

## **OCOLUMBIA RIVER TECHNICAL MANAGEMENT TEAM**

April 10, 2024

Draft Facilitator's Summary

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*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: <https://pweb.crohms.org/tmt/agendas/2024/> Suggested edits for the summary are welcome and can be sent to Colby at [colby@dsconsult.co](mailto:colby@dsconsult.co).*

**Review Meeting Summaries & Minutes** – TMT Members approved the official meeting minutes from the March 20, 27 and April 3 meetings.

**Water Supply forecast** – Chris Runyan, Reclamation, reported the official April water supply forecast for Hungry Horse Dam, where conditions remain dry. April through July was 1,450 kaf, or 73% of average (3% down from last month); April through August was 1,504 kaf, or 74% of average; May through July was 1,184 kaf, or 71% of average; and May through September was 1,279 kaf, or 72% of average. Minimum flows downstream of the project have not changed (set from March final forecast), 3,390 cfs at Columbia Falls and 710 cfs below the dam on the south fork gauge.

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

- **The Dalles:** NWRFC April to August volume forecast is 72 maf, or 80% of average;
- **Lower Granite:** NWRFC April to July volume forecast is 18 maf, or 88% of average;
- **Libby:** Corps April to August runoff forecast is 5,036 kaf 83% of average; and
- **Dworshak:** NWRFC April to July forecast is 1,860 kaf, or 75% of average.

**Dworshak Update** – Jon Roberts, Corps, provided an update on operations at Dworshak Dam, posted to the TMT website. The water supply forecast for the project is 75% as Doug noted, and snowpack also remains about 75% of average for this time of year. Snow water equivalent (SWE) is about 24.6 inches in the lower basin, well below average. The upper portion of the basin is slightly better comparably, with about 29.1 inches.

Long term projections have not changed. Short term projections don't show much precipitation, although some precipitation last week helped mobilize low and mid-level elevation snowpack to runoff directly to the river and therefore reservoir, rather into the ground. Snowpack has been fairly efficient with runoff, and even with less-than-ideal conditions, the project will continue to ensure the reservoir is filling and conserving water as much as possible. Today the reservoir is 46 feet from full.

Ideally, 1.0-1.5 inches of water would be needed every 10 days (4.5 inches over the next 30) to reach the desired mid-June refill. Current conditions still put refill by June 27, and any rain will help drive remaining snowpack down to the reservoir to capture as much water as possible. The reservoir is currently about 3 feet ahead of the typical elevation with this kind of snowpack, this puts the project in a good position to guard against a potential lack of precipitation in May. Jon noted that the snow flight was in progress, which will help to better analyze and understand the existing snowpack based on temperatures, snow layers, and moisture content.

Jay Hesse, Nez Perce Tribe, questioned the difference between this forecast and the STP forecast. Jon noted that for the STP to be true, it would need 100% accuracy in the forecast (STP will update moving forward and begin to reflect closer to actual operations). Jay also asked if base flows would also be

impacted and have a negative impact on overall volume for flow augmentation this summer. Better information will be available on this after the snow flight, to verify ground conditions and gain a better understanding of what type of impact rain will have on the basin. This will be looked at closely during the end of May snow flight. Finally, Jon noted that prior to freezing, soil moisture was high, relative to average.

**Flow Augmentation** – Kelsey Swieca, NOAA, emphasized that the STP and NWRFC forecasts are well below average throughout the basin for the remainder of April through mid-May, with most of the region at about 80% of average. Fish Managers have been considering how to best manage available volumes of water for fish during these low flow conditions. Given the water saved at Grand Coulee from the chum operation, system operations, and environmental conditions, Fish Managers are interested in exploring opportunities to potentially use some volume out of the project to augment flows in the mid and lower Columbia in the early migration season. She noted that more information was needed on how much water may be available and what a request for flow augmentation would need to look like. Discussions yesterday with Action Agencies confirmed this request would likely need to come in as a weekly flow request at Chief Joseph Dam.

Tony Norris, BPA, confirmed that traditionally flow requests in low flow years have been received on a weekly basis to target something above the otherwise planned flow. The amount requested would depend on what Fish Managers think would be most beneficial for fish in the mid-Columbia, and the continued benefit downstream in the lower Columbia. Tony highlighted an example flow request arithmetic posted to the TMT website to assist Fish Managers in determining a request. Additionally, Tony noted that this type of operation was included in the assumptions in the recent BiOp and has been coordinated in the past.

Questions and concerns that arose in the discussion among TMT Members included:

- The region wants to balance augmentation flows in April with refill needs and also not pull too much water from the May-June period.
- Wild fish stocks are moving downstream and a boost in flows soon would be beneficial. Additionally, there will be releases of hatchery fish in the mid-Columbia on April 15th.
- Grand Coulee is in a unique position for this time of year and there is relatively little space left to fill; the AAs do not see flood risk concerns, or threats to refilling. Further, creating more space in Grand Coulee reservoir could be helpful as it would allow for more flexibility in managing flows in the lower Columbia.

Kelsey noted that Fish Managers needed more time to discuss in depth following the information provided today, with the understanding that Action Agencies need 3 days of advance notice to implement any request. Doug confirmed that an email to Action Agencies from Fish Managers with specifics would suffice as an official request, as the Corps heard general regional support today.

- **ACTION:** Fish Managers will discuss a potential request for flow augmentation (after TMT today or on Thursday); if made, the request will include an acceptable lower limit elevation for Grand Coulee and a weekly flow average target.
- **ACTION:** Kelsey will provide any request for flow augmentation to Action Agencies via email as soon as possible and at least 3 days prior to expected implementation.

Kelsey also noted that FPAC has been notified that any request from Fish Managers for the 1/2 maf dry year flow augmentation would need to be submitted by early May.

**Operations Review** – *Reservoirs:* Chris reported on Bureau of Reclamation projects:

- **Hungry Horse:** inflows have increased due to warmer weather last week; inflows yesterday were 4.5 kcfs and outflow was 0.84 kcfs, and the project is operating to the minimum flow requirement below the dam at the south fork gauge. Streamflow at Columbia Falls is above the minimum requirement, at 5.9 kcfs yesterday. Midnight elevation was 3,537.0 feet, about 23 feet from full (2+ since last week). Snowpack continues to be variable in the basin, about 90% of average near the dam, but record lows at the back of the basin. Chris noted that 2 units will be down/2 available during spring runoff due to window replacement work in the powerhouse required for staff safety; 4 units will be available for the first 2 weeks in June.
  - Chris reported that Energy Keepers, Inc., Reclamation, the Corps, and NOAA hosted a virtual public meeting in March, [Flathead Basin Public Meeting](#); presentations and links to other resources can all be found on the website. For people interested in projected levels for Flathead Lake, Energy Keepers has created a blog with up-to-date information: <https://energykeepersinc.com/>.
- **Grand Coulee:** inflows yesterday were 60.7 kcfs, with outflows of 63.1 kcfs. Midnight elevation was 1,284 feet, and the project is 6 feet from full. The April 10 target has been met, and the project is transitioning to operate to the April 30 FRM requirement (1,283.3 feet). Chris acknowledged the ongoing conversations of how best to utilize Grand Coulee to assist other operations.

Aaron Marshall, Corps, reported on Corps of Engineers projects:

- **Libby:** midnight elevation was 2,416.9 feet, average inflows of 5.5 kcfs, outflows of 4 kcfs;
- **Albani Falls:** midnight elevation was 2,052.7 feet, average inflows of 15 kcfs, outflows of 17 kcfs;
- **Dworshak:** midnight elevation was 1,553.9 feet, with average inflows of 9 kcfs, outflows of 1.6 kcfs;
- **Lower Granite:** reservoir elevation was 734.1 feet, with inflows of 64 kcfs, outflows of 66 kcfs
- **McNary:** reservoir elevation was 338.8 feet, with inflows of 132 kcfs, outflows 140 kcfs;
- **Bonneville:** reservoir elevation was 74.4 feet, with inflows of 147 kcfs, outflows of 160 kcfs;

Aaron noted that Lower Granite and all the lower Snake River projects are currently operating in the normal MOP range.

*Water Quality:* Dan Turner, Corps, reported that the Corps continues to coordinate internally and with external agencies on the State WQS regarding Fish Managers' recommendations to adjust the Spill Priority List (SPL), specifically the recommendation for Level 1 text. Next steps will be to discuss at a TMT Process meeting.

TDG is well below the 125% threshold in the basin, most projects are operating on minimum generation and spilling the rest. Spring spill started last week on the Snake River projects, and early this morning on the lower Columbia. The Corps is tracking TDG downstream of McNary due to unique spill patterns this year, and it remains too early to fully analyze.

*Fish:* Kelsey reported that juvenile index estimates from Lower Granite show substantial increasing passage of yearling Chinook starting about 5 days ago, nearly 31,000 yesterday. Sampling at Bonneville was temporarily suspended due to an emergency release from Spring Creek Hatchery, those data are expected by the end of this week. Steelhead passage has ranged from 4,000 last week to about 20,000 yesterday.

For adults, spring Chinook and steelhead, upstream migration has started slow. Passage index at Bonneville for Chinook is 301, steelhead is 1,800; 23% and 77%, respectively, of the 10-year average. Similarly, at Lower Granite, adult Chinook and steelhead passage is at 13% and 31% of the 10-year averages. NOAA will continue to track and provide updates at TMT as usual. Jay reminded the group that

the 10-year averages that are referenced, are not the management target. The 10-year returns are still significantly below the management goals and returns below the 10-year average represent stock status that is quite dire.

Winter surface spill operations saw 156 adult steelhead detected moving downstream at the Lower Granite surface passage route. Origins of these fish will be provided at the next TMT meeting.

Dave Swank, USFWS, noted that it's still too early in the season for lamprey, there are a few juveniles trickling through the system. Regarding juvenile salmon sampling at Bonneville, Dave added that the suspension last week was due to an emergency release from the Spring Creek Fish Hatchery due to gill disease infecting a large portion of the fish in the hatchery. The final fish were released at the end of last week (about 800,000). Sampling was suspended to avoid the diseased fish mixing with healthy fish in the same holding tanks at the Smolt Monitoring Program Facility. Sampling should resume tomorrow morning; most diseased fish are now passed Bonneville.

*Power System:* Tony reported that temperatures are climbing with the season; energy use is less, and BPA is expecting warmer temperatures in the future.

**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 April 17, 2024, at 9:00 AM.**