

*This determination was presented to WOMT on 2/19.*

**NMFS Determination (2/19/2010)**

The Temporary Restraining Order runs through today, February 19th, and it is not clear at what time the TRO expires. This information is not being provided to implement RPA Action IV.2.3, it is being provided for informational purposes only today, and, in the absence of further action by the court, to advise on weekend operations.

NMFS has reviewed the DOSS notes and accepts the advice from DOSS on 2/18/2010 (draft DOSS advice attached).

If the TRO were not currently in place, NMFS would otherwise determine that operating projects to an OMR flow of no more negative than -5000 OMR over the weekend is consistent with Action IV.2.3 in the 2009 biological opinion and will protect salmon, steelhead and sturgeon. NMFS has reviewed monitoring and salvage information relative to all triggers in Action IV.2.3. Based on the fish monitoring data, NMFS concludes that the trigger in the NMFS BO for spring-run Chinook had been reached last Friday (2/12) and that a target OMR of -3500 cfs would have been appropriate for the next 5 days (until 2/17), had a Temporary Restraining Order not been in place. Actual daily OMR flow this last week ranged from -4,500 to -3,300 cfs. If the TRO were not currently in place, NMFS would otherwise determine that, at this time, targeting -3500 OMR is not necessary, since the peak of Spring run tag loss has passed. All species of juvenile salmonids are in the Delta now, and Action IV.2.3 implementation is necessary to avoid jeopardy to these species. NMFS will continue to monitor real-time information related to Action IV.2.3.

**Addendum to DOSS notes [steelhead loss estimations were completed after the 2/18 DOSS call]:**

On February 10, wild steelhead salvage was 25 at the CVP and 35 at the SWP. Using a “loss multiplier” of 0.667 for the CVP and 4.5 for the SWP (estimated using the reported loss:salvage ratio for ad-clipped winter-run on that date at each facility), the loss was estimated to be 15.3 at the CVP and 157.5 at the SWP, for a total loss of 172.8. Loss density is calculated by dividing combined loss by combined exports, in thousand acre-feet (TAF). The loss of 172.8 divided by combined exports of 15.075 TAF results in a loss density of 11.5, which reaches the criterion (loss density>8) for the first level of concern.

**DOSS advice for NMFS and WOMT (2/18) [was sent out to group for review the morning of 2/19]**

The DOSS reviewed the salvage data from last week and up to through Wednesday (2/17) and concluded:

- 1) salvage of non-clipped winter-run is declining from the previous week's counts,
- 2) confirmed loss of tagged hatchery spring-run surrogates (CNFH late fall run) is 0.496 % of the total number released on (1/14/10), and (based on projections from still-unread tags) is expected to exceed 0.5% of the total number released. This information was first received 2/12/10.
- 3) tagged hatchery spring-run surrogates were observed leaving the Delta based on Chipps Island monitoring data
- 4) daily loss densities for older juvenile Chinook salmon are very low,  $\leq 2.2$  fish per thousand acre feet (TAF) during the last week. Trigger levels are 8 fish per TAF for first stage level of concern, 12 fish per TAF for the second level of concern,
- 5) non-clipped steelhead salvage has tripled from the week of 1/31/10 (total of 85) to the week of 2/7/10 (total of 305). The current week (4 days 2/14 through 2/17) has a grand total of 87 unclipped steelhead salvaged at both facilities. It appears that the pulse has diminished, therefore no action is recommended at this time for steelhead.
- 6) adult green sturgeon will be moving into San Francisco Bay from the Pacific Ocean and staging to make their spawning migration upriver into the Sacramento River. Sufficient flows from the Sacramento River into the lower estuary are necessary to provide attraction cues for this upstream migration.

Based on the fish monitoring data above, DOSS concluded that the criteria in the NMFS BO for spring-run Chinook had been reached last Friday (2/12). Actual daily OMR flow this last week ranged from -4,500 to -3,300 cfs. DOSS concluded that, at this time, even if the TRO is not extended, targeting -3500 OMR is not necessary, since the peak of tag loss has passed. DOSS advises that operating to an OMR flow of no more negative than -5000 cfs would be protective of salmon, steelhead, and green sturgeon.