

**National Marine Fisheries Service (NMFS) Determination June 7, 2011:**

**Old and Middle River Flow Management and Six-Year Acoustic Tag Experiment  
[Action IV.2.3 (pages 74-70) and Action IV.2.2 (pages 72-74) of the  
2011 Amendment to the Reasonable and Prudent Alternative of NMFS' Biological Opinion  
for the Long-Term Operations of the  
Central Valley Project and State Water Project (Opinion)]**

**Summary of Advice from the Delta Operations for Salmonids and Sturgeon (DOSS) group:**

**Background:** DOSS confirmed that from 5/31/11 to 6/5/11, older juvenile Chinook loss density has been 0 fish/TAF and the combined wild steelhead loss density at the fish facilities is as provided in the following table. The fish loss densities for this period (number of fish lost per thousand acre feet of water diverted) were calculated using the Chinook loss and steelhead salvage reported by DFG.

**SWP & CVP WILD STEELHEAD LOSS & LOSS DENSITY  
05/31/2011 through 06/05/2011**

Date	WILD STEELHEAD LOSS*			Combined wild steelhead loss density Loss Density (fish/taf)
	(# fish)			
	SWP	CVP	Combined	
5/31/2011	25.98	0.00	25.98	5.28
6/1/2011	17.32	0.00	17.32	1.31
6/2/2011	0.00	5.44	5.44	0.29
6/3/2011	0.00	2.72	2.72	0.14
6/4/2011	103.92	0.00	103.92	5.24
6/5/2011	0.00	0.00	0.00	0.00

DWR-DES 6/6/2011

Preliminary, subject to revision

\*SWP loss = salvage \* 4.33, CVP loss = salvage \* 0.68

**DOSS advice for 6/7/11.**

On Thursday, 6/2/2011, the projects (and WOMT) were notified by NMFS that the OMR limit of -3,500 cfs could be relaxed to -5,000 cfs. Because the reported wild older juvenile Chinook salmon and wild steelhead loss densities currently are below all trigger levels in Action IV.2.3, DOSS advises that the projects continue to operate such that OMR flows are no more negative than -5,000 cfs.

DOSS also advises that implementation of the 1:1 I:E ratio (required under Action IV.2.2 from June 1 – June 15) continue to be implemented. DOSS advises that compliance under Action IV.2.2 be measured by a 14-day running average of inflows to exports (as for I:E implementation

under Action IV.2.1); for tracking purposes a progressive daily average will be reported until a 14-day average is available.

**NMFS Determination**

NMFS accepts the advice from DOSS and determines that meeting the following RPA requirements is consistent with the intended implementation of the NMFS RPA and sufficiently protective of listed species present in the Delta at this time:

Action IV.2.3: Operate such that OMR flows are no more negative than -5,000 cfs

Action IV.2.2: Operate such that the Vernalis inflow:combined exports ratio is not less than 1:1 (*i.e.*, exports cannot be greater than the San Joaquin River flow as measured at Vernalis).