

CHAPTER 3

CHANGES IN PROJECT DESCRIPTION AND ANALYSES OF PROJECT IMPACTS SINCE PUBLICATION OF DRAFT EIR/EIS

3.1 INTRODUCTION

Section 10.1.4.1 on pages 10-31 through 10-36 of the Draft EIR/EIS discusses the recent decline of pelagic fish species in the Delta, the Pelagic Fish Action Plan and Reclamation's decision to re-initiate ESA consultations regarding the OCAP with USFWS and NMFS. On page 10-35, the Draft EIR/EIS "acknowledges that there are numerous issues surrounding the pelagic organism decline, and recognizes that future Delta operations and management will differ from the operations and management that have been in place under the CEQA Existing Condition and the NEPA Affected Environment."

The Draft EIR/EIS was issued on June 25, 2007. Just over two months later, on August 31, 2007, the court in *NRDC v. Kempthorne* issued its draft interim remedies order, which directs Reclamation and DWR to take several actions, including some substantial curtailments in Delta exports by the CVP and SWP during late December through June of each year. This order has caused two significant changes to the Proposed Project/Action.

First, as a result of this order, 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 that is described on pages 3-14 to 3-16 of the Draft EIR/EIS, and Reclamation would not execute the Tier 3 Agreements that are described on pages 3-16 to 3-17 of the Draft EIR/EIS. The same amount of Component 1 water still would go to the Environmental Water Account (EWA) Program. For Components 2, 3 and 4 water, DWR still would execute Tier 3 Agreements with SWP contractors, and DWR also may execute water-purchase agreements with interested CVP contractors.

After Reclamation issues its Record of Decision, 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 CVP contractors would execute their Tier 3 Agreements, as contemplated in the Draft EIR/EIS.

Second, as a result of the court's interim remedies order in *NRDC v. Kempthorne*, the times of the year during which the additional water that would flow into the Delta under the Yuba Accord Alternative may be exported from the Delta, and the amounts of such water that may be exported from the Delta, would be more limited than under the Yuba Accord Alternative that is described and analyzed in the Draft EIR/EIS.

Even with the proposed phasing of the Yuba Accord Alternative, and even with the court's interim remedies order in *NRDC v. Kempthorne*, the Fisheries Agreement and YCWA's obligations to maintain the lower Yuba River flows that are specified by the Fisheries Agreement under the Yuba Accord would not change. The Yuba Project operations and lower Yuba River flows that are described and analyzed in the Draft EIR/EIS for the Yuba Accord Alternative would change slightly as a result of this proposed phasing and the court's interim

remedies order, because of some small changes in the amounts of groundwater substitution pumping. The amount of groundwater substitution pumping in any particular year would be partly determined by the available capacity at the Banks and Jones pumping plants during the months of July, August, and September. Increased CVP or SWP pumping of CVP and SWP water during these months to offset reduced pumping of CVP and SWP water during the winter and spring, as a result of the court's interim remedies order, could reduce available capacity at these pumping plants for Yuba Accord transfer water, and therefore could reduce or shift the amounts of groundwater substitution pumping in some years. These changes in groundwater-substitution transfers, and the associated impacts of groundwater substitution pumping under the Yuba Accord Alternative would be relatively small, and would not change the conclusions in the impact analyses discussed in the Draft EIR/EIS.

The proposed phasing of the Yuba Accord Alternative and the court's interim remedies order in *NRDC v. Kempthorne* could change the amounts and timing of CVP and SWP exports from the Delta, the storage of Yuba Accord transfer water in Oroville Reservoir, and the amounts of Yuba Accord transfer water available in the Export Service Area. The phasing of the Yuba Accord Alternative and the effects of this phasing on the Yuba Accord Alternative's potential environmental impacts in the Delta Region and the Export Service Area are discussed in Section 3.2. The effects of the court's interim remedies order on the Yuba Accord Alternative's potential environmental impacts in the Delta Region and the Export Service Area are discussed in Section 3.3.

3.2 EFFECTS OF PHASING THE YUBA ACCORD ALTERNATIVE

The first phase of the Yuba Accord Alternative, under which YCWA and DWR would be the only parties to the Water Purchase Agreement, could result in two major changes in the analyses in the Draft EIR/EIS. First, the proportions of Yuba Accord transfer water pumped at the Banks and Jones pumping plants could change, if Yuba Accord transfer water could not be pumped at the Jones Pumping Plant at the rates analyzed in the Draft EIR/EIS. Second, while the amounts of Yuba Accord transfer water that go to the EWA Program would not change, there could be some changes in the amounts of Yuba Accord transfer water that go to CVP and SWP contractors in drier years. These changes are discussed respectively in Sections 3.2.1 and 3.2.2.

3.2.1 POTENTIAL CHANGES IN THE RATES OF PUMPING OF YUBA ACCORD TRANSFER WATER AT BANKS AND JONES PUMPING PLANTS DURING THE FIRST PHASE OF THE YUBA ACCORD ALTERNATIVE

As discussed in Section 5.6 of the Modeling Technical Memorandum, Appendix D of the Draft EIR/EIS, on page D-30, the CVP (Jones Pumping Plant) has little surplus capacity, except under drier hydrologic conditions, and the SWP (Banks Pumping Plant) has greatest surplus capacity in dry and critical years, less under average conditions, and some in wetter years. For modeling purposes, it therefore was assumed that: (a) in wet and above normal years, all exports of Yuba Accord transfer water would be through the Banks Pumping Plant until all capacity, including the dedicated EWA capacity, is used; then any remaining transfers would be exported through the Jones Pumping Plant, to the extent that it has capacity for such transfers; and (b) in below normal, dry and critical years, exports of Yuba Accord transfer water would be split evenly between the Banks and Jones pumping plants; once either plant reached capacity, any remaining exports would be through the remaining capacity at the other pumping plant.

It is possible that, under the first phase of the Yuba Accord Alternative, Yuba Accord transfer water still could be exported through both the Banks and Jones pumping plants. However, to determine the maximum potential changes in the mix of exports through these two pumping plants, it was assumed for the following analysis that all Yuba Accord transfer water under the Yuba Accord Alternative would be pumped only through the Banks Pumping Plant during this first phase, and only when there was capacity available at the Banks Pumping Plant for this purpose.

This analysis used the previous model results, and post-processed them with the restriction that export pumping of Yuba Accord transfer water could occur only at the Banks Pumping Plant. Other modeling assumptions, impact assessment methodologies, impact indicators and evaluation guidelines are the same as those that are described in Appendix D, and on pages 10-63 through 10-65, of the Draft EIR/EIS. **Table 3-1** shows the changes in pumping rates that would result from this pumping restriction.

Table 3-1. Simulated Average Annual Exports Through Banks and Jones Pumping Plants During the First Phase of the Yuba Accord Alternative and the Draft EIR/EIS Yuba Accord Alternative (TAF)

Water Year Type	First Phase of Yuba Accord Alternative		Draft EIR/EIS Yuba Accord Alternative		Change (First Phase of Yuba Accord Alternative Minus Draft EIR/EIS Yuba Accord Alternative)	
	Banks Pumping Plant	Jones Pumping Plant	Banks Pumping Plant	Jones Pumping Plant	Banks Pumping Plant	Jones Pumping Plant
Average All Years	3,264	2,300	3,245	2,322	19	-22
Wet	4,029	2,606	4,028	2,610	1	-4
Above Normal	3,713	2,566	3,712	2,566	0	-1
Below Normal	3,486	2,447	3,468	2,464	18	-17
Dry	2,882	2,163	2,842	2,212	40	-49
Critical	1,805	1,553	1,762	1,598	43	-45

Notes:
Sacramento Valley Index Water Year Types as defined in State Water Resources Control Board Revised Decision 1641
TAF = thousand acre-feet

As indicated in this table, there normally would be slightly lower exports from Jones Pumping Plant, and slightly higher exports from Banks Pumping Plant, during the first phase of the Yuba Accord Alternative, relative to the Yuba Accord Alternative analyzed in the Draft EIR/EIS. On an average annual basis, total exports would be 3 TAF lower during this first phase. Average annual exports would be lower under the first phase during all water-year types except for below-normal years, during which total exports would be slightly higher.

These changes in export pumping of Yuba Accord transfer water were subsequently used to determine the changes in the differences in salvage estimates for fish in the Delta for the following two comparisons of alternatives: (1) Yuba Accord Alternative compared to the CEQA Existing Condition; and (2) Yuba Accord Alternative compared to the CEQA No Project Alternative.

Table 3-2 lists the estimated differences in salvage of the fish species listed in the table for the Yuba Accord Alternative compared to the CEQA Existing Condition (Scenario 3 vs. Scenario 1) under the first phase (during which all Yuba Accord transfer water would be exported through the Banks Pumping Plant), and the estimated differences in salvage of these species for this same comparison in the Draft EIR/EIS (during which Yuba Accord transfer water would be exported through both the Banks Pumping Plant and the Jones Pumping Plant).

This table shows that there could be some slight changes in the numbers of fish salvaged as a result of this phasing, but that the percent differences in average salvage and salvage by water year for these species under this first phase of the Yuba Accord Alternative, relative to the CEQA Existing Condition, generally would not change from the results presented in the Draft EIR/EIS for the comparison of these two scenarios. The greatest percent increase in salvage differences under this first phase would be for delta smelt during critical years. For delta smelt in critical years, the percentage reduction in salvage under the Yuba Accord Alternative, relative to the CEQA Existing Condition, would change from -0.6 percent (Draft EIR/EIS) to -0.4 percent (First Phase of the Yuba Accord Alternative). Although this salvage estimate therefore would be higher than the salvage estimate that is presented in the Draft EIR/EIS for this scenario, species and water-year type, the change from the CEQA Existing Condition to the First Phase of the Yuba Accord Alternative still would be negative, that is, fewer fish would be salvaged under the Yuba Accord Alternative than under the CEQA Existing Condition. Thus, even though there would be some slight changes in the salvage estimates for the first phase of the Yuba Accord Alternative, the Yuba Accord Alternative still would not have any significant impacts on these fish species, relative to the CEQA Existing Condition.

Table 3-3 lists the estimated differences in salvage of these fish species under the first phase of the Yuba Accord Alternative, compared to the CEQA No Project Alternative (Scenario 3 vs. Scenario 2), and the estimated differences in salvage of these species for this same comparison in the Draft EIR/EIS.

This table shows that there could be some slight changes in the numbers of fish salvaged as a result of this phasing, but that the percent differences in long-term average salvage and salvage by water year for these species under this first phase of the Yuba Accord Alternative, relative to the CEQA No Project Alternative, generally would not change compared to the results presented in the Draft EIR/EIS. The greatest percent increase in salvage differences under this first phase would be for delta smelt during critical years. For delta smelt in critical years, the percentage reduction in salvage under the Yuba Accord Alternative, relative to the CEQA No Project Condition, would change from -5.3 percent (Draft EIR/EIS) to -5.1 percent (First Phase of the Yuba Accord Alternative). Although this salvage estimate therefore would be higher than the salvage estimate that is presented in the Draft EIR/EIS for this scenario, by species and water-year type, the change from the CEQA No Project Alternative to the first phase of the Yuba Accord Alternative still would be negative, that is, fewer fish would be salvaged under the Yuba Accord Alternative than under the CEQA No Project Alternative. Thus, even though there would be some slight changes in the salvage estimates for the first phase of the Yuba Accord Alternative, the Yuba Accord Alternative still would not have any significant impacts on these fish species, relative to the CEQA No Project Alternative.

Table 3-2. Salvage Estimates for the First Phase of Yuba Accord Alternative (Exports Only at Banks Pumping Plant) Compared to the CEQA Existing Condition (Scenario 3 vs. Scenario 1)

Year Type	First Phase of Yuba Accord Alternative Total: CVP and SWP		Draft EIR/EIS Yuba Accord Alternative Total: CVP and SWP	
	Difference in Average Salvage	Percent Difference in Average Salvage	Difference in Average Salvage	Percent Difference in Average Salvage
Winter-run Chinook Salmon Salvage Projections				
All Years	-41	-0.3	-15	-0.1
Wet	-13	-0.1	-6	0.0
Above Normal	-23	-0.2	0	0.0
Below Normal	-38	-0.2	0	0.0
Dry	-118	-0.9	-87	-0.7
Critical	-15	-0.2	16	0.2
Spring-run Chinook Salmon Salvage Projections				
All Years	-80	-0.2	-79	-0.2
Wet	-62	-0.1	-61	-0.1
Above Normal	-41	-0.1	-38	-0.1
Below Normal	0	0.0	-2	0.0
Dry	-295	-1.3	-293	-1.3
Critical	-1	0.0	-2	0.0
Steelhead Salvage Projections				
All Years	-18	-0.5	-5	-0.1
Wet	-18	-0.4	-8	-0.2
Above Normal	-28	-0.5	-1	0.0
Below Normal	-9	-0.3	-2	-0.1
Dry	-26	-1.0	-16	-0.6
Critical	-7	-0.4	3	0.2
Delta Smelt Salvage Projections				
All Years	-353	-0.5	-376	-0.5
Wet	-214	-0.2	-213	-0.2
Above Normal	-859	-1.0	-847	-0.9
Below Normal	-164	-0.2	-228	-0.3
Dry	-359	-0.6	-347	-0.6
Critical	-169	-0.4	-244	-0.6
Striped Bass Salvage Projections				
All Years	-42,417	-1.3	-34,796	-1.1
Wet	-68,808	-1.6	-66,197	-1.5
Above Normal	-65,636	-1.6	-65,198	-1.6
Below Normal	-33,415	-0.9	-32,982	-0.9
Dry	-26,404	-0.9	-4,712	-0.2
Critical	-17,822	-1.2	-4,892	-0.3

Table 3-3. Salvage Estimates for the First Phase of Yuba Accord Alternative (Exports Only at Banks Pumping Plant) Compared to CEQA No Project Alternative (Scenario 3 vs. Scenario 2)

Year Type	First Phase of Yuba Accord Alternative Total: CVP and SWP		Draft EIR/EIS Yuba Accord Alternative Total: CVP and SWP	
	Difference in Average Salvage	Percent Difference in Average Salvage	Difference in Average Salvage	Percent Difference in Average Salvage
Winter-run Chinook Salmon Salvage Projections				
All Years	-30	-0.2	-4	0.0
Wet	1	0.0	8	0.1
Above Normal	-23	-0.2	0	0.0
Below Normal	-27	-0.2	11	0.1
Dry	-105	-0.8	-74	-0.6
Critical	5	0.1	36	0.4
Spring-run Chinook Salmon Salvage Projections				
All Years	-56	-0.1	-56	-0.1
Wet	-1	0.0	0	0.0
Above Normal	-3	0.0	0	0.0
Below Normal	3	0.0	1	0.0
Dry	-284	-1.3	-282	-1.3
Critical	4	0.0	3	0.0
Steelhead Salvage Projections				
All Years	-15	-0.4	-2	-0.1
Wet	-10	-0.2	0	0.0
Above Normal	-27	-0.5	0	0.0
Below Normal	-7	-0.2	0	0.0
Dry	-24	-0.9	-14	-0.5
Critical	-7	-0.4	3	0.2
Delta Smelt Salvage Projections				
All Years	-747	-1.0	-770	-1.0
Wet	158	0.1	159	0.1
Above Normal	81	0.1	93	0.1
Below Normal	12	0.0	-52	-0.1
Dry	-1,836	-3.0	-1,824	-3.0
Critical	-2,151	-5.1	-2,226	-5.3
Striped Bass Salvage Projections				
All Years	-46,221	-1.4	-38,600	-1.2
Wet	48,864	1.2	51,475	1.2
Above Normal	37,344	1.0	37,782	1.0
Below Normal	-18,874	-0.5	-18,441	-0.5
Dry	-116,390	-3.9	-94,698	-3.2
Critical	-182,047	-11.4	-169,117	-10.6

As shown in Table 3-1, there potentially would be less Yuba Accord transfer water exported during the first phase of the Yuba Accord Alternative than under the Yuba Accord Alternative discussed and analyzed in the Draft EIR/EIS. If less Yuba Accord transfer water were exported while the same amounts of Yuba Accord water would flow into the Delta, then potential changes in other Delta parameters like X2 and Delta outflows under the Yuba Accord Alternative, compared to the bases of comparison, also would be lower than the corresponding changes that were discussed and evaluated in the Draft EIR/EIS. For this reason, the environmental impacts associated with these parameters that are discussed in the Draft EIR/EIS are greater than or equal to the corresponding environmental impacts that would occur under the first phase of the Yuba Accord Alternative, and no further analyses of these impacts are necessary here.

3.2.2 POTENTIAL CHANGES IN ALL ALLOCATIONS OF YUBA ACCORD TRANSFER WATER DURING THE FIRST PHASE OF THE YUBA ACCORD ALTERNATIVE

As discussed in Section 3.2.1.3 on pages 3-14 to 3-15 of the Draft EIR/EIS, for the analyses in the Draft EIR/EIS it was assumed that Component 1 water would be supplied to the EWA Program, and that Components 2, 3, and 4 water normally would be shared equally by Reclamation and DWR and conveyed to CVP and SWP contractors. However, page 3-15 of the Draft EIR/EIS also noted that there could be years during the Yuba Accord Alternative in which up to 100 percent of the Components 2, 3, and 4 water would go to either the CVP contractors or the SWP contractors.

Although Reclamation would not be a party to the Water Purchase Agreement during the first phase of the Yuba Accord Alternative, the Component 1 water still all would be supplied to the EWA Program. Also, it is anticipated that DWR would enter into contracts with interested CVP contractors under which DWR would supply Components 2, 3, and 4 water to such contractors. The range of allocations of Components 2, 3, and 4 water that are discussed and analyzed in the Draft EIR/EIS therefore probably would not change significantly during the first phase of the Yuba Accord Alternative.

Moreover, even if there were some differences in these allocations during the first phase of the Yuba Accord Alternative, deliveries of Components 2, 3 and 4 water to SWP contractors still would not cause the total deliveries of water to any SWP contractor to exceed its Table A amount, and the first phase of the Yuba Accord Alternative would not have a long enough duration to result in any permanent new water supplies to any SWP contractor. The changes in the Yuba Accord Alternative caused by the proposed phasing, therefore, still would not have any growth-inducing impacts. For this reason, and because the exports of Yuba Accord transfer water during the first phase of the Yuba Accord Alternative would be less than or equal to corresponding exports that were discussed and analyzed in the Draft EIR/EIS, no further analyses of environmental impacts in the Export Service Area are necessary.

3.3 EFFECTS OF THE INTERIM REMEDIES ORDER IN *NRDC v. KEMPTHORNE*

As described in Section 3.1, the U.S. District Court issued its draft interim remedies order in the *NRDC v. Kempthorne* litigation on August 31, 2007. Although the court has yet not issued its final interim remedies order in that case, it is anticipated that the court's final interim remedies order will be very similar to the draft order, and therefore will significantly reduce the amounts of water that Reclamation and DWR may pump from the Delta during December through June of each year.

Tables 5-26 and 5-27 on pages 5-46 and 5-47 of the Draft EIR/EIS list the estimated annual amounts of stored-water and groundwater-substitution transfers that would be likely to occur under the Proposed Project/Action and alternatives. Because the monthly transfer amounts are important for the following discussion, the following Tables 3-4 and 3-5 list the estimated monthly stored-water and groundwater-substitution transfer volumes for the Yuba Accord Alternative, and the percentages of the total transfers that would occur during each month.

Table 3-4. YCWA Stored-Water Transfer Volumes, Yuba Accord Alternative, Average All Years

Month	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Annual Transfer Volume (TAF)	6.7	3.3	0.8	0.0	0.4	0.3	0.0	-0.4	0.0	27.1	21.6	3.8	63.5
Percent of Annual Transfer Volume.	10.6	5.2	1.2	0.0	0.6	0.4	0.0	-0.7	0.0	42.7	33.9	6.0	100
Percent of Transfer Volume by Period	15.7		1.6						82.7				100

Table 3-5. YCWA Groundwater-Substitution Transfer Volumes, Yuba Accord Alternative, Average All Years

Month	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Annual Transfer Volume (TAF)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	10.5	2.4	24.5
Percent of Annual Transfer Volume	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.1	43.0	9.7	100
Percent of Transfer Volume by Period	0.4		0.0						99.6				100

These tables show that relatively small percentages of the stored-water transfers and none of the groundwater-substitution transfers under the Yuba Accord Alternative are predicted to occur during December through June. Because lower Yuba River flows would not change, the net effect of the court's interim remedies order in *NRDC v. Kempthorne* on the Yuba Accord Alternative would be to slightly reduce exports of Yuba Accord transfer water, and to slightly increase Delta outflows, during these months. These changes are not anticipated to result in any new significant environmental impacts as a result of operations of the Yuba Accord Alternative under the interim remedies that were not already analyzed in the Draft EIR/EIS.

These tables also show that the majority of the stored-water and groundwater-substitution transfers under the Yuba Accord Alternative are predicted to occur during July through September, and that some additional transfers are predicted to occur during October and November. Because the court's interim remedies order would not significantly affect CVP or SWP exports during these months, and because the lower Yuba River flows and associated Delta inflows under the Yuba Accord Alternative would not significantly change as a result of the court's interim remedies order, it is unlikely that this order would significantly affect exports of Yuba Accord transfer water, or any of the other Delta parameters that are analyzed in the Draft EIR/EIS, during these months.

For these reasons, the environmental impact analyses in the Draft EIR/EIS do not have to be changed because of the court's interim remedies order in *NRDC v. Kempthorne*.