#### COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

March 6, 2024 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: <a href="https://pweb.crohms.org/tmt/agendas/2024/">https://pweb.crohms.org/tmt/agendas/2024/</a> Suggested edits for the summary are welcome and can be sent to Colby at colby@dsconsult.co.

**Review Meeting Summaries & Minutes** – TMT Members approved the official meeting minutes from the February 7 and 21 meetings, and facilitator's summary from February 21 (2/7 summary was previously approved).

**Official Water Supply Forecasts** – Chris Runyan, Reclamation, reported the projected March water supply forecast for Hungry Horse Dam. March through July was 1,595 kaf, or 76% of average, conditions haven't changed much since the last update. April through August was 1,561 kaf, or 76% of average; May through July was 1,203 kaf, or 72% of average; and May through September was 1,302 kaf, or 73% of average.

Chris reminded the group that the April to August forecasts set minimum flows for the remainder of the year: Columbia Falls is set at 3,390 cfs, and below the dam is 710 cfs. The end of April forecast for the project's forebay elevation is 3,547 feet, around 8 feet below FRM. He clarified that this is a general projection, as official forecasts/FRM elevations are not out yet.

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

- The Dalles: NWRFC April to August volume forecast is 74 maf, or 83% of average;
- Lower Granite: NWRFC April to July volume forecast is 18 maf, or 88% of average;
- Libby: Corps March runoff forecast is 5,261 kaf, or 87% of average; and
- **Dworshak**: NWRFC April to July is 1,894 kaf, or 77% of average.

In response to a query about Libby and Dworshak FRMs, Doug reported that the March 31 Libby Dam FRM elevation was 2,416.4 feet; project forebay elevation at 0100 hours this morning was 2,416.2 feet. Dworshak FRM elevation has not been finalized yet; midnight elevation was 1,531.01 feet. In response to another query, Action Agencies confirmed that Dworshak is on track for refill this year.

**Chum Operation** - Doug reported that RFC inflow forecasts at Bonneville Dam over the next 10 days show a low of 113 kcfs on March 11, and a high of 130 kcfs on March 13. The chum incubation operation of an 11.3 feet minimum tailwater elevation at Bonneville will continue through April 9 with the start of spring spill on April 10, unless otherwise coordinated at TMT.

Doug highlighted the recent improvements to precipitation throughout the Columbia River Basin since the last TMT meeting. The Snake River Basin above Ice Harbor Dam is 100% of normal for the water year, with 12.4 inches observed. The Columbia River Basin above The Dalles is 90% of normal, at 14 inches; the Willamette River Basin above Portland is 109% of normal, at 48.7 inches

Also noteworthy are the current cool temperatures throughout the basin for the month of March: The Snake River Basin above Ice Harbor is 7.3 degrees F below average for the month of March, although the

seasonal temperature departure is still 1.7 degrees F above normal. The Columbia River Basin above The Dalles is 7.3 degrees F below average, still 1.5 degrees F above average for the water year.

Kelsey Swieca, NOAA, reiterated that NOAA is closely monitoring the chum operation and will continue to do so moving forward through the start of spring spill, working to maintain the 11.3 feet tailwater minimum at Bonneville while also monitoring the elevation at Grand Coulee. Tony Norris, BPA, added that BPA expects to be able to maintain the chum elevation at Bonneville through April 10 while also achieving Grand Coulee's refill objective. Charles Morrill, WA, noted that heavy precipitation forecasted for this weekend in the Cascades may increase Willamette River outflow and continue to relieve pressure off of Grand Coulee; Chris added that the Coulee has only drafted 0.9 feet since February 7, another positive reflection for water storage.

**Questions and Comments from Members of the Public** – There were no questions or comments from members of the public.

The next scheduled TMT meeting is on March 13, 2024, at 9:00 AM. The following TMT meeting, on March 20, will be held in-person and on WebEx.

# Columbia River Regional Forum Technical Management Team OFFICIAL MINUTES Wednesday, March 6, 2024

Minutes: Andrea Ausmus, BPA (contractor, CorSource Technology Group)

Today's TMT meeting was held via conference call and webinar, chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting. A list of today's attendees is available at the end of these minutes.

- 1. Review Summaries and Minutes February 7 and 21
  - February 7 Minutes Approved
  - February 21 Summaries and Minutes Approved
- 2. Official March Water Supply Forecasts Chris Runyan, BOR, and Doug Baus, Corps NWD

### Reclamation

- Hungry Horse (HGH)
  - o March July
    - 1595 kaf
    - 76% of average
    - Note: Last couple months have been in that range, conditions have not changed much.
  - $\circ \quad Apr-Aug$ 
    - 1561 kaf
    - 76% of average
  - o May July
    - 1203 kaf
    - 72% of average
  - o May Sep
    - 1302 kaf
    - 73% of average
- April through August forecast sets minimum flows downstream of HGH
  - o Columbia Falls
    - **3390** cfs
  - o S. Fork below HGH
    - 710 cfs
- Projecting that HGH will be ~3547 ft on April 30
  - o Calculated to be ~8 feet below FRM.

### Corps

- The Dalles (TDA)
  - April to August
    - 74 maf
    - 83% of average
- Lower Granite (LWG)
  - o April to July
    - 18 maf
    - 88% of average
- Libby (LIB)
  - March Runoff Forecast
    - 5261 kaf
    - 87% average
- Dworshak (DWR)
  - April to July
    - 1894 kaf
    - 77% of average

Tom Lorz, Umatilla, asked Baus where LIB and DWR are with FRM.

- Libby FRM March 2024 as compared to Hourly Data
  - o FRM end of March elevation: 2416.4 feet
  - o Today at Hour 1: 2616.2 feet

Tony Norris, BPA, said that Dworshak and the other FRM elevations have not been finalized yet.

Baus said that those should be finalized soon.

- Dworshak Hourly Data
  - o Hour 1: 1531.01 feet

Runyan clarified that he was trying to give everyone an idea of where HGH was going to be April 30 assuming a certain forecast. He said as noted, the official FRM elevations have not been released yet. Runyan said that the estimate that he gave, that they are projected to be ~8' under at that point, is just a general projection. He said that he wanted to clarify that he was wanting to provide a little insight.

Jay Hesse, Nez Perce, asked Baus if there is any risk to not refilling DWR at this point with the water supply forecast and current elevation.

Baus said no, that it was his understanding that DWR was on track to refill.

Julie Ammann, Corps, said that she could confirm that DWR is on track to refill this year.

Norris said that none of the current ESP traces miss refill at DWR.

- 3. Chum Operations Doug Baus, Corps; Tony Norris, BPA; Chris Runyan, BOR; Charles Morrill, Washington; and Kelsey Swieca, NOAA Fisheries
  - a. NWRFC Bonneville Dam Extended Inflow Forecast
    - 10 Day Forecast

Low
High
113 kcfs (March 11)
High
130 kcfs (March 15)

- b. NWRFC Water Year Precipitation Table
  - Precipitation improvements regarding percent of normal throughout the basin.
  - Snake River Basin above IHR

Observed: 12.4 inchesPercent of Normal 100%

• Columbia River Basin above TDA

Observed: 14.0 inches

Percent of Normal 90%

• Willamette River Basin above Portland

Observed: 48.7 inchesPercent of Normal 109%

- c. NWRFC Monthly Temperature Table
  - Temperatures are below average so far this month.
  - Snake River Basin above IHR

o March: -7.3°F

 Water Year (October – November – December – January – February) all were above.

o Seasonal Departures: +1.7°F

• Columbia River Basin above TDA

o March: -7.3°F

• Water Year (October – November – December – January – February) all were above.

o Seasonal Departures: +1.5°F

- d. Summary of Chum Operation
  - Continuing to implement the Bonneville Chum Minimum Tailwater Elevation of 11.3' and will continue through midnight of April 9, this will end on April 10 with the start of Spring Spill. Unless otherwise coordinated with TMT.

- Kelsey Swieca shared that NOAA is keeping a close eye on the Chum Operation and are working to maintain the 11.3' tailwater minimum through the start of Spring Spill Season. They are keeping their eyes on GCL elevations and things seem to be able to sustain that tailwater elevation minimum for the duration of the season, but we will continue to monitor it as we move forward.
- Norris said that BPA expects to be able to maintain the chum elevation through April 10 and achieve the April 10 refill objective at GCL.
- Charles Morrill, WA, added that the 10-day weather weekend outlook shows heavy precipitation along the Cascades, both Oregon and Washington, and that will likely boost Willamette flows again. That may relieve more pressure off of GCL.
- Runyan said that since he reported on February 7 the conditions at GCL they have only drafted 0.9 feet. It is great news and good storage up there.

#### 4. Public Comments:

- 5. Set agenda for next meeting March 13, 2024
  - a. Chum Update
  - b. Operations Review
    - March 20, 2024, Meeting will be in-person for those who can join.

## **Today's Attendees:**

Agency	TMT Representative(s)
Army Corps of Engineers	Doug Baus, Julie Ammann, Lisa Wright
Bonneville Power Administration	Scott Bettin, Ben Haussmann, Tony Norris
Bureau of Reclamation	Chris Runyan
NOAA Fisheries	Kelsey Swieca
US Fish & Wildlife Service	
Washington	Charles Morrill
Oregon	Erick Van Dyke
Idaho	Jonathan Ebel
Montana	Brian Marotz
Nez Perce Tribe	Jay Hesse
Umatilla Tribe	Tom Lorz (CRITFC)
Colville Tribe	Kirk Truscott, Dennis Moore
Warm Springs Tribe	
Kootenai Tribe	
Spokane Tribe	
Yakama Nation	Keely Murdoch

Other Attendees (non-TMT members):

COE - Chris Peery, Alexis Mills, Tom Conning (Public Affairs)

Oregon DEQ - David Gruen

DS Consulting - Emily Stranz (Facilitator), Colby Mills

CorSource – Andrea Ausmus (BPA note taker, Contractor)

NW Power and Conservation Council - Kate Self

Clearing Up - K.C. Mehaffey

Chelan PUD – Jay Fintz, Melissa Lesser

Douglas Co PUD- Andrew Gingerich

Columbia Basin Bulletin – Mike O'Bryant

Snohomish PUD – Ryan Ziegler