

WOMT Notes

June 9, 2015 Meeting

1. General Information:

CVP

- *Keswick Releases to upper Sacramento River @ 7200 cfs*
- *Nimbus Releases to lower American River @ 2000 cfs*
- *Goodwin Release to Stanislaus River @ 150 cfs*
- *Jones Pumping Plant 2 Day Cycling Pattern @ 800 cfs on, next day off*
- *Delta Cross-Channel Gates: Closed during week, opened on weekends Friday morning thru Monday morning*
- *Federal Share of San Luis 270 TAF*

SWP

- *Oroville Release to Feather River @ 2000 cfs*
- *Clifton Court Allotment @ 400 cfs*
- *State Share of San Luis @ 752 TAF*

Delta

- *Freeport Flow approx. 7,000 cfs*
- *Vernalis Flow approx. 300 cfs*
- *Delta Outflow approx. 4,700 cfs*

OMR (cfs):

- INDEX (as of 6/5/2015):
5 day average: -1485 cfs,
14 day average: -1600 cfs
- USGS (as of 5/9/2015):
5-day average: -1550 cfs
14 day average: -1600 cfs

FISHERY UPDATES:

DOSS

DOSS Advice to WOMT and NMFS: None.

Delta RPA Actions affecting operations during June:

Action IV.1.2 (DCC gate operations):

- DCC gates were opened Friday, 6/5/15, and closed Monday, 6/8/15.
- DCC gates will open again Friday, 6/12/15, and stay open indefinitely.
- Both of the above openings are allowed during the May 21-June 15 period of both the NMFS BiOp and D-1641 DCC operations schedule.
- No restrictions on DCC operations are in effect June 16-September 30

Action IV.2.3 (OMR Flow Management)

- Mean daily water temperatures at Mossdale exceeded 72°F for seven consecutive days in June, satisfying the temperature offramp conditions.

- Therefore, effective 6/8/15, the OMR restrictions were lifted through the remainder of Action IV.2.3 on June 15, 2015

Action IV.2.1 (I:E ratio)

- Implementation of this RPA action ended May 31.

DOSS Estimates of Fish Distribution

DOSS estimates of the current distribution of listed Chinook and steelhead, as a percentage of the population, are based on recent monitoring data and historical migration timing patterns. The table below reflects current distribution.

| Location | Yet to Enter Delta (Upstream of Knights Landing) | In the Delta | Exited the Delta (Past Chipps Island) |
|---|---|--------------|---|
| Young-of-year (YOY) winter-run Chinook salmon (naturally produced) | >99% out of Delta; Generally done migrating with the exception of a few stragglers. (Last week: same) | | |
| YOY winter-run Chinook salmon (hatchery-produced) | >99% out of Delta; Generally done migrating with the exception of a few stragglers. (Last week: same) | | |
| YOY spring-run Chinook salmon ^A | >99% out of Delta; Generally done migrating with the exception of a few stragglers. (Last week: Few stragglers yet to enter the Delta, 5% in the Delta, 95% exited the Delta) | | |
| Yearling spring-run Chinook salmon ^B | >99% out of Delta; Generally done migrating with the exception of a few stragglers. (last week: same) | | |
| Hatchery steelhead ^C | >99% out of Delta; Generally done migrating with the exception of a few stragglers. (Last week: >95% out of Delta) | | |
| Sacramento River steelhead (naturally- produced) | Limited catch data | | |
| San Joaquin River steelhead ^D | >99% out of Delta; Generally done migrating with the exception of a few stragglers. (Last week: >95% out of Delta) | | |

- ^A Chipp Island Trawl data of spring-run is difficult to interpret now that the 75% unmarked fall-run productions are likely masking the wild spring-run Chinook catch.
- ^B No yearling spring-run Chinook salmon have been caught in 2014 monitoring. In general, very few yearling spring-run Chinook salmon are observed because of their relatively large size and strong swimming (and associated gear avoidance) abilities.
- ^C Difficult to assess now that all hatchery releases are in the system (CNFH, Feather River Fish Hatchery, and Mokelumne Fish Hatchery released as usual; Nimbus Hatchery released their steelhead in the spring of 2014 because of expected unsuitable hatchery water temperatures during the summer of 2014). Percentages are intended to capture distribution of steelhead that migrate out; not those that may residualize.
- ^D Have observed a few juvenile steelhead in monitoring data. Distribution estimates are also based on 10 years of historical data from Mossdale Trawls (on the San Joaquin River) and RST data from Caswell Park (on the Stanislaus River), as well as on recent flow and water temperature conditions.

DOSS Feedback on Entrainment Risk

Entrainment risk of fish from the Sacramento River into the Interior Delta (same as last week except for tidal conditions):

DOSS noted that generally, there is an increased risk of entrainment into the interior Delta during spring tides, compared to during neap tides, at any OMR level. During a spring tide, tidal conditions extend further upstream and may, for example, create conditions at Georgiana Slough (e.g., reverse flows) that are associated with routing into Georgiana Slough, a route to the interior Delta. Currently, the Delta is entering a spring tide.

DOSS notes that an open DCC may increase the risk of entrainment into the interior Delta for fish in the vicinity of the DCC. However, occasional DCC gate opening from 5/21 to 6/15 is allowed per both D-1641 and the NMFS BiOp's RPA Action IV.1.2, and so this opening doesn't represent any change in risk to migrating salmonids relative to typical operations.

Entrainment risk of fish in the Interior Delta into the CVP/SWP facilities (same as last week):

DOSS assessed the current risk of entrainment for listed salmonids. For listed salmonids in the Delta, the current risk of entrainment for each OMR flow range was characterized as follows:

- -1,200 to -2,000 cfs has a medium risk of entrainment
- -2,000 to -3,500 cfs has a medium to high risk of entrainment

- -3,500 to -5,000 cfs has a high risk of entrainment

DOSS notes that, once the CVP pumping plant resumes operations on Thursday, 5/28, the risk of facility loss may be reduced relative to the risk during the period of SWP pumping only, since the CVP is more efficient at salvaging fish.

Next Meeting: The next DOSS conference call will be on 7/21/15 at 9am.

SWG – Group met Monday, no advice. Low risk of entrainment at current low OMR levels. Continue to monitor and meet, next meeting is next Monday.

NMFS – No determination needed.

USFWS – No determination at this time.

DFW – No determination.

SWRCB:

Division of Water Rights – Drought Workshop was held on May 20; Shasta Temperature Management Plan is still being discussed. Keswick releases frozen at 7500 cfs or lower thru June 10 until a new Temperature Management Plan is approved by SWRCB; currently being developed. Objections to the Temporary Urgency Change Petition filed May 21 are being accepted until June 17.

Office of Delta Watermaster - Staff is reviewing about 250 plans submitted voluntarily by Delta farmers to meet 25% water savings mandated by SWRCB in lieu of mandatory curtailments.

2. WOMT Decisions - None