

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

May 12, 2021

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/2021/>.

Review Meeting Summaries & Minutes

TMT Members approved the official minutes and facilitator's summaries for the April 28 and May 5 meetings; pending an edit to the May 5 minutes and summary to specify "Kootenai white sturgeon," and "FPIP Technical Team," in the Libby Dam SOR update, and a clarification in the flow request section on the request of a weekly average *minimum* of 220 kcfs at McNary Dam. The facilitator's summary was approved for the April 21 meeting, and the official minutes will be reviewed at the next TMT meeting.

Official May Water Supply Forecasts

Joel Fenolio, BOR, reported on the official May water supply forecast for Hungry Horse Dam. May through July residual forecast volume was 1,500 kaf, or 90% of average; April to August was 1,800 kaf, or 93% of average; and May to September, was 1,600 kaf or 95% of average. Draft targets for the project are set on these local inflow forecasts, which is 10-feet from full by the end of September.

Doug Baus, Corps, reported official May water supply forecasts for Corps projects:

- **The Dalles:** NWRFC April to August volume forecast is 75 maf, or 85% of average;
- **Lower Granite:** NWRFC April to July volume forecast is 14 maf, or 69% of average;
- **Libby:** Corps NWS May runoff forecast is 5,191 kaf, or 88% of average; and
- **Dworshak:** Corps NWS April to July runoff forecast is 2,141 kaf, or 88% of average.

SOR Libby Dam Releases for Sturgeon and Bull Trout

Ryan Bart, USFWS, presented SOR: FWS #1 (posted on the TMT website), which recommends a minimum release volume of 0.80 maf from Libby Dam for sturgeon conservation within a Tier 2 operations year. The SOR seeks to provide a period of peak river flow during the spring freshet, while concurrently providing a stable-rising thermograph in the river as the operation concludes. SOR parameters provide guidance on creating optimal conditions for Kootenai sturgeon migration, spawning, incubation and rearing. In-season coordination will occur via the FPIP Team with a recommendation coordinated through the AAs and the TMT. Greg Hoffman, Corps, noted research and temperature models are in the works to collect data on the relationship between spring reservoir elevation and the ability to send water through selective withdrawal earlier.

David Bogema, Corps, presented the Corps' Libby Dam sturgeon operation implementation plan, which is posted to the TMT website. Sturgeon augmentation flow began on May 6 at 9 kcfs, and will increase to 25 kcfs (powerhouse capacity) on May 13, maintaining a pulse discharge until May 29. The project will ramp back down to summer flat flow around June 2. Greg noted that discharge temperatures during the pulse are projected to be cold, as surface temperatures are just now approaching 50 degrees F. The Corps hopes to get a warmer surface temperature before the pulse ends with the help of a crane repair expected for installation as the project comes ramps down from full powerhouse flows.

TMT Members were polled on the SOR:

NOAA	Supports	USFWS	Supports
Oregon	No Objection	Montana	Supports
Washington	Supports	Idaho	Supports
Kootenai	Absent	Spokane	Absent
Colville Tribes	Supports	Nez Perce	Supports
Umatilla Tribes	Absent	Warm Springs	Supports
Reclamation	Supports	BPA	Supports
Corps	Supports		

Doug confirmed that the Corps plans on implementing the SOR as requested.

Flow Update

Charles Morrill, WA, reported that FPAC is following flows closely, and expressed appreciation for AA’s efforts to maintain a weekly average minimum of 220 kcfs at McNary Dam. He noted movement of most species through the Snake and mid-Columbia; a full update on fish passage will be provided at the next TMT meeting.

Tony Norris, BPA, confirmed that flows have been at or above 220 kcfs at McNary this week. Moving forward AAs will be managing refill at Grand Coulee while following freshet. With little rain in the basin and the WSF continuing to trend downward, Tony urged TMT Members to continue monitoring forecasts moving forward through the spring.

Snake River Flow Augmentation

Jonathan Ebel, ID, reported that Idaho has been coordinating closely with Reclamation in response to the declining WSF, especially in Snake River basin, and there is some water available for release now for flow augmentation from the Snake above Milner and the Boise. Flow augmentation started at Milner on May 3, and ramped up to 3 kcfs, with plans to start ramping up for the Boise around May 17. In coordination with Reclamation, Idaho had requested to ramp Milner up to 5 kcfs around May 24 to ensure minimum flow of 8,500 cfs until the end of May at Pittsburgh landing for fall Chinook acclimation ponds, and also to release this water in case of hot temperatures. Joel clarified that after releasing 5 kcfs through the May 24, Milner would ramp back down to reach flow augmentation volume by May 31, although there might be more water depending on actual releases and flows.

The Boise will start releasing 1.2 kcfs on May 17 to contribute to flow augmentation, and once powerhead is used, total volume will be 427 kaf for the year; 487 kaf will not be reached unless there is heavy precipitation later on. Joel noted that with some lingering uncertainties, there may be shifts to flow augmentation amounts or plans to ramp down; he was confident on the solid operation moving forward.

Claire McGrath, NOAA, added that NOAA has been coordinating closely with Reclamation, Idaho and Nez Perce on this effort to get flow augmentation as early as possible, and appreciated the collaboration and flexibility in working to achieve the best outcomes under difficult circumstances this year.

Juvenile Transportation

Chris Peery, Corps, reported that juvenile transporting has been underway for just under a month, with about 0.5 million fish so far. This is about 10% of the amount transported at this time a couple years ago. Chris recommended that daily barging end this year on May 17, and then continue on alternate days. NOAA appreciated the communication efforts and supported the plan for barging.

Weekly Native Non-Salmonids GBT Report, May 3-6

Tony Norris, BPA, presented the detailed weekly report per WA standard criteria to monitor GBT on resident non-salmonids (posted to the TMT website), and noted that these reports will be provided each week at TMT meetings moving forward. These reports are shared in addition to the FPC GBT reports accessible on the FPC site. Although sampling is showing GBT on some species, it has not yet reached any official criteria that would require action.

Charles noted that FPAC members thought there may need to be consideration for different approaches in collecting fish for samples, and the relative depth at which fish are sampled to accurately reflect GBT. Claire added that tailoring this report to reflect and display relevant monitoring information is key, and that FPC is working with USGS and BPA on modifying this report. She encouraged AAs to clearly communicate to Salmon Managers on how these reports are progressing before it's finalized.

The Corps confirmed that they are working with OR and WA to comply on WQ requirements, and given that this report is new this year, they look forward to coordinating with the states to track GBT and will report back to TMT next week (and weekly moving forward) to share information with transparency. OR noted that regulatory agencies have established the action criteria.

More information will be provided to follow up on current questions at the next TMT meeting; including a point of contact for providing input on reports, and the possibility of adding a short description of sampling protocol and triggers.

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 May 19, 2021 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
Wednesday, May 12, 2021
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 4/21 (Summary), 4/28, and 5/5 Facilitator's Summaries and Official Minutes

The 4/28 summary and minutes were approved with no edits. The 5/5 official minutes and summary were approved with the following edits:

1. In the Libby Dam SOR Update section of the minutes and summary, update language to read "Kootenai white sturgeon."
2. In that section, change "sturgeon pulse group," to its official name: Flow Plan Implementation Protocol (FPIP) Technical Team.
3. Add the word "minimum" to the flow request specification out of McNary Dam (weekly average *minimum* of 220 kcfs at McNary Dam).

The April 21 facilitator's summary was approved with no additional edits. The minutes will be reviewed at the next TMT.

2. Water Supply Forecast

Doug Baus, Corps, and Joel Fenolio, Reclamation, updated the TMT on the official May water supply forecast, which was released on May 5 (the 3rd workday of the month):

- Hungry Horse: May-July: 1,500 kaf (90% of average). April-August 1,800 kaf (93% of average), and May-September 1,600 kaf (95% of average). This sets the end of September elevation target at 3,550 ft., or 10 feet from full.
- The Dalles Dam: April-August, 75 maf (85% of average)
- Lower Granite: April-July, 14 maf (69%)
- Libby Dam: April-August: 5,191 kaf (88%)
- Dworshak Dam: April-July: 2,141 kaf (88% of average)

3. SOR Libby Dam Releases for Sturgeon and Bull Trout

Ryan Bart, USFWS, presented an SOR for this year's sturgeon pulse operation at Libby Dam. The SOR is available on the TMT website. The operation would include:

1. Starting sturgeon augmentation flow operations on May 6, 2021.
2. 7 days of steady flows of 9,000 cfs followed by a period of increasing flows (pre-peak) from 9,000 cfs to 25,000 cfs (powerhouse capacity) over two days. Maintaining peak flows for approximately 15 days; and a period of decreasing flows (post-peak) from 25,000 cfs to 7,000 cfs following 2020 BiOp ramping rates over approximately 7 days.

Since this year is classified as a “Tier 2” year, the operation calls for peak flows of 25 cfs for 16 days. The operation would allow for flows of 30,000 cfs at Bonners Ferry for ~ 15 days.

Projected full pool elevation for Koocanusa Reservoir is between 2448 to 2452 ft. in early August; the Corps’ September 30 target reservoir elevation is 2,449 ft, dependent upon inflows to the reservoir.

David Bogema, Corps, presented for the Corps. Currently, Libby Dam is at 2,409.9 ft. The minimum elevation was 2,401.02 ft. on April 4-5. The water supply forecast calls for below average conditions with the April-August inflow forecast coming in around 88% of average. The water supply forecast was below average in March and April as well. In June, the water supply forecast calls for below average conditions before coming closer to average in July. The sturgeon volume is 0.8 maf and the bull trout minimum flows following the Sturgeon Pulse through Aug 31 is 7 kcfs, based on the forecast. Initial VarQ of 11 kcfs increased wetted perimeter and inundated vegetated beds. Subsequent VarQ of ~5.9 kcfs would have left those zones dry. Sturgeon augmentation flow operations began on May 6th with 9 kcfs outflow to keep those zones wet. Full Powerhouse release is projected to last for 15 Days. The FPIP sturgeon flow augmentation operation is projected to end ~June 2, dependent upon in-season management.

Questions on the SOR, prior to polling, included:

- Brian Marotz, MT, asked if there is more information available on the relationship between reservoir elevation in the spring and the ability to send warm water through selective withdrawal gates earlier. Greg Hoffman, Corps, shared that the Corps is building temperature models but that they are still in development.
- Dave Swank, USFWS, asked if the selective withdrawal crane at Libby will only be out during the sturgeon pulse. Hoffman responded yes and no, clarifying that the part to fix it is on-site and will need to be installed.

Emily Stranz, DS Consulting, polled TMT members on the SOR. For information on available polling responses and their meaning, see the official TMT guidelines, available on the TMT website. The results are as follows:

Agency	Representative	
Army Corps of Engineers	Doug Baus	Support
Bonneville Power Administration	Tony Norris	Support
Bureau of Reclamation	Joel Fenolio	Support
NOAA Fisheries	Claire McGrath	Support
US Fish & Wildlife Service	Dave Swank	Support
Washington	Charles Morrill	Support
Oregon	Erick Van Dyke	No Objection
Idaho	Jonathan Ebel	Support
Montana	Jim Litchfield	Support
Nez Perce Tribe	Jay Hesse	Support
Umatilla Tribe/CRITFC	Absent	Absent
Colville Tribe	Absent	Support
Warm Springs Tribe	Absent	Support
Kootenai Tribe	Absent	Absent
Spokane Tribe	Absent	Absent

Official comments and clarifications on polling responses for the record: None.

The Corps will implement the SOR.

4. Flow Update

Charles Morrill, WA, reported on target flow at McNary. At last week's TMT meeting, fish managers requested a flow target of 220 kcfs minimum, as a week average, at Chief Joseph Dam, beginning on May 10. Flows have been at or above 220 kcfs at McNary Dam over the last week, reported Tony Norris, BPA. There has been little precipitation and the water supply forecast is trending downwards. The Action Agencies will follow the freshet during refill at Grand Coulee Dam, he commented.

Morrill will provide an update on fish passage at the next TMT meeting. Species are moving through both the Snake and mid-Columbia, he commented.

5. Snake River Flow Augmentation

Flow augmentation started at Milner Dam on May 3 and ramped up to 3 kcfs. Augmentation will start on the Boise River around May 17. On May 24, Reclamation will seek to ramp Milner Dam up to 5 kcfs for 2 reasons: 1) to ensure minimum flow of 8.5 kcfs at Pittsburg Landing for fall Chinook acclimation ponds through the end of the month, and 2) to release water in advance of rising temperatures.

Releases will be maintained at 5 kcfs until May 24, after which the project would ramp down to meet flow augmentation volume around May 31.

Fenolio reported that conditions on the Payette River and Upper Snake have remained static. The Boise will start releasing 1.2 kcfs on May 17 for augmentation. Total volume will be ~427 kaf for the year; 487 kaf will not happen this year due to dry conditions necessitating the use of powerhead from Anderson Ranch and Palisades Dam. Fenolio says there may be about 4,000 cfs of rental water available. He cautioned that flow augmentation may have to start and stop this year, due to the uncertainty in water availability in the three basins that release water for flow augmentation, but that may change depending on conditions over the next few weeks. There is still some uncertainty, for now.

Erick Van Dyke, OR, asked if it is possible to manage flows to be between the two levels (427 kcfs and 487 kcfs). Fenolio replied that once powerhead is started, there is no flexibility. In big water or normal water years, that could happen depending on rentals, he added.

6. Juvenile Transportation

Chris Peery, Corps, reported on juvenile transportation, which started a little under a month ago. About ~0.5 million fish have been transported, thus far. Last year, daily barging stopped on May 20. Peery noted that the Corps is suggesting a May 17 end date for daily barging this year, with continuation every other day beginning May 19. McGrath voiced support for the plan.

7. Weekly Native Non-Salmonids GBT Report, May 3-6

Norris directed the TMT to a Weekly Native Non-Salmonids GBT Report for May 3-6, available on the TMT website. The report will be made available weekly and Norris will present on it at each scheduled TMT meeting for the remainder of the season. This week’s report shows GBT on some species of native nonsalmonids below Ice Harbor, McNary, and Bonneville for the week of May 3, below the criteria that would require action.

Van Dyke and Morrill expressed concern for transparency as related to fish sampling methods. Morrill added that FPAC had concern about different approaches to sampling, especially in regard to depth. Doug Baus, Corps, noted that the Action Agencies are coordinating with the states of OR and WA on the GBT monitoring data to ensure the Corps is adhering to the water quality requirements. The Native Non-Salmonid monitoring is new this year. The GBT report is being shared today with the TMT to be transparent about the GBT monitoring data that is being coordinated with the states. Following coordination with the states, Baus will report back to TMT next week.

Van Dyke added that data sharing has been transparent in the past. He noted that FPC provides real-time data online and noted that today’s report has not been distributed to everyone. Scott Bettin, BPA, replied that FPC gets their data from the Weekly Native Non-Salmonids GBT Report. The only piece that is sometimes missing when FPC pulls the data is the comment section.

McGrath asked who comments and concerns should be reported to, should any of the co-managers have questions or concerns. Baus said he will circle back to provide that information once he knows it.

Norris, Baus, and Bettin assured the TMT that there would be a more robust discussion at the next scheduled TMT meeting and that they would be able to answer any questions or concerns then.

Tom Iverson, Yakama Nation Fisheries, added that he would like to know the sampling timeframe (weekly? Daily?), location, sample size, and other requirements. He suggested adding a line or two to each weekly report with that information.

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	Joel Fenolio
NOAA Fisheries	Claire McGrath
US Fish & Wildlife Service	Dave Swank
Washington	Charles Morrill
Oregon	Erick Van Dyke
Idaho	Jonathan Ebel
Montana	Brian Marotz
Nez Perce Tribe	Jay Hesse

Agency	TMT Representative
Umatilla Tribe/CRITFC	Absent
Colville Tribe	Absent
Warm Springs Tribe	Jen Graham
Kootenai Tribe	Absent
Spokane Tribe	Absent

Other Attendees (non-TMT members):

Corps – David Bogema, Greg Hoffman, Chris Peery, Alexis Mills, Aaron Marshall, Dan Turner, Catherine Dudgeon

USFWS – Ryan Bart

Reclamation – Eric Rothwell

Yakama Nation Fisheries – Tom Iverson

DS Consulting – Emily Stranz (Facilitator), Colby Mills

BPA – Melissa Haskin (FLUX Resources contractor, Notetaker)

Columbia Basin Bulletin – Mike O’Bryant

Clearing Up – K.C. Mehaffey

Portland General Electric – Ruth Burris