COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

April 22, 2020 DRAFT Facilitator's Summary Facilitator: Emily Stranz; 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://www.nwdwc.usace.army.mil/tmt/agendas/2020/.

Review Meeting Minutes

TMT Members approved the official minutes from the April 8 meeting, and the minutes and facilitator's summary from the April 10 meeting.

TDG & Flex Spill Update

Dan Turner, Corps, reported that daily average spill is below the spill caps on the Columbia River. McNary, John Day, and Bonneville Dams are at minimum generation and spill the rest, and The Dalles is spilling at its 40% spill target. TDG levels are below the 125% state criteria. Snake River projects are also at minimum generation and spill the rest, especially during hours of spill to the spill cap. TDG levels are below the 125% criteria.

Flow forecasts for Bonneville show up to 150 kcfs this weekend, John Day may reach flows needed to hit spill targets by early May, and forecasts suggest flows in mid-May will be sufficient to hit Lower Granite and Little Goose spill targets.

Tony Norris, BPA, reported that flexible spill is being utilized at all projects, now that there is enough water in the river.

Chief Joseph Dam Flow Request

Paul Wagner, NOAA, reported that in previous years during low spring flow, Salmon Managers have requested increased flows from Chief Joseph Dam to assist juvenile travel time. After discussion at FPAC, Salmon co-Managers did not support such a request this year. Instead, the preference from the majority of Salmon Managers is to hold current operations (weekly average of 80 kcfs out of Chief Joseph), because the lower flows are resulting in low powerhouse passage (referred to as PITPH).

Dave Swank, USFWS, reported that a recent Fish Passage Center (FPC) memo (posted on the FPC website) detailed the benefit of the lower flows in minimizing PITPH at some projects. He noted that there are tradeoffs, as higher flows result in some environmental benefits; however, testing the PITPH assumptions is priority this year.

Jay Hesse, Nez Perce, clarified that the optimum PITPH would be zero from a fish standpoint. When considering minimum powerhouse and spill caps across the four lower Columbia River projects, the lowest PITPH value is estimated to be at about 160 kcfs outflow. The current flow

request of an 80 kcfs week average at Chief Joseph Dam will continue for Grand Coulee Dam operations through the end of the month.

Adult Steelhead Counts

Dave reported back on previous questions at TMT regarding the adult dam passage counts noted for unclipped and total steelhead. It was curious that the unclipped steelhead counts could at times be higher than the total number of steelhead. This is in fact accurate because of the way that the counts are conducted. The higher unclipped count incorporates net daily counts, so includes up and downstream passage.

The next TMT meeting is a conference call on April 29th 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 DRAFT OFFICIAL MINUTES April 22, 2020

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

Today's TMT meeting was chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting. Due to COVID-19, today's meeting was conducted via conference call and webinar. See the end of these minutes for a list of attendees.

1. Meeting Minutes

The official minutes for 4/8 were approved with no additional edits. The official minutes and facilitator's summary for 4/10 were approved, as well.

2. TDG and Flex Spill Update - Dan Turner, Corps, and Tony Norris, BPA

Dan Turner, Corps, reported on spill operations. The daily average spill is below the spill caps on the lower Columbia River. The Dalles has been spilling at its 40% target and TDG is below 125%. On the Snake, the projects are operating at minimum generation and "spill the rest," especially during the spill cap hours. TDG is below 125%. Based on the flow forecasts, Bonneville may be able to spill to 150 kcfs this weekend. John Day has a spill cap target of 120% TDG. It may be early May that there will be enough flow to hit the spill target. At Lower Granite and Little Goose, it may be mid-May before flows come up and spill is closer to spill caps.

Tony Norris, BPA, reported on flex spill hours. BPA is utilizing flexible spill at all projects now that flows have come up.

3. Chief Joseph Dam Flow Request - Paul Wagner, NOAA, and Tony Norris, BPA

Paul Wagner, NOAA, reported on a request for increased spring flow that he brought to FPAC yesterday. Typically, when flows are low in the spring, the salmon managers make a request for increased flow from upstream projects to aid the juvenile fish outmigration. However, the other salmon managers at FPAC did not support that request this year due to concern that increased flows would result in increased powerhouse passage (referred to as PIT-PH).

Dave Swank, USFWS, reported that FPAC had a lengthy discussion and there was a general consensus among the other salmon managers to prioritize minimizing PIT-PH over the environmental benefits of higher flows (e.g., reduced travel time to the estuary). They would like to see where it goes this year.

Doug Baus, Corps, noted the current low flow conditions with yesterday's Bonneville Dam outflows of 167 kcfs, which is 63% of the 10-year average, and the approaching peak of yearling Chinook migration through the lower Columbia River, and wondered why salmon managers aren't requesting higher Columbia River flows for the benefit of the juvenile salmon outmigration, as typically recommended by TMT and as described in the spring flow objectives of the Water Management Plan.

Tom Lorz, Umatilla Tribe/CRITFC, said he would welcome any suggestions from the Action Agencies.

Swank noted that there are different metrics to measure juvenile survival and that a quirk of the hydro system is that under low flows, PIT-PH is near its minimum. "We're close to the sweet spot of minimizing PIT-PH," he noted, saying the regional flex spill agreement calls for minimizing PIT-PH.

Scott Bettin, BPA, asked why the salmon managers aren't recommending raising flows out of Chief Joseph from the current 80 kcfs to 95-100 kcfs, as that would be closer to the optimal flow for minimum PIT-PH. Waiting could mean higher flows later, which would blow PIT-PH even higher, depending on the hydrograph, he said.

Salmon managers expressed different interpretations of how to minimize PIT-PH to most benefit fish. Swank said there is no one magical optimal flow number.

Jay Hesse, Nez Perce Tribe, said the optimal PIT-PH level is 0. He noted the "Shiny" app tool that estimates PIT-PH under various conditions estimates that a Lower Columbia River flow of 163 kcfs results in the lowest PIT-PH. This comes with some caveats, like that flow would have to be the same across all four projects on the lower Columbia. Baus asked what that flow would be for the Snake River. Salmon managers did not look at that and thus were unable to provide a number.

While salmon managers noted that there are some benefits to higher flows – like decreased travel time – the consensus was to prioritize minimizing PIT-PH. Swank referred to an FPC memo, released yesterday, for additional information and analyses by FPC. Swank noted that the conversation at FPAC was lengthy and that if TMT members have questions after reviewing the memo, he would be happy to address them.

Therefore, the Action Agencies will continue to operate under the current flow request for a week average of 80 kcfs at Chief Joseph Dam through April 30.

4. Other

Swank has noted in the past what he thought was an error in adult steelhead counts. Sometimes there are more wild steelhead than total steelhead reported. After investigating, he reported back that the steelhead counts are correct, and the issue is due to the counting method, which is a "net daily count".

5. Next TMT

The next TMT meeting is call on April 29 at 9 a.m.

¹ http://www.fpc.org/documents/memos/20-20.pdf

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	Peter Cooper
NOAA Fisheries	Paul Wagner
US Fish & Wildlife Service	Dave Swank
Washington	Charles Morrill
Oregon	Erick Van Dyke
Idaho	Jonathan Ebel
Montana	Jim Litchfield
Nez Perce Tribe	Jay Hesse
Umatilla Tribe/CRITFC	Tom Lorz
Colville Tribe	Sheri Sears
Warm Springs Tribe	N/A
Kootenai Tribe	N/A
Spokane Tribe	N/A

Other Attendees (non-TMT members):

Army Corps of Engineers – Dan Turner, Aaron Marshall, Jon Roberts, Chris Peery, Laura Hamilton, Alfredo Rodriguez, Willow Walker BPA – Melissa Haskin (CONTR, FLUX Resources, Note taker)

Clearing Up – K.C. Mehaffey

DS Consulting - Emily Stranz (Facilitator), Colby Mills

Fish Passage Center – Dave Benner, Erin Cooper

Oregon DEQ – Paula Calvert

 $Snohomish\ PUD-Mike\ Shapley$