

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

FRIDAY, June 10, 2022

Facilitator's Summary

Facilitation Team: Doug Baus, Corps, & Colby Mills, DS Consulting

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; it is not intended to be the "record" of the meeting. Official minutes can be found on the TMT website: <http://pweb.crohms.org/tmt/agendas/2022/>. Suggested edits for the summary are welcome and can be sent to Colby at colby@dsconsult.co.

Spill Operations Update – Tony Norris, BPA, updated the group on lower Snake River spill operations. As of 0900 hours, the system is still experiencing high flows and an atmospheric river. Projects are spilling, utilizing the Spill Priority List (SPL) for lack of load, through to Bonneville Dam.

TMT members discussed potential proposed changes to the performance standard spill blocks, and how to operate the lower Snake River to improve adult Chinook passage.

FPAC chair, Jonathan Ebel, ID, reported that offline communications among Fish Managers had led to a couple of recommendations (in order of prioritization), although not a firm proposal:

1. Change performance standard spill from a fixed rate up to 40% at Lower Granite and Lower Monumental; and
2. Suspend the MOP range at Ice Harbor for next 7-10 days and allow the pool to operate in the full normal operating range.

Tom Lorz, CRITFC/Umatilla Tribes, emphasized that these are Fish Managers' best recommendations for fish from a biological standpoint, with the collective hope that Action Agencies will do as best they can under the current and evolving conditions.

Tony noted that the ability to implement a coordinated operational change may be impacted if there are dramatic increases in spill, necessitating moving further through the SPL, and the spill change to Lower Granite would likely make a big difference to minimize and potentially eliminate the need to fill above MOP. Additionally, Little Goose is still the bottle neck in the system, and is the primary culprit for the large swings in discharge that translate downstream. Regional forecasts show lack of market spill conditions, and operational changes discussed today may need to pause during this high flow period. Fish Managers understood this possibility; their primary concern is to reduce large fluctuations in flows. Erick Van Dyke, Oregon, noted that the state largely abstained from today's discussion, and expects to see what can be learned from this negotiated effort.

Following further discussion, TMT Members coordinated the following operational changes to the 2022 spring spill operations as described in the 2022 Fish Operations Plan (FOP):

- Effective today through June 20: performance standard spill at Lower Granite and Lower Monumental dams will shift up to 40% for up to 8 hours per day; and
- Ice Harbor Dam will change to the 3-foot normal operating range (437-440 feet).

2022 FOP summer spill operations at the lower Snake projects will begin on June 21. Also of note, the last Lower Monumental juvenile barge will depart on June 11, and then switch to bypass. The Corps will plan on resuming juvenile transport and the next barge departures are tentatively planned for June 17 and 19 (subject to change based on project outflows).

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Action Agencies' Plan for Implementation

Based on the TMT-coordinated request to modify operations in the Lower Snake River to improve adult Chinook passage, Action Agencies will plan on implementing the adjustments coordinated, as feasible and as conditions allow.

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 on June 15, 2022 at 9:00 AM.

Columbia River Regional Forum

Technical Management Team

OFFICIAL MINUTES

FRIDAY, June 10, 2022

Minutes: Melissa Haskin, BPA (contractor, CorSource Technology Group, LLC)

Today's unscheduled TMT meeting was held via conference call and webinar, chaired and facilitated by Doug Baus, Corps. A list of today's attendees is available at the end of these minutes. The purpose of today's meeting is to discuss adult passage in the lower Snake River.

1. Spill Operations Update

Tony Norris, BPA, started by sharing an update on spill operations as of 0900 this morning. There are high flows due to an atmospheric river system sitting in the basin. BPA is spilling for lack of load and lack of turbine per the spill priority list. The next step is to modify performance standard spill blocks per coordination at Wednesday's TMT meeting.

Jonathan Ebel, ID, speaking as FPAC Chair, shared that there are some options on the table for improving adult fish passage, but that the group has not reached a consensus and does not have a firm recommendation. With drastic increases in inflows expected on the Snake River over the next two weeks, the goal of these options would be to decrease within-day variation in flow in the lower Snake River to provide conditions adequate for adult passage.

The two proposed options Ebel laid out were:

1. Changing performance standard spill at Lower Granite and Lower Monumental from a fixed rate to 40%.
2. Suspending MOP at Ice Harbor Dam for the next 7 to 10 days.

The Corps and BPA asked for additional clarification before providing feedback.

- Norris noted that BPA would still need access to fill above MOP at the other projects in order to provide performance standard spill and asked if fish managers are recommending any restrictions.
 - Ebel clarified that under these conditions the FOP allows for excursions above MOP when ponding at all 3 projects (Lower Granite, Little Goose, and Lower Monumental). The fish managers would recommend extending this to Ice Harbor temporarily.
- Julie Ammann, Corps, asked if the intent is to pond and then draft across the remaining 16 hours.
 - Ebel clarified that this operation is noted in the FOP in Footnote C of Table 3. However, there are different interpretations of this table and its implementation.
- Ammann asked if the intent is to "target 40%" or "up to 40%."
 - Ebel clarified that he meant "up to 40%."

Following clarifications, Norris provided some context and insight, noting that the Action Agencies operate the Snake River projects as a system. Dramatic increases in spill, even if changes are made today, could still trigger the spill priority list.

Norris commented that increasing Lower Granite performance standard spill to 40% could have a significant impact and could result in less excursions above MOP. However, Little Goose is still a bottleneck in the system and the primary culprit behind large swings in flow downstream. BPA would need a substantial amount of storage space in order to continue to manage performance standard spill blocks. Norris commented that if the requirement to draft back to MOP each day was dropped temporarily that it could help ease the large swings in flow. Storing day-to-day would allow BPA to manage flows across the system, but the agency would need access to the entire forebay ranges available until flows drop to more manageable magnitudes (120 kcfs or lower). The atmospheric river is resulting in uncertainty for real time operations. The more flexibility there is, the easier it will be for real time folks to implement the intended operation. Norris commented that what Ebel is proposing is implementable but may not maximize the ability to achieve some of the objectives. Ammann asked what the objectives are and wondered if fish travel times are a concern or juvenile passage. Ebel clarified that passage of both adults and juveniles is always a concern. Hesse clarified that from his perspective the objective is to keep the reservoirs as low as possible to minimize juvenile travel time regardless of flows. Any operations above MOP are a degradation of juvenile travel time, he said, however he recognizes that there is a balancing act of risks to adults. That said, MOP is just as important to him as is maintaining surface passage. He does not want to redirect fish into the powerhouse.

Norris noted that splitting the performance standard spill blocks into one 4-hour morning block and one 4-hour afternoon block would lessen swings in flow downriver of Lower Monumental Dam. This operation would allow BPA to draft between blocks, lessening the swings since it would be moving out water between the blocks.

Peery added some insight regarding current adult fish passage noting that originally he thought that slower passage could have been related to periods of high spill and reduced turbine capacity. However, he reviewed the data and found that the lowest counts occurred during periods where the flows were the highest. Additionally, the low passage seemed to coincide with a period when river temperatures were down by 5 to 6 degrees as well as when there were dramatic changes in flow. He commented that based on available data, it seems the change that would have the biggest impact on fish passage would be to reduce swings in flow.

Conder added that he looked at data from 2011 and 2017, two years when flows as well as variability were high. DART showed adult delay during periods of high flow, high variability in outflow, and high spill. Conditions are similar now, he commented. The proposed operation will diminish some of those conditions, he noted. He wondered if it would be enough to make an impact. NOAA's highest priority is to maintain adequate adult passage while maintaining effective juvenile passage, as well.

Lorz asked what the hydraulic capacity at Little Goose is currently. It is currently 70 kcfs with two units out of service.

Following today's discussion, the Action Agencies will:

1. Change performance standard spill blocks at Lower Granite from 20 kcfs to “up to 40%.”
2. Change performance standard spill blocks at Lower Monumental from 30 kcfs to “up to 40%.”
3. Have use of the full pool at Ice Harbor (437-440 feet) to be able to store water and smooth out the swings in outflow from upstream projects implementing performance standard spill.

This will be effective today through June 20 (the remainder of spring spill). On June 21, summer spill operations will begin.

Baus has updated and posted a document to the TMT website that documents these changes from the FOP listed above.

BPA understands the urgency of today’s request and will implement it as soon as possible. It will be somewhat tricky since BPA has already marketed energy through the weekend. It may be a few days before the agency could implement the changes.

Juvenile transport was scheduled for tomorrow. Transport will proceed as planned tomorrow then be put on hold until June 17, at the earliest. The last transport of the season (an end date of June 21 for transportation was coordinated at the June 1 TMT meeting) may not occur this season due to the incoming high flows.

In closing, Erick Van Dyke, OR, commented that OR has largely abstained from this conversation and the conversation earlier this week at FPAC. It would like to limit opposition to coordination and wants to see what can be learned from this coordinated operation.

Charles Morrill, WA, is supportive of the plan going forward. WA made no additional comments.

Dave Swank, USFWS is okay with the operation though it would not be the agency’s first choice. The agency is also looking forward to the information that will be gathered from this operation so that lessons can be learned moving forward.

Lorz added that MOP is more important to fish managers as a whole than increasing the performance standard spill blocks. He clarified that the swings in flow are the biggest concern right now. If the Action Agencies can reduce the swings by only using the 40% performance standard spill, that would be the preference of the fish managers, he said. He clarified that the opinion of fish managers is that they would not want the Action Agencies to first use the expanded pool at Ice Harbor and not implement the other portions of the operation. They would rather try the increased performance standard spill hours first and then, if that does not work, the expanded pool operations. Norris replied to Lorz that without changes to Little Goose, there will still be flow swings at Lower Monumental and Ice Harbor due to Little Goose’s 30% performance standard spill operation.

Today's Attendees:

Agency	TMT Representative
Army Corps of Engineers	Doug Baus (Chair), Lisa Wright, Julie Ammann
Bonneville Power Administration	Tony Norris, Scott Bettin
Bureau of Reclamation	
NOAA Fisheries	Trevor Conder, Kelsey Swieca
US Fish & Wildlife Service	Dave Swank
Washington	Charles Morrill
Oregon	Erick Van Dyke
Idaho	Jonathan Ebel
Montana	
Nez Perce Tribe	Jay Hesse, Anthony Capetillo
Umatilla Tribe/CRITFC	Tom Lorz
Colville Tribe	
Warm Springs Tribe	
Kootenai Tribe	
Spokane Tribe	

Other Attendees (non-TMT members):

Corps – Aaron Marshall, Alexis Mills, Dan Turner, Chris Peery, Scott St. John
DS Consulting – Colby Mills
BPA – Melissa Haskin (Contractor with CorSource Technology Group)
Yakama Nation Fisheries – Tom Iverson
FPC – Erin Cooper