

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

May 29, 2020 DRAFT

Facilitator's Summary

Facilitator: Donna Silverberg; Notes: 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. 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/>.

Spring Chinook Passage

Claire McGrath, NOAA, reported on the FPAC meeting held this morning to discuss the apparent lengthening of travel times for PIT-tagged adult fish in the lower Snake River, a suggestion that fish are spending longer times in between reaches.

Salmon Managers had agreed on Tuesday (and Wednesday at TMT) to take a "wait and see" approach, as there were issues with missing data at Lower Monumental that has since been fixed. After monitoring the data throughout the week, some FPAC and TMT members expressed serious concerns over the lengthening travel times between the Ice Harbor to Lower Monumental and Lower Monumental to Little Goose reaches.

The decision by consensus was to bring forward a request (not in the form of an SOR) for Lower Monumental Dam to implement an 8-hour continuous block of performance standard spill, as feasible daily, during the same hours as implemented at Little Goose Dam (0400-1200), and change from the bulk to uniform spill pattern for performance spill. Salmon Managers asked the Corps and BPA for feedback on the feasibility of the proposed operational changes.

As of today, they will not be moving forward with a jointly drafted SOR for operational changes to Little Goose, as it was decided to wait and see for data to come in through the weekend and bring up at the next TMT meeting if necessary. Salmon Managers also wanted to address concerns over the justification and analyzing the potential impact of extending the hours of performance standard spill at Little Goose on juvenile fish.

The proposed operational request is as follows (with understanding a lack of flexibility):

- Change operations at Lower Monumental to the performance standard spill hours (8 hours per day), as consistent with Little Goose, from 0400 hours to 1200 hours of 30 kcfs, and a uniform spill pattern for both gas cap and performance standard spill. Salmon Managers requested this implementation as begin as soon as able to run until June 5 when the project would return to FOP operations. Results from the operation will be reviewed at Wednesday's TMT meeting to see if the operation needs to continue further.

Given the short notice, BPA and the Corps were not able to provide an immediate response and requested a short break to coordinate feasible operation options. Factors that could cause issues to the request include the Lower Monumental spill reduction for the fish transport barge (occurs every other day in the afternoon) and energy storage in an already saturated market. Tony Norris, BPA, noted that 2-3 days is the normal time frame for coordinating and being able to implement operational changes. Action Agencies noted their deep concern for fish passage, and want to be sure the requested operational changes are feasible.

After reconvening the TMT, BPA relayed the following feasible operational changes for Lower Monumental Dam:

1. Saturday and Monday, move 2 of 8 performance standard spill hours into the morning starting at 0600 hours at 30 kcfs spill (Sunday not able to move generation into the morning).
2. Tuesday through Friday, performance standard spill for 8 consecutive hours starting at 0600 hours.

Doug Baus, Corps, noted that the Ice Harbor forebay might have to expand to a 2-foot MOP range with significant changes in Lower Monumental outflow throughout the day. Additionally, the requested uniform pattern would have very small gate openings during reduced spill for barging (below 30 kcfs), which could be of concern to fish.

After deliberating concerns about whether there is a benefit to only having two hours of performance spill in the morning on Saturday and Monday, Salmon Managers asked that the Action Agencies switch to using the uniform pattern for performance standard spill starting immediately, but wait until Tuesday to implement the 8-hour blocks of performance standard spill starting at 0600 hours, and continue through Friday. For spill below the performance standard level of 30 kcfs (i.e., during transit of the fish barge), use the bulk pattern.

Spill Program

Dan Turner, Corps, updated the TMT on spill operations at The Dalles Dam. The FOP calls for 40% spill and not to exceed the state TDG standard of 125% in the tailrace, and the project is getting very close to exceeding TDG criteria. TDG did reach 126% for a couple of hours with a spill of 150 kcfs, which equated to spill at 50%. If the project goes above spill of 150 kcfs it will exceed water quality criteria. Dan noted that if flows increase over the weekend as forecasted, 150 kcfs will be less than the 40% spill as written in the FOP.

In response to questions from Salmon Managers, Dan responded that the cause of higher TDG levels could be due to the combination of both spill rate at The Dalles and high TDG coming in. The Corps is keeping a close eye on the project if there are longer exceedances, and Dan asked the TMT for any feedback on what might be the cause.

The next TMT meeting is a conference call on June 3rd 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.

Columbia River Regional Forum

Technical Management Team OFFICIAL MINUTES

Friday, May 29, 2020

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

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

1. Spring Chinook Passage - Claire McGrath, NOAA

Claire McGrath, NOAA, reported on adult Chinook passage. Earlier this week salmon managers noted that PIT tag data were indicating longer travel times between the Lower Snake projects for Chinook traveling upstream. The concern is that fish are spending longer time in reaches due to high spill levels.

At Wednesday's TMT, McGrath reported that FPAC had decided to take a "wait and see" approach, particularly since the PIT-tag equipment at Lower Monumental is out of service. The data are coming in manually.

FPAC met again this morning. McGrath noted that not all salmon managers were concerned about the travel times. At Little Goose, salmon managers have decided to continue with a "wait and see" approach. They will reevaluate next Tuesday (June 2). Salmon managers requested at today's meeting to fix flex hours of performance standard spill at Lower Monumental to one 8-hour block each day starting at 0400.

Tony Norris, BPA, asked if it would make sense to try the uniform pattern during performance standard spill instead of shifting to the bulk pattern those hours since the eddy may be increased by the pattern.

McGrath responded that the 8-hour block provides a long enough period for fish to respond to changes in tailwater conditions and find the ladder. They do this best in the morning, according to data from past years, she noted.

Scott Bettin, BPA, noted that typically 2-3 days lead-time is necessary to coordinate operations. He expressed that BPA would like to accommodate the request and that they are concerned about fish but need to make sure there is somewhere to put the energy. The market is currently saturated and marketing has already been planned through Wednesday of next week, he noted.

Norris also noted that the spill reduction for the fish transport barge loading that occurs in the afternoon would be an issue, since the drop in spill from the gas cap will be significantly greater than the drop in spill from the performance standard level.

BPA requested a brief recess to internally coordinate operations and return to TMT with options.

At 2 p.m., TMT reconvened. BPA noted they could flex (i.e., implement performance standard spill) at Lower Monumental for 8-hour blocks beginning at 0600 on Tuesday and continue that through Friday. The agency also added that on Saturday and Monday it could move two of its 8 hours of flex spill into the morning starting at 0600. With such short notice and current conditions, BPA noted they would not be able to move Sunday's hours of performance spill into the morning.

Salmon managers discussed to what magnitude Saturday and Monday operations would help fish. Most agreed that a 2-hour window may not provide much assistance. ID and Nez Perce were supportive of waiting until Tuesday to begin the operation. Dave Swank, USFWS, said he would be supportive of trying Saturday and Monday to see if 2 hours makes a difference.

Another issue discussed was the every-other-day spill reduction for fish transport barge loadings, which will happen Tuesday afternoon. Moving all performance standard spill hours to the morning will mean the afternoon spill reduction for the barge will require a ramp down from gas cap spill of about 114 kcfs, which is a huge swing compared to when it occurs during the 30 kcfs performance spill under normal circumstances. In the past, the spill reduction for barge loading has lowered the Ice Harbor dam forebay. To position the reservoir for barge loading, there will likely need to be an expanded 2-foot MOP range at Ice Harbor.

Norris also noted that using the uniform pattern during this spill reduction would result in small gate openings, which has adversely affected fish in the past. Charles Morrill, WA, and Jay Hesse, Nez Perce Tribe, were supportive of using the bulk pattern during the spill reduction to maintain larger spill gate openings for fish.

Thus, the final coordinated operation is:

- Starting immediately and continuing for the remainder of spring spill, both performance standard spill and gas cap spill will be in the uniform pattern. During hours of lower spill (i.e., for the fish barge), spill will be in the bulk pattern.
- Starting Tuesday 6/2 and extending through Friday 6/5, BPA will shift all hours of performance standard spill at Lower Monumental to one 8-hour block each day beginning at 0600.

BPA noted that if salmon managers want to request a change at Little Goose, they will need notification before 11 a.m. on Monday in order to start on Wednesday. If something is requested after 11 a.m. on Monday, it could be implemented on Thursday.

2. Spill Update

Dan Turner, Corps, provided an update on spill. The Dalles is spilling at 40% per the FOP. The project has been close to exceeding the 125% TDG criteria several times. It did exceed 126% a few days ago when spill was 150 kcfs. If spill increases above 150 kcfs this week, the project will likely exceed water quality criteria unless flows increase over the weekend (which would mean 150 kcfs would be less than 40%).

Jay Hesse, Nez Perce, asked why TDG has been elevated, noting that in the past spill has been this high but TDG has not. Dan reported that there has been high TDG coming in to The Dalles

and that TDG has always been variable at the project. The Corps will reduce spill if TDG exceeds criteria.

3. Next TMT

The next TMT meeting is a conference call on Wednesday, June 3.

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	Absent
NOAA Fisheries	Claire McGrath
US Fish & Wildlife Service	Dave Swank
Washington	Charles Morrill
Oregon	Absent
Idaho	Jonathan Ebel
Montana	Jim Litchfield
Nez Perce Tribe	Jay Hesse
Umatilla Tribe/CRITFC	Absent
Colville Tribe	Sheri Sears
Warm Springs Tribe	Absent
Kootenai Tribe	Absent
Spokane Tribe	Absent

Other Attendees (non-TMT members):

Army Corps of Engineers – Dan Turner, Chris Peery

BPA – Melissa Haskin (CONTR, FLUX Resources, Note taker)

DS Consulting – Donna Silverberg (Facilitator), Colby Mills

Yakama Nation Fisheries – Tom Iverson