

Modeling Assumptions for the Interim Remedies Actions¹ Identified to Protect Delta Smelt

<i>Action</i>	<i>Description of the Action</i>	<i>Action Trigger(s)</i>	<i>End of Action</i>	<i>Modeling Assumptions for Lower Yuba River Accord²</i>
1	Within 3 days of the trigger, achieve an average net daily upstream Old and Middle rivers flow not to exceed 2,000 cfs for a 10-day period (one-time action).	On or after December 25, contingent on when turbidity threshold is greater than 12 nephelometric turbidity units at Prisoners Point, Holland Tract, or Victoria Island, unless the 3-day average Sacramento River flow at Freeport is greater than 80,000 cfs during the period.	After 10 days, or if the 3-day Sacramento River flow at Freeport increases to greater than 80,000 cfs during the 10 days, or the onset of spawning, or when water temperatures reach 12°C.	Assume average net daily upstream Old and Middle rivers flows may not exceed 2,000 cfs for a 10-day period from December 25 through January 3.
2	Daily net upstream Old and Middle rivers not to exceed a 7-day running average of 5,000 cfs.	Immediately following Action 1, or beginning January 15, unless the 3-day average Sacramento River flow at Freeport is greater than 80,000 cfs.	Ending at the onset of spawning ³ or when Delta water temperatures reach 12°C. ⁴	Assume daily net upstream Old and Middle rivers flows may not exceed a 7-day running average of 5,000 cfs from January 4 through February 8 ⁵ .
3	Target daily net upstream Old and Middle rivers flow of 750-5,000 cfs. As described in Attachment A to the Exhibit, actual flow to be determined based on real-time data estimating spawning distribution, and the susceptibility of a substantial portion of the population to the effects of CVP/SWP operations based on particle tracking model results or other real-time data. The flow will be a 14-day running average. Simultaneously, the 7-day running average shall be within 500 cfs of the applicable 14-day running average.	Initiate the action at the onset of spawning ³ or when water temperatures reach 12°C. ⁴ This action may be modified, or unnecessary, if the distribution of spawning delta smelt, larvae, and juveniles is not occurring south or east of Franks Tract and flows in the Yolo Bypass have reached the lower end of the bypass.	Until entrainment risk is abated or June 1, whichever occurs first.	Assume net daily upstream Old and Middle rivers flows may not exceed 750 cfs from February 9 through June 1.
4	Evaluation of real-time delta smelt data to recommend an action to protect juvenile smelt.	Based on real-time information, starting June 1. Evaluation of conditions to start Action 4 will begin May 15.	Until entrainment risk is abated or June 30, whichever occurs first.	Assume net daily upstream Old and Middle rivers flows may not exceed 750 cfs from June 2 through June 30.

¹ Columns 1 through 4 in the table summarize the actions, timing and triggers associated with the actions adopted by the U.S. District Court in *Natural Resources Defense Council (NRDC) et al. v. Kemphorne et al.* on August 31, 2007.

² Information describing the interim remedies order and related triggers in Columns 1 through 4 was used to develop modeling assumptions for the Lower Yuba River Accord described in Column 5.

³ The onset of spawning is indicated by the presence of spent females collected in Spring Kodiak Trawl or at the salvage facilities.

⁴ Delta water temperatures will be determined based on a three station average of the water temperatures at the Mossdale, Antioch, and Rio Vista monitoring stations.

⁵ For the Lower Yuba River Accord modeling, from inspection of 2001-2007 water temperature monitoring records at Mossdale, Antioch, and Rio Vista, February 8 used as the end of Action 2, as it was the first date the three-station average daily water temperature exceeded 12°C.