

Smelt Monitoring Team – Tuesday, November 10, 2020

Participants

- CDFW
- DWR
- NMFS
- SWRCB
- USBR
- USFWS
- Kearns & West

Actions Items

- USBR and/or DWR will follow up on the potential for excess aquatic vegetation to be released into the system along with the removal of South Delta agricultural barriers.
- USFWS will follow up internally re: the current year's UC Davis lab brood stock collection within the Delta and their observations on Delta Smelt presence; will provide updates to the SMT.
- SMT members who are interested in including the X2 spreadsheet as part of the SacPAS toolbox in the immediate future (as opposed to keeping it as a local resource for SMT member use as needed) should reach out to Kearns & West via email.
- USBR will distribute a list of SMT-relevant data sources to the SMT for members' additions and suggested additional tools within the next week or so.
- All SMT members to provide feedback on the notes and draft ITP risk assessment by Friday 11/13 NOON.

Meeting Summary

1. Agenda Review, Logistics, & Housekeeping

The facilitator reviewed the agenda and meeting materials. She confirmed that meetings will be held for 90-minute blocks going forward.

2. Relevant Actions & Triggers

USBR stated that there are currently no relevant actions or triggers for Delta Smelt. The First Flush Protective Measure will be activated at the onset of OMR management on December 1st.

CDFW noted that the conditions of approval described in the ITP also begin on December 1st, with the exception of condition of approval 8.1.5.2 which tasks the SMT with conducting weekly risk assessments from November through the end of OMR management for both Delta Smelt and Longfin Smelt.

3. Current Operations & Outlook

USBR and DWR shared operations updates from the Outlook.

- USBR CVO noted that the range of releases to the Sacramento River anticipated over the next week reflects operators desire to make further cuts in releases if Delta water quality conditions allow.
- CVO also stated that river water temperature management season for salmonids below the dams is largely over as water temperatures are cooling in the northern system.
- The cross-channel gates were closed Monday 11/9 for the weekdays; they will be reopened on Friday for the weekend and then closed again on Monday 11/16. At that point, operators will assess whether they should remain closed or go through another weekend opening cycle on Friday 11/20.

4. Review of Environmental Conditions and Survey Updates

CDFW shared survey updates.

- Last week, the FMWT captured no Delta Smelt and 7 Longfin Smelt (4 in San Pablo Bay, 3 in Suisun Bay).
- Zero Delta Smelt and Longfin Smelt were detected in the September and October FMWT surveys.

USFWS reported on EDSM.

- No Delta Smelt observed in last week's sampling, so no abundance estimate.
- Yesterday (11/09/2020) 1 Delta Smelt was detected in Montezuma Slough (57mm, not expressing eggs or milt). USFWS noted that the IEP uses 58mm as the cutoff between a juvenile and adult Delta Smelt; if the federal side wants to use the same cutoff, yesterday's smelt should be designated as a juvenile.
- No Longfin Smelt were caught by EDSM last week (11/3 through 11/6) and no Longfin Smelt have been caught by EDSM so far this week (11/9 and 11/10).

CDFW provided a salvage update (Nov 2-8).

- No salvage of Delta Smelt or Longfin Smelt to report.
- No closures or impacts to pumping are anticipated in the next week.
- The State's Banks Pumping Plant was closed for maintenance last Monday (11/2) through Friday (11/6); there was no inflow to Clifton Court Forebay on 11/2 or 11/3 to allow for an herbicide application treatment.

USBR shared water quality data and the seven-day weather forecast for Antioch.

- CDFW asked if the forecasted precipitation later in the week is likely to change hydrology given that it looks like a small system. DWR said they do not expect any significant changes to hydrology.

Questions from SMT members included:

- USFWS asked what OMR will look like this week and whether there are changes in OMR that will result from the removal of the South Delta ag barriers.
 - DWR: OMR yesterday was -1400 cfs; with exports increasing to 1500 cfs, the resulting OMR will be about -2500 cfs. When the Grant Line agricultural barrier is breached later this week, OMR will reduce to approximately -2200 cfs. OMR over the next week is expected to range between -1000 and -2500 cfs, largely based on export levels, which in turn will depend on tidal conditions and other water quality factors.

- NMFS asked whether the South Delta ag barrier removal is anticipated to send water hyacinth/other aquatic vegetation downstream; in past years, the removal of the barrier has sent a significant volume of that vegetation toward the Tracy facilities.
 - USBR & DWR were not sure but committed to following up.
- USFWS asked why there is a discrepancy between the OMR values reported on CDEC versus the OMR index cited on these calls.
 - DWR explained that the USGS Tidally Filtered OMR (the value reported by CDEC) and the OMR Index (the value generally cited on these calls and available on SacPAS) are computed differently. The first is a 25-hour running average of USGS tidally filtered discharge data at Old and Middle River sites, and the latter is a calculation based on the MWD model equation.
 - CDFW explained that much of the published entrainment analysis was based on the USGS gage measurements. As a result, while the group is operating using the OMR Index value, it is important to track how well the index aligns with the USGS Tidally Filtered OMR values. The ITP requires the ongoing comparison of the USGS Tidally Filtered OMR values and the OMR Index. If there are significant discrepancies between the two, the SMT should discuss them. A table that compares both daily OMR values is [available on SacPAS](#) and a similar table is included in the ITP Risk Assessment.

5. Risk Assessment Questions for Weekly Evaluation of Delta Smelt

SMT members agreed that the answers to the risk assessment questions from last week are still appropriate given that none of the triggers or actions are relevant until December 1st.

From an ITP perspective, CDFW recommended conveying to WOMT that there is a low risk of entrainment for Delta Smelt across all potential OMR levels for the next week. DWR and USFWS concurred, and there were no objections to this characterization.

6. Executive Summary for Assessment

USBR asked for proposed edits to last week's executive summary language. USFWS suggested adding the latest EDSM catch data, which included a single Delta Smelt, in that it is the first detection of Delta Smelt in the System in some time.

- The group agreed to add, *"A Delta Smelt (57mm) was collected 11/9 by EDSM in Montezuma Slough within the Suisun Marsh Stratum. Prior to this, no Delta Smelt had been collected since September."*
- USFWS suggested that if a similar dearth of Delta Smelt detections continues into next month, the SMT should consult with the UC Davis fish lab doing collections for their brood stock. The lab's observations could give the SMT independent information on the presence of Delta Smelt if they are not being picked up by the surveys. USFWS committed to following up with contacts on that brood stock collection and providing updates to the SMT.

7. Barker Slough Operations

CDFW asked to keep this as a standing item on the agenda but noted that the SMT can skip it until their January 12th meeting, in that the relevant conditions for approval will not start until January 15th.

8. ITP Longfin Smelt Risk Assessment

CDFW explained that they are tracking the Chipps Island catch as one of the metrics to predict Longfin Smelt migration, which is what the ITP emphasizes at this time of year. The FMWT has caught some Longfin downstream of the confluence but none have been caught in the Chipps Island Trawl to indicate the potential start of the adult migration season into the Delta. The last Longfin detected by EDSM was October 15. CDFW expects migration in early to mid-December. There is no evidence that the Longfin are moving into an area where they will be at higher risk of entrainment.

- DWR agreed that this was a reasonable assessment.

9. Additional Considerations/Discussion

- USBR asked whether there should be any changes to the language about Delta Smelt provided in the outlook. USFWS suggested keeping it as is; there were no objections.
- USBR asked about the X2 spreadsheet provided by DWR in response to USFWS' query last week. USBR observed it appears to give a higher resolution calculation of X2 but would like a better understanding.
 - DWR explained that D1641 requirements only fall in a small geographic range; as a result, whenever X2 is greater than 81 km, for SacPAS's purposes the default is 82 km and CDEC does not report the values. DWR created the spreadsheet tool to download water quality data and use the same methodology that is used for CDEC's X2 calculations to interpolate X2 values when X2 is upstream of the confluence. Therefore, the tool is using similar logic to estimate X2 on both the Sacramento and San Joaquin Rivers. DWR cautioned that they never crosschecked these numbers with actual X2 values; they are just estimates that could be close to the actual values.
 - CDFW stressed that the tool is useful when the SMT anticipates X2 may be close to the confluence but is not yet registering, but also that it has not been ground-truthed and is intended as an estimate. The X2 method currently used is based on surface salinity, and no one is sure how that would behave in an upstream environment.
 - SMT members tentatively agreed that the X2 spreadsheet should be used as a resource for SMT members but should not yet be put on SacPAS. Any SMT members who have additional perspectives should follow-up with Kearns & West via email.
- USBR shared that they are compiling a data source list for the SMT, like the one being circulated in SaMT. The impetus for the effort is to have a centralized list of data sources SMT members can reference prior to calls and to identify those that are priorities for review prior to every meeting. Once they have finished their internal review, USBR will share with the SMT via email for their feedback on additional data sources that should be added.
 - USFWS suggested that there may be additional tools that would be useful to the SMT. For instance, the Delta Stewardship Council has developed tools for compiling temperature data, combining them, and producing graphical outputs; a similar tool that uses data from probes in the Delta on conductivity and converts it into salinity would be useful. Also, there are consulting firms developing 3D maps of salinity (e.g., those by Michael McWilliams used in reports on the fall outflow action); it would be valuable if the SMT could engage a consultant to develop something similar to track where salinity is in the system.

- USBR voiced support for additional tools to support the SMT, whether via different graphics on SacPAS or a tool to address a specific action or trigger. Perhaps those ideas can be gathered as part of the data source list exercise; then they can explore the level-of-effort that might be involved in fully developing the suggested additions.
- Agencies reported no additional items for WOMT. CDFW does not plan to elevate any items to WOMT.
- USFWS requested additional time to look at the notes and ITP Risk Assessment given that Wednesday is a federal holiday. Kearns & West and CDFW agreed to accept comments until noon on Friday.