

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

January 19, 2022

Facilitator's Summary

Facilitation Team: Emily Stranz & 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.

Review Meeting Summaries & Minutes

TMT Members will review the official minutes and facilitator's summary for the January 5, 2022 meeting at the February 2 TMT meeting.

Official Water Supply Forecasts

Joel Fenolio, BOR, reported the official January 1 water supply forecast for Hungry Horse Dam. May through September is 1,920 kaf, or 108% of average. The project is drafting currently, with a target of 3,542.2 feet.

Doug Baus, Corps, reported official January water supply forecasts for Corps of Engineers projects:

- **The Dalles:** NWRFC April to August volume forecast is 91 maf, or 102% of average;
- **Lower Granite:** NWRFC April to July volume forecast is 21 maf, or 104% of average;
- **Libby:** Corps NWS January runoff forecast April to August is 7,273 kaf, or 120% of average; and
- **Dworshak:** Corps NWS January runoff forecast April to July is 3,090 kaf, or 125% of average.

Chum Operation

Doug reported on the incubation phase of the chum operation, during which Bonneville Dam will be operated to a minimum tailwater of 13ft. This operation will continue until the beginning of spring spill (April 10) unless otherwise coordinated at TMT.

On January 19 at 0800 hours, Bonneville tailwater elevation was 17.5 feet, with a total outflow of 211 kcfs. The RFC inflow forecast at Bonneville ranges from 172 kcfs to 193 kcfs over the next 10-day period. Tony Norris, BPA, added that the current WSF projects plenty of water to support chum minimum tailwater.

Zero Generation

Tony reviewed a current summary of zero generation usage from December 17, 2021 through January 18, 2022. The operation has been used about 13.5% of available hours and 41% of available days. Tony reminded the group that with extremely cold temperatures and higher power prices, the operation gets used frequently, and when temperatures are moderate it is not used as much. As such, it hasn't been utilized since January 8. Hours of consecutive use are between 4-5 hours at a time, and the days of consecutive use haven't changed since Tony's previous update.

System Operational Request: 2022-1

Tom Lorz, CRITFC, reported on SOR 2022-1, which requests clarification on the frequency of zero-generation operations of the four Lower Snake River dams (posted to the TMT website). Specifically, it requests language clarification to include that zero generation at any single dam on the Lower Snake River will be implemented no more than 1 out of every 3-5 days, between the date of initiation until the last day of February.

The BiOp included a broader date range for the operation, which was adjusted in the Agreement on 2022 Operations. Tom shared that from the SOR signatories' perspective, the sideboards of the operation need to be clarified to address what partners are seeing as inconsistencies between the description analyzed in the BiOp and what is being implemented.

TMT Members were polled on the SOR, with some providing additional rationale for their responses:

TMT Member	Polling Response	Rationale (optional)
NOAA	Abstain	NOAA evaluated the operation based on historical implementation in recent years and assessment of biological risk; NOAA did not interpret the proposed action as specifying that the operation will not be done on consecutive days or more in 1 out of every 3-5 days. As of today’s date, BPA’s implementation is within historic range of usage and within the allowable range described in SOR 2002-22, and recent water management plans; NOAA doesn’t anticipate any risk to juvenile fall Chinook or adult steelhead beyond those already considered in the BiOp. NOAA will continue to monitor implementation in-season and post-season.
OR	Supports	Oregon supports the SOR and believes it important because it revisits past discussions on this operation. There is uncertainty surrounding evaluation, sideboards, and decision-making, that, from Oregon’s perspective, do not provide support for the protection of listed species. Oregon believes the SOR addresses what would be expected to occur based on guiding federal documents, and that current activity is out of the operational sideboards.
WA	Supports	Washington believes that clarification and further discussion on the operational expectations are needed and will benefit all involved.
Umatilla Tribe	Supports	No additional comments.
Reclamation	Abstain	No additional comments.
Corps	Abstain	No additional comments.
USFWS	Abstain	USFWS abstained and is reserving judgement until after new video monitoring data via the Corps is analyzed from the fish ladders at Lower Monumental and Little Goose Dams. When USFWS evaluated this operation for the BiOp, the focus was on bull trout, which have very limited data during the winter months due to lack of monitoring.
ID	Abstain	Idaho generally agrees that it would be helpful to clarify the language in the proposed action to better reflect how the AAs intend/expect to operate.
MT	Abstain	Montana wants to further understand the biological implications of the operation and requested more information on this.
BPA	Abstain	No additional comments.
The Nez Perce and Spokane Tribes were signatories to the SOR; however, were not present to provide a polling response/rationale during the meeting. The Colville, Kootenai, and Warm Springs Tribes were not present to register a polling response.		

Action Agencies Decision:

The Action Agencies need to vet the SOR internally and requested a TMT meeting be added to the calendar for January 26 at 9:00AM. At that time, the AAs will provide a response to the SOR.

- **ACTION:** Jonathan Ebel, ID & FPAC Chair, will follow up with Brian Marotz, MT, and provide additional information regarding the operation’s biological impacts, with the caveat that the basin’s monitoring structure is not operating right now, so behavior for overwintering fish in the system is unknown.
- **ACTION:** The AAs will meet internally to discuss the SOR, with the intention of providing a response on January 26.
- **ACTION:** A TMT meeting will be scheduled for January 26 at 9:00AM.

Power System Emergency Action Plan

Tony provided an update on the Power System Emergency Action Plan (attached to the TMT Emergency Protocols); the update is posted to the TMT website. The plan details how BPA will manage power system emergencies to best avoid interrupting fish protection measures. It includes expected preemptive measures, and a list of last resort contingency actions necessary to avoid interrupting transmission and power delivery to the region. The list of contingency actions has been coordinated at TMT over the years and was last updated in 2018 for changes to spill operations. The updated list contains 8 distinct periods of operation across the year and has been modified to include priorities by tier to support decision-making in real-time. Fish Managers were asked to provide input to the suggested order.

Some Fish Managers requested more clarity around BPA’s expectations for how and when the emergency actions will be implemented, specifically, what is the process leading up to BPA determining that the emergency actions are necessary, and clarification between “emergency” versus “routine” actions. There was also interest in more information on when and where these emergencies have occurred in the past.

Generally, when there is a power emergency, BPA works to resolve the emergency as quickly as possible. Tony noted that the tiers and priority order will be followed as best as possible, however, the nature of the emergency dictates what needs to be done to address it (for example, a lack of energy in the Tri-Cities area cannot be addressed by increasing generation at BON, the increase in generation may need to occur more locally, as experienced at IHR a couple years ago). Scott Bettin, BPA, noted that most commonly these emergencies occur in spring and summer seasons. Jonathan, noted that although the emergencies are low probability events, there are tradeoffs, and there may be differences of opinion regarding the list. FPAC will work to reach consensus on recommendations for the February 2 TMT meeting. Fish Managers asked for clarity around how decisions will be made regarding the list order if FPAC does not reach consensus on the recommendation.

- **ACTION**: Prior to the February 2 TMT meeting: FPAC will review the contingency list and provide comments and recommendations (hopefully consensus) to BPA; non-FPAC TMT Members will send any comments and recommendations directly to Tony.
- **ACTION**: BPA will discuss internally how decisions will be made if consensus is not reached on Fish Managers’ recommendations for reordering.
- **ACTION**: Tony will provide links for additional information regarding the WEC processes that lead to the need for implementing these emergency contingency actions, as well as more information on past emergencies that have occurred.

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 January 26, 2022, at 9:00 AM to hear the AAs response to SOR 2022-1.

The next regularly scheduled TMT meeting is a conference call on February 2, 2022, at 9:00 AM.

Columbia River Regional Forum

Technical Management Team

OFFICIAL MINUTES

January 19, 2022

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 Official Minutes and Summaries

The facilitator's summary and official minutes for the January 5 meeting will be reviewed at the next TMT meeting.

2. Official Water Supply Forecasts – Joel Fenolio, Reclamation, and Doug Baus, Corps

Joel Fenolio, Reclamation, reported on the official January water supply forecast for Hungry Horse Dam. Residual forecast for May through September is 1,920 kaf, or 108% of average. Joel confirmed the project is currently drafting. The end-of-month target is currently 3,542.2 feet.

Doug Baus, Corps, reported official January water supply forecasts for Corps projects.

- **The Dalles**: NWRFC April to August volume forecast is 91 maf, or 102% of average;
- **Lower Granite**: NWRFC April to July volume forecast is 21 maf, or 104 % of average;
- **Libby**: Corps NWS January runoff forecast April to August is 7,273 kaf, or 120% of average;
- **Dworshak**: Corps NWS January runoff forecast April to July is 3,090 kaf, or 125% of average.

3. Chum Operation – Doug Baus, Corps, and Tony Norris, BPA

Baus updated the TMT on chum operations were coordinated at TMT and available on the TMT website. As coordinated, the chum operation transitioned from spawning to incubation on December 24, at 0001 hours with a Bonneville Dam minimum tailwater elevation of 13 feet at all hours. Incubation will continue until the start of spring spill at Bonneville Dam on April 10, unless coordinated otherwise at TMT.

The Bonneville Dam tailwater at 0800 this morning was 17.5 ft. Outflow was 211 kcfs. The RFC inflow forecast for Bonneville Dam is 172-193 kcfs over the next 10 days. Tony Norris, BPA, commented that the current water supply forecasts indicate that there will be ample water to support the minimum chum tailwater elevation.

4. Zero Generation – Tony Norris, BPA, and Claire McGrath, NOAA

Norris reported that BPA has used about 13.5% of available hours and 41% of available days for zero generation operations. As Norris has indicated in the past, when temperatures are extremely cold and power prices are high, the operation is used more frequently than when conditions are moderate. Zero generation has not been used much since January 8, when conditions became moderate. Little daytime hours have been used. As far as days of consecutive use, the data has not changed since last week. Norris provided the TMT with additional data and graphics, available as a PowerPoint presentation on the TMT website.

5. System Operational Request: 2022-1

Tom Lorz, Columbia River Inter-Tribal Fish Commission/Confederated Tribes of the Umatilla Indian Reservation, presented the first SOR of the year, SOR 2022-1. The SOR calls for the following change to zero generation operation guidance language:

“Zero-generation at any single dam on the Lower Snake River will be implemented no more than 1 out of every 3 to 5 days, between the date of initiation (see SOR 2021-6) until the last day of February.”

Signatories of the SOR include Columbia River Inter-Tribal Fish Commission/Confederated Tribes of the Umatilla Indian Reservation, Nez Perce Tribe, Spokane Tribe of Indians, Yakama Nation, Washington Department of Fish and Wildlife, and Oregon Department of Fish and Wildlife.

Questions and comments prior to polling: None.

Emily Stranz, DS Consulting, polled TMT members and agencies on the original SOR as written. The polling process and available responses are available in the official TMT guidelines posted to the TMT website. Results of today’s polling are as follows:

Agency	TMT Representative	Polling response
Army Corps of Engineers	Doug Baus (Chair)	Abstain
Bonneville Power Administration	Tony Norris	Abstain
Bureau of Reclamation	Joel Fenolio	Abstain
NOAA Fisheries	Trevor Conder	Abstain
US Fish & Wildlife Service	Dave Swank	Abstain
Washington	Charles Morrill	Support
Oregon	Erick Van Dyke	Support
Idaho	Jonathan Ebel	Abstain
Montana	Brian Marotz	Abstain
Nez Perce Tribe	Absent	
Umatilla Tribe	Tom Lorz	Support
Colville Tribe	Absent	
Warm Springs Tribe	Absent	
Kootenai Tribe	Absent	
Spokane Tribe	Absent	

Following the poll, TMT members and agencies registered the following comments for the official record. These comments are not a verbatim transcript of today’s discussion. They are not quotes but rather a summary of key points raised by each agency.

NOAA: NOAA evaluated the operation based on historical implementation in recent years and assessment of biological risk. NOAA did not interpret the proposed action as specifying that the operation will not be done in consecutive days or more than 1 out of every 3 to 5 days. As of today’s date, BPA’s usage is within historic usage and within the range specified in SOR 2022-2 and recent water management plans. NOAA does not anticipate any risks to juvenile fall Chinook or adult steelhead beyond what was considered in the BiOp. NOAA will continue to monitor implementation both in-season and post-season.

OR: OR supports the SOR and is concerned about how zero generation is being implemented by the Action Agencies. OR thinks today’s concerns and SOR build on issues that have been discussed over the years. OR would like to see additional information, particularly regarding any evaluation that was used when the Action Agencies were deciding how often zero generation could be used. Erick Van Dyke, OR, commented that it seems to be a “light and low bar,” adding that the power flexibility takes emphasis away from listed species. He added that he is surprised this activity has occurred outside of the sideboards.

WA: WA believes the language in the SOR needs further discussion and clarification. Charles Morrill, WA, commented he thinks it will be helpful to everyone involved to have this clarity.

USFWS: Dave Swank, USFWS, commented that when the language in the BiOp was evaluated, the focus was on bull trout in the Snake River. It is difficult to evaluate the impact, since there are few fish in the system, making uncertainty high. USFWS requested additional video monitoring at the Little Goose and Lower Granite ladders, which the Corps agreed to. Monitoring will be ongoing this winter and USFWS will reserve judgement until data from the season is in.

ID: Jonathan Ebel, ID, shared that he is interested in hearing the Action Agencies response to the SOR. He agrees that there is a need to clarify the language in the proposed action to better reflect the Action Agencies intent. Editing the language would set expectations, he added.

MT: As a newer representative, Brian Marotz, MT, shared that he is trying to understand the biological implications of the zero generation operation and how often it is implemented. He would like further information. Ebel, speaking as FPAC chair, offered to reach out to Marotz offline. That said, Ebel noted that it is difficult to quantify the biological impacts this time of year since the monitoring infrastructure in the Basin is down for the most part due. Ebel commented that fish managers do not have much information on the behavior of fish that overwinter in the system.

_____ End of official comments _____

Next Steps: The Action Agencies are not prepared to poll on the SOR today and need additional time to consult internally. In addition to the steps outlined in the comments above, **there will be an unscheduled TMT meeting on January 26, 2022.** At that meeting, the Action Agencies will present their response to the SOR and answer any questions.

6. Power System Emergency Action Plan - Contingency Actions List

Norris reported on the Power System Emergency Action Plan Contingency Actions List. The list is available on the TMT website and is used as a last resort. The steps indicated in the action plan are the last actions taken to avoid interrupting transmission and power delivery to the region. Steps taken prior to implementing the list are available in the FOP and on the TMT website.

This list is changed occasionally over the years; most often when there has been a significant change to seasonal operations or project changes. The last time the list was changed was in 2018. Spill operations have changed since then, warranting a change. Specifically, there used to be two distinct time periods: April-August and September-March. The new spill operations create 8 different spill periods. Given this, BPA adjusted the list and would like to present it to TMT members and agencies for review. Norris commented that if fish managers want to re-order actions, they can send any edits, modifications, or comments to BPA. He will also check in for revisions at the next scheduled TMT (February 2, 2022). Ebel said he will add it to the FPAC

agenda for discussion. Ideally, FPAC would come to a consensus, noted Norris. Lorz asked what would happen if there was no consensus. Norris is not sure. He will look into it. Norris added that the Action Agencies need to have a list in place prior to the start of spill in March.

TMT members and agencies asked clarifying questions about the list. Highlights include:

- Trevor Conder, NOAA, commented that he does not remember “JDA shutoff adult attraction flow” being on old list. He asked what BPA’s thought process was for adding it as an action on the list. Norris explained that there are not a lot of other ways to increase power generation during the periods of time it is listed as an action in the new draft. It can be moved/re-ordered on the list, he added, should fish managers prefer it to be elsewhere. He also added that the action would likely only be for a short duration. Any long duration operations would be coordinated at TMT with the input of the region. Conder said he is concerned about this action and will plan to suggest a change.
- Marotz asked about ramping rates at Hungry Horse and Libby. Specifically, he wondered if the language in the draft (“HGH & LIB modify ramping rates”) would include down-ramping as well as up-ramping. Norris said there are some scenarios where there would be rapid changes.
- Van Dyke commented that this list is problematic to the equitable legs of the stool.
- Baus added that while the Corps supports BPA that the FOP is a good place to start for information and that this list is a last resort for BPA, that he does not support shifting this discussion to a policy level. The Corps supports BPA’s efforts to coordinate the list at TMT. Baus directed folks to the BiOp and appendix I of the Water Management Plan.
- Conder also asked if he was correct in his interpretation of the list: that while BPA would try to implement tier 1 actions before tier 2 actions, there are some instances where not all actions in a tier would be taken before moving on to the next tier. Norris said Conder was correct. For instance, if there is a localized issue, steps may be skipped so as to solve the local issue with minimal impact elsewhere. The example Norris gave is that a problem in the I-5 corridor likely cannot be fixed at Libby or Hungry Horse. Thus, those steps would be skipped. BPA makes best efforts to follow the list as closely as possible, when possible.

Several action items were identified during today’s discussion. Those include:

1. FPAC will review the Power System Emergency Action Plan - Contingency Actions List at its next meeting and send any comments, questions, or edits to BPA. Non-FPAC members can send their comments directly to BPA.
2. Norris will look into how decisions to edit the list are made if there are differences of opinion. Norris will report back to TMT.
3. Norris will provide additional information on the Power System Emergency Action Plan - Contingency Actions List, including a link to the plan. Norris will provide information on past emergencies, as well.

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	Trevor Conder
US Fish & Wildlife Service	Dave Swank
Washington	Charles Morrill
Oregon	Erick Van Dyke
Idaho	Jonathan Ebel
Montana	Brian Marotz
Nez Perce Tribe	Absent
Umatilla Tribe/CRITFC	Tom Lorz
Colville Tribe	Absent
Warm Springs Tribe	Absent
Kootenai Tribe	Absent
Spokane Tribe	Absent

Other Attendees (non-TMT members):

Corps –Dan Turner, Willow Walker, Scott St. John, Alexis Mills, Leon Basdekas

Yakama Nation Fisheries – Tom Iverson

DS Consulting – Emily Stranz (Facilitator), Colby Mills

BPA – Melissa Haskin (CONTR, FLUX Resources, Notetaker)

Clearing Up – K.C. Mehaffey

Columbia Basin Bulletin – Bill Crampton

Portland General Electric – Ruth Burris

Snohomish PUD – Mike Shapley, Jesse Preuss

Chelan PUD – Kate von Reis Baron