

Meeting Summary

Smelt Monitoring Team – Thursday, January 18th, 2024

MEETING PURPOSE

Convene the Smelt Monitoring Team (SMT) to discuss if the current level of OMR flow restriction is warranted or if a restriction of -5,000 cfs on a 7-day average will be sufficient in minimizing current or future entrainment risk of LFS.

PARTICIPANTS

- California Department of Fish and Wildlife (CDFW)
- California Department of Water Resources (DWR)
- State Water Resources Control Board (SWRCB)
- U.S. Bureau of Reclamation (USBR)
- U.S. Fish and Wildlife Service (USFWS)
- Kearns & West (KW)

ACTION ITEMS

- DWR to follow up with the SMT on 1/22 to alert them to confirm QWEST values.

MEETING SUMMARY

Relevant Actions & Triggers

CDFW reported that the first trigger of COA 8.4.2 was met by Smelt Larval Survey 1. CDFW reminded the SMT that this meeting does not require consensus and is a forum for agencies to share their position. The conditions are as follows:

Longfin Smelt larvae or juveniles are found in four or more of the 12 Smelt Larval Survey (SLS) or 20 mm stations in the central or south Delta, or (2) Longfin Smelt catch per tow exceeds five larvae or juveniles in two or more of the 12 stations in the central or south Delta. The relevant stations are: 809, 812, 815, 901, 902, 906, 910, 912, 914, 915, 918 and 919.

Hydrological Conditions

- DWR opened the meeting by sharing the rationale for calling the Off-Cycle SMT meeting. Due to the precipitation on 1/16 and forecasted precipitation for the upcoming weekend (1/20 – 1/21), the hydrological conditions are wetter than what was discussed during the 1/16 SMT meeting. Given these forecasted conditions, the hydrology appears to be more favorable for LFS and DWR recommends a -5,000 OMRI on a 7-day average. DWR also shared that QWEST has been positive for the past week, which should have

helped limiting entrainment into the OMR corridor. This was clarified late that the positive QWEST started on 1/14.

- DWR shared that due to the combined 0.48” of precipitation from 1/16 and 1/17 at Stockton, QWEST is around +4,000 cfs and is estimated to drop to +2,000 cfs on 1/19.
 - NOAA California Nevada River Forecast Center Verona guidance plot forecasts a significant increase in Sacramento River flows during the upcoming storm event. It is possible that Sacramento River flows at Freeport will exceed 25,000 cfs by early next week which could trigger first flush conditions.
 - On 1/16 a length-at-date natural-origin winter run Chinook salmon (WR) was salvaged and genetically confirmed on 1/18 as a WR which will continue the -3,500 cfs OMRI action associated with salmon protections through 1/21.
 - Upstream reservoir operations are unlikely to change based on the current forecast.
 - DWR modeled projected QWEST under a variety of scenarios including if only 50% of the expected precipitation arrives and results indicate that the more positive trend in QWEST will reverse slightly on 1/18 and 1/19 before increasing again.
 - The proposed recommendation of OMR at -5,000 cfs is estimated to reduce QWEST by 900 cfs compared to the current -3,500 cfs OMR management level.

Discussion

- CDFW asked if the 25,000 cfs flows at Freeport were expected to occur on 1/21 or 1/22 and whether DWR plans to utilize the 3-day operations scheduling period after the date the First Flush conditions are met.
 - DWR responded that conditions are likely to be met on either of those dates, and they plan to enact the restrictions three days after the trigger, on either 1/24 or 1/25. DWR also noted that it is unclear how turbidity at Freeport will play out.
- USFWS asked DWR about the WR actions based on the salvage and DWR responded that the WR was captured on 1/16 so the relevant action was triggered that day and the -3,500 cfs OMRI operated to for 5 days from 1/17 through 1/21.
 - USFWS clarified that this OMRI requirement of -3,500 cfs only applies to the State Water Project (SWP) and not the Central Valley Project (CVP).
 - USFWS asked DWR to share with the SMT a timeline summary email with bullet points summarizing triggers hit so far this season and averaging periods related to: general OMR management season, WR, LFS and potential First Flush so they could see these active triggers in relation to one another. DWR indicated they would send an email with that information after the call.
- DWR noted that the recommended -3,500 cfs OMRI from the SMT went into effect 1/14 and would already have been in place for 5 days given the hydrologic conditions. The

proposed recommendation of -5,000 cfs OMRI for the SWP would go into effect 1/19 if accepted by the SMT.

- CDFW asked about the projected QWEST value tomorrow under a -5,000 cfs OMRI.
 - DWR replied QWEST that would be about +2,000 cfs tomorrow.
- USFWS asked about when the Winter Run (Chinook) action would be implemented. DWR clarified that it began on 1/17 and will run through 1/21 (given the salvage date of the salmon). CDFW pointed out that if the SMT agreed to recommend a -5,000 cfs OMR today it would effectively not be implemented until 1/22 due to the WR protection of -3,599 cfs OMRI. CDFW added that dropping to -5,000 cfs OMRI on 1/22 would render QWEST under 2,000cfs.
- CDFW asked for clarification as whether the group was talking about lifting COA 8.4.2 or modifying the existing recommendation under 8.4.2 to a -5,000 OMR on a 7-day average. DWR clarified that discussions were not about an off-ramp for COA 8.4.2 because the off-ramp would require survey detections; rather a change to the OMRI recommendation to WOMT under 8.4.2 from a -3,500 to a -5,000 cfs OMRI on a 7-day average.
- CDFW asked DWR for clarification about what would happen if the recommendation changed from -3,500 cfs to -5,000 cfs OMRI given possible First Flush thresholds being met and expressed a desire to have a better understanding considering multiple regulatory triggers under the dynamic conditions. DWR responded that recommendation for a -5,000 OMR and positive QWEST is sufficiently protective of LFS. CDFW asked what the QWEST values would be over the next 5 days under a -5,000 cfs OMRI recommendation.
 - DWR shared the following for 100% anticipated precipitation:
 - 1/19 QWEST of +1,400 cfs
 - 1/20 QWEST of +2,200 cfs
 - 1/21 QWEST of +3,700 cfs
 - 1/22 QWEST of +6,200 cfs
 - DWR shared the following for 50% anticipated precipitation:
 - 1/19 QWEST of +1,400 cfs
 - 1/20 QWEST of +1,800 cfs
 - 1/21 QWEST of +2,600 cfs
 - 1/22 QWEST of +3,600 cfs
- USFWS asked DWR about turbidity updates given this weekend's potential for increased turbidity and if that would meet Turbidity Bridge Avoidance thresholds. DWR shared that they are unsure of possible turbidity conditions and unsure if OBI would reach the 12 FNU threshold. Flow at Vernalis is currently expected to be low for the next 5 days from

the San Joaquin River, so not expecting major turbidity from SJR. USBR noted that Turbidity Bridge Avoidance follows either the end of First Flush Action or 2/1.

- CDFW asked for more information about how QWEST works when most of the flow is coming from the Sacramento River. QWEST is a measure of flow past Jersey Point which would be influenced by the flow from the Sacramento River. If QWEST is high due to Sacramento River flow and not San Joaquin River flow, would a positive QWEST help with downstream movement up at station 815? DWR clarified that the part of the Sacramento River flow goes through Georgiana Slough, into the lower Mokelumne River, and then into the San Joaquin River around station 815 and then push West.
- CDFW asked DWR for their perspective on how these conditions impact LFS risk to make sure the SMT is in agreement. DWR responded that most larval LFS detections in the central and south delta have been in the lower San Joaquin River and that the proposed recommendation would allow for a positive outcome for LFS larvae in the lower SJR. DWR posited that a positive QWEST generally reduces entrainment from the lower San Joaquin River into the OMR corridor. QWEST has been positive for 5 days and will continue to be positive into the foreseeable future, thus reducing risk of entrainment. DWR expressed the desire to be nimble with changing hydrological conditions given LFS distribution.
 - CDFW noted that the SMT makes decisions and recommendations based on OMR values not on QWEST, but that QWEST is an important consideration. CDFW expressed a desire to be responsive to changing conditions while ensuring that LFS still get protections. They agreed that the projected precipitation would offer adequate protections under a -5,000 cfs OMRI, but were concerned about whether those conditions would provide adequate protection if the precipitation did not occur. Thus, they proposed that a recommendation of -5,000 cfs OMRI be contingent upon the precipitation materializing, but keeping the -3,500 cfs OMRI in place if adequate precipitation does not happen.
 - DWR acknowledged CDFW's concern and noted that it was the basis of proposing a 3-day average a +3,000 QWEST threshold as a backstop. The 3-day average threshold would give a fallback if flows don't materialize as expected.
 - CDFW asked for clarification about how fast the response would be if QWEST falls below the +3,000 cfs threshold: whether the -3,500 cfs OMR would be implemented immediately or would incur a 3-day waiting period. DWR noted they would need at least 1 day to implement a shift in OMR recommendations and that adjustments would be operating on a 3-day average.
- CDFW asked DWR about the proposed QWEST backstop. DWR noted it would be a 3-day average +3,000 cfs QWEST which would be protective of larval LFS in the lower San Joaquin River. CDFW wondered if the Spring tide next week would be a king tide and whether that would impact flows. DWR clarified that the tide would not be a king tide and the full moon on 1/25 would not be as high as the new moon tide was earlier this month. DWR also clarified that QWEST is not impacted by the tidal cycle and that all index calculations, including OMRI, QWEST, and Net Delta Outflow (NDOI) do not have tidal influence. Gauge measurements in the Delta and X2 will have a tidal impact because of their location.

- Recognizing that LFS are widely distributed throughout the Central and South Delta, CDFW agreed that a positive QWEST helps push water and LFS westwards from stations 809, 812, 815 but expects LFS larvae are present in the southern Delta as well. DWR responded that there are likely LFS larvae in OMR corridor based on detections in West Canal and that there will likely be salvage as these fish grow given these detections. OMR management would be unlikely to have dramatic effect on fish that far down the OMR corridor, regardless of what level of the SMT recommends.
- CDFW agreed with DWR's recommendation of a QWEST backstop of a 3-day average of +3,000 cfs for a -5,000 cfs OMRI. Given that the winter run WR Action is triggered through 1/21, CDFW sought clarification and assurance that on 1/22 the 3-day QWEST value would still be over +3,000 cfs. DWR proposed to share email updates to the SMT on the 1/21 about the QWEST values and follow up on 1/22 to confirm the values.
- DWR and CDFW agreed to an OMR of -5,000 cfs and a backstop QWEST of 3,000 cfs over a 3-day average.
- DWR and CDFW proposed to convene separately immediately following the call to draft and discuss the risk assessment and report back to the SMT with any changes. The SMT agreed to this format.

LFS Risk Assessment Live Editing

DWR and CDFW proposed to convene separately after this off-cycle SMT meeting to discuss and draft the LFS risk assessment and will report back to the SMT with any changes shortly thereafter. SMT agreed with this approach.