant Change in the assumed Operating Assumptions is defined as one of the following occurrences:

1. Any releases from storage in the New Bullards Bar reservoir required by a regulatory mandate that was not in place on October 1, 2004, that would result in a reduction in the North Yuba Index of 10,000 AF or more in any water year, in comparison to the index value that would occur in the absence of those required releases.
2. Changes in the flow reduction and fluctuation criteria that are included in YCWA's pending license amendment application to FERC that would require the release of additional water from storage in excess of 10,000 AF in any water year.
3. A requirement to release water from storage solely to meet the terms of the Power Purchase Contract between YCWA and PG&E that would prevent YCWA from operating to achieve the following target levels:
  - a. 705 TAF in January;
  - b. 720 TAF in February;
  - c. 790 TAF in March, or
  - d. 890 TAF in April.
4. An increase of 5,000 AF or more in YCWA's total obligation to contribute to the implementation of Bay/Delta water quality objectives, if such increase is caused by a judicial or regulatory action.

5. An ESA, CESA, or other regulatory action that would result in a change in flow Schedules 1 – 6 and that would result in either: a) decrease in total Transfer Agreement payment amounts for Components 2-4 water of 5% per year or more in any water year, or b) decrease in the amount of flow that can be delivered to YCWA's consumptive users of 5% or more in any water year.

The following are not considered Significant Changes in Operating Assumptions:

1. Any decrease in YCWA's Phase 8 Bay/Delta obligations.
2. Any supplemental surface water transfer or supplemental groundwater transfer.
3. An ESA, CESA, or other regulatory action that would result in a change in flow Schedules 1 – 6 and that would result in: a) an increase in Transfer Agreement payment amounts, and b) an increase in the amount of flow that can be delivered to YCWA's consumptive users.



## **Exhibit 11**

### **Addresses of Representatives of Lower Yuba River Fisheries Agreement Parties**

General Manager  
Yuba County Water Agency  
1402 D Street  
Marysville, CA 95901  
Telephone: 530-741-6278  
Fax: 530-741-6541

Regional Manager  
California Department of Fish and Game, Region 2  
1701 Nimbus Road  
Rancho Cordova, CA 95670  
Telephone: 916-358-2898  
Fax: 916-358-2912

Executive Director  
South Yuba River Citizens League  
216 Main Street  
Nevada City, CA 95959  
Telephone: 530-265-5961  
Fax: 530-265-6232

Conservation Director  
Friends of the River  
915 20<sup>th</sup> Street  
Sacramento, CA 95814  
Telephone: 916-442-3155  
Fax: 916-442-3396

California Hydro Power Coordinator  
Trout Unlimited  
828 San Pablo Ave., Suite 208  
Albany, CA 94706  
Telephone: 510-528-4164  
Fax: 510-528-7880

Program Director  
The Bay Institute  
500 Palm Drive, Suite 200  
Novato, CA 94949  
Telephone: 415-506-0150  
Fax: 415-506-0155

Exhibit 11

**Exhibit 12**  
**River Management Fund, Restoration Account**

Money from the RMF, Restoration Account, may be used to provide parts of the costs of pilot projects for: (a) side channel restoration; (b) riparian habitat; and (c) woody debris. Any such projects must be simple, robust and self-sustaining and demonstrate, verify or test some specific benefit.

No projects will be funded from the RMF, Restoration Account until sufficient core monitoring or focused studies have been completed and justify the feasibility of the proposed project, efficacy of the proposed location and scope and extent of the proposed actions.

No project will be funded from the RMF, Restoration Account unless matching funds are available for at least 70% of the project's total cost.

The RMT Participants in RMF Issues will make all decisions regarding: (a) the designs of projects to be funded from the RMF, Restoration Account, and (b) expenditures from the RMF, Restoration Account.

# APPENDIX M2

## OCTOBER 3, 2007 DRAFT OF YUBA ACCORD WATER PURCHASE AGREEMENT

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*(showing changes from April 2005 Draft Water Purchase Agreement, in Appendix B of Draft EIR/EIS, with new Exhibits 1-4 added)*

October 3, 2007

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April 19, 2005

STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
DEPARTMENT OF WATER RESOURCES  
AND  
YUBA COUNTY WATER AGENCY

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DEPARTMENT OF THE INTERIOR¶  
BUREAU OF RECLAMATION¶  
CENTRAL VALLEY PROJECT,  
CALIFORNIA¶  
AND¶

AGREEMENT FOR THE LONG-TERM PURCHASE OF WATER FROM YUBA COUNTY WATER AGENCY BY THE DEPARTMENT OF WATER RESOURCES

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This Agreement is entered into as of the Effective Date between the Department of Water Resources of the State of California, pursuant to the provisions of the California Water Resources Development Bond Act, the Central Valley Project Act and other applicable laws of the State of California, and Yuba County Water Agency, acting pursuant to the Yuba Act (California Statutes 1959, Chapter 788, as amended) and other applicable laws of the State of California. Defined terms are set forth in section 1 of this Agreement.

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Deleted: ; the United States Department of the Interior, acting through the United States Bureau of Reclamation, pursuant to Section 14 of the Reclamation Project Act of 1939 (43 USC section 389) and other applicable federal law;

RECITALS

A. DWR operates and maintains the SWP pursuant to the laws of the State of California, involving the development and conveyance of water supplies to water supply agencies throughout the State of California.

B. Reclamation has constructed and is operating the CVP for the diversion, storage, carriage, and distribution of waters of the State of California for irrigation, municipal, domestic, industrial water supplies, for fish and wildlife mitigation, protection and restoration, and for generation and distribution of electric energy, salinity control, navigation, flood control, recreation and other beneficial uses.

C. Yuba is a public agency created and existing pursuant to the provisions of the Yuba Act. Yuba owns and operates the Yuba River Development Project, including the Yuba Project.

D. Yuba is engaged in the Yuba River Accord initiative to resolve issues associated with operation of the Yuba Project in a way that protects lower Yuba River fisheries and local water-supply reliability, while providing revenues for local flood control projects, water for the CALFED Program to use for protection and restoration of Delta fisheries, and improvements in state-wide water supply management.

E. The Yuba River Accord includes three major elements, all of which must be in place for the Yuba River Accord to become effective: (1) the Fisheries Agreement, under which Yuba would revise the operations of the Yuba Project to provide higher flows in the

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**October 3, 2007**

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April 19, 2005**

lower Yuba River under certain conditions to improve fisheries protection and enhancement; (2) the Conjunctive Use Agreements between Yuba and water districts within Yuba County for implementing a conjunctive use and water use efficiency program; and (3) this Agreement between Yuba and DWR, pursuant to which DWR will have rights to beneficially use water flows made available by Yuba through the Fisheries Agreement, the Conjunctive Use Agreements, and additional water releases from the Yuba Project, which Yuba asserts it would not and could not make available from the Yuba Project in the absence of the Yuba River Accord and without the revenues provided to Yuba under this Agreement.

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F. DWR supports the Yuba River Accord, and is willing to enter into this Agreement because it will enable the Yuba River Accord to become effective, thereby improving fishery conditions on the Yuba River and improving water supplies to DWR for: (1) the EWA; (2) the SWP contractors; and (3) to other water users (including CVP contractors) pursuant to DWR's dry-year supplemental water supply programs.

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G. The Contracting Parties believe that this Agreement is consistent with: (1) Yuba's commitments to utilize water management tools (such as conjunctive use of groundwater), to create operational efficiencies, and manage water shortage risks in new ways that would benefit the fisheries and augment water supplies for downstream users; and (2) the Projects' need for additional water supplies.

H. Yuba is authorized under the Yuba Act to enter into long-term contracts to sell water for use outside of Yuba County, subject to the provision of Section 5 of the Yuba Act. Yuba has determined, after compliance with the procedures set forth in Section 5 of the Yuba Act, that the water subject to sale or disposition under this Agreement will not be needed during the term of this Agreement by or for the Member Units of Yuba. Yuba has further determined that Yuba is willing, in exchange for the consideration described in this Agreement, to enter into this Agreement.

I. The Contracting Parties, in coordination and consultation with the SWP contractors and CVP contractors, carried out pilot water transfer programs during the 2006 and 2007 Water Accounting Years, and, based on the success of these pilot programs, desire to move forward with this Agreement, as part of the Yuba River Accord.

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J. A portion of the Water delivered under this Agreement will be paid for with funds appropriated pursuant to Chapter 7(d) of Proposition 50, California Water Code Section 79550(d).

**K. DWR has entered into separate agreements with the SWP contractors and the CVP contractors for the allocation of and/or payment for the Water to the extent determined necessary by DWR prior to executing this Agreement. Reclamation has determined to not be a party to this Agreement until after Reclamation has completed the reinstated consultation under ESA regarding the future operation of the CVP and SWP. Yuba and DWR intend to enter into an appropriate amendment of this Agreement at such time as Reclamation is able to become a party, subject to Reclamation and DWR entering into a separate agreement for the allocation of and payment for the Water under this Agreement.**

**Deleted: DWR and Reclamation have entered into a separate agreement for the allocation of the Water. In addition, DWR has entered into separate agreements with its SWP contractors, and Reclamation has entered into separate agreements with its CVP contractors, for the allocation of and/or payment for the Water.**

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L. The Contracting Parties have determined that this Agreement does not conflict with Section 25 of the Short-Term Phase 8 Settlement Agreement.

AGREEMENT

The Contracting Parties agree as follows:

1. Definitions.

When used herein, the term:

a. "Buyer" means DWR.

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b. "CALFED" means the joint federal and California program, administered by the California Bay-Delta Authority, intended to develop and implement a long-term comprehensive plan that will, among other purposes, restore ecological health and improve water management for beneficial uses of the Bay-Delta System.

c. "CEQA" means the California Environmental Quality Act.

d. "Component 1 Water" means the water supplies described in Section 5 of this Agreement.

e. "Component 2 Water" means the water supplies described in Section 6 of this Agreement.

f. "Component 3 Water" means the water supplies described in Section 7 of this Agreement.

g. "Component 4 Water" means the water supplies described in Section 8 of this Agreement.

h. "Conference Year" means a Water Year for which the North Yuba Index is less than 500,000 acre-feet, calculated according to the procedures and formulas set forth in Exhibit 1 to this Agreement, and using the latest available forecasts for the Water Year.

i. "Conjunctive Use Agreements" means those agreements (if any) for implementing a conjunctive use and water use efficiency program between Yuba and a sufficient number of Member Units that Yuba determines is satisfactory for Yuba to meet Yuba's obligations under this Agreement, the Fisheries Agreement, and the Yuba Act.

j. "Contracting Parties" means DWR and Yuba.

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k. "CVP" means the Central Valley Project, operated by Reclamation.

l. "Decision 1644" means Revised Water-Right Decision 1644 of the State Board, adopted on July 16, 2003.

Deleted: "CVPIA" means the Central Valley Project Improvement Act, Title 34 of the Act of October 30, 1992 (106 Stat. 4706).¶  
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m. "DWR" means the Department of Water Resources of the State of California.

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n. "ESA" means the federal Endangered Species Act of 1973, as amended (16 U.S.C. sections 1531-1544).

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o. "EWA" means the environmental water account program described in the CALFED Record of Decision, as extended by amendment and supplemental approvals, or a long-term environmental water account program.

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p. "Feather River Diversion Facility" means an intake structure, pumping facilities, a fish screen that meets State and Federal fish screen criteria, and related facilities that Yuba may consider constructing at some future time at or below the confluence of the Yuba River and the Feather River for the diversion of water under Yuba's existing water rights for use within Yuba County. Yuba has no current plans to develop or construct the Feather River Diversion facility. If this project were developed, the Feather River Diversion Facility would be added as a point of re-diversion under Yuba's existing water rights. On a real-time basis, diversions by Yuba at the Feather River Diversion Facility: (1) would not exceed the quantity of water that would have been available to Yuba for diversion from Yuba River flows upstream of its confluence with the Feather River; (2) when added to the quantity of water diverted by Yuba at Yuba's Daguerre Point of Diversion, would not exceed the quantities of water under Yuba's water rights that Yuba had diverted to beneficial use under applicable provisions of law (including Chapter 1 of Part 1 of Division 2 of the Water Code) prior to the initiation of water diversions at the Feather River Diversion Facility; and (3) would not cause adverse impacts to, or interfere with, DWR or Reclamation's operations of the SWP and CVP, or cause DWR or Reclamation to have to modify operations of their respective SWP or CVP facilities.

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q. "FERC" means the Federal Energy Regulatory Commission.

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r. "FERC License" means the license, as amended, issued to Yuba by FERC for the operation of the power facilities of the Yuba Project, the term of which expires on April 3, 2016.

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s. "FERC Annual License" means one or more annual licenses issued to Yuba by FERC for the operation of the power facilities of the Yuba Project following the expiration of the term of the FERC License.

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i. "FERC Long-Term License" means the long-term license issued to Yuba by FERC for the operation of the power facilities of the Yuba Project following the expiration of the term of the FERC License and the last FERC Annual License.

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ii. "Final Classification" means the year-type classification for the Sacramento River region in the May issue of DWR's Bulletin 120.

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y. "Fisheries Agreement" means the agreement among Yuba, the California Department of Fish and Game, and other parties, under which Yuba operates the Yuba Project to provide higher flows in the lower Yuba River under certain conditions to improve fisheries protection.

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y. "Force Majeure Event" means any: (1) flood; (2) earthquake; (3) failure of the California Aqueduct, the Delta-Mendota Canal, levees, other conveyance facilities, or other major components of the SWP, CVP or the Yuba Project; (4) act of God (other than drought); or (5) any other event (other than a Regulatory Action) beyond the reasonable control of DWR, Reclamation, or Yuba that significantly affects the ability to divert or use Water delivered by Yuba under this Agreement, or that significantly affects Yuba's ability to deliver Water under this Agreement while also meeting its obligations to its Member Units or its obligations under the Fisheries Agreement.

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x. "Groundwater O&M Costs" means the costs related to pumping groundwater as described in Section 12 ("Other Payments to Yuba by Buyers") of this Agreement.

y. "Groundwater Substitution Transfer Monitoring and Operations Program" means the program, set forth in Exhibit 3 to this Agreement, pursuant to which Yuba will monitor and report groundwater pumping to implement this Agreement.

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z. "Management Committee" means the committee, consisting of one representative each from Yuba, DWR, the CALFED fishery agencies on behalf of EWA, SWP contractors, and CVP contractors, established under Section 14 ("Technical Committee and Management Committee") of this Agreement.

Deleted: "Groundwater O&M Costs" means the costs related to pumping groundwater as described in Section 12 ("Other Payments to Yuba by Buyers

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aa. "Member Units" means a "Member Unit" as defined in section 84-2(g) of the Yuba Act.

bb. "NEPA" means the National Environmental Policy Act.

cc. "PG&E" means Pacific Gas and Electric Company.

dd. "PG&E Power Contract" means the power purchase contract between Yuba and PG&E related to the operation of the Yuba Project for the generation of hydroelectric power, dated May 13, 1966.

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ee. "Projects" means the SWP and the CVP.

ff. "Reclamation" means the United States Department of the Interior, Bureau of Reclamation.

gg. "Regulatory Action" means a court order, regulatory action or change in applicable law that significantly affects either the ability to divert or use Water, or that significantly affects Yuba's ability to deliver Water while also meeting its obligations to its Member Units or its obligations under the Fisheries Agreement.

hh. "Short-Term Phase 8 Settlement Agreement" means the "Short-Term Agreement to Guide Implementation of Short-Term Water Management Actions to Meet Local Water Supply Needs and to Make Water Available to the SWP and CVP to Assist in Meeting the Requirements of the 1995 Water Quality Control Plan and to Resolve Phase 8 Issues" (effective date March 24, 2003).

ii. "State Board" means the California State Water Resources Control Board.

jj. "SWP" means the State Water Project operated by DWR. The SWP is also known as the State Water Facilities, as defined in California Water Code section 12934(d).

kk. "Technical Committee" means the committee, consisting of technical representatives from Yuba, DWR, the CALFED fishery agencies on behalf of EWA, SWP contractors and CVP contractors, established under Section 14 ("Technical Committee and Management Committee") of this Agreement.

ll. "Water" means Component 1 Water through Component 4 Water delivered by Yuba in a manner consistent with the provisions of Section 11 ("General Provisions Applicable to Water") of this Agreement.

mm. "Water Accounting Year" means the twelve-month period from January 1 to December 31. The Water Accounting Year will be used to account for Water.

nn. "Water Year" means the twelve-month period from October 1 of one year through September 30 of the following year. For this Agreement, each Water Year will be classified: (1) as "Wet," "Above-Normal," "Below-Normal," "Dry" or "Critical," based on the Sacramento Valley Water Year Hydrologic Classification in Figure 1 on page 188 of the State Board's March 15, 2000, Revised Water-Right Decision 1641; or (2) as a "Conference Year," based on the procedures and formulas set forth in Exhibit 1 to this Agreement, using the latest available forecast for the Water Year.

oo. "Yuba" means the Yuba County Water Agency.

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Deleted: "Policy Committee" means the committee, consisting of one representative each from Yuba, DWR, Reclamation, the CALFED fishery agencies on behalf of EWA, SWP contractors, and CVP contractors, established under Section 14 ("Technical Committee and Policy Committee") of this Agreement. ¶

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**pp.** "Yuba Act" means the Yuba County Water Agency Act, California Statutes 1959, Chapter 788, as amended.

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**qq.** "Yuba Project" means the Yuba River Development Project, including New Bullards Bar Dam and Reservoir on the North Yuba River.

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**rr.** "Yuba River Accord" means Yuba's initiative as described in Recitals D and E of this Agreement.

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**2. Term of Agreement.**

This Agreement will terminate on December 31, 2025, or when all obligations under this Agreement have been satisfied, whichever is later, unless this Agreement is terminated earlier as provided herein.

**3. Effective Date.**

This Agreement will become effective when all of the following have occurred: (1) full execution of this Agreement; (2) full execution of the Fisheries Agreement; (3) full execution of the Conjunctive Use Agreements (if any, unless Yuba provides DWR written notification of Yuba's waiver of this condition); (4) full execution of an agreement between Yuba and PG&E to amend provisions of the PG&E Power Contract, and approval of the California Public Utilities Commission of such an amendment, if determined necessary by Yuba (unless Yuba provides DWR written notification of Yuba's waiver of this condition); (5) receipt of all State Board approvals that may be necessary to enable the Fisheries Agreement and this Agreement to be fully implemented; and (6) full execution of the agreements among DWR and SWP contractors and CVP contractors, referred to in Recital K of this Agreement, to the extent determined necessary by DWR to satisfy its payment obligations to Yuba under this Agreement. The Contracting Parties will support the actions described in this section.

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**4. Actions Taken by Yuba to Make Water Available.**

**A.** In accordance with Section 5 of the Yuba Act, all sales of Water are subject to the prior right to the use of such water or Yuba facilities by or for the Member Units. Yuba has taken the following measures to assure that the quantities of Water will be available to DWR during all Water Year types, as provided in this Agreement, for the term of this Agreement:

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**1.** Yuba has entered into the Conjunctive Use Agreements (if any) under which the contracting Member Units have agreed to provide groundwater supplies in substitution for surface water supplies to assist Yuba in implementing this Agreement, to the extent (if any) determined by Yuba to be satisfactory for Yuba to meet Yuba's obligations under this Agreement, the Fisheries Agreement, and the Yuba Act; and

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2. Yuba is implementing a groundwater monitoring program within its service area to ensure that the groundwater supply developed pursuant to the Conjunctive Use Agreements (if any) is within the long-term safe yield of the affected aquifer; and

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3. The Board of Directors of Yuba has adopted a resolution making findings concerning Yuba's compliance with Section 5 of the Yuba Act, and determining that the Water exceeds the needs of its Member Units and that Yuba can and will perform its obligations under this Agreement.

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B. In addition, Yuba may consider the installation and operation of the Feather River Diversion Facility at some future time in the event that Yuba determines that operation of the Feather River Diversion Facility would assist Yuba in making water supplies available within Yuba County. Subject to Yuba agreeing to operate this facility in the manner described in Section 1(p) of this Agreement, DWR will not oppose the installation and operation of the Feather River Diversion Facility for this purpose, and will not object to Yuba obtaining regulatory permits and approvals for the Feather River Diversion Facility.

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5. Component 1 Water

A. Component 1 Water Quantity.

1. In each of the first eight Water Accounting Years of this Agreement (January 1, 2008 through December 31, 2015), Yuba will deliver to the Buyer, for use by the EWA, and the Buyer will pay for, 60,000 acre-feet of Component 1 Water, subject to Section 11 ("General Provisions Applicable to Water") of this Agreement. The total quantity of Component 1 Water that Yuba will deliver to the Buyer during the first eight Water Accounting Years of this Agreement will be 480,000 acre-feet. Unless conditions under Section 23.D. apply, Component 1 Water will be used to support continued implementation of EWA fishery protection purposes under the EWA Operating Principles Agreement (dated August 28, 2000, as amended) and that supplement regulatory obligations existing in 2006.

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2. In certain years, and pursuant to the accounting principles set forth in **Exhibit 1**, operational limitations of the Yuba Project, the CVP, and/or the SWP may cause the quantity of Component 1 Water that Yuba can deliver to the Buyer to be reduced below 60,000 acre-feet during a Water Accounting Year. Under those circumstances, unless the Contracting Parties agree otherwise, Yuba will deliver the undelivered Component 1 Water: (a) during the next Water Accounting Year that is not a Dry or Critical Water Year; (b) when such make-up water can be delivered from Yuba's available surface-water supply; and (c) on a schedule that is acceptable to the Buyer and Yuba that would not impair the ability of Yuba to make Components 2 through Components 4 Water available, as provided in this Agreement.

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3. The Buyer and Yuba will schedule Component 1 Water pursuant to Section 9 ("Scheduling of Water") of this Agreement.

4. In all Water Accounting Years that include all or part of the term of any FERC Annual License, Yuba will deliver to the Buyer, and the Buyer will pay for, 60,000 acre-feet of Component 1 Water, subject to Sections 15A(2) and 15B of this Agreement.

5. The quantities of Component 1 Water delivered by Yuba to the Buyer during all Water Accounting Years that include the term of the FERC Long-Term License, and do not include any part of the term of any FERC Annual License, will be subject to Sections 15A(3) and 15C of this Agreement.

**B. Component 1 Water Pricing.**

1. As full compensation to Yuba for making Component 1 Water, available during each of the first eight Water Accounting Years of this Agreement, the Buyer will pay Yuba \$30,900,000. This payment will be made as described in Section 5C and Section 10 ("Invoicing") of this Agreement.

2. The pricing provisions applicable to Component 1 Water delivered by Yuba to the Buyer during all Water Accounting Years after the first eight Water Accounting Years will be those set forth in Section 15 ("Quantities of and Pricing Provisions for Water During a FERC Annual License and During the FERC Long-Term License") of this Agreement.

**C. Component 1 Water Payment Provisions.**

In accordance with Section 10 ("Invoicing") of this Agreement, Yuba will, within thirty days of the Effective Date, submit an invoice to DWR for the payment of \$30,900,000. DWR will make payment to Yuba within sixty days of the date the invoice has been received by both the DWR Contract Manager and the Accounting Office.

**6. Component 2 Water.**

**A. Component 2 Water Quantity.**

1. Yuba will deliver to the Buyer, subject to Section 11 ("General Provisions Applicable to Water") of this Agreement, and the Buyer will pay for:

a. In any Water Year that has a Final Classification as Dry, 15,000 acre-feet of Component 2 Water; and

b. In any Water Year that has a Final Classification as Critical, 30,000 acre-feet of Component 2 Water.

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*Notwithstanding any other provision of this Agreement, the amount of Component 2 Water that Yuba is required to deliver under this section will not exceed in any Water Year the quantity of Water accounted for as Delivered Water between April 21 and June 30 in accordance with Exhibit 1 ("Scheduling and Accounting Principles") of this Agreement. [Drafting note: Component 2 water is intended to provide the Projects the benefit of higher releases from April 21 through June 30 that would have occurred under the instream flow requirements of long-term SWRCB Decision 1644. Yuba asserts that, especially in light of potential restrictions on the ability of the Projects to export water during this time period, Component 2 Water should be accounted for only during this time period. This proposed revision has not been accepted by DWR.]*

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. . . 3. In all Water Accounting Years that include all or part of the term of any FERC Annual License, Yuba will deliver to the Buyers Component 2 Water, subject to Sections 15A(2) and 15B of this Agreement.¶  
. . . 4. The quantities of Component 2 Water delivered by Yuba to the Buyers

2. The Buyer and Yuba will schedule Component 2 Water pursuant to Section 9 ("Scheduling of Water") of this Agreement.

3. In all Water Accounting Years that include all or part of the term of any FERC Annual License, Yuba will deliver to the Buyer Component 2 Water, subject to Sections 15A(2) and 15B of this Agreement.

4. The quantities of Component 2 Water delivered by Yuba to the Buyer during all Water Accounting Years that include the term of the FERC Long-Term License, and do not include any part of the term of any FERC Annual License, will be subject to Sections 15A(3) and 15C of this Agreement.

**B. Component 2 Water Pricing.**

1. The Buyer will pay Yuba for Component 2 Water as follows:

- a. In any Water Year that has a Final Classification as Dry, \$50.00 per acre-foot;
- b. In any Water Year that has a Final Classification as Critical, \$62.50 per acre-foot; and
- c. The payment adjustments (if any) provided for in Section 12C of this Agreement.

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2. The Buyer will pay Yuba for Component 2 Water pursuant to Section 6C and Section 10 ("Invoicing") of this Agreement.

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3. The pricing provisions applicable to Component 2 Water delivered by Yuba to Buyer during all Water Accounting Years that include all or part of the term of any FERC Annual License or the term of the FERC Long-Term License are set forth in Section 15 ("Quantities of and Pricing Provisions for Water During a FERC Annual License and During the FERC Long-Term License") of this Agreement.

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C. Component 2 Payment Provisions.

1. For each Water Year that Component 2 Water is being delivered to ~~the Buyer~~, Yuba will submit an invoice to ~~the Buyer~~ on or after June 1 for fifty percent of the amount due for Component 2 Water scheduled to be delivered to the Buyer pursuant to this Agreement, adjusted by an amount equal to fifty percent of any credits or reimbursements due from Yuba to the Buyer. By January 7 of the subsequent year, Yuba will submit an invoice to ~~the Buyer~~ for the remaining fifty percent of the amount due for Component 2 Water scheduled to be delivered to the Buyer pursuant to this Agreement, less the remaining amount of any credits or reimbursement due the Buyer. The invoices will contain all of the information and be transmitted to Buyer as set forth in Section 10 ("Invoicing") of this Agreement.

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2.      DWR will pay Yuba within sixty days of the date that both the DWR Contract Manager and the Accounting Office receive invoices containing all of the information required by Section 10(B) of this Agreement. With respect to the first invoice from Yuba, the Buyer will pay Yuba an amount equal to fifty percent of the price for the Component 2 Water that has been scheduled for delivery during the current Water Accounting Year in accordance with Section 9 ("Scheduling of Water") of this Agreement, minus fifty percent of any credit or reimbursement due from Yuba to the Buyer pursuant to Section 12 ("Payments for Fixed Annual Costs") of this Agreement. With respect to the second invoice from Yuba, the Buyer will pay the remaining amount due to Yuba for Component 2 Water, based on an accounting of actual Water deliveries in the previous Water Accounting Year, less the remaining amount of any credit or reimbursement due the Buyer pursuant to Section 12 ("Payments for Fixed Annual Costs") of this Agreement. With respect to both invoices from Yuba, DWR will pay Yuba within sixty days of the date both the DWR Contract Manager and the Accounting Office have received the appropriate invoices containing all of the information required by Section 10(B) of this Agreement.

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7. Component 3 Water.

A. Component 3 Water Quantity.

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1. Subject to Section 11 ("General Provisions Applicable to Water") of this Agreement:

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a. When the allocations as of April 21:

(i) For CVP South of Delta agricultural contractors are at or below thirty-five percent of their CVP contractual entitlements, and for SWP contractors are at or below forty percent of their SWP water supply contract Table A Amounts, Yuba will deliver to the Buyer, and the Buyer will pay for, 40,000 acre-feet of Component 3 Water; or

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(ii) For CVP South of Delta agricultural contractors are at or below forty-five percent and above thirty-five percent of their CVP contractual

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entitlements, or for SWP contractors are at or below sixty percent and above forty percent of their SWP water supply contract Table A Amounts the Buyer, on or before April 21, the Buyer may request that Yuba deliver up to 40,000 acre-feet of Component 3 Water, and Yuba will deliver to Buyer the quantity of Component 3 Water requested.

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2. The Buyer and Yuba will schedule Component 3 Water pursuant to Section 9 ("Scheduling of Water") of this Agreement. In addition:

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a. If after April 21, but prior to May 21, allocations to CVP South of Delta agricultural contractors or SWP contractors decrease, then:

(i) if section 7A(1)(a)(ii) of this Agreement remains applicable notwithstanding the decreased allocation(s), the Buyer will have the right to call for Component 3 Water or additional Component 3 Water up to the maximum amount authorized by section 7A(1)(a)(ii); provided, however, that the quantity or increased quantity of Component 3 Water Yuba is required to deliver will be reduced to reflect any reduction in the amount of groundwater pumping availability between April 21 and May 21.

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(ii) if section 7A(1)(a)(i) of this Agreement becomes applicable due to the decreased allocations, and the Buyer had opted to have less than 40,000 acre feet of Component 3 Water delivered, Yuba will deliver to the Buyer, and the Buyer will pay for 40,000 acre feet of Component 3 Water reduced by an amount that reflects any reduction in the amount of groundwater pumping availability between April 21 and May 21.

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b. If after April 21, but prior to May 21, allocations to CVP South of Delta agricultural contractors or SWP contractors increase, then the Buyer may, on or before May 21, reduce their request for Component 3 Water to the greater of zero or the quantity of water already delivered by Yuba plus the quantity of water already stored by Yuba through the substitution of groundwater for surface water in anticipation of Component 3 Water deliveries originally requested by the Buyer. This section will not apply to circumstances where, notwithstanding an increase in the Buyer's May water supply allocations, Section 7(A)(1)(a)(i) of this Agreement remains applicable.

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3. In all Water Accounting Years that include all or part of the term of any FERC Annual License, Yuba will deliver to the Buyer, and the Buyer will pay for, Component 3 Water, subject to Section 15B of this Agreement.

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4. The quantities of Component 3 Water delivered by Yuba to the Buyer during Water Accounting Years that include the term of the FERC Long-Term License, and do not include any part of the term of any FERC Annual License, will be subject to Section 15C of this Agreement.

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**B. Component 3 Water Pricing.**

1. The Buyer will pay Yuba for Component 3 Water as follows:

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a. In any Water Year that has a Final Classification as Above-Normal, \$50.00 per acre-foot;

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b. In any Water Year that has a Final Classification as Below-Normal, \$75.00 per acre-foot;

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c. In any Water Year that has a Final Classification as Dry, \$100.00 per acre-foot;

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d. In any Water Year that has a Final Classification as Critical, \$125.00 per acre-foot; and

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e. The payment adjustments (if any) provided for in Section 12C ("Payments for Adjustments in Groundwater O&M Costs) of this Agreement.

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2. The Buyer will pay Yuba for Component 3 Water pursuant to Section 7C and Section 10 ("Invoicing") of this Agreement.

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3. The pricing provisions applicable to Component 3 Water delivered by Yuba to Buyer during all Water Accounting Years that include all or part of the term of any FERC Annual License or the term of the FERC Long-Term License are set forth in Sections 15B and C of this Agreement.

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**C. Component 3 Payment Provisions**

1. In accordance with Section 10 ("Invoicing") of this Agreement, Yuba will submit an invoice to the Buyer on or after June 1 each Water Accounting Year for fifty percent of the amount due for Component 3 Water scheduled to be delivered to the Buyer pursuant to this Agreement, adjusted by an amount equal to fifty percent of any credits or reimbursements due from Yuba to the Buyer. By January 7 of the subsequent year, Yuba will submit an invoice to the Buyer for the remaining fifty percent of the amount due for Component 3 Water scheduled to be delivered to the Buyer pursuant to this Agreement, less the remaining amount of any credits or reimbursement due the Buyer.

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2. In accordance with Section 10 ("Invoicing") of this Agreement, DWR will pay Yuba within sixty days of the date that both the DWR Contract Manager and the Accounting Office receive the appropriate invoices and verification that the amount of Component 3 Water specified therein has been scheduled in accordance with Section 9 ("Scheduling of Water") of this Agreement. The Buyer will pay Yuba an amount equal to fifty percent of the price for the Component 3 Water that has been scheduled for delivery during the current Water Accounting Year in accordance with Section 9 ("Scheduling of Water") of this Agreement, minus fifty percent of any credit or reimbursement due from Yuba to the Buyer pursuant to Section 12 ("Payments for Fixed Annual Costs") of this Agreement. On or before March 7 of the subsequent year, the Buyer will pay the remaining amount due to Yuba for Component 3 Water, based on an accounting

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of actual Water deliveries in the previous Water Accounting Year, less the remaining amount of any credit or reimbursement due the Buyer pursuant to Section 12 ("Payments for Fixed Annual Costs") of this Agreement.

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**8. Component 4 Water.**

**A. Component 4 Water Quantity.**

1. Yuba will provide to the Buyer, subject to Section 11 ("General Provisions Applicable to Water") of this Agreement, Component 4 Water as follows:

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a. On or before April 10 of each year, Yuba will inform the Buyer of the quantity of Component 4 Water that Yuba could make available from Yuba's available surface and groundwater that Water Accounting Year.

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b. By May 15 the Buyer will notify Yuba if it will take delivery of any or all of the Component 4 Water that Yuba informed the Buyer that Yuba will make available.

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2. The Buyer and Yuba will schedule Component 4 Water pursuant to Section 9 ("Scheduling of Water") of this Agreement.

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3. In all Water Accounting Years that include all or a part of the term of any FERC Annual License, Yuba will deliver to the Buyer, and the Buyer will pay for, Component 4 Water pursuant to Section 15B of this Agreement.

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4. The quantities of Component 4 Water delivered by Yuba to the Buyer during all Water Accounting Years that include the term of the FERC Long-Term License, and do not include any part of the term of any FERC Annual License, will be subject to Section 15C of this Agreement.

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**B. Component 4 Water Pricing.**

1. The Buyer will pay Yuba for Component 4 Water as follows:

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a. In any Water Year that has a Final Classification as Wet, \$25.00 per acre-foot;

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b. In any Water Year that has a Final Classification as Above-Normal, \$50.00 per acre-foot;

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c. In any Water Year that has a Final Classification as Below-Normal, \$75.00 per acre-foot;

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d. In any Water Year that has a Final Classification as Dry, \$100.00 per acre-foot;

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e. In any Water Year that has a Final Classification as Critical, \$125.00 per acre-foot

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f. The payment adjustments (if any) provided for in Section 12C ("Payments for Adjustments in Groundwater O&M Costs") of this Agreement.

2. The Buyer will pay Yuba for Component 4 Water pursuant to the payment and invoicing provisions of this Section.

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3. The pricing provisions applicable to Component 4 Water delivered by Yuba to Buyer during all Water Accounting Years that include all or part of the term of any FERC Annual License or the term of the FERC Long-Term License are set forth in Sections 15B and C of this Agreement.

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**C. Component 4 Payment Provisions.**

1. In accordance with Section 10 ("Invoicing") of this Agreement, Yuba will submit an invoice to the Buyer on or after June 1 each Water Accounting Year for fifty percent of the amount due for Component 4 Water scheduled to be delivered to the Buyer pursuant to this Agreement, adjusted by an amount equal to fifty percent of any credits or reimbursements due from Yuba to the Buyer. By January 7 of the subsequent year, Yuba will submit an invoice to the Buyer for the remaining fifty percent of the amount due for Component 4 Water scheduled to be delivered to the Buyer pursuant to this Agreement, less the remaining amount of any credits or reimbursement due the Buyer.

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2. In accordance with Section 10 ("Invoicing") of this Agreement, DWR will pay Yuba within sixty days of the date that both the DWR Contract Manager and the Accounting Office receive the appropriate invoices and verification that the amount of Component 4 Water specified therein has been scheduled in accordance with Section 9 ("Scheduling of Water") of this Agreement. The Buyer will pay Yuba an amount equal to fifty percent of the price for the Component 4 Water that has been scheduled for delivery during the current Water Accounting Year in accordance with Section 9 ("Scheduling of Water") of this Agreement, minus fifty percent of any credit or reimbursement due from Yuba to the Buyer pursuant to Section 12 ("Payments for Fixed Annual Costs") of this Agreement. On or before March 7 of the subsequent year, the Buyer will pay the remaining amount due to Yuba for Component 4 Water, based on an accounting of actual Water deliveries in the previous Water Accounting Year, less the remaining amount of any credit or reimbursement due the Buyer pursuant to Section 12 ("Payments for Fixed Annual Costs") of this Agreement.

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**9. Scheduling of Water.**

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On or about April 10 of each Water Accounting Year, or as soon thereafter as practicable, the Contracting Parties will agree on a proposed delivery schedule for Component 1, 2, 3 and 4 Water. The proposed schedule may be revised periodically thereafter, and the Contracting Parties will agree on a final schedule no later than May 21. The final schedule may be adjusted to account for changes in Bay-Delta conditions that affect the delivery of Water, and for changes in the flow schedule for the lower Yuba River as provided for in the Fisheries Agreement. The proposed and final schedules will also show the scheduling of water delivered by Yuba under the Short-Term Phase 8 Settlement Agreement. The scheduling of Water, and any adjustments to the schedule, will be in accordance with the water scheduling and accounting provisions set forth in **Exhibit 1** ("Scheduling and Accounting Principles") of this Agreement.

**10. Invoicing.**

**A.** ~~Reserved.~~

**B.** Yuba's invoices to DWR will contain the following information:

- ~~i)~~ Federal and State Agreement numbers;
- ~~ii)~~ Yuba's Taxpayer Identification Number;
- ~~iii)~~ remittance address;
- ~~iv)~~ point of contact;
- ~~v)~~ for estimated payments, verification that the Water has been scheduled in accordance with Section 9 ("Scheduling of Water") of this Agreement; and
- ~~vi)~~ for year-end payments, certification that the Water has been delivered.

**C.** Yuba will submit, at the same time, two copies of each invoice to DWR State Water Project Analysis Office and one copy to DWR Accounting office at the following addresses:

Department of Water Resources  
Chief, State Water Project Analysis Office  
1416 Ninth Street  
Post Office Box 942836  
Sacramento, California 94236-0001

Department of Water Resources  
Accounting Office, Contracts Payable Unit  
Post Office Box 942836  
Sacramento, California 94236-0001

**11. General Provisions Applicable to Water.**

**A. Accounting for Water.**

Water delivered by Yuba to the Buyer will be accounted for in the manner set forth in **Exhibit 1** ("Scheduling and Accounting Principles") of this Agreement.

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Deleted: On or before May 31 of each year, the Buyers will notify Yuba of the percentage allocation of payments to be billed by Yuba that year to DWR and Reclamation, respectively; provided that, the Buyers will not allocate a payment obligation to one of the Buyers to the extent that the Buyer lacks funds to make the payment that year.¶

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... U.S. Bureau of Reclamation, Mid Pacific Region¶  
... Re: Agreement No. (to be provided)¶  
... 2800 Cottage Way¶  
... Sacramento, California 95825¶  
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**B. Reservoir Refill Impact Accounting.**

Yuba will provide assurance to the Buyer and Reclamation that the refilling of reservoir storage in the Yuba Project resulting from the delivery of Water under this Agreement will not adversely impact the Projects by complying with the provisions of **Exhibit 2** ("Reservoir Refill Accounting Provisions") of this Agreement. The provisions of **Exhibit 2** will not apply to Water made available as a result of Yuba delivering groundwater instead of surface water to its Member Units to implement this Agreement.

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**C. Yuba's Conjunctive Use Program.**

To the extent that Yuba delivers groundwater instead of surface water to its Member Units in order to deliver Water to the Buyer pursuant to this Agreement, Yuba will comply with the provisions of **Exhibit 3** ("Groundwater Substitution Transfer Monitoring and Operations Program") of this Agreement.

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**D. Conference Year Principles.**

During any Conference Year, the Contracting Parties will meet (along with the parties to the Fisheries Agreement and the Conjunctive Use Agreements) to determine how to address the circumstances, and to discuss the operation of the Yuba Project during that Water Accounting Year. During a Conference Year: (1) Yuba will have no obligation to deliver any quantity of Components 1 through 4 Water; (2) Yuba will not have to refund any part of the payment received for Component 1 Water; and (3) Yuba will deliver in a subsequent Water Accounting Year on a schedule that is acceptable to the Buyer and Yuba the quantity of Component 1 Water that was not delivered during the Conference Year.

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**E. Efforts to Maximize the Beneficial Use of Water.**

Yuba will optimize to the extent feasible the operation of the Yuba Project to meet Yuba's obligations to supply Water under this Agreement. DWR will coordinate with Reclamation in the operation of the Projects to maximize the beneficial use of Water released by Yuba under this Agreement, including without limitation using all reasonable efforts to store water in Project facilities when Delta pumping is constrained and to avoid spills of water stored as result of the release of Water.

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**F. Sale to Third Parties.**

To the extent the Water is otherwise transferable under California law, in those years when Yuba offers Components 3 or 4 Water, but the Buyer decline to take all of the Water offered, Yuba may sell the Water not taken by Buyer to a third party, provided that such sale to the third party will not impair Yuba's ability to meet its obligations to deliver Components 1 through 4 Water in the current or any future Water Accounting Year. In addition, to the

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extent the water is otherwise transferable under California law, Yuba may sell to a third party any quantity of Components 1, 3 or 4 Water released by Yuba that would have been accounted for as Water except for the inability of the Buyer to take delivery (e.g., during times when the Bay-Delta was out of balance). Yuba will provide the Buyer ten days' advance notice of a sale to a third party under this section.

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**G. Periodic Accounting of Water Delivered by Yuba.**

After the first ~~eight~~ years of operations under this Agreement, and as appropriate thereafter, the Contracting Parties, with the assistance of the Technical Committee and the ~~Management~~ Committee, will develop a comprehensive accounting of all Water delivered under this Agreement. If it is determined that less than the quantities of Water required to be delivered ~~during~~ the first ~~eight~~ years have been delivered, and the ~~Buyer has~~ paid for quantities of Water that have not been delivered, then Yuba will deliver supplies of Water to the Buyer to make up for such deficiencies, on a schedule that is acceptable to the Buyer and Yuba that would not impair the ability of Yuba to make other deliveries of Water under this Agreement.

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**12. Other Payments to Yuba by the Buyer,**

**A. Diesel Conversions.**

In furtherance of the mitigation of potential impacts to air quality from implementation of the Accord, Yuba has implemented a program to convert certain pumps used to pump groundwater from diesel to electric, or to other forms of energy that reduce air quality impacts. Conversion of pumps to electricity or other forms of energy that reduce air quality impacts has been and will be performed by Yuba for purposes of this Agreement. Prior to submitting invoices ~~under this section~~ to the Buyer under Section 10 ("Invoicing") of this Agreement, Yuba will: (1) submit to the Technical Committee for review documentation of the diesel conversion work performed and costs incurred from and after September 1, 2004 for purposes of this Agreement and the Accord; and (2) confirm to the ~~Management~~ Committee that the work performed and costs incurred were in furtherance of mitigation of potential impacts on air quality from implementation of the Accord. Subject to receipt of such information and concurrence by the ~~Management~~ Committee, the Buyer will pay Yuba the amount of such invoices, but not more than a total of \$1,000,000.00.

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**B. Payments for Fixed Annual Costs ~~and for Environmental Compliance.~~**

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~~1.~~ During the term of this Agreement, on or before April 1 each year, the Buyer will pay to Yuba up to \$250,000.00 to pay a portion of Yuba's annual costs for implementing the Yuba River Accord. On or before February 1, Yuba will submit to DWR invoices with documentation of costs incurred by Yuba to implement the Yuba River Accord, up to \$250,000 per year. The Buyer will pay Yuba the amount of such invoice, but not more than \$250,000 per year, pursuant to this Section and Section 10 ("Invoicing") of this Agreement. Yuba will provide to the Buyer, for payments made under this subsection, a

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credit against future payments due for Components 2, 3 and 4 Water. Yuba will record and accrue these credits from year to year until Yuba makes Component 2, 3 or 4 Water available, in which time such credits will be applied toward payments due.

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2. Under separate agreements among them, Yuba, DWR and Reclamation have paid the costs of environmental compliance for implementing the Yuba River Accord, which is referred to in Section 16 ("Environmental Compliance") of this Agreement.

**C. Payments for Adjustments in Groundwater O&M Costs.**

During the term of this Agreement, the Buyer will pay Yuba, based on itemized invoices of work done and costs incurred, an amount to compensate for any annual increases above actual 2006 Groundwater O&M Costs, including those costs necessary for upkeep, power, and operation of those fixed assets that are dedicated to making Water available to the Buyer under this Agreement from groundwater sources, and recurring costs or payments required to obtain consents necessary to make Water available under this Agreement from groundwater sources. Groundwater O&M Costs will exclude general district overhead charges. Yuba will submit to the Technical Committee for a thirty-day review the documentation of work done and costs incurred prior to submitting invoices to the Buyer in accordance with the payment and invoicing provisions for Components 2, 3, or 4 Water under this Agreement. The Technical Committee will review invoices to ensure that payments made under the payment and invoicing provisions for Components 1 through 4 Water do not duplicate payments made under this subsection. Annual increases above the 2006 baseline will be computed based on the Consumer Price Increase as provided by the United States Department of Labor, Bureau of Labor Statistics. *[Drafting note: This section is subject to revision to provide a more specific reference to the applicable Consumer Price Index. Additional drafting note: do we want to provide a more specific CPI, or go with this CPI as described? DWR proposes using 2008 as a baseline. We used 2006 because this is the baseline to be used for the Phase 8 settlement agreements, from which this payment is derived. We need to discuss how this adjustment would be made.]*

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**13. Certain Payments Contingent on Appropriation or Allotment of Funds.**

**A. General.**

In consideration of Yuba's eight-year commitment to deliver Component 1 Water, the Buyer confirm that the funds required to pay Yuba for Component 1 Water during that period have been appropriated, and DWR will encumber the funds to pay Yuba for Component 1 Water during that period on the schedule provided for in Section 5C1 of this Agreement. The Buyer intend that the payments due to Yuba under this Agreement for Components 2, 3, and 4 Water that is made available to the SWP and CVP contractors will be paid from DWR funds received from the SWP and/or CVP contractors. The Buyer has made contractual arrangements with the SWP and CVP contractors under which the SWP and CVP contractors would have an opportunity to make payments due to Yuba under this

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Agreement, in the event that the Buyer fail to make such payments when due, in order to avoid an interruption in Yuba making Water available to the Buyer under this Agreement. To the extent that the Buyer defaults in making the payments due to Yuba under this Agreement, then: (1) Yuba's obligation to make Water available to the Buyer under this Agreement will be excused to the extent and for the duration of the Buyer' default; (2) Yuba may attempt to mitigate its damages by selling Component 3 and Component 4 Water made available under this Agreement to other parties to the extent and for the duration of the Buyer' default; and (3) the Buyer will be obligated to pay Yuba to the extent that Yuba is unable to mitigate Yuba's damages resulting from the Buyer' default.

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The expenditure or advance of any money or the performance of any obligation of the United States under this Agreement will be contingent upon the appropriation or allotment of funds for the purposes of this Agreement. No liability will accrue to the United States in case funds are not appropriated or allotted. ¶

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**B. State Funding Contingency.**

Except to the extent that DWR uses funds from sources that do not require legislative budgetary appropriation, DWR's payment obligations under this Agreement are contingent on appropriation or allotment of funds through the State Budget process.

**14. Technical Committee and Management Committee**

**A. Technical Committee.**

The Technical Committee will: (1) collect, review and analyze information relevant to accounting for Water consistent with **Exhibits 1** through **3**, and information related to advances, payments and cost adjustments; (2) identify and attempt to resolve technical implementation issues; (3) periodically report to the Management Committee on the information gathered and any technical implementation issues identified; and (4) make recommendations to the Management Committee for resolution of any policy issues that arise or for any required factual determinations. If the Technical Committee is unable to agree on a recommendation to the Management Committee, the Technical Committee will cooperate to provide a balanced presentation of the facts, opinions and other information underlying the various positions on the issue to be determined.

**B. Management Committee.**

The Management Committee will: (1) provide policy guidance in implementing this Agreement; (2) make any factual determinations required to implement this Agreement; (3) consider information provided by the Technical Committee, if applicable, when making decisions; and (4) identify and resolve any policy-related implementation issues. If agreement among the representatives to the Management Committee cannot be reached on any issue necessary to the ongoing implementation of the Agreement, the Buyer and Yuba will meet and confer in a good faith effort to reach agreement. In the event that agreement cannot be reached among the Buyer and Yuba on an issue, that issue will be subject to Section 22 ("Remedies and Dispute Resolution") of this Agreement.

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**C. Interaction with River Management Team.**

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DWR will designate a representative to actively participate in the River Management Team established under the Fisheries Agreement. Reclamation may also designate a representative to participate in the River Management Team established under the Fisheries Agreement.

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**15. Quantities of and Pricing Provisions for Water During a FERC Annual License and During the FERC Long-Term License.**

**A. Intent of the Contracting Parties.**

1. Yuba expects that, upon the expiration of the term of the FERC License, FERC will issue to Yuba one or more FERC Annual Licenses, before it issues to Yuba the FERC Long-Term License.

2. The Contracting Parties desire that Yuba continue to deliver, and the Buyer continue to pay for, Components 1 through 4 Water in accordance with Section 11 ("General Provisions Applicable to Water") of this Agreement during any Water Year beginning after September 30, 2015 for which either the FERC License or a FERC Annual License is in effect, if: (a) these quantities of Water can be delivered by Yuba consistent with the terms of the FERC License or any FERC Annual License; and (b) subject to a pricing agreement between the Contracting Parties. The Contracting Parties further intend that, other than the pricing provisions, there will be no change in the other provisions of this Agreement (including the provisions regarding the quantities of Components 1 through 4 Water delivered by Yuba, and paid for by the Buyer) during any Water Year beginning after September 30, 2015 that includes all or part of the term of any FERC Annual License, if the terms of the FERC Annual License do not significantly affect Yuba's ability to make these water supplies available.

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3. The Contracting Parties desire that Yuba continue to deliver, and the Buyer continue to pay for, Components 1 through 4 Water in accordance with Section 11 ("General Provisions Applicable to Water") of this Agreement during any Water Year that is within the term of a FERC Long-Term License, and not within the term of any FERC Annual License, if these quantities of Water can be delivered by Yuba consistent with: (a) the terms of the FERC Long-Term License; (b) the water supply needs within the service area of Yuba; and (c) the ability of the Buyer and Yuba to agree to pricing provisions. The Buyer and Yuba further intend that, other than the quantity and pricing provisions, there will be no change in the other provisions of this Agreement during any Water Year that is within the term of a FERC Long-Term License.

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**B. Quantities of Water and Pricing Provisions Applicable During the Term of the FERC Annual Licenses.**

During any Water Accounting Year beginning after December 31, 2015 during which either the FERC License or any FERC Annual License is in effect, Yuba will deliver, and the Buyer will pay for, Components 1 through 4 Water, in accordance with Section 11 ("General Provisions Applicable to Water") of this Agreement, subject to the following: Yuba may

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adjust the quantities of Water that Yuba will deliver to the Buyer, (but the quantity will not be less than 20,000 acre-feet of Water in each such Water Accounting Year, other than a Conference Year), but only to the extent needed to reflect the ability of Yuba to deliver these quantities of Water consistent with the terms of the FERC Annual License. The Buyer and Yuba will negotiate in good faith the quantity and pricing provisions applicable to Components 1 through 4 during such Water Accounting Years, but under no circumstance will the price for the Water be less than the pricing provisions applicable to Components 1 through 4 Water, as set forth in Sections 5 through 8 of this Agreement.

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**C. Quantities of Water and Pricing Provisions Applicable During the Term of the FERC Long-Term License.**

During any Water Accounting Year that is within the term of the FERC Long-Term License, and for which no part of the Water Accounting Year is within the term of any FERC Annual License, Yuba will deliver, and the Buyer will pay for, Components 1 through 4 Water, in accordance with Section 11 ("General Provisions Applicable to Water") of this Agreement, subject to the following: the Buyer and Yuba reach agreement as to the quantities of Components 1 through 4 Water that Yuba will deliver to the Buyer (but which quantities will not be less than 20,000 acre-feet of Water in any Water Accounting Year through December 31, 2025, other than during a Conference Year), to reflect the ability of Yuba to deliver these quantities of Water consistent with: (a) the terms of the FERC Long-Term License; and (b) the water supply needs within the service area of Yuba. The Buyer and Yuba will negotiate in good faith the quantity and pricing provisions applicable to Components 1 through 4 Water during the term of the FERC Long-Term License.

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**16. Environmental Compliance.**

Yuba, as lead agency under CEQA, and DWR as a responsible agency, have approved and filed notices of determination concerning the implementation of the Yuba River Accord and its environmental effects.

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¶ A. NEPA/ESA.¶

¶ On \_\_\_\_\_, 20\_\_\_\_, Reclamation adopted and approved

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¶ B. CEQA.¶

¶ Yuba, as lead agency, and DWR and \_\_\_\_\_, as

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**17. Approvals and Conditions Precedent to Performance of this Agreement.**

**A. Section 5.2 of the Yuba Act.**

Yuba represents that Yuba has complied with the provisions of Section 5.2 of the Yuba Act, which requires that, prior to entering into this Agreement, the Board of Directors of Yuba to: (1) determine that water to be purchased under this Agreement would be surplus to the amount of water available to meet the contractual requirements of Member Units; (2) hold a public hearing to receive and consider comments on and objections to this Agreement; (3) confirm that a majority in number of registered voters residing within Yuba County have not filed written protests against this Agreement; and (4) find that the long-term purchase of water under this Agreement may be carried out without injuring any legal user of water, without unreasonably affecting fish, wildlife or other instream beneficial uses, and without unreasonably affecting the overall economy of Yuba County.

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**B. Compliance with Water Code Section 1745.10.**

Yuba represents that Yuba has complied with the provisions of Water Code Section 1745.10.

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¶  
... Yuba has obtained approval of the State Board as necessary to enable this Agreement to be fully implemented.¶  
¶  
... C. ...

**C. Other Approvals by Yuba.**

Yuba will be responsible for obtaining approval of the State Board as necessary to enable this Agreement to be fully implemented, and obtaining any other permits and approvals necessary for Yuba to make Water available to the Buyer under this Agreement. [Drafting note: the previous draft assumed the State Board order would be obtained prior to execution of the water purchase agreement. We are now planning to execute the water purchase agreement prior to the State Board hearing.]

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**D. Other Approvals by Buyer.**

Except as otherwise addressed in this Agreement, the Buyer will be responsible for obtaining any permits and approvals necessary for the Buyer to make use of the Water made available under this Agreement

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**18. Place of Use of Water.**

Water made available under this Agreement will be not used outside of the place of use specified in the State Board order approving this delivery of Water from Yuba to the Buyer, without the written consent of Yuba.

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**19. Hold Harmless.**

**A.** DWR will not assert that Yuba, its officers, agents or employees, are liable for damages of any nature whatsoever arising out of any actions or omissions by DWR, its officers, agents or employees, related to DWR's performance of this Agreement, where such liability is caused by an act, error or omission of DWR, its officers, agents or employees.

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**B.** Yuba will not assert that DWR, its officers, agents or employees, are liable for damages of any nature whatsoever arising out of any actions or omissions by Yuba, its officers, agents or employees, related to Yuba's performance of this Agreement, where such liability is caused by an act, error or omission of Yuba, its officers, agents or employees.

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Deleted: and Yuba, their respective officers, agents or employees, are liable for damages of any nature whatsoever arising out of any actions or omissions by Reclamation, its officers, agents or employees, related to Reclamation's performance of this Agreement, where such liability is caused by an act, error or omission of Reclamation

**D.** To the extent permitted by California law, Yuba will indemnify, defend and hold DWR and its officers, agents and employees safe and harmless from any and all claims, judgments, damages, penalties, costs, liabilities and losses (including without limitation, sums paid in settlement of claims, actual attorney's fees, paralegal fees, consultant fees, engineering fees, expert fees and any other professional fees) that arise from or are related in any way to Yuba's activities under this Agreement that are under the

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C. Yuba will not assert that DWR and Reclamation, their respective officers, agents or employees

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exclusive control of Yuba, including but not limited to the release, conveyance, use or distribution of water released by Yuba from the Yuba Project for purposes of this Agreement.

**E.** To the extent permitted by California law, DWR will indemnify, defend and hold Yuba and its officers, agents and employees safe and harmless from any and all claims, judgments, damages, penalties, costs, liabilities and losses (including without limitation, sums paid in settlement of claims, actual attorney’s fees, paralegal fees, consultant fees, engineering fees, expert fees and any other professional fees) that arise from or are related in any way to DWR’s activities under this Agreement that are under the exclusive control of DWR, including but not limited to the conveyance, use or distribution of water made available by Yuba from the Yuba Project for purposes of this Agreement.

**F.** Yuba and its officers, agents, employees and insurers will not be responsible for the quality of water made available by Yuba from the Yuba Project for purposes of this Agreement.

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**20. Force Majeure Event.**

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**A.** A *Force Majeure* Event will excuse or suspend performance as provided in this section for the duration of the *Force Majeure* Event. To the extent that *Force Majeure* Event prevents the Buyer from using the Water delivered by Yuba, then: (a) the Buyer will be excused from paying for Components 2 through 4 Water during the duration of the *Force Majeure* Event; and (b) Yuba will retain the payments received for Component 1 Water with no obligation to deliver this Component 1 Water again at some later time.

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**B.** To the extent that a *Force Majeure* Event prevents Yuba from providing Components 1 through 4 Water, then: (a) Yuba’s performance will be excused during the duration of the *Force Majeure* Event; (b) Yuba will not be required to refund payments for Component 1 Water; and (c) Yuba will deliver this Component 1 Water supply at some later time on a schedule that is acceptable to the Buyer and Yuba.

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**C.** During a *Force Majeure* Event, each of the Contracting Parties will, to the extent practicable, take actions to minimize the impacts of the *Force Majeure* Event on the other Contracting Parties.

**21. Regulatory Action.**

In the event of a Regulatory Action during the term of this Agreement: (a) the affected Contracting Party will promptly notify the other Contracting Parties of the Regulatory Action and the manner in which it affects performance under this Agreement; and (b) the Contracting Parties will proceed under the process provided for in Section 22 ("Remedies and Dispute Resolution"), to the extent applicable. This section does not affect the other rights and remedies of the parties under this Agreement.

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## 22. Remedies and Dispute Resolution.

A. Should any material disputes arise concerning any provision of this Agreement, or the rights and obligations of the Contracting Parties thereunder, including those involving possible termination or those that might cause the initiation of any administrative or judicial proceeding to enforce or interpret this Agreement, the Contracting Parties will present the issue to the Management Committee (which may request assistance from the Technical Committee) for a recommendation for resolving the dispute.

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B. If the Process described in the preceding subsection fails to resolve the dispute within thirty days, the Contracting Parties will submit the dispute to a mediator who has experience in water-related disputes. The costs of any such mediation will be borne one-third each by the Contracting Parties. Initiation of this mediation process will be through written notice by one Contracting Party to the other Contracting Parties. The Contracting Parties reserve all of their other remedies that may be provided by law or equity in the event that such mediation fails to resolve a dispute. The Contracting Parties, in consultation with the mediator, will use their best efforts to resolve the dispute within thirty days. Under no circumstances, however, will mediation under this Section 22 result in a requirement that diminishes, limits or contravenes the discretion, authority or any delegated authority of the Director of DWR under State law.

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C. If mediation fails to resolve the dispute, and prior to commencing any legal action to resolve the dispute, the Contracting Party proposing to commence legal action will provide the other Contracting Party thirty days' written notice of such action, provided that such notice will not be required where a delay in commencing an action would prejudice the interests of the Contracting Party that intends to file suit. During the thirty-day notice period, the Contracting Parties will continue to attempt to resolve the dispute.

## 23. Effect of this Agreement on other Matters.

### A. As a Precedent.

Nothing in this Agreement is intended or will be construed as a precedent or other basis for any argument that the Contracting Parties have waived or compromised their rights that may be available under State or federal law, except as to matters addressed in this Agreement.

### B. As to Water Rights.

The only rights granted to the Contracting Parties as a result of this Agreement are those expressly set forth in this Agreement. The providing of water by Yuba under this Agreement will not confer any appropriative, public trust or other right to water on any person or entity. Nothing in this Agreement is intended or will be construed to act as a forfeiture, diminution or impairment of any water right of Yuba. Consistent with the provisions of California Water Code sections 109, 475, 1011, 1014 through 1017, 1244 and

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11961, the delivery of water under this Agreement will not be evidence of or used to demonstrate either the existence of surplus water after this Agreement expires, or the lack of beneficial use of the water supplies referred to in this Agreement, and the Contracting Parties will not contend otherwise. In accordance with Water Code section 1016, and other applicable provisions of California law, at the conclusion of the term of the water transfers provided for under this Agreement, all rights in, and the use of, the water supplies referred to in this Agreement will revert back to Yuba, and DWR, or any beneficiary of this Agreement, will not do either of the following: (1) bring any claim for continuation of the water supply made available by this Agreement; or (2) claim any right to a continued supply of water made available under this Agreement, based on reliance, estoppel, intervening public use, prescription, water shortage emergency, or unforeseen or unforeseeable increases in demand, or any other cause.

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**C. As to the Phase 8 Settlement**

Nothing contained in this Agreement affects the Contracting Parties' respective rights and obligations under the Short-Term Phase 8 Agreement. The Contracting Parties agree that water provided by Yuba under the Short-term Phase 8 Agreement will be accounted for and delivered on a higher priority than water delivered under this Agreement.

**D. As to the Continuation of the EWA Program**

1. **DWR intends** that Component 1 Water will be dedicated to the EWA, and that in the future, upon completion of environmental documentation for a long-term EWA, the EWA would be sized sufficiently to accommodate the proposed South Delta Improvement Program, including the proposal to increase the maximum diversion rate into Clifton Court Forebay for the SWP Bank's Pumping Plant. If the EWA terminates, **DWR agrees** that Component 1 Water remaining to be delivered under this Agreement will be managed annually, as follows: (a) DWR, in coordination with the California Department of Fish and Game, will first use Component 1 Water to fulfill fishery obligations **that supplement regulatory obligations existing in 2006 and are necessary** to maintain and enhance water supply reliability of the Delta export facilities; and (b) if any Component 1 Water is not used for such fishery obligations, DWR will use the remaining Component 1 Water for other purposes consistent with the requirements of the funding source from which this water was purchased, including funds from Chapter 7(d) of Proposition 50, California Water Code Section 79550(d).

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2. Except as provided in the previous subsection, none of the rights and obligations of the Contracting Parties under this Agreement will be affected in the event that the EWA program terminates prior to the expiration of the term of this Agreement.

**E. As to the Fisheries Agreement.**

None of the rights and obligations of the Contracting Parties under this Agreement will be affected in the event that the Fisheries Agreement terminates prior to the expiration of the term of this Agreement.

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**F. As to the Application of Section 27 of the Federal Power Act.**

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Section 27 of the Federal Power Act limits the licensing authority of FERC with respect to a law regarding the control, appropriation, use or distribution of water used in irrigation or for municipal or other uses. The Contracting Parties, and the SWP and CVP contractors, will not contend or bring any claim that any provision of this Agreement is a law regarding the control, appropriation, use or distribution of water used in irrigation or for municipal or industrial uses, as these terms are used in Section 27 of the Federal Power Act.

**24. General Contracting Provisions.**

**A. Notices.**

The time for providing any notices specified in this Agreement may be extended within the term of this Agreement with the consent of the Contracting Parties, confirmed in writing, without requiring an amendment to this Agreement. All notices and other communications required under this Agreement will be in writing, and will be deemed to have been duly given upon the date of service, if: (a) served personally on the Contracting Party to whom notice is to be given; (b) sent by electronic mail, and the Contracting Party to whom notice is to be given confirms receipt; or (c) on the third day after mailing, if mailed to the Contracting Party to whom notice is to be given by first-class mail, postage prepaid, and properly addressed to the designated representatives of the Contracting Parties set forth below. A Contracting Party may notify the other Contracting Parties in writing of a change in its designated representatives, without requiring an amendment to this Agreement.

DWR: Director  
Department of Water Resources  
1416 Ninth Street, Room 1115-1  
P.O. Box 942836  
Sacramento, CA 94236-0001

Yuba: General Manager  
Yuba County Water Agency  
1402 D Street  
Marysville, CA 95901

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Director¶  
U.S. Department of the Interior¶  
Bureau of Reclamation, MP-100¶  
2800 Cottage Way¶  
Sacramento, CA 95825¶  
¶**

**B. Signatories' Authority.**

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The signatories to this Agreement represent that they have authority to execute this Agreement and to bind the Contracting Party on whose behalf they execute this Agreement. Yuba will provide to DWR a copy of a resolution or minute order authorizing execution of this Agreement.

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**C. Counterparts of this Agreement.**

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This Agreement may be signed in any number of counterparts by the Contracting Parties, each of which will be deemed to be an original, and all of which together will be deemed to one and the same instrument. This Agreement, if executed in counterparts, will be valid and binding on a party as if fully executed all in one copy.

**D. Binding on Successors/Assignment.**

This Agreement will bind and inure to the benefit of the respective successors and assigns of the Contracting Parties, except that, none of the obligations of the Contracting Parties set forth in this Agreement will be assigned without the prior, written approval of the other Contracting Parties, which approval will not unreasonably be withheld.

**E. No Third-Party Beneficiaries, Except as Expressly Provided.**

This Agreement will not be construed to create any third-party beneficiaries, except as set forth in this section. This Agreement is for the sole benefit of the Contracting Parties, their respective successors and permitted transferees and assigns, and no other person or entity will be entitled to rely on or receive any benefit from this Agreement or any of its terms.

**F. Amendments.**

This Agreement may be amended or modified only by a subsequent written agreement approved and executed by the Contracting Parties.

**G. Opinions and Determinations.**

Where the terms of this Agreement provide for action to be based upon the opinion, determination, approval or review of either Contracting Party, such terms are not intended to be, and will not be construed as permitting such actions to be arbitrary, capricious or unreasonable. Any opinion, determination, approval or review required of a Contracting Party under this Agreement will be provided in a timely manner.

**H. Reasonable Cooperation.**

The Contracting Parties will reasonably cooperate with each other, including the execution of all necessary documents and providing assistance in obtaining approvals and permits from regulatory agencies required to perform the obligations under this Agreement and to carry out the purpose and intent of this Agreement.

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**I. Construction and Interpretation.**

This Agreement is entered into freely and voluntarily. This Agreement has been arrived at through negotiation, and each Contracting Party has had a full and fair opportunity to revise the terms of this Agreement. Consequently, the normal rule of construction that any ambiguities are to be resolved against the drafting party will not apply

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in construing or interpreting this Agreement.

**J. Complete Contract.**

This Agreement constitutes the sole, final, complete, exclusive and integrated expression and statement of the terms of this Agreement among the Contracting Parties concerning the subject matter, and supersedes all prior negotiations, representations or agreement, either oral or written, that may be related to the subject matter of this Agreement, except as to those other agreements that are expressly referred to in this Agreement.

**K. Determination of Unenforceable Provisions.**

If any term or provision of this Agreement is deemed invalid or unenforceable by any court of final jurisdiction, the Contracting Parties will meet and attempt to address this situation pursuant to the provisions of Section 22 ("Remedies and Dispute Resolution") of this Agreement.

**L. Waiver.**

The waiver at any time by a Contracting Party of its rights with respect to a default or other matter arising in connection with this Agreement will not be deemed a waiver with respect to any other default or matter.

**M. Time.**

Time is of the essence in this Agreement. Any date specified in this Agreement may be changed with the written consent of the Contracting Parties.

**N. Applicable Law.**

This Agreement will be construed under and will be deemed to be governed by the laws of the United States and the State of California.

**O. Venue.**

Any appropriate County under California law will be venue for any state court litigation concerning the enforcement or interpretation of this Agreement.

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**P. Remedies Not Exclusive.**

The remedies provided in this Agreement are cumulative and not exclusive, and are in addition to any other remedies that may be provided by law or equity. The exercise by the Contracting Party of any remedy under this Agreement will be without prejudice to the enforcement of any other remedy.

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**Q. Officials Not To Benefit.**

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No member or delegate to Congress, Resident Commissioner, or Federal or State official will be admitted to any share or part of this Agreement or to any benefit that may arise therefrom.

**R. Standard Clauses.**

Yuba will comply with the Standard Clauses as shown on **Exhibit 4** ("State of California Standard Clauses") to this Agreement for the State of California, Contracts with Public Entities.

**Deleted: With respect to the mutual obligations of DWR and Yuba under this Agreement, DWR and**

**S. Exhibits Incorporated.**

Each exhibit to which reference is made is deemed incorporated in this Agreement, whether or not actually attached.

The foregoing is hereby agreed to by the Contracting Parties.

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**List of Exhibits**

- Exhibit 1** Scheduling and Accounting Principles
- Exhibit 2** Reservoir Refill Accounting Provisions
- Exhibit 3** Groundwater **Substitution Transfer** Monitoring and **Operations** Program
- Exhibit 4** State of California Standard Clauses

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## EXHIBIT 1

### **Accounting For Water Transfers From Yuba Project To DWR**

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#### **OVERVIEW**

Monitoring, measuring, and accounting of the water that will be transferred under the Long Term Transfer Agreement can be generally described as consisting of two fundamental parts: (1) measuring the flows at the Marysville Gage resulting from increased releases from storage in New Bullards Bar Reservoir that are greater than the baseline, without-transfer flows; and (2) measuring the ability of the Projects and the EWA to apply these flows to beneficial uses. The amounts of increased releases will be determined by measuring the outflow of the Yuba River at the Marysville Gage, and by measuring groundwater substitution pumping associated with this Agreement. The Projects' ability to use the water will be determined by the ability of the Projects to export the water at the Projects' Delta pumping facilities or to put the water to other beneficial uses. That is, water accounted for as transfer water under this Exhibit will include Released Transfer Water that is deemed to be Delivered Transfer Water, as those terms are defined in this Exhibit.

#### **1. DEFINITIONS**

Terms used in this Exhibit have the same definitions as the definitions listed in Section 1 of the Agreement. When used in this Exhibit, the following terms have the following definitions:

**“Accord Flows”** mean the schedule of instream flows listed in Exhibit 1 of the Fisheries Agreement.

**“Agreement”** means the “Agreement for the Long-Term Purchase of Water from Yuba County Water Agency by the Department of Water Resources.”

**“Balanced Conditions”** mean the hydrologic condition of the Delta as defined in the November 24, 1986 “Agreement between the United States of America and the State of California for Coordinated Operations of the Central Valley Project and the State Water Project.”

**“Baseline Conditions”** mean the conditions deemed under this Exhibit to represent the conditions that would have occurred without implementation of the Agreement or the Fisheries Agreement. “Baseline Conditions” define the without-transfer conditions and would result in the Baseline Flows.

**“Baseline Diversions”** mean the diversions that are defined in section 2.3.1.1.

**“Baseline Flows”** mean the flows that would have been present at the Marysville Gage under the Decision 1644 interim instream flow requirements and all other Baseline Conditions, without implementation of the Yuba River Accord.

**“Baseline Storage”** means the amount of water that would have been stored in New Bullards Bar Reservoir under Baseline Conditions.

## EXHIBIT 1

**“Baseline Storage Target”** means the storage targets that are defined in section 2.4.

**“Carriage Water”** means the water losses in the Delta as determined by DWR, including the additional Delta outflows that are associated with Delivered Transfer Water or Stored Yuba Water that is exported at the Projects’ Delta pumping facilities.

**“Delivered Transfer Water”** means Released Transfer Water that is accounted as being exported by the Projects, or contributing to exports, as described in Section 5.

**“Groundwater Substitution Component”** means the quantity of Released Transfer Water that Yuba makes available from releases from New Bullards Bar Reservoir as a result of Yuba’s groundwater substitution pumping program, and that is not related to releases for the Storage Component of Released Transfer Water. Groundwater Substitution Component water will be made available under the Conjunctive Use Agreements by Member Units forgoing surface water deliveries and instead pumping groundwater as a replacement water supply for local irrigation needs.

**“Negative Transfer Flows”** means the additional amount of flow above the Accord Flow that would have been released as part of a Baseline Flow when the Baseline Condition Decision 1644 interim instream flow requirement is greater than the Accord Flow. “Negative Transfer Flows” are further defined in Section 4.4.

**“North Yuba Index”** means the index used to determine the applicable Fisheries Agreement flow schedule for the Lower Yuba River. This index is defined in Exhibit 4 of the Fisheries Agreement.

**“Projects”** mean the CVP and the SWP.

**“Refill”** is a condition of reduced releases from New Bullards Bar Reservoir as compared with the releases that would occur under Baseline Conditions. These reduced releases could result from diversions to storage to fill storage space evacuated as a result of releases that created the Storage Component of Released Transfer Water.

**“Released Transfer Water”** means the average daily flows measured at the Marysville Gage that are greater than the Baseline Flows. “Released Transfer Water” is further described in Section 4.2.

**“Section”** refers to sections of this Exhibit, unless otherwise stated.

**“Storage Component”** means the quantity of Released Transfer Water that Yuba makes available from storage releases from New Bullards Bar Reservoir, and which storage is not a result of storage releases resulting from Groundwater Substitution Component operations.

**“Stored Yuba Water”** means the stored water in Project upstream reservoirs. “Stored Yuba Water” is further defined in Section 4.3 of the Exhibit.

**“Total Uncontrolled Flows”** mean the total amount of flows entering Englebright Reservoir, other than from releases from the New Colgate Powerhouse, plus flows from Deer Creek and Dry Creek into the lower Yuba River downstream of Englebright Reservoir.

## EXHIBIT 1

### 2. BASELINE CONDITIONS

Baseline Conditions are the controlling constraints and criteria for operation of the Yuba Project that determine Baseline Flows for the accounting of Released Transfer Water during the term of this Agreement. Baseline Conditions include the following:

#### 2.1. Regulatory Instream Flow Requirements:

- 2.1.1. Decision 1644 interim instream flow requirements.
- 2.1.2. FERC License 2246 instream flow requirement of 400 cfs at the Marysville Gage (below Daguerre Point Dam) for the period of October 1-14, including the dry year reductions of this flow requirement that are authorized in the license.
- 2.1.3. Flow reduction restrictions required by FERC License 2246.
- 2.1.4. Flow fluctuation restrictions specified in the November 22, 2005 FERC Order Modifying and Approving Amendment of License (at page 11 of that order).]

#### 2.2. Operational Agreements:

- 2.2.1. The PG&E Power Contract, as modified by the July 16, 2002 Agreement Concerning Power Purchase Contract of 1966 and Consolidated Operations of the Narrows I and Narrows II Powerhouses. The 2002 Agreement removed the generation quota terms of the PG&E Power Contract for the months of January to June.

#### 2.3. Water Supply Agreements:

- 2.3.1. Water supply agreements between Yuba and the following Member Units: Browns Valley Irrigation District, Hallwood Irrigation Company, Cordua Irrigation District, Ramirez Water District, Brophy Water District, South Yuba Water District, Dry Creek Mutual Water Company and Wheatland Water District.

- 2.3.1.1. Baseline Diversions that are made under the agreements listed in Section 2.3.1 are the measured diversions as reported by Yuba, excluding any reduced diversions that are made to provide water for the Groundwater Substitution Component, and excluding other reduced diversions that are implemented as part of defined water efficiency or conservation programs or projects.

2.4. **Baseline Storage Target Line** is a graphical line of the maximum storage levels during the year at which Yuba would normally operate New Bullards Bar Reservoir under Baseline Conditions.

2.4.1. These levels are:

- September 30: 705,000 acre-ft;
- October 1 to October 31: linearly ramped from 705,000 acre-ft to 700,000 acre-ft;
- November 1 to February 15: 700,000 acre-ft;
- February 16 through March 31: linearly ramped from 700,000 acre-feet to 796,000 acre-feet;

## EXHIBIT 1

- April 1 through April 30: linearly ramped from 796,000 acre-feet to 896,000 acre-feet;
- May 1 through May 31: linearly ramped from 896,000 acre-feet to 966,000 acre-feet; and
- June 1 through June 30: 966,000 acre-feet.
- July 1 to September 29: no fixed Baseline Storage Target amounts are provided for this period, because the maximum storage levels during this period at which Yuba would normally operate New Bullards Bar Reservoir under Baseline Conditions are governed by the runoff hydrology conditions of the Yuba River.

### 3. BASELINE FLOW DETERMINATION

- 3.1. Baseline Flows will be determined as mean daily flows in cubic feet per second (cfs), with a separate determination for each day of the accounting period. Baseline operations will be characterized by four categories of operation, each of which are governed by the overriding operational constraint for the applicable time period. The four categories of operation are: 1) Operation to Minimum Flows, 2) Operation to Baseline Storage Target release, 3) Transitional Operations and 4) Flow Fluctuation Restricted Operations. The four categories and the calculation to determine the Baseline Flow under each category of operation as well as a general description of when each category will occur are described below. Once one of the four categories of operation have been determined to be in effect, the procedures of this section will be used to determine the resulting Baseline Flow that would have occurred at the Marysville Gage. At the request of DWR, Yuba will prepare a guideline description of baseline operations that can be used by the parties and others to understand the operations of the Yuba Project that would occur under baseline conditions.
- 3.2. Due to the complex nature of the controlling operational criteria for the Yuba Project and the hydrology of the Yuba River watershed, there may be periods when conditions will not allow for use of the accounting procedures listed for any of these four categories of operations to determine the baseline flows. Technical representatives from each Party will work together to attempt to resolve the transfer accounting for such periods. If the Parties cannot agree upon the accounting for such periods, then the dispute resolution process of section 10.2 will be followed.
- 3.3. **Operation to Minimum Flows** is the controlling category of operation when releases under Baseline Conditions would have been made to maintain the minimum required flow at the Marysville Gage or at the Smartville Gage, whichever is the controlling location. The flow requirements listed in the table titled "Interim Instream Flow Requirements" on page 176 of

## EXHIBIT 1

Decision 1644 are the regulatory minimum required flows under Baseline Conditions and are the Baseline Flows that would occur when this category of operation is controlling.

**3.3.1. Determination of When Operation to Minimum Flows Would Occur** - Starting on October 1, operations under Baseline Conditions would always have been to Minimum Flows. This category of operation would have continued until precipitation and runoff required increased releases from New Bullards Bar Reservoir to manage storage levels in anticipation of winter runoff or when uncontrolled flows to the lower Yuba River would have exceeded the Interim Instream Flow Requirements. Under Baseline Conditions in the fall and winter, Yuba has a policy of not increasing releases from New Bullards Bar Reservoir until precipitation events occur that would require greater releases.

3.3.1.1. Minimum flow operations would continue until such time as significant precipitation has occurred and runoff forecasts indicate a need to increase releases to manage storage levels at or below the Baseline Storage Targets. In the late winter and spring, forecasted runoff and resulting New Bullards Bar Reservoir storage govern when releases would exceed the minimum flows. For the winter and spring, if storage in New Bullards Bar Reservoir would have been at or above the Baseline Storage Targets with continued operations to minimum flows then a transition to releases above the minimum flow requirements would occur.

3.3.1.2. For the months of March through September, if, with releases from New Bullards Bar Reservoir to meet the Decision 1644 Interim Instream Flow Requirements and Baseline Diversions, the end-of-September Baseline Storage Target in New Bullards Bar Reservoir would have been at or below 705,000 acre-feet, then the Baseline Flows for this period will be the Interim Instream Flow Requirements.

3.3.1.3. The water storage volume in New Bullards Bar Reservoir is affected by natural inflow, and the scheduled release of water from New Bullards Bar Reservoir is predicated on an estimate of this inflow. Because the release of water to achieve the Baseline Storage Target is relatively fixed as of August 1, Yuba, DWR may revise the New Bullards Bar Reservoir Baseline Storage Target volume of 705,000 acre-ft upward as mutually agreed to account for differences in actual inflow versus the estimate used to develop the release schedule.

3.3.1.3.1. The conditions when a revision of the Baseline Storage Target of 705,000 acre-ft may take place are: 1) unexpected increases in runoff during the months of August and September, or 2) increased releases from upper Yuba River watershed reservoirs during the months of August and September that are not consistent with historical operations and were not known before August 1.

3.3.1.3.2. Yuba will provide weekly updates to the Projects' technical team members of adjustments in Baseline Flows to achieve an end-of-September New Bullards Bar

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Reservoir Baseline Storage Target of 705,000 acre-ft. Any necessary adjustments in Baseline Flows will be made weekly, on the Monday of each week. Any necessary Baseline Flow adjustment will be made in a multiple of a 50-cfs increment, in accordance with any applicable ramping rate, reflecting up-to-date available information. If, under mutually-agreeably reasonable Baseline Operations, forecasted New Bullards Bar Reservoir end-of-September storage exceeds 705,000 acre-ft, then a revision of the target storage may occur.

**3.3.2. Calculation of Baseline Flow under Operations to Minimum Flows** If operations to minimum flows has been determined to occur as described in Section 3.3 then Baseline Flows will be calculated as follows;

3.3.2.1. Calculate the River Balance – The River Balance includes intervening accretions or depletions of the Yuba River between the Smartville Gage and the Marysville Gage. The River Balance equals the measured flow at the Marysville Gage plus the measured Yuba diversions minus the measured flow at the Smartville Gage

3.3.2.2. Calculate the Baseline Flow – The Baseline Flow equals the greater of the required Decision 1644 Interim Instream Flow Requirement at the Smartville Gage minus the sum of the measured Yuba diversion plus the River Balance or the required Decision 1644 Interim Instream Flow Requirement at the Marysville Gage plus any adjustments for Total Uncontrolled Flows that would not have been offset by a reduction in releases from Englebright Reservoir. The adjustment of Total Uncontrolled Flows will include short-duration increases in releases from the Narrows II Powerhouse due to short-term increases in power demands, power outages resulting in loss of control of releases from Englebright Dam and short duration uncontrolled runoff downstream of Englebright Dam that occurs when there is no Decision 1644 Interim Instream Flow Requirement at the Smartville Gage.

### **3.4. Operations to Target Storage Release**

3.4.1. For all times of the year, Operations to Target Storage Release is the controlling category of operation if Operation to Minimum Flows would result in New Bullards Bar Reservoir storage above the Baseline Storage Target. If Operations to Target Storage Release would have occurred, then the Baseline Flow is the rate of release that would have been needed to meet the monthly Baseline Storage Target amount in New Bullards Bar Reservoir.

3.4.2. In the months of December through March, forecasts of future inflow are used to develop release decisions. During these months, operations are to manage storage to meet the springtime Baseline Storage Target, while avoiding spills of water from New Bullards Bar Reservoir.

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- 3.4.3. In the spring and summer months when New Bullards Bar Reservoir storage is relatively high, Baseline Flows may be governed by the amount of water that would have been released to meet the September 30 New Bullards Bar Reservoir Baseline Storage Target of 705,000 acre-ft. Since runoff patterns dictate the release schedule to meet the September 30 Baseline Storage Target under these conditions, there would have been no instream flow requirement defined for these operations; flows needed to meet the Baseline Storage Target amount therefore will be determined through a calculation instead. Baseline Flows for periods when releases would be made to meet Baseline Storage Targets will be determined by Yuba as a forecasted baseline operation and reviewed by DWR. For these periods, Yuba will prepare estimates of end-of-month Baseline Storage Target volumes and flows. If DWR do not agree with the forecasted operations, then the Technical Committee will attempt to resolve the disagreement in Baseline Flow determination. If the determination of Baseline Flow can not be resolved the dispute resolution process defined in the Agreement will be used.
- 3.5. **Transition Operations** would have occurred when Baseline Releases would have previously been governed by either Operation to Minimum Flows or Operation to Target Storage Release and the operational constraint would have shifted to the other type of operation. Under this condition, a period of transition would have occurred and flows would have been based on the specific conditions at that time, including actual runoff, forecasts of runoff, and planned operations. Because each circumstance of Transition Operations would have been different, Yuba will prepare forecasted Baseline Flows for the transition time period and provide supporting data to show why the Baseline Flows would have been expected to have occurred.
- 3.6. **Flow Fluctuation Operations** would have occurred when the FERC License 2246 restriction on flow reductions in the months of October to March, or the restriction on flow reductions in the November 22, 2005 FERC Order Modifying and Approving Amendment of License would have required flows to be maintained above the minimum flows. Flow Fluctuation Operations would have been managed the same as Operations for Minimum Flows except that the minimum instream flow requirement would be prescribed by the flow reduction restrictions in FERC License 2246 or the flow fluctuation restrictions in the November 22, 2005 FERC Order Modifying and Approving Amendment of License, rather than the Decision 1644 Interim Instream Flow Requirements. As early practical, Yuba will provide the minimum allowable flows for Flow Fluctuation Operations as the Baseline Flows to DWR, along with an explanation of the determination of these Baseline Flows.
- 3.7. **Fishery Study Flows** - The Fishery Agreement calls for the development of fishery studies. Some of the studies to be conducted could involve fluctuation of flows during some periods. If a defined flow release schedule is planned as part of a fishery study administered by Yuba or the River Management Team (a group defined in the Fisheries Agreement) under the Fisheries



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Agreement, then these flows in this schedule will not be part of Baseline Flows and, if all other aspects of this Exhibit are satisfied, then the amounts of these flows that exceed Baseline Flows will be accounted as Released Transfer Water. Before the start of any such study, and as early as possible, Yuba will provide notice of the Fishery Study Flows to DWR.

- 3.8. **Confirmation of Baseline Flows.** Determination of Baseline Flows for some periods will require examination and consideration of several pieces of information. Yuba will make all reasonable efforts to provide sufficient supporting data to support its determination of Baseline Flows. The Parties agree that the following types of information are reasonable supporting evidence for determination of Baseline Flows. However these types of information may not provide a conclusive determination of Baseline Flows during some periods:

1. Forecasted Baseline Operations provided in reasonable advance of the time period in question
2. Evidence of historical operations consistent with the Baseline Flow determination

- 3.9. **Baseline Storage** -Yuba will use the Baseline Flow amounts to determine the daily storage in New Bullards Bar Reservoir that would have occurred under Baseline Conditions. The calculation of Baseline Storage will use the actual inflows into New Bullards Bar Reservoir and Total Uncontrolled Flows into the lower Yuba River, along with a daily calculation of the releases from New Bullards Bar Reservoir that would have been made to meet the Baseline Flow, to determine the daily Baseline Storage amount. The Baseline Storage amount will be used to calculate the Base Transfer amount for Refill accounting in Exhibit 2.

#### 4. **TRANSFER WATER DELIVERY AND FLOW MEASUREMENT**

- 4.1. **Point of Measurement and Delivery** - The point of delivery and the point of measurement of Released Transfer Water, and the point for determination of Baseline Flows, all will be at USGS Gaging Station No. 11421000 near Marysville on the Yuba River. The flows used for calculating Released Transfer Water and Baseline Flows will be mean-daily flows in cfs.
- 4.2. **Released Transfer Water** will be the amount of the actual mean-daily flow that has been measured at the gaging station described in Section 4.1 minus the mean daily Baseline Flow for the same day. The mean daily Baseline Flow will be determined according to the methods described in Section 3.
- 4.3. **Stored Yuba Water** is water that has been accounted for as Released Transfer Water and that results in increased storage in an upstream Project reservoir (that is, water that is “backed into storage”). Stored Yuba Water will be released at the earliest possible date for export. Released Transfer water will be deemed to have been stored in an upstream Project reservoir under either of the following two conditions: 1) when the Delta is in Balanced Conditions and there is no available pumping capacity at Project Delta pumping facilities, but releases from Project storage reservoirs can be reduced, or 2) when the Delta is in Balanced Conditions, and it is not necessary to increase releases from Project reservoirs to meet Project purposes because

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Released Transfer Water is flowing from the Yuba River into the Feather River. The Released Transfer Water that is accounted for as Stored Yuba Water under this section will be added to an ongoing accounting of Stored Yuba Water. This accounting of Stored Yuba Water will be kept to determine whether Stored Yuba Water can subsequently be released from Project storage and exported by the Projects under Section 5.5, and thus be accounted for as Delivered Transfer Water.

- 4.4. **Negative Transfer Flows** – During certain periods, the amount of the actual measured flow under Section 4.1 may be lower than the applicable Decision 1644 Interim Instream Flow Requirement. During these periods, the Baseline Flow will be the applicable Decision 1644 Interim Instream Flow Requirement. During these periods, the amount of the applicable Decision 1644 Interim Instream Flow Requirement minus the measured flow under Section 4.1 will be accounted for as a Negative Transfer Flow. If a Negative Transfer Flow occurs on a day when all or a portion of the Negative Transfer Flow amount could have been accounted for as Delivered Transfer Water as described in Section 5.5, then this amount will be deducted from the total Delivered Transfer Water for the Water Accounting Year in which the Negative Transfer Flow occurred.
- 4.5. **Groundwater Substitution Component Flow** – Released Transfer Water may be fully or partially derived from Groundwater Substitution Component water. **Exhibit 3** of this Agreement describes the process that will be used to determine the planned amount of Groundwater Substitution Component water that will be provided each year and the monitoring and reporting that will be conducted by Yuba and participating Member Units for Groundwater Substitution Component operations.
  - 4.5.1. Delivery and Measurement – Groundwater Substitution Component water will be delivered at the Marysville Gage, and measured as Released Transfer Water under Section 4.2.
  - 4.5.2. Water released as Groundwater Substitution Component water will not be included in the transfer amount for Refill accounting in **Exhibit 2** of this Agreement.
  - 4.5.3. The total amount of Released Transfer Water that will be designated as Groundwater Substitution Component water will be limited to the amount of groundwater pumping that is measured by the procedures described in **Exhibit 3** of this Agreement.

## 5. DETERMINATION OF DELIVERED TRANSFER WATER

- 5.1. Delivered Transfer Water may only occur when the Delta is determined by DWR to be in “Balanced Conditions”.
- 5.2. For this Agreement, it is assumed that Released Transfer Water measured at the Marysville Gage will reach the Projects’ Delta export pumps two days after the date of measurement at the Marysville Gage.

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- 5.3. For this Agreement, Released Transfer Water used as Carriage Water by the Projects will be accounted as Delivered Transfer Water as described in Section 5.7.
- 5.4. For this Agreement, it is assumed that there will be no conveyance losses between the Marysville Gage and the Project's Delta pumping facilities.
- 5.5. For each day that Released Transfer Water is accounted for under Section 4.2, Stored Yuba Water accounted for under Section 4.3 is released from Project storage, or a Negative Transfer Flow is accounted for under Section 4.4, a determination will be made, utilizing information provided by DWR that is described in Section 6, regarding whether or not there was capacity available at the Projects' Delta pumping facilities to export this water, or in the case of Negative Transfer Flows, a determination will be made regarding the amount of reduced Delta exports that resulted from the Negative Transfer Flow.
- 5.6. Stored Yuba Water will be released from Project storage only if capacity at the Projects' Delta pumping facilities is be available to export the water.
- 5.7. The lesser of the following two amounts will be accounted for as Delivered Transfer Water:
- 5.7.1.1. The Released Transfer Water amount determined under Section 4.2 ,
  - or
  - 5.7.1.2. The sum of the amount of available pumping capacity at the Projects' Delta pumping facilities that is not being used to pump Project Water and the amount of Carriage Water that is associated with this unused pumping capacity. For example, if 500 cfs of Project export pumping capacity is available, and if the Carriage Water percentage is determined to be 20%, then the total Delivered Transfer Water amount would be 625 cfs ( $500 \text{ cfs} / (1-.2)$ ), if not limited by the Released Transfer Water amount.
- 5.7.2. Available Project export pumping capacity will be determined based on the Released Transfer Water having a priority as the first increment of transfer water to be exported, except that Component 4 water may, at the discretion of the Buyers, have a lower priority than water that is made available pursuant to the proposed Sacramento Valley Water Management Agreement (SVWMA).
- 5.8. Stored Yuba Water will be accounted as Delivered Transfer Water in the same manner as Released Transfer Water if, before Stored Yuba Water spills from Project storage, available export capacity exists, as described in Section 5.7, for a portion or all of the amount of Stored Yuba Water.
- 5.8.1.1. The Projects' ability to release and then divert Stored Yuba Water that was previously backed into upstream Project storage reservoirs will be based on the Stored Yuba Water having a diversion priority equal to the diversion priority that Released Transfer Water would have if it were being released from the Yuba River, unless such a release of Stored Yuba Water would preclude the export of Released Transfer Water, in which case, Stored Yuba Water will remain in Project storage. The priority for the

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Projects' release or export of the Stored Yuba Water will not be diminished by future water transfer agreements, except as provided for in Section 5.7.2. .

- 5.8.2. Some or all of the Stored Yuba Water will be deemed to have been spilled from Project reservoir storage and will be debited from the account described in Section 4.3, if the Project reservoir in which the Stored Yuba Water is stored makes flood control releases. The Stored Yuba Water will be the last stored transfer water spilled after all other stored transfer water has spilled. The debit amount will equal the amount of flood control releases after all other stored transfer water has spilled, or the total amount of Stored Yuba Water, whichever is less.
- 5.8.3. Delivered Transfer Water will be accounted for and credited to Component 1, 2, 3, or 4 Water when the Delta is in Balanced Conditions but the E/I ratio is controlling (i.e. the E/I requirement, as described in SWRCB Revised Decision 1641 is limiting exports) and the increased Yuba flow of the Released Transfer Water provides an incremental increase in Project Delta exports. Under this condition, the incremental increase in Project exports resulting from the Released Transfer Water amount will be treated as Delivered Transfer Water. Under this condition, this amount will be determined on a case-by-case basis by the Parties. **[DISCUSSION NEEDED ON THIS WITH THE PARTIES. THE INTENT HERE WAS FOR YUBA TO TAKE ON RESPONSIBILITY FOR CARRIAGE WATER WHEN E/I MADE CARRIAGE WATER A HIGH COST (IE. 65%)]**
- 5.8.4. A Negative Transfer Flow will be accounted for as a debit to the total amount of Delivered Transfer Water if export capacity exists under Section 5.7 at the time of the Negative Transfer Flow. The total debit amount will be the lesser of: (1) the Negative Transfer Flow amount; or (2) the Project's export capacity plus the associated Carriage Water amount.
- 5.8.5. Along with the accounting of Delivered Transfer Water, Yuba will maintain an accounting of the Base Transfer amount for Refill accounting. The Base Transfer amount for refill accounting will be calculated as the difference in volume of actual New Bullards Bar Reservoir storage and the Baseline Storage that is directly attributable to the release of Delivered Transfer Water from New Bullards Bar Reservoir storage.

## 6. PROCEDURES FOR ACCOUNTING OF BASELINE FLOWS AND TRANSFER AMOUNTS

- 6.1. The Water Accounting Year and provisions of the Agreement pertaining to notice and invoicing for Delivered Transfer Water will govern the timing of transfer accounting.
- 6.2. **Calculation of Baseline Flows.** Yuba will calculate a preliminary forecast of Baseline Flows, as described in Section 3 , on a monthly basis unless more frequent forecasted Baseline Flows are

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requested by DWR or provided by Yuba. The forecasted Baseline Flows along with forecasted operations will be used by DWR to plan Project operations to export Released Transfer Water. The preliminary forecast of the Baseline Flows will be made using forecasted hydrologic conditions for the month, based on Yuba River unimpaired flows forecasted in the most-recent DWR Bulletin 120 and any updates. Within 14 days after the end of the month, Yuba will provide DWR with its draft calculations of final Baseline Flows.

6.2.1. Yuba will provide preliminary and draft final calculations of Baseline Flows to DWR for its review and concurrence. The calculation of preliminary Baseline Flows will be used to predict the amount and timing of Released Transfer Water that will be generated for the upcoming period. During that period, Yuba may update the preliminary calculation of Baseline Flows as changes in hydrologic conditions affect the accuracy of the calculation. Yuba will provide to DWR all requested backup information and calculations, excluding any models that were the bases of the calculation of Baseline Flows, so that DWR may verify the calculation. If DWR concurs with the preliminary calculation of Baseline Flows, then such preliminary Baseline Flows will be used in coordinating operations and for any initial allocation of Released Transfer Water to Components 1, 2, 3 and 4 Water. If DWR does not concur with the preliminary calculation of Baseline Flows, then the accounting issue resolution procedures as described in Section 3.2 will be followed.

6.2.2. Due to the delayed release of final USGS reporting of flows at the Marysville Gage, Yuba's transfer accounting will use the mean-daily flows as reported by Yuba to the USGS. All parties to this Agreement will be given timely notice if this information subsequently changes due to re-rating or shifts in the Gage, as reported by Yuba to the USGS.

6.3. **Calculation of Transfer Amount.** At the time that Yuba develops a preliminary estimate of Baseline Flows and provides it to DWR, Yuba also will develop and provide to DWR a preliminary release schedule and forecast of daily Released Transfer Water. Yuba will update the release schedule and resulting forecast of daily Released Transfer Water no less than once per month, unless an alternate time period is agreed to by the Parties. Within fourteen days after the end of each month, Yuba will calculate a draft final Transfer Accounting under Section 6.3.5. Section 11 describes the scheduling and coordination of sharing operational information.

6.3.1. Because of the variability of hydrologic conditions, and because of the uncertainty regarding whether or not DWR will call for option water in some periods, Yuba will prepare a matrix of one or more forecasted Baseline Flows, one or more release schedules and the resulting estimated quantities of Released Transfer Water. Yuba will provide indications of the relative probability of each Baseline Flows scenario that is provided in the matrix.

6.3.2. DWR will notify Yuba periodically, as information is available, when Project conditions are such that any of the forecasted Released Transfer Water may not be exported.

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- 6.3.3. Calculation of the amount of Released Transfer Water will utilize the determination of export capacity and Carriage Water, provided to Yuba by DWR no later than ten days after the end of the assumed export period.
- 6.3.4. If DWR concurs with Yuba's draft final calculation of Baseline Flows, then it will become the final Baseline Flows, and will be used for all final transfer accounting for the corresponding period. If DWR does not concur with Yuba's draft final calculation of Baseline Flows, then the accounting dispute resolution procedures described in Section 10.2 will be followed.
- 6.3.5. Along with the calculation of the draft final Baseline Flows, Yuba will also calculate and submit to DWR a draft final accounting of the amounts of Components 1, 2, 3 and 4 Water that were Delivered Transfer Water during the accounting period. This draft final accounting of will include entries for the following:
- (a) Mean daily flow at the Marysville Gage, as measured according to Section 4 ;
  - (b) Daily schedule of resulting Released Transfer Water according to Section 4.2 and accounting for Negative Transfer Flows under Section 4.4 ;
  - (c) Calculation of Delivered Transfer Water under Section 5, including any necessary reductions for Negative Transfer Flows and an accountings of Stored Yuba Water delivered and Stored Yuba Water remaining in storage, using the export capacities submitted DWR;
  - (d) Calculation of the amounts of Components 1, 2, 3 and 4 Water that were Delivered Transfer Water, as calculated under Section 7 ; and
  - (e) A breakdown of the Storage Component and the Groundwater Substitution Component of the Delivered Transfer Water for the period.
  - (f) A calculation of the amount of reduced storage in New Bullards Bar Reservoir that resulted from releases of Storage Component Released Transfer Water. The resulting amount of reduced storage calculated at the start of the Refill Period will be the Base Transfer amount used for Refill accounting as described in **Exhibit 2**.

## 7. ACCOUNTING FOR COMPONENTS OF TRANSFER WATER

- 7.1. Water that has been determined to be Delivered Transfer Water will be credited towards one of four components of Water that are described in sections 5 through 8 of the Agreement.
- 7.2. Delivered Transfer Water will be credited to one of these four components of Water in the following priorities:
- 7.2.1. The first 60,000 acre-ft of Delivered Transfer Water that also is Storage Component water in each Water Accounting Year will be credited to Component 1 Water.

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- 7.2.2. In Dry and Critical Water Years, the first 60,000 acre-ft of Storage Component water will be credited to Component 1 Water, and the next 15,000 acre-ft in Dry Water Years,<sup>1</sup> and 30,000 acre-ft in Critical Water Years, of Storage Component water will be credited to Component 2 Water. If the total amount of Delivered Transfer Water that also is Storage Component water in any Water Accounting Year is less than the total of commitment for Component 1 Water (i.e., 60,000 acre-ft), and for Component 2 Water (i.e., 15,000 acre-ft in Dry Water Years and 30,000 acre-ft in Critical Water Years), then Yuba will provide Groundwater Substitution Component water, but subject to the provisions of **Exhibit 3**, to complete the balance of Yuba's commitment for Component 2 Water. **[CHANGES IN ACCOUNTING DUE TO PROPOSED CHANGES IN CREDITING OF ACCORD RELEASED TRANSFER WATER FROM APRIL 21 TO JUNE 30 WILL NEED TO BE ADDED HERE UPON ACCEPTANCE OF THIS PROVISION IN THE TRANSFER AGREEMENT]**
- 7.2.3. In years when Yuba has a commitment to provide 40,000 acre-ft of Component 3 Water, after Component 1 Water and Component 2 Water (if any is required) is fully accounted for, any remaining Storage Component water will be credited as Component 3 Water, and then any remaining unfulfilled commitment for Component 3 Water will be provided and accounted from Groundwater Substitution Component water, but subject to the provisions of **Exhibit 3**.
- 7.2.4. Any remaining balance of Storage Component water, and then Groundwater Substitution Component water, will be credited as Component 4 Water after all other commitments of Water have been credited from the total Delivered Transfer Water for the Water Accounting Year.
- 7.3. In years when there is no commitment for Component 2 or Component 3 Water, any Delivered Transfer Water that also is Storage Component water, and that exceeds the 60,000 acre-ft of the Component 1 Water obligation, will be credited as Component 4 Water, or as Holding Account Water as described below.
- 7.4. If Delivered Transfer Water has been credited as Component 4 Water under Section 7.2.4 or Section 7.3, and if DWR has not taken some or all of the credited Component 4 Water under the option provisions of the Agreement, then the uncommitted portion of Component 4 Water will be credited to a Holding Account that Yuba may use to meet any previous Water Accounting year's unfulfilled Component 1, 2 or 3 Water commitment, or a future Water Accounting year's Component 1 Water commitment, or a Refill repayment under Section 7.5, and the amount so credited will not be accounted for as Component 4 Water in the present Water Accounting Year.

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<sup>1</sup> These water-year types are defined by the Sacramento Valley Index in SWRCB Revised Decision 1641.

**EXHIBIT 1****7.5. Holding Accounts and Makeup Provisions; [DRAFTING NOTE – THE USE OF AND PROVISIONS FOR A HOLDING ACCOUNT REQUIRE FURTHER POLICY REVIEW]**

7.5.1. Component 1 Water Accounting. In very wet years, Yuba may release sufficient Released Transfer Water to provide the full required amount of Component 1 Water, but due to Delta conditions, some or all of this Released Transfer Water may not be able to be accounted for as Delivered Transfer Water under Section 5 . In such years, the amount of Delivered Transfer Water will be less than Yuba's obligation to provide Component 1 during that Water Accounting year, and Yuba will be obligated to provide the remaining amount of Component 1 Water in a subsequent Water Accounting Year. This amount of Component 1 Water will be noted as a Component 1 Water account deficit for that Water Accounting Year, and Yuba will repay the deficit amount in a subsequent Water Accounting Year in the following manner:

7.5.1.1. Yuba may apply some or all of the amount of water in the Holding Account to provide the unfulfilled Component 1 Water amount in the current Water Accounting Year. Water from the Holding Account may be applied only to the unfulfilled Component 1 Water obligation if it is water that was delivered in the year previous to the year of the unfulfilled Component 1 Water obligation.

7.5.1.2. Yuba will apply Component 4 Water that is derived from Storage Component water during the current Water Accounting Year to any deficit in the Component 1 Water account from a previous year, as long as the current Water Year type is not a Dry or Critical Water Year. If the current Water Year type is a Dry or Critical Water Year, then Component 4 Water Storage Component water may be applied to a deficit in the Component 1 Water account at Yuba's discretion.

7.5.2. A deficit in providing Component 2 and or Component 3 Water could occur if there is not enough Storage Component water accounted for as Delivered Transfer Water to meet the total obligations to provide Components 1, 2 and 3 Water, and due to the provisions of Exhibit 3 for determining the amount of Groundwater Substitution Component water that may be provided, the amount of Groundwater Substitution Component water is does not sufficient to make up the entire remainder of the commitment to provide Components 1, 2 and 3 water. A deficit in Component 2 or Component 3 water will be repaid in the same manner as the manner for making repayments of Component 1 water described in Section 7.5.1 with exception that there will be no restriction on repayment of Component 2 or Component 3 Water in the following water year if the following water year is a Dry or Critical water year.



**EXHIBIT 1****8. CONFERENCE YEAR ACCOUNTING**

- 8.1. No Negative Transfer Flows amounts will be accounted for in a Conference Year if there is no Delivered Transfer Water.
- 8.2. In a Conference Year, the obligation to provide Component 1 Water may be suspended by Yuba, and instead Yuba will incur a deficit in its obligation to provide Component 1 Water Delivered Transfer Water that must be repaid in a non-Conference Year as provided in the Agreement.
- 8.3. Makeup provisions and repayment of Refill provisions of the accounting will be suspended during a Conference Year. Any amounts of water in Holding Accounts or repayment amounts will be carried forward to the next year non-Conference Year following a Conference Year.
- 8.4. If Yuba and the Buyers agree to transfer some amount of Water in a Conference Year, then the Conference Year Baseline Conditions will be agreed to by Yuba and the Buyers.
- 8.5. Transfer of Component 4 water may occur in a Conference Year only if Negative Transfer Flows and Refill impacts are accounted for and, in the case of Refill impacts, repaid first.

**9. GROUNDWATER SUBSTITUTION COMPONENT WATER**

- 9.1. Yuba, at Yuba's sole discretion, may decide to enter into agreements with participating Member Units under which the participating Member Units will arrange for their respective water users to reduce their use of surface water diversions by amounts to be determined by Yuba and the participating 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 Released Transfer Water. Yuba will provide DWR with one or more lists of the locations of the wells that may be pumped for the Groundwater Substitution Component. In no case will groundwater pumping commence from a well for the Groundwater Substitution Component before approval of the well by DWR. Wells that are located within two miles of the Yuba River or the Feather River will be subject to review and approval by DWR. All other listed wells will be approved by DWR upon demonstration by Yuba that all required local permits for these wells have been obtained. DWR will review the list of wells, their locations and any other pertinent information provided by Yuba and the participating Member Units, and will notify Yuba and the participating Member Units within ten working days after the submittal of a list by Yuba of any well that DWR reasonably determines is not acceptable for pumping under this Agreement, and will inform Yuba and the Member Unit in which the well is located of the basis for the determination by DWR. Upon receipt of supplemental information from Yuba or the Member Unit in which the well is located, DWR may reconsider its refusal to allow the well to provide Groundwater Substitution Component water and reverse its determination. Groundwater pumped for the Groundwater Substitution Component must be

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put to reasonable use for irrigation on lands that otherwise would have been served with surface water within the participating Member Unit's service area between March 1 and December 31.

- 9.2. Yuba will comply with the Groundwater Monitoring, Reporting and Operations Program, which is **Exhibit 3** to the Agreement.
- 9.3. Yuba will ensure that flow-measuring devices are acquired, installed and maintained to measure the quantities of groundwater actually being pumped for the Groundwater Substitution Component from wells identified in Section 9.1. Yuba and the participating Member Units will be responsible for the distribution of water pumped under this Agreement within each participating Member Unit's boundaries. The Projects will not be responsible for any costs of installing, operating or maintaining groundwater pumping facilities or flow-measuring devices, or for any costs of conveying groundwater pumped to places of use within the participating Member Units' service areas pursuant to this Agreement. By the fifteenth day of every other month, Yuba will provide a report to DWR of the quantities of groundwater pumped from each well for the Groundwater Substitution Component during the previous reporting period under this Agreement.
- 9.4. Yuba will make arrangements for DWR and its representatives to have access to facilities and records of Yuba and its participating Member Units to the extent reasonably necessary to verify that the groundwater pumping, the management of such pumping and the implementation of the Groundwater Monitoring and Reporting Program for the Groundwater Substitution Component meet the requirements of this section 9.

### 10. ACCOUNTING PREPARATION AND NOTIFICATIONS

- 10.1. **Accounting preparation for invoicing** - Yuba will prepare a draft accounting of the quantities of Released Transfer Water and the Delivered Transfer Water, utilizing information provided by DWR, as described in Section 6, and Yuba will submit these calculations in a standard form to be developed by the Parties for review by the Technical Committee according to the schedules set forth in this Agreement. The Technical Committee will provide written notification to Yuba and DWR within 20 days of receipt of the Transfer Accounting from Yuba whether it agrees with the accounting. If the Technical Committee agrees with the accounting, or if there has been no written notification by the 20<sup>th</sup> day, then Yuba will submit invoices to DWR as provided in the Agreement.
- 10.2. **Disputes on accounting amounts** – If there is a dispute between the Parties regarding accounting, then the Technical Committee will first meet and attempt to resolve the dispute, and submit the disputed accounting for final resolution by the Policy Committee. For accounting disputes only, if the dispute cannot be resolved by the Policy Committee, then the Parties will submit the accounting dispute to binding arbitration for final resolution.

## EXHIBIT 1

- 10.3. **Maintaining Records of Accounting and Accounts** – Yuba will maintain a set of records for all accountings, and all back-up materials used to prepare the accountings, at Yuba’s offices, and Yuba will make these records available to DWR upon request during normal business hours. DWR will maintain records of DWR’s determination of Delta conditions and Project export capacity as described in Section 6.3.2, and make these records available to Yuba upon request during normal business hours.

### 11. FORECASTING AND EXCHANGE OF INFORMATION FOR TRANSFER

- 11.1. Yuba and DWR will exchange operations forecasts and other data deemed useful for purposes of enhancing the usefulness of the water to be made available under this Agreement. The forecasts will identify and substantiate the quantities and timing of forecasted transfer flows over a range of possible hydrologic conditions, and identify forecasted periods of balanced conditions and water allocations for the CVP and SWP. Additionally, the operations forecasts to be provided will assist the CVP and SWP to efficiently integrate the Yuba flows in their operations plans, and will assist EWA in planning asset acquisition and management.

- 11.2. Yuba will provide the following:
- Updated forecasts of operations, monthly from February through June.
  - Updated forecasts as necessary, but not less than monthly, depending on changing conditions, from July through January.
  - The operations forecast should extend through the end of the current “classification” year, January 31.
  - Initially, each year, separate operations forecasts will be provided based on hydrologic probability of exceedance levels of 90%, 10%, and 50%. Some forecasts may be deleted as the year progresses, depending on need. Likewise, other forecasts may be added, if needed.
  - Each Yuba forecast will include:
    1. Forecasted flows at Marysville Gage (daily for the first 30 days of forecasted flows and then monthly, or for a partial month if the dates of flow change within month are known)
    2. Forecasted Baseline Flows (daily for the first 30 day of forecasted flows and then monthly, or for a partial month if the dates of flow change within month are known)
    3. Forecasted New Bullards Bar reservoir storage
    4. New Bullards Bar forecasted inflow, outflow, diversions, evaporation

## EXHIBIT 1

5. Yuba River Index and Water Year classification
6. North Yuba Index and computation details, North Yuba Year classification
7. Forecasted transfer water quantities (monthly)
8. Identification of any “make-up” flows or other flows planned.
9. Amounts and timing of groundwater pumping contributing to availability of transfer flows.

DWR will provide to Yuba before the 1<sup>st</sup> of each month from February through June, and from July through January if updated Yuba forecasts are needed, the following information:

- Details of CVP and SWP forecasted reservoir and export operations through the end of the current calendar year.
- Forecasted periods of balanced conditions through the end of the current calendar year.

## 12. TECHNICAL COMMITTEE AND POLICY COMMITTEE

### 12.1. Technical Committee

The Technical Committee will: (1) collect, review and analyze information relevant to accounting of water consistent with **Exhibits 1, 2 and 3**, and information related to advances, payments and cost adjustments; (2) identify and attempt to resolve technical implementation issues; (3) periodically report to the Policy Committee on the information gathered and any technical implementation issues identified; and (4) make recommendations to the Policy Committee for resolution of any policy issues that arise or for any required factual determinations. If the Technical Committee is unable to agree on a recommendation to the Policy Committee, then the Technical Committee will cooperate to provide a balanced presentation of the facts, opinions and other information underlying the various positions on the issue to be determined.

### 12.2. Policy Committee.

The Policy Committee will: (1) provide policy guidance in implementing this Agreement; (2) make any factual determinations required to implement this Agreement; (3) consider information provided by the Technical Committee, if applicable, when making decisions; and (4) identify and resolve any policy-related implementation issues.

**EXHIBIT 2****New Bullards Bar Reservoir Refilling  
Conditions and Procedures for Water Transfer**

DWR must be assured that the refilling of New Bullards Bar Reservoir resulting from purchase of water from Yuba by the Buyers will not impact the Projects. Such impacts could occur (according to DWR) if storage vacated by the transfer is refilled during Balanced Conditions in the Delta. Yuba agrees that if there is an outstanding account of impacts after the Water Year reservoir refill period, then Yuba will release additional water during subsequent Balanced Conditions in excess of normal operating requirements to compensate for refill impacts. The following procedures for determining refill impacts and conditions for additional releases will be used in accounting for refill. DWR will work with Reclamation to allocate the impact account between the Projects.

1. “Base Transfer” is the amount of Delivered Transfer Water released from New Bullards Bar Reservoir, as determined by the accounting rules in **Exhibit 1**, and which results in a storage amount in New Bullards Bar Reservoir that is lower than the storage that would have occurred under Baseline Conditions. Calculation of this amount is described in Section 5 of Exhibit 1.
2. “Impact Account” is the amount of water DWR would have obtained from the Yuba River in the absence of the transfer releases, but which DWR did not receive due to refilling of New Bullards Bar Reservoir. The amount of Impact Account water will be computed daily during the Refill Period based on balanced or excess conditions as used in the Coordinated Operations Agreement between DWR and Reclamation (“COA”).
3. “Refill Period” is from October 1 through September 30.
4. “Target Storage” is the maximum storage volume during the Refill Period at which Yuba would normally operate New Bullards Bar Reservoir without a water transfer. The Target Storage levels are as follows:
  - (a) October 1 through October 31: linearly ramped from 705,000 acre-feet to 700,000 acre-feet
  - (b) November 1 through February 15: 700,000 acre-feet.
  - (c) February 16 through March 31: linearly ramped from 700,000 acre-feet to 796,000 acre-feet.
  - (d) April 1 through April 30: linearly ramped from 796,000 acre-feet to 896,000 acre-feet.
  - (e) May 1 through May 31: linearly ramped from 896,000 acre-feet to 966,000 acre-feet.
  - (f) June 1 through June 30: 966,000 acre-feet. This Target storage amount of 966,000 acre-ft may be slightly reduced because this amount is the top of conservation storage in New Bullards Bar Reservoir and releases may be made to avoid exceeding this storage

**EXHIBIT 2**

amount. The Target Storage reduction will be made when releases from New Bullards Bar Reservoir are increased as storage reaches 996,000 acre-ft which demonstrates filling of the Reservoir.

- (g) During July 1 through September 29, Target Storage must be determined on a case by case basis as described in **Exhibit 1**.
5. “Actual Storage” is the amount of water physically in storage in New Bullards Bar Reservoir at any time.
  6. “Theoretical Storage” is the sum of (1) Actual Storage on the day specified and (2) Transfer Account Amount.
  7. When Actual Storage exceeds the Target Storage during the Refill Period, there will be no further refill impacts.
  8. The accounting procedure in **Section 2** will be used to calculate the Impact Account. The general principles in **Section 2** will be applied in accounting for any unusual operational conditions not set forth in the application example described below.
  9. If the Transfer Amount Account is not zero on September 30, then the remaining balance of the account will be carried forward to the subsequent water year and the impact accounting will continue until the outstanding balance is eliminated.
  10. If there is an Impact Account balance on September 30, then Yuba will release water during Balanced Conditions on a schedule that is agreed to by the Parties at a time when such releases will not create or affect deficiencies in local deliveries or instream flows, and these releases will be coordinated with releases for other (if any) water transfers of Yuba. The water released to offset refill impacts will be delivered as Delivered Transfer Water by Yuba and the accounting provisions and refill conditions of this section will apply to those quantities.
  11. By November 29, of each year, the Parties will complete an accounting of the Transfer Amount.
  12. By July 31 of each year, the Parties will complete an accounting of the Impact Account.

## EXHIBIT 2

### SECTION 2: ACCOUNTING PROCEDURES FOR DETERMINING NEW BULLARDS BAR REFILL IMPACTS ON THE PROJECTS

The following columnar description sets forth the format, criteria, and procedures to be used for the determination of combined impacts to the Projects due to changes in refilling New Bullards Bar Reservoir caused by the transfer to DWR. An example of the application is attached.

#### COLUMNAR DESCRIPTION

- Column 1 - Date
- Column 2 - New Bullards Bar Reservoir Actual Storage at 2400 hours.
- Column 3 - Transfer Amount Account (Base Transfer for the year) lists transfer water for which impact accounting is yet to be made. It is the previous day's amount minus the previous day's impact volume.  $Column\ 3_i = Column\ 3_{i-1} - Column\ 6_{i-1}$  any transfer amount account remaining after September 30 will be the initial (October 1) amount used in the subsequent water year.
- Column 4 - Theoretical Storage indicates the operation of storage as it might have occurred in the absence of the transfer. It is the actual storage plus the Transfer Amount Account.  $Column\ 4_i = Column\ 2_i + Column\ 3_i$
- Column 5 - Target Storage is a postulated level of storage, which New Bullards Bar Reservoir might not normally exceed. When Column 5 exceeds this level, it is postulated that the storage would be reduced to the Target Storage amount. The Target Storage is defined as follows: October 1 (705,000); October 2-October 31 (ramped linearly to 700,000) November 1-February 15 (700,000); February 16-March 31 (ramped linearly to 796,000); April 1-30 (ramped linearly to 896,000); May 1-31 (ramped linearly to 966,000); June 1-30 (966,000); July 1-September 29 – determined by hydrology.
- Column 6 - Impact Volume indicates daily amounts of water that would be released to achieve the Column 5 Target Storage.  $Column\ 6_i = (Column\ 4_i - Column\ 5_i)$  but not less than zero, and not greater than Column 3i.
- Column 7 - Delta Conditions are determined jointly by DWR and Reclamation in accordance with the COA. A "1" is listed if the Delta is declared to be in Balanced Conditions three days after the daily amounts are calculated, a zero or null "-" is listed when the Delta is declared to be in excess conditions three days after the daily amounts are calculated. The amount of Theoretical Storage above the Target Storage on December 31, if any (Column 4 - Column 5), is deducted from the Transfer Amount Account (Column 3) on January 1.
- Column 8 - Net Daily Impact is the daily impact volumes when the Delta is in Balanced Conditions as indicated in Column 7.  $Column\ 8_i = Column\ 6_i \times Column\ 7_i$
- Column 9 - Impact Account is the accumulation of Net Daily Impacts.  $Column\ 9_i = Column\ 9_{i-1} + Column\ 8_i$

## EXHIBIT 3

### GROUNDWATER MONITORING AND REPORTING PROGRAM

#### 1. Groundwater Monitoring

In cooperation with DWR, Yuba has monitored Yuba County groundwater conditions for many years, and many aspects of the groundwater resources are well known. Yuba and DWR have worked cooperatively to develop a groundwater transfer monitoring and reporting program specific to Yuba County for past groundwater substitution water transfers. Yuba has also developed a Groundwater Management Plan ("GMP"), which was adopted on March 1, 2005 pursuant to Water Code Sections 10750 *et seq.* The GMP formalizes a monitoring program that includes measuring water levels in wells that are part of a dedicated monitoring well network, a plan to expand the network, annual reporting provisions and other groundwater monitoring activities. Since 2005, Yuba has constructed eight additional groundwater monitoring wells for this program. (See DWR, Memorandum Report, "Monitoring Well Construction Technical Assistance," April 2007.) Information gathered from the activities specified in the GMP, along with the activities described in this exhibit, will be used to assess effects of groundwater pumping on groundwater resources, and to provide reasonable assurances that any water pumped and accounted for as part of any groundwater substitution is in lieu of surface water delivered by Yuba to its Member Units. Yuba will continue to work with DWR and the Member Units to identify and resolve any new groundwater monitoring issues.

a. The water levels in selected production wells geographically dispersed throughout each Member Unit participating in the groundwater substitution program will be measured by the Member Unit prior to the initial pumping for each year during which a groundwater substitution transfer will take place. Selection of these wells will be by mutual agreement by DWR and Yuba, in consultation with the member Unit. Upon termination of pumping for the year, the water levels will be measured by the Member Units, and such measurements will continue on a monthly basis until water levels have recovered to the pre-pumping levels, or have stabilized. In no case will water-level measurements be required following spring high water levels in the year following the year of the groundwater substitution pumping. The Member Units will provide the water-level readings to Yuba within 15 days of each reading.

b. To supplement the GMP-specified monitoring program, water levels in each monitoring well in the Yuba network will be measured at least every two months by Yuba in each year during which a groundwater substitution transfer is to take place, commencing no later than April. Upon termination of pumping, the monitoring well water levels will be measured, and such measurements will continue on a monthly basis until water levels have recovered to the pre-pumping levels, or have stabilized. In no case will water-level measurements be required following spring high water levels in the year following the year of the groundwater substitution pumping. DWR and Yuba will cooperate in obtaining these measurements.

c. Readings of flow meters on the discharges of the wells will be recorded every month during the pumping period by Member Units for each production well. In addition,



electric meter readings and fuel consumption for diesel pumps will be recorded by the Member Units, and made available to Yuba upon request. The quantities of water pumped between successive readings will be calculated by Member Units and reported to Yuba.

d. Electrical Conductivity ("EC") will be measured for water pumped from selected production wells at the initiation of pumping (or as soon thereafter as practicable), two months after the initial EC measurements and at the termination of pumping.

e. For selected production wells (to be identified before the monitoring plan is finalized) near Yuba monitoring wells, drawdown analyses (of distance and time) will be completed, and comparisons made to monitoring well water levels.

All monitoring data will be reported on a semi-monthly basis, and in an annual final summary report prepared by Yuba that will evaluate the impacts of the groundwater substitution pumping transfer program for that year. The final report will include water-level contour maps for the groundwater basin showing initial water levels and final, recovered water levels.

## **2. Groundwater Pumping Operations Plan**

This Agreement sets forth the procedures by which the total amount of water to be transferred will be determined. These amounts include Components 1, 2, 3 and 4 water. A portion of the Water will be from surface water and a portion may be provided through groundwater substitution pumping. Yuba will base the determination of the amount of water to be provided through groundwater substitution pumping (in consultation with the Member Units) by: (a) estimating the amount of surface water that will be transferred for the year by operation to the flow schedules in the Fisheries Agreement and the September 30 target New Bullards Bar Reservoir storage level; (b) determining the amount of water from groundwater substitution pumping that Member Units can make available through wells of farmers who are willing to participate in the program and whose farms are located within a participating Member Unit; and (c) determining the amount of water that can be pumped within the safe yield of the basin without contributing to long-term overdraft and without resulting in significant unmitigated impacts to other groundwater users in the basin.

This section sets forth the procedure that will be used to determine the amount of water that can be pumped within the safe yield of the basin without contributing to long-term overdraft, and without resulting in any significant unmitigated third-party ("Third Party" or "Third Parties") impacts to other groundwater users in the basin. Section 1 of this Exhibit describes the monitoring plan that will be used to obtain information from which the determination will be made of the condition of the groundwater basin in the spring of the year during which groundwater substitution pumping is planned. Based on this condition, Yuba will determine the expected response of the basin to the proposed pumping for that year and the resulting condition of the basin at the conclusion of the pumping. Determination of the expected condition at the conclusion of the pumping will be made by examining the historic response of the basin during previous years when pumping occurred and by examining the recovery of the basin during pumping years and successive years, and by comparing these basin responses with the planned pumping. Analysis of the historical responses of the basin to pumping will be used to develop

empirical relationships between pumping and basin drawdown and recovery. These empirically derived relationships will be the formulas that will be used to determine basin response to the proposed pumping.

The determination of basin response to the proposed pumping will result in an estimated basin condition at the end of pumping and an estimated condition for the spring of the next year. This estimated condition will be compared to historical groundwater levels in the basin. In 1991, Yuba and the Member Units completed a groundwater substitution transfer to provide water to other parts of California under the Governor's Emergency Drought Water Bank in response to a severe statewide drought. The groundwater levels that occurred in the fall of 1991 at the end of pumping did not result in any overdraft of the groundwater basin or any significant unmitigated Third-Party impacts. Groundwater levels had been lower than these levels during the 1980's, but the extent of effects of these lower levels on groundwater users in the basin is not well known. Therefore, the fall 1991 groundwater levels will be used for comparison with the estimated condition of the basin that will result from the proposed groundwater pumping under this Agreement and the Yuba River Accord.

If the estimated levels are above the fall 1991 levels, then significant unmitigated Third-Party impacts will not be expected. If the estimated levels are below the fall 1991 levels, then further examination of potential impacts and consultation with the Member Units and the GMP Water Advisory Group (discussed below) will be required. The GMP Water Advisory Group is a group that was formed under the GMP to provide input and guidance on groundwater issues. The GMP Water Advisory Group comprises representatives from local groundwater users, including municipal water purveyors, Member Units, reclamation districts and others. Groundwater substitution pumping that would result in levels near the fall 1991 levels will occur only if the Member Units and the GMP Water Advisory Group agree to allow such pumping. Even if the determination is that estimated levels resulting from proposed pumping will be above the fall 1991 levels, the Member Units still will be consulted, and each Member Unit must individually approve the proposed pumping in its area or such pumping will not occur. If the amount of proposed pumping that will not cause fall groundwater levels to drop below 1991 levels cannot be confirmed using the procedures described above, then a lower amount of pumping that satisfies the conditions of this section will be determined using these procedures. The Yuba Board reserves the right to restrict the maximum amount of groundwater substitution pumping and the right to resolve any disputes in the Water Advisory Group regarding maximum amount of groundwater pumping.

If for any year the total amount of groundwater pumping that is determined to be acceptable under this section is less than the total amount of Components 1, 2 and 3 water that is provided for in the Agreement, minus the amount of surface water to be transferred, then Yuba may either: (a) use additional surface water through supplemental surface water transfer to provide Components 1, 2 and 3 water; or (b) advise DWR that the total unmet amount of Components 1, 2 and 3 water will not be provided during the present year and instead will be owed to the Buyers and repaid in a manner detailed in Exhibit 1 of this Agreement

### **3. Third-Party Impacts Action Plan**

The purpose of this Third-Party impacts action plan is to describe actions that will be undertaken by Yuba and Member Units to respond to impacts to Third Parties that occur because of groundwater substitution pumping for transfers under this Agreement. Third Parties include local groundwater users that could be affected by fluctuations in groundwater levels because of the pumping of such groundwater substitution water. Yuba and the Member Units agree that prompt responses to and mitigation of potential impacts to Third Parties are an important requirement for Yuba's present and future groundwater substitution transfers.

This action plan includes a series of steps that will be taken to ensure that the groundwater substitution component of this Agreement and the Yuba River Accord does not cause significant, unmitigated impacts to Third Parties. Under this action plan, groundwater substitution pumping must not produce significant unmitigated impacts on Third Parties, impacts must be identified and mitigated as quickly as possible, and there must be ongoing, open communications with affected Third Parties. Because not all potential impacts can be known in advance, this plan provides a process for responding to concerns expressed by local groundwater users who believe that their water-production facilities are being or will be impacted by groundwater substitution pumping under this Agreement and the Yuba River Accord.

As a contractual condition of a Member Unit participating in the groundwater substitution component of this Agreement and the Yuba River Accord, the Member Unit will identify a contact person or persons who will be responsible for initially responding to a notification of a potential Third-Party impact, and take the other action specified in this section. The contact person for a Member Unit will be the person designated by the Member Unit. The responsibilities of Yuba under this action plan will be carried out by the General Manager, or by a person designated by the General Manager. The contact persons for the Member Units will also serve on a Yuba Groundwater Substitution Program Advisory Group ("Advisory Group") for either the area north of the Yuba River or the area south of the Yuba River.

Upon either Yuba or the Member Unit receiving notification of a potential Third-Party impact, Yuba or the Member Unit will immediately notify the other party of the nature of the potential impact. The Member Unit will promptly (within one day) contact the Third Party and obtain all available information regarding the nature and extent of the potential impact, and provide that information to Yuba. The Member Unit also will regularly update Yuba on the status of the Member Unit's response.

If the Third Party is not within the boundaries of any Member Unit of Yuba, then Yuba will either: (a) determine if it is evident that the Third Party is in close proximity to the groundwater-production facilities within a Member Unit that are involved in the groundwater substitution program, and designate the Member Unit or Member Units responsible for responding to the potential impact; or (b) consult with the Advisory Group concerning which Member Unit or Member Units should be designated for responding to the potential impact.

After the Third Party has been contacted and the relevant information regarding the potential impact has been received, the Member Unit will develop an approach (subject to approval by Yuba) to: (a) determine whether the Third Party has actually been impacted by groundwater pumping by the Member Unit, and, if so; (b) mitigate for the impact. Yuba will be

available to provide assistance to the Member Unit in developing the foregoing approach. Yuba and the Member Unit will consult with the applicable Advisory Group in developing the approach referred to in this section.

Yuba will resolve any dispute concerning implementation of this action plan, including which Member Unit will be responsible for mitigating a potential impact, whether it is reasonably likely that there was a Third-Party impact, and the measures to be taken by the Member Unit to mitigate the impact. If a Member Unit fails to carry out its responsibilities under this action plan, then Yuba will be authorized (but not required) to perform the responsibilities of the Member Unit and recover its reasonable costs in doing so from the Member Unit, including deducting these costs from payments due the Member Unit for the groundwater substitution transfer. Yuba will consult with the applicable Advisory Group in carrying out its responsibilities under this section.

It is the intention of this action plan that: (a) any Third-Party impact that is reasonably likely to have been caused by implementation of the groundwater substitution program will be promptly and substantially mitigated; (b) as to any Third-Party impact that is not reasonably likely to have been caused by implementation of the groundwater substitution program, the Third Party will be provided information to reasonably demonstrate the reasons that there were no impacts; and (c) Yuba, the Member Units and the Advisory Group will be involved in the implementation of this action plan. Actions that will be taken to mitigate an impact include, but are not limited to, deepening of the impacted Third Party's well or lowering of pump bowls, cessation of pumping in the area of the impacted well, and providing a temporary or permanent alternative water supply to the Third Party.

## EXHIBIT 4

### State of California – Department of Water Resources

#### Agreement for the Long-term Purchase of Water from Yuba County Water Agency by the Department of Water Resources

#### STANDARD CLAUSES

**Worker's Compensation Clause.** Contractor affirms that it is aware of the provisions of Section 3700 of the California Labor Code which require every employee to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that Code, and Contractor affirms that it will comply with such provisions before commencing the performance of work under this Agreement.

**Nondiscrimination Clause.** During the performance of this Agreement, Contractor and its subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, and denial of family care leave. Contractor and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Contractor and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12990 (a-f) et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement.

Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Agreement.

**Compliance with Laws, Regulations, Permit Requirements.** Contractor shall at all times comply with, and require its contractors and subcontractors to comply with, all applicable federal and State laws, rules and regulations, permits and all applicable local ordinances, specifically including but not limited to environmental, procurement and safety laws, rules, regulations, permits and ordinances.

**Availability of Funds.** Work to be performed under this contract is subject to the availability of funds through the State's normal budget process.

**Audit Clause.** For contracts in excess of \$10,000, the contracting parties shall be subject to the examination and audit of the State Auditor for a period of three years after the final payment under the contract (Government Code Section 8546.7).

**Payment Retention Clause.** Ten percent of any progress payments that may be provided under this contract shall be withheld per Public Contract Code Sections 10346 and 10379 pending satisfactory completion of all services under the contract.

**Reimbursement Clause.** If applicable, travel and per diem expenses to be reimbursed under this contract shall be at the same rates the State provides for unrepresented employees in accordance with the provisions of Title 2, Chapter 3, of the California Code of Regulations. Contractor's designated headquarters for the purpose of computing such expenses shall be: 1402 D Street, Marysville, California 95901-4226.

**Termination Clause.** The State may terminate this contract without cause upon 30 day's advance written notice. The Contractor shall be reimbursed for all reasonable expenses incurred up to the date of termination.

**Drug-Free Workplace Certification.** By signing this contract, the Contractor or grantee hereby certifies under penalty of perjury under the laws of the State of California that the Contractor or grantee will comply with the requirements of the Drug-Free Workplace Act of 1990 (Government Code Section 8350 et seq.) and will provide a drug-free workplace by taking the following actions:

1. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations.
2. Establish a Drug-Free Awareness Program to inform employees about all of the following:
  - (a) The dangers of drug abuse in the workplace,
  - (b) The person's or organization's policy of maintaining a drug-free workplace,
  - (c) Any available counseling, rehabilitation, and employee assistance programs;  
and
  - (d) Penalties that may be imposed upon employees for drug abuse violations.
3. Every employee who works on the proposed contract or grant:
  - (a) Will receive a copy of the company's drug-free policy statement, and
  - (b) Will agree to abide by the terms of the company's statement as a condition of employment on the contract or grant.

This contract or grant may be subject to suspension of payments or termination, or both, and the contractor or grantee may be subject to debarment if the Department determines

that: 1) the Contractor or grantee has made a false certification, or 2) the Contractor or grantee violates the certification by failing to carry out the requirements noted above.

**Americans with Disabilities Act.** By signing this contract, Contractor assures the State that it complies with the Americans With Disabilities Act (ADA) of 1990, 942 U.S.C.12101 et seq.), which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA.

**Conflict of Interest.** Current State Employees: a) No officer or employee shall engage in any employment activity or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any State agency, unless the employment, activity or enterprise is required as a condition of regular State employment. b) No State officer or employee shall contract on his or her own behalf as an independent contractor with any State agency to provide goods or services.

**Former State Employees:** a) For the two year period from the date he or she left State employment, no former State officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements or any part of the decision-making process relevant to the contract while employed in any capacity by any State agency. b) For the twelve-month period from the date he or she left State employment, no former State officer or employee may enter into a contract with any State agency if he or she was employed by that State agency in a policy-making position in the same general subject area as the proposed contract within the twelve-month period prior to his or her leaving State service.

**Child Support Compliance Act.** For any agreement in excess of \$100,000, the Contractor acknowledges in accordance herewith, that:

1. The Contractor recognizes the importance of child and family support obligations and shall full comply with all applicable State and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earning assignment orders, as provided in Chapter 8 (commencing with Section 5200) of Part 5 of Division 9 of the Family Code; and
2. The Contractor, to the best of its knowledge, is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the Employment Development Department.

**Air or Water Pollution Violation.** Under the State laws, the Contractor shall not be: 1) in violation of any order or resolution not subject to review promulgated by the State Air Resources Board or an air pollution control district; 2) subject to cease and desist order not subject to review issued pursuant to Section 13301 of the Water Code for violation of waste discharge requirements or discharge prohibitions; or 3) finally determined to be in violation of federal law relating to air or water pollution.

**Union Organizing.** For all contracts, except fixed price contracts of \$50,000 or less, the Contractor acknowledges that: by signing this Agreement the Contractor hereby

acknowledges the applicability of Government Code Section 16645 through Section 16649 to this Agreement and agrees to the following:

- (a) Contractor will not assist, promote or deter union organizing by employees performing work on a State service contract, including a public works contract.
- (b) No State funds received under this Agreement will be used to assist, promote or deter union organizing.
- (c) Contractor will not, for any business conducted under this Agreement, use any State property to hold meetings with employees or supervisors, if the purpose of such meetings is to assist, promote or deter union organizing, unless the State property is equally available to the general public for holding meetings.
- (d) If Contractor incurs costs or makes expenditures to assist, promote or deter union or organizing, Contractor will maintain records sufficient to show that no reimbursement from State funds has been sought for these costs, and that the Contractor shall provide those records to the Attorney General upon request.

**Recycling Certification.** Contractor shall certify in writing under penalty of perjury, the maximum, if not exact, percentage of recycled content, both post consumer water and secondary waste as defined in Public Contract Code, Section 12161 and 12200, in materials, goods, or supplies offered or products used in the performance of this Agreement, regardless of whether the product meets the required recycled product percentage as defined in Public Contract Code, Sections 12161 and 12200. Contractor may certify that the product contains zero content. (PCC 10233, 10308.5, 10354)