



— BUREAU OF —
RECLAMATION

Smelt Monitoring Team

Tuesday, March 3, 2020
11:00 a.m.–12:00 p.m.

1. Introductions

Action Item: The SMT leaders requested that participants provide names of all potential smelt monitoring team members and back ups to help produce an accurate mailing list and roster.

2. Relevant Actions and Triggers

Currently under the Turbidity Bridge Avoidance measure which can be found on page 2 of the OMR guidance document and it states: “Reclamation and DWR shall manage to a more positive OMR than -5,000 cfs based on the following conditions: After the Integrated Early Winter Pulse Protection (above) or February 1 (whichever comes first) and until a ripe or spent female is detected or April 1 (whichever is first), Reclamation and DWR propose to manage exports in order to maintain daily average turbidity in Old River at Bacon Island (OBI) at a level of less than 12 NTU. The purpose of this action is to minimize the risk to adult Delta smelt in the Old and Middle River Corridor, where they are subject to higher entrainment risks.”

3. Operations

For conditions through March 1, 2020

General Conditions	Amount
Inflows	
Freeport	12194 CFS
Yolo Bypass	31 CFS
Vernalis	2902 CFS
Cosumnes	97 CFS
Mokelumne	145 CFS
Calaveras	25 CFS
Exports	
Clifton Court	495 CFS
Jones	1802 CFS

General Conditions	Amount
Other	
OMR (Index)	-955 CFS
QWEST	2470 CFS
NDOI	11341 CFS

The D-1641 Delta outflow standard is controlling operations. The projects are anticipating needing to meet Chipps Island water quality standard for this week and may be released from this requirement as early as this weekend. It is likely that OMR index will be approximately -700 to -1000 cfs through the end of this week. This may change to -3000 cfs over the weekend or early next week based on preliminary Chipps Days value, which operators should have by the end of the week.

4. Review of Environmental Conditions

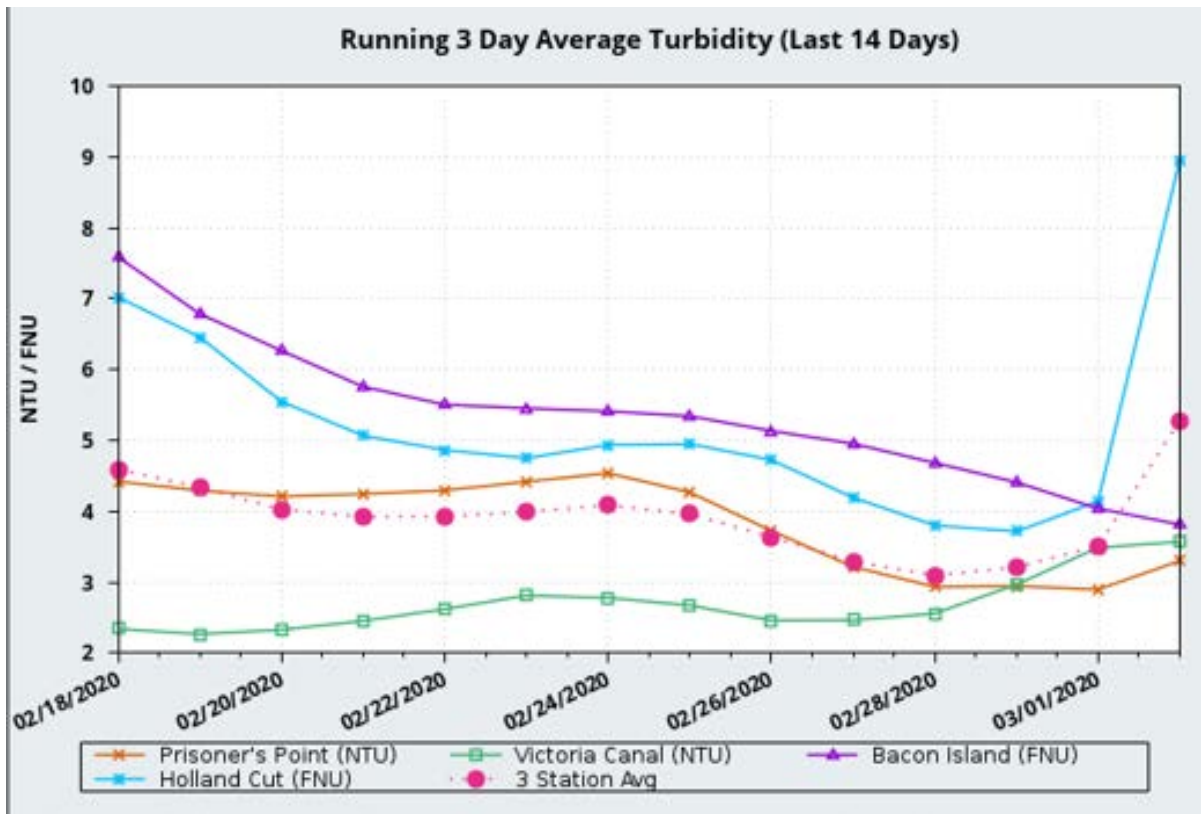


Figure: Running 3-Day Average Turbidity (Last 14 days)

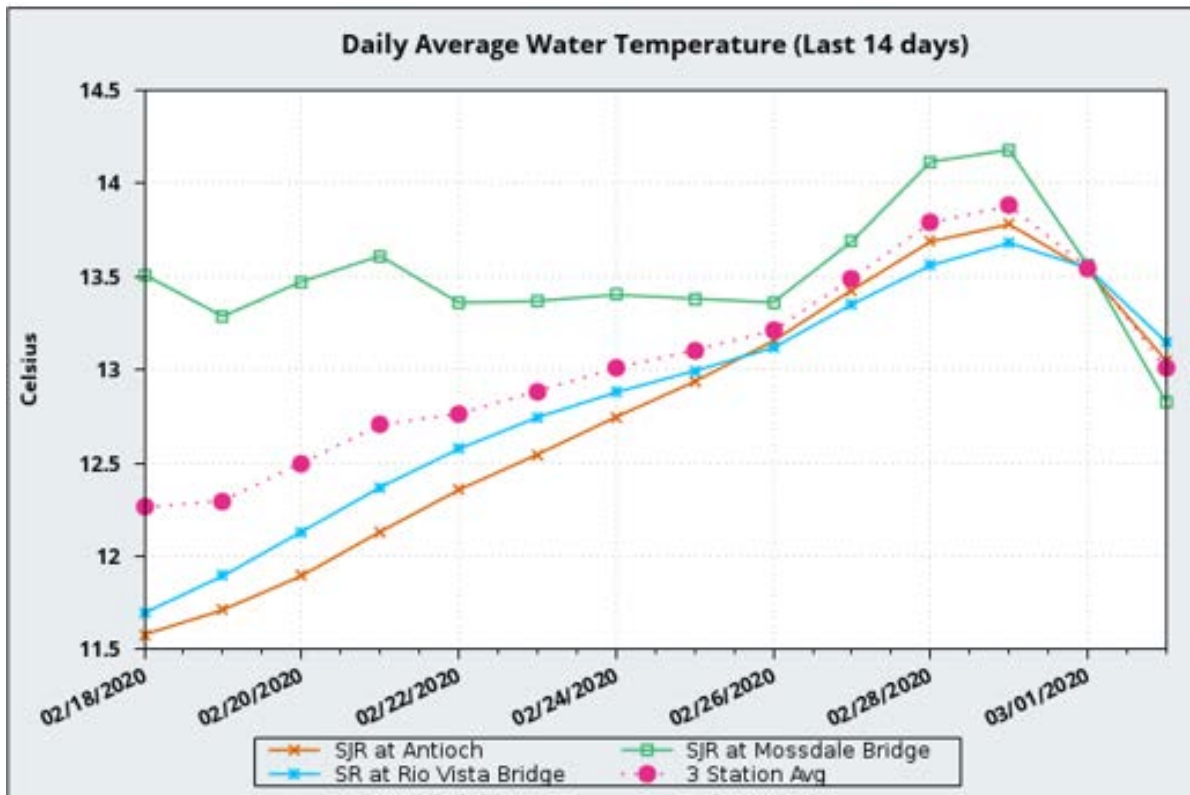


Figure: Daily Average Water Temperature (Last 14 days)

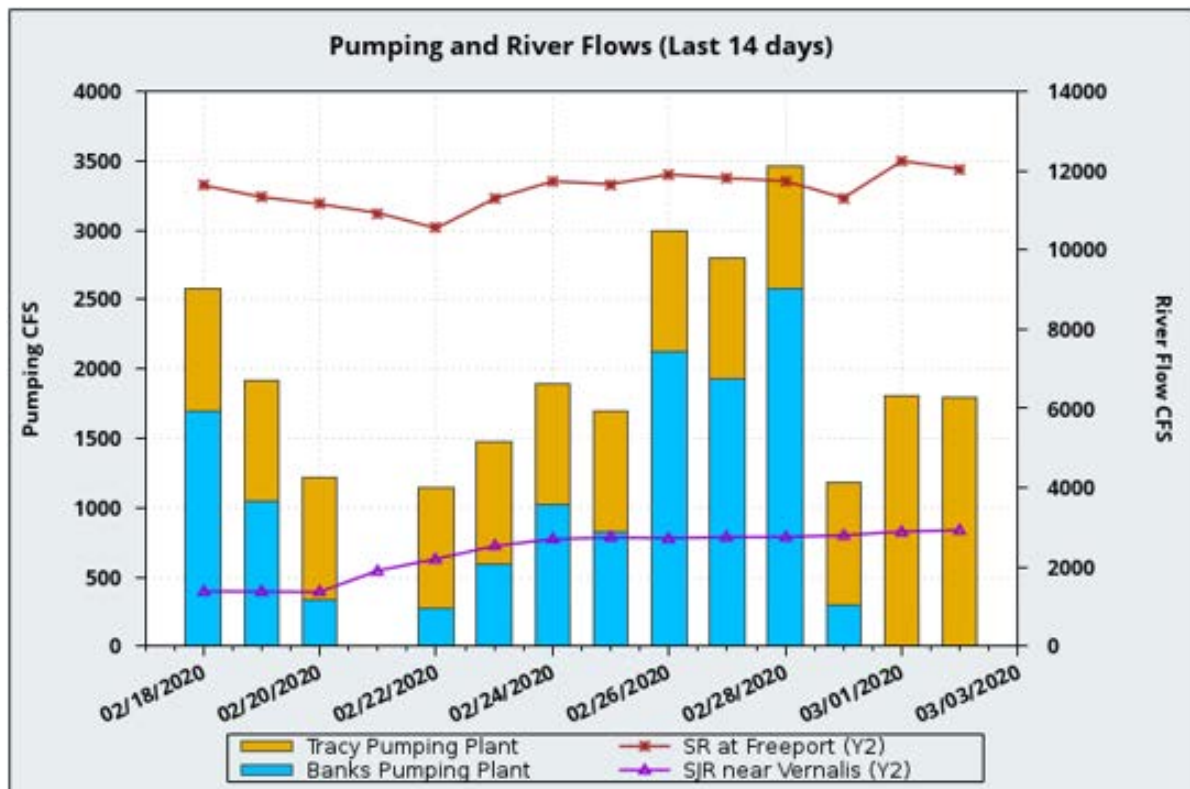


Figure: Pumping and River Flows (Last 14 days)

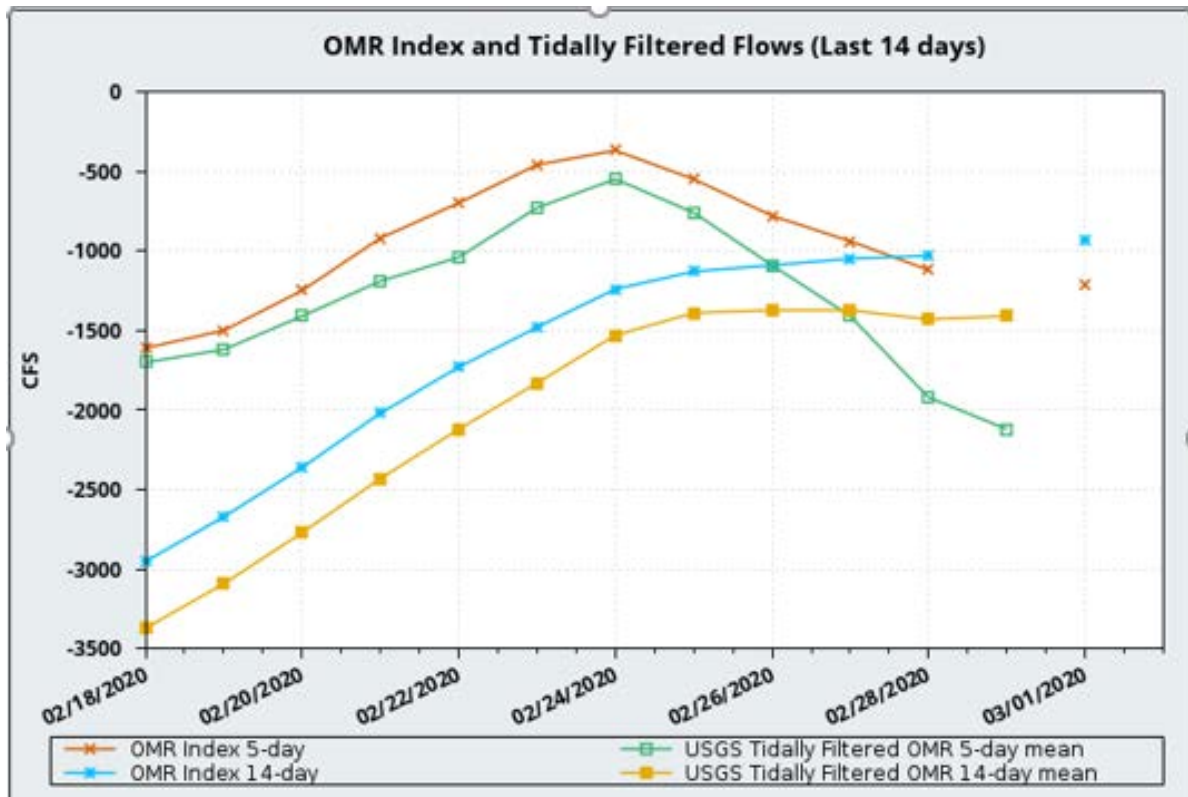


Figure: OMR Index and Tidally Filtered Flows (Last 14 days)

There was a turbidity spike seen at Frank's Tract (peaked at 55 NTU) and Holland Cut (peaked at 107 FNU) during a high wind event on Monday, March 2. Since then, the turbidity has declined. Holland Cut is still showing high turbidity (>20 NTU), but it has not been seen at OMR Bacon Island. This is likely due to the more positive OMR flows not pulling in the turbid water. Turbidity is a concern if winds continue but doesn't warrant a recommendation from the group.

Ambient temperatures are expected to rise this week. No precipitation is forecasted midweek, but some is forecasted for this weekend and early next week.

The data presented for conditions was accessed via SacPAS:
http://www.cbr.washington.edu/sacramento/data/delta_smelt.html

It was requested that the groups review the data presented on SacPAS and offer feedback for additional information they would like to see presented. Please direct feedback to Nick Bertrand

5. Fish Abundance, distribution, and lifestage

A. Survey Updates:

SKT #2 is complete and sampled from February 10th-14th. They caught one female Delta Smelt (65 mm, Stage 4-ripe) on the Lower Sacramento River. Two Longfin Smelt (75, 77 mm) were caught at Stations 501 and 606, downstream of the confluence. SKT #3 will begin March 9. SLS #4 is complete and processing of samples is ongoing with processing complete at the Central and South Delta stations. Zero Delta Smelt and 4 longfin smelt were caught in the south Delta stations. So far 47 Longfin Smelt were caught (5-9mm). SLS #5 is in the field this week. EDSM Week 13 was in the field February 24-27, 2020. They sampled 38 sites. No Delta Smelt were detected. EDSM collected 7

LFS (FL+67 to 90mm) in Suisun Bay and Marsh between February 25th and March 3rd. This includes two males and two females that were expressing milt and eggs.

B. Salvage Monitoring:

- No adult or juvenile Delta Smelt or Longfin Smelt have been observed in salvage so far this season (WY 2020).
- Temperatures have been increasing quickly, which is likely to trigger spawning. Recent surveys collected one ripe female. Available evidence does not suggest that the main spawning event is underway.

6. Fish Exposure and Behavioral Cues

No new PTM runs were requested and no modeling was performed.

7. Additional Considerations

The group expressed confusion regarding whether the ripe female caught by SKT#2 would offramp the turbidity bridge avoidance measure. The language of the new BA states that a ripe female can be an offramp for adult Delta Smelt protection and shift to larval and juvenile protection. Reclamation advised using the criterion of a ripe female as a soft offramp. The group noted that in previous years we've detected ripe or spent females as early as January. This is expected to continue with climate change and earlier warming temperatures in the Delta. This does not mean the onset of main spawning and migration period. Having flexibility in regard to this off ramp would be good. However, interagency talks for offramps and juvenile protection are ongoing but expected to be finalized soon with the input of the SMT in mind.

8. Next Meeting

March 10, 2020 at 11:00 a.m.