COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

November 4, 2020 DRAFT Facilitator's Summary Facilitator: Emily Stranz; Notes: Colby Mills

The following Facilitator's Summary is intended to capture basic discussion, decisions, and actions, as well as point out future actions or issues that may need further discussion at upcoming meetings. These notes are not intended to be the "record" of the meeting, only a reminder for TMT members. Official minutes can be found on the TMT website: http://pweb.crohms.org/tmt/agendas/2020/.

Review Meeting Summaries & Minutes

TMT members approved official meeting minutes and facilitator's summaries for the September 30 and October 21 meetings, following a name correction to the latter.

Treaty Fishing

Kyle Dittmer, CRITFC, provided a summary of pool operations for the 2020 Fall Season Treaty Fishery (posted on the TMT website). Member Tribes fished during 7 different periods from the end of August to mid-October. Fishing efforts were good and there were no accidents reported. Significant challenges did arise due to Covid-19 safety precautions and poor air quality due to fires. Tribal fishers expressed appreciation to the Corps and BPA for the smooth and stable operations. BPA noted that if Covid-19 conditions continue into next season, Action Agencies will need a longer lead time for requested operational changes.

Preliminary Survival Estimates

Claire McGrath, NOAA, reported on Northwest Fisheries Science Center's (NWFSC) memo of preliminary survival estimates for PIT-tagged juveniles through the Snake and Columbia River projects during spring outmigration, and Snake River smolts transported from Snake River dams (memo posted on the TMT website). The memo is a preliminary analysis of the data at hand; a full report will be published in February or March of 2021. Claire noted that 2020 has been an unusual and challenging year for data collection as it has been significantly limited due to Covid-19 restrictions on fieldwork. As a result, survival estimates to Bonneville are not currently available. NWFSC is evaluating the potential for PIT data recovery through other sources like estuary bird colonies. One positive takeaway is that the new Lower Granite PIT antennae has been able to provide much needed survival data on fish detected in the RSW.

Estimates

Lower Granite to McNary survival for Snake River yearling Chinook was 76.1%; steelhead 79.4%; and sockeye 83.5% (with high uncertainty). Snake River hatchery survival from release site to Lower Granite showed above average survival for most hatchery stocks; 67.6% on average, which is slightly higher than the long-term average. Survival at Lower Granite itself was 85.4%. This is the 3rd year below the long-term average, and could warrant further investigation if the trend continues. Survival for upper Columbia River yearling Chinook, steelhead and sockeye to McNary were all slightly above average, although again, precision was poor compared to previous years.

Transport rates were among the lowest on record, at about 16% on average for yearling Chinook and steelhead. Transport averages were low due to low collection rates resulting from high spill rates.

In general, flows were middle of the road on average across the migration season, travel times were among the shortest observed. Claire noted that the trend towards shorter travel times, while controlling for flow, is likely a result from higher spill rates. She suggested a future conversation regarding whether

lower transportation rates are meeting management objectives and expressed interest in thoughts from comanagers.

Claire will find out more about using bird colony detection data upstream of Bonneville and report back to the TMT. In regard to survival data resulting from special operations, Claire emphasized that the current data and analysis aren't tied to specific operations, and with such limited data this year they are instead more of a comparison to historical data. Jonathan Ebel, ID, noted that the lack of precision is striking, and that if Salmon Managers and AAs want to continue using these data in the future, they need to increase their ability to detect under this new spill regime. Erick Van Dyke, OR, noted that detection barges may not have the same limitations if used in smaller systems such as the Snake River.

Looking ahead, the potential for Covid-19 restrictions to fieldwork remains a real issue, and adaptive management will have to be utilized. Claire invited the TMT to look at the memo in depth, and offer feedback as the NWFSC completes their analysis.

Fish Summary

Claire updated the group on fish (details posted on the TMT website). Juveniles are passing in lower numbers, with persistent numbers of sub-yearling Chinook in the Snake River. For adults, continued declining numbers of fall Chinook, steelhead and coho are passing all projects. 14 chum have passed Bonneville to date. Passage numbers at all projects remain consistent with YTD percentages relative to the 10-year average. Fall-Chinook are at 65-75%; steelhead 50%; and coho 133-156%. At Lower Granite, wild steelhead are doing well compared to overall total numbers, and there have been enormous numbers of jack coho compared to the 10-year average.

Charles Morrill, WA, confirmed that 14 chum have been observed over Bonneville Dam. The first survey from the Ives area shows 39 live chum, 13 redds, and Chinook presence. Hamilton Creek observed no chum, and at least 100 Chinook in the area. Chum are clearly in the system and WA appreciated the flexibility from the Corps and BPA for a quick response to chum and water availability. Erick van Dyke, OR, noted that to date, 4 adult chum have passed over Willamette Falls, and chum have been observed below Bonneville in the Willamette since mid-October.

Dave Swank, USFWS, reported no significant changes on lamprey counts since his last update.

Spill Priority List

Dan Turner, Corps, reported on the request made at the September 2 TMT meeting from the Nez Perce Tribe to move Dworshak down to the bottom of level 2 on the Spill Priority List (SPL). He reminded the group that level 1 is currently representative of spill to meet but not exceed state Water Quality standards.

After consideration, the Corps decided to not implement the request. Dan noted that the rationale behind the Corps' decision was that the current policy appears to be working in minimizing lack of load spill at Dworshak, and the priority within each level is manageable. Data and modeling analysis did not find predicted lack of load spill at the project. If a situation arises or a forecasted change in the power system increases the risk of lack of market spill at Dworshak, the Corps will consider adaptive management changes at that time. BPA was also reluctant to change the policy, as other agency priorities use the same list. Tony Norris, BPA, noted only 1 type of condition where a lack of market spill would occur, that being significant flood control draft requiring specific discharge from a project.

Jay Hesse, Nez Perce, appreciated the thoughtful consideration and detailed response. The Nez Perce Tribe accepted moving forward with the acknowledgement that the issue is open for real time adaptive management if an event occurs.

Erick observed that high head dams that are less active with fish passage are at bottom of lists, while projects with more active fish passage are at the top of the list, and that this should be a topic for wider conversation in the future. Sheri Sears, Colville Tribe, noted that the Tribe has released anadromous fish above Chief Joseph and Grand Coulee Dams, and that those fish have spawned. With high flows¹, they are losing over 400,000 non-anadromous fish per year, and these challenges should also be considered.

Questions or comments from members of the public: there were no questions or comments from members of the public.

The next scheduled TMT meeting is a conference call on November 18 at 9:00 AM.

This summary is respectfully submitted by the DS Consulting Facilitation Team. Suggested edits are welcome and can be sent to Colby at colby@dsconsult.co.

¹ After the meeting, Sears clarified she was referring to high flows through the 3rd powerhouse at Grand Coulee.

Columbia River Regional Forum

Technical Management Team DRAFT OFFICIAL MINUTES Wednesday, November 4, 2020

Minutes: Melissa Haskin, BPA (contractor, FLUX Resources)

Today's TMT meeting was held via conference call and webinar, chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting. See the end of these minutes for a list of attendees.

1. Review of Meeting Minutes

The September 30 and October 21 facilitator's summaries and official TMT minutes were approved following a minor edit for spelling (Charlie instead of Charley).

2. Treaty Fishing - Kyle Dittmer, CRITFC

Kyle Dittmer, CRITFC, reported on fall treaty fishing in the lower Columbia River. The tribes fished 7 times this fall during the August 24 to October 7 timeframe. During this time, CRITFC requested restricted pool operating ranges at Bonneville, The Dalles and John Day dams (via SOR 2020-C2):

- 1. 1.5-foot elevation bands at BON, TDA and 2-foot band at JDA, as a hard constraint, and
- 2. stable pool elevations during each week of treaty fishing.

Dittmer reported that the Corps was "100% compliant at the 1.5-foot range and near 100% at the 1-foot range (i.e., former CRITFC criteria)."

Scott Bettin, BPA, noted that BPA was able to work with the tribes on short notice this year but that if COVID continues that the tribes may need to find a way to communicate faster. Dittmer replied that he would pass the lead-time message on to management at the tribes.

3. Preliminary Survival Estimates - Claire McGrath, NOAA

The NOAA Northwest Fisheries Science Center released its preliminary survival estimates for the passage of spring-migrating juvenile salmonids through Snake and Columbia River dams and reservoirs. This year was unusually challenging due to COVID. McGrath shared a few highlights from the study. Below are several passages that McGrath highlighted. The full report is available on the TMT website.

- For Snake River yearling Chinook salmon in 2020, estimated survival from Lower Granite Dam tailrace to McNary Dam tailrace was 76.1%; this estimate is slightly above the long-term (1999-2020) average of 73.5%.
- For Snake River steelhead in 2020, estimated survival from Lower Granite Dam tailrace to McNary Dam tailrace was 79.4%. This was well above the long-term mean of 66.8%, and actually the highest estimate on record for this reach.

- Estimated survival in 2020 of Snake River sockeye salmon (hatchery and wild combined) from the tailrace of Lower Granite Dam to the tailrace of McNary Dam was 83.5% (95% CI: 63.1-110.5%; Table 7). Note this estimate has a large margin of error.
- Across the seven "index" hatcheries, the annual mean estimated survival from release to Lower Granite Dam has been relatively stable since 1998 (Figure 1, Table 1). The mean survival in 2020 was 67.6%, which was slightly higher than the long-term mean (1998-2020) of 64.7% and well above the very low mean of 54.4% in 2019.
- Estimated survival for hatchery and wild yearling Chinook salmon in the Lower Granite project (head of reservoir to tailrace) was 85.4%, based on fish PIT tagged at and released from the Snake River trap. This estimate marks the third year in a row that the estimate for the Lower Granite project was below the long-term average of 92.1%.

McGrath wrapped up by saying that this years' travel times are some of shortest yet. She added that there seems to be a trend that is likely related to high spill rates.

Doug Baus, Corps, mentioned that usually when these reports are released there are some key takeaways. He wondered if there was anything that could be learned operationally from the available data. Unfortunately, since the data this year are so limited, McGrath said she did not have any takeaways to share. She said, however, that one thing that the region could do is look at the transportation rates and decide if the goals of the program are being met.

Jonathan Ebel, ID, mentioned that if the groups wants better data, it will have to find a way to better detect under the new spill operation. Tom Lorz, Umatilla Tribe/CRITFC, noted that NOAA already has 14,000 tags and should be able to run data, but that it may take time.

McGrath noted that the author of the report (Richard Zabel) commented in the report that Lower Granite RSW PIT detectors would be good at additional projects.

Charles Morrill, WA, wondered if NOAA had looked into how to improve detection if COVID were to continue into next spring. McGrath agreed that she thinks it may continue through spring. She says she does not see any broad policy changes at NOAA and the Department of Commerce, which limited field work this year. For instance, the organization was not able to operate the estuary trawl. NOAA was able to use a barge detector and other automated detectors, however, so there may be more they could do, she said.

Erick Van Dyke, OR, reminded the group that the barge was experimental and the group should be careful about drawing conclusions or applying that sort of tool elsewhere in the system.

Emily Stranz, DS Consulting, noted that she has asked Steve Smith to present on this report more at the YER.

4. Spill Priority List - Dan Turner, Corps

At an earlier TMT, Jay Hesse of the Nez Perce Tribe requested that Dworshak Dam be moved from the bottom of level 1 to the bottom of level 2 on the Spill Priority List. Dan Turner, Corps, reminded the group that the Spill Priority List is used to manage lack of load spill on the system. Level 1 spill is set to meet state water quality standards. Those change throughout the year and at

different projects. The Corps internally discussed Hesse's request and has chosen note to implement it. A few reasons the Corps made this decision include:

- 1. The Spill Priority List is aligned to the current Water Quality Plan.
- 2. Turner reviewed data back to 2000 and did not find any evidence of lack of load spill at Dworshak Dam between September and March in any of those years.
- 3. Turner reviewed modeling per the EIS and it did not suggest that there would be lack of load at Dworshak Dam given the current conditions.
- 4. In the Corps perspective, the list is already working to minimize lack of load spill at Dworshak Dam.

Turner noted that the Corps can – and will – adaptively manage in real time. Thus, if the situation arises (and it likely will not), the Corps can reconsider and react to a specific situation as opposed to changing the entire policy. Other agencies, like Bonneville have other policies that use the spill priority list.

Erick Van Dyke, OR, requested future conversation on the Spill Priority List. He observed that high-head dams without fish passage and extirpated populations happen to be at the bottom of the list while those with fish passage and actively migrating fish populations are at the top. He was unsure how that played into decision making for this priority order. He also noted that Dworshak is only listed in level 1 and isn't used at higher levels for managing lack of load spill. Norris asked if he'd prefer the headwater projects be at the top of the list, which would be the opposite of what has been requested from salmon managers to prioritize lack of load spill in the system for the benefit of fish passage. Van Dyke said it should be a topic of future discussions to understand how marketing for lack of load impacts system operations. Bettin noted that the reason for the winter order of the spill priority list was for the benefit of steelhead if spill occurs.

Sheri Sears, Colville Tribe, added that the Tribes are trying to get anadromous fish back above Chief Joseph and Grand Coulee and have done cultural releases of fish over the past two years. Juveniles have emerged and are doing well, so there are fish up there. However, due to high flows¹, they've lost over 400,000 non-anadromous fish each year. Even though the populations are currently considered extirpated, the tribes are working to fix that and are in stage two of their plan. So those challenges will need to be considered when allocating spill.

5. Fish Summary

_

McGrath updated TMT on fish passage. She directed the group to a written summary available on the TMT website. Juveniles are passing projects in persistent but low numbers. Adult coho, Chinook, and steelhead are passing in declining numbers. For adults, fall Chinook are coming in at 65-75% of the 10-year average, steelhead are at about 50%, and coho are above average at 133-156%. To date, 14 chum have passed Bonneville Dam and per Morrill, 39 live chum were observed in the Ives Island area. The survey also counted 13 redds. There has not been any chum observed at Hamilton Creek yet. Morrill shared that another chum survey is planned for Thursday or Friday of this week and that he will distribute that information to the TMT via email next week since there is not a TMT meeting on the books.

¹ After the meeting, Sears clarified she was referring to high flows through the 3rd powerhouse at Grand Coulee.

Van Dyke noted that the fish ladder and passage system was recently improved at Willamette Falls. This improvement has provided new passage numbers via video and shown that thus far 4 chum have passed the project and first appeared at the project in mid-October. This provides the group another observable point for chum data.

There is no update on lamprey.

6. Next TMT

The next TMT will be a call on November 18.

Today's Attendees:

Agency	TMT Representative
Army Corps of Engineers	Doug Baus, Lisa Wright, Julie Ammann
Bonneville Power Administration	Scott Bettin, Tony Norris
Bureau of Reclamation	Absent
NOAA Fisheries	Claire McGrath
US Fish & Wildlife Service	Dave Swank
Washington	Charles Morrill
Oregon	Erick Van Dyke
Idaho	Jonathan Ebel
Montana	Absent
Nez Perce Tribe	Jay Hesse
Umatilla Tribe/CRITFC	Tom Lorz
Colville Tribe	Sheri Sears
Warm Springs Tribe	Jen Graham
Kootenai Tribe	Absent
Spokane Tribe	Absent

Other Attendees (non-TMT members):

CRITFC – Kyle Dittmer

Corps – Dan Turner, Aaron Marshall, Eric Hockersmith, Alexis Mills

Yakama Nation Fisheries – Tom Iverson

DS Consulting – Emily Stranz (Facilitator), Colby Mills

BPA – Melissa Haskin (contractor notetaker)