

OVERVIEW OF 1996 SUPPLEMENTAL ACTIONS TO DELTA ACCORD
USING CVPIA "TOOLS" TO IMPROVE FISHERY PROTECTION

PRIORITY ORDER	ACCORD	ACTION	PRIMARY SPECIES ^G	POTENTIAL BENEFIT ^F	ESTIMATED WATER COST
1.	EXPORT 50 TO 100% OF VERNALIS FLOW DURING APRIL/MAY PULSE.	VERNALIS TO EXPORT RATIO OBJECTIVE, 20 TO 50%, APRIL/MAY PULSE.	FALL-RUN CHINOOK.	SMOLT SURVIVAL INCREASE.	100-150 KAF ^A <i>B.O. above baseline</i> <i>800K - this</i> 100-138 TAF - BQ 100-103 TAF AFRP
2.	NO OBJECTIVE.	MINIMUM 13,000 CFS FLOW AT FREEPORT IN MAY.	STRIPED BASS.	TRANSPORT OF EGG/LARVAE TO MORE PRODUCTIVE REARING AREAS AND REDUCE EGG SETTLING AT LOW FLOWS.	50-100 KAF ^B 50% - 0 TAF 90% - 0 TAF
3.	JULY EXPORT 65% OF DELTA INFLOW FROM 35% IN JUNE.	JULY RAMPING OF DOF AND EXPORTS, I.E., AVOID RAPID INCREASE IN EXPORT OR DECREASE IN DOF.	STRIPED BASS.	INCREASE JUVENILE SURVIVAL DUE TO LESSER EXPORT AND GREATER DOF THAN 65% E/I RATIO.	50-100 KAF ^C <i>DOF controlling</i> <i>of TAF</i> <i>export controlling</i> 0-75 TAF
4.	X2 DAYS AT CHIPPS ISLAND IN MAY AND JUNE-SIMILAR TO LATE 1960'S EARLY 1970'S.	INCREASE DAYS WHEN X2 IS AT CHIPPS ISLAND IN MAY AND JUNE - SIMILAR TO EARLY 1960'S.	STRIPED BASS.	EXTENDS PERIOD WHEN IMPROVED REARING CONDITIONS ARE PRESENT IN W. DELTA.	MINOR ^D 50% $\hat{=}$ 8% 90% $\hat{=}$ 4-11 days (10 TAF/day) 100-140 TAF
5.	NOVEMBER-JANUARY EXPORT 65% OF DELTA INFLOW.	ESTABLISH CONDITIONS FOR CWT SMOLT SURVIVAL EXPERIMENT IN DEC/JAN AT EXPORTS OF 35 AND 65% OF DOF.	LATE-FALL CHINOOK	GAIN INFORMATION ON THE BENEFIT OF REDUCED E/I RATIO IN NOVEMBER-JANUARY PERIOD OF SPRING-RUN, LATE FALL	100-140 KAF ^E 0-10 TAF/day x 10-14 days 100-140 TAF

"most costly"

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FOOTNOTES: ESTIMATED WATER COSTS ARE PRELIMINARY AND SHOULD NOT BE QUOTED. CVP/SWP OPERATORS ARE REFINING COST ESTIMATES AND FEASIBILITY OF ACTIONS AND WILL MEET WITH BIOLOGISTS ON 3/5/96. COST WILL INCLUDE "PAYBACK" TO SWP AND USE OF MODIFIED CVP OPERATION, (B)(2) AND POSSIBLY (B)(3) TO IMPLEMENT ACTIONS. CVP WATER CONTRACT ALLOCATION WORKSHOP SET FOR 3/11 WHICH WILL INCLUDE ASSESSMENT OF MEETING THESE SUPPLEMENTAL DELTA FISHERY ACTIONS. USBR/DWR MUST ACHIEVE AGREEMENT TO IMPLEMENT AND COORDINATE VIA CAL FED/OPS GROUP.

- A) ASSUMES VERNALIS PULSE FLOW OF ~8,000 CFS IN PULSE AND PROJECTED EXPORT TOTAL OF 4,000. I/E RATIO OF 4:1 = 2000 EXPORTS OR COST OF 4000 AF/D.
- B) PROBABLY MAXIMUM COST IF WATER YEAR IS ABOVE NORMAL. DELTA INFLOW LIKELY \geq 13,000 CFS IN MAY DUE TO HIGH RESERVOIR RELEASES.
- C) E/I RATIO DEPENDENT ON SWP, COULD BE 45-50%, DEPENDENT ON DECISION WHEN TO FILL SAN LUIS.
- D) X2 SHOULD NOT BE CONTROLLING AS HIGH FLOWS IN MARCH, APRIL, EARLY MAY SHOULD HELP X2 TO WEST OF CHIPPS ISLAND.
- E) MAY NOT IMPACT 1996 CONTRACT ALLOCATIONS. ASSUMES EXPORT CURTAILMENT OF 5,000 CFS/D OR 10,000 AF/D. 10 D=100 KAF.
- F) QUANTIFICATION OF BENEFITS IS DIFFICULT ALTHOUGH PAST DATA AND SMOLT SURVIVAL AND STRIPED BASS MODELS PROVIDE SUPPORT FOR THESE ACTIONS.
- G) OTHER ANADROMOUS AND NON-ANADROMOUS SPECIES WILL BE HELPED BY MOST ACTIONS.