

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

July 3, 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: <https://pweb.crohms.org/tmt/agendas/2024/> 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 May 22 and June 12 meetings and the minutes and facilitator's summary from June 26. Minutes from May 17 will be reviewed at the next TMT meeting.

Dworshak Operations – Willow Walker, Corps, reported on current conditions and temperature trends at Dworshak Dam (DWR). The project is still roughly within the top 0.5-foot from full and is starting to draft, slowly increasing releases since Monday, about 2 kcfs every evening. In anticipation of an incoming heat wave the goal is to reach full powerhouse by the end of today, for a smooth start to temperature augmentation. The pool has not been drafting until now, and with the upcoming July 4 holiday weekend will be within the top 4-5 feet from full for recreators.

Regional temperatures are expected to increase with the incoming heat wave (100+ degree F days); Anatone has increased to the 68-degree F range, Orofino is hanging at 64 degrees F, and the Lower Granite (LWG) tailwater temperature is around 66 degrees F (2 degrees from the 68-degree F BiOp upper limit). Temperatures in the LWG forebay have been rising at the top of the pool; stratification at the 15-20-meter mark remains good and will hopefully hold through the heat wave.

Friday will start to heat up with Saturday's temperatures reaching over 100 degrees F; this could last through the 10-day forecast, continuing longer term into the 90s. Wednesday, July 10 could get over 105 degrees F, before cloud cover moves in on July 12 and 13 which would be helpful for temperature augmentation. The Corps will be monitoring the situation closely.

Willow reviewed the DWR water temperature modeling results, noting no significant changes from what was posted before FPAC yesterday morning. Current modeling shows reaching full powerhouse by tonight and holding through the remainder of the 10-day forecast. Starting July 4, Orofino and Anatone temperatures will start to get above 68 degrees F, signaling the need for cooler water from DWR. Willow reminded the group that 3 days are needed for cold water from DWR to reach the LWG tailwater, which is why DWR has begun to slowly step up releases over the past couple days. Once Anatone and Orofino are over 68 degrees F, full powerhouse and some spill will be needed. Depending on the heat and actual cloud cover, the project may need to begin spilling on Monday or Tuesday evening. Since the project was able to fill earlier than usual, they have been able to pass inflow at about 3.5 kcfs rather than minimum powerhouse, which has helped maintain LWG pool stratification and benefit temperatures downstream.

Jonathan Ebel, IDFG, asked if BPA or others had an updated status on fire prevention actions around the transmission lines out of DWR since last year? Tony Norris, BPA, was not aware that BPA conducts prescribed burns, and noted that BPA is diligent at managing vegetation issues that could impact transmission to maintain power system reliability. He will report back if needed, noting that severe smoke from nearby fires can cause issues due to the particulate matter in the air.

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

- **Hungry Horse (HGH):** inflows have been receding over the last week, 3.8 kcfs yesterday. The project received 1.5 inches of precipitation and most of the snow has melted. Outflows are 4.5 kcfs and are anticipated to hold through next week. Midnight elevation was 3,558.8 feet with the pool pretty flat this week, about 1.2 feet from full. The current operation is to incrementally adjust outflows down to meet the 20-foot end of September draft target slowly as possible to minimize peaking at Columbia Falls (currently 14 kcfs). Flathead Lake is currently at full pool.
- **Grand Coulee (GCL):** yesterday's inflows were 139 kcfs, with a weekly average around 73% of normal. Outflows yesterday were 122.2 kcfs, and midnight elevation was 1,286.2 feet. The project is 3.8 feet from full heading into the July 4 holiday. Thursday through the weekend the pool will be in the 1,286-foot range, limiting fill to no more than 0.5-feet for holiday recreators. After the weekend GCL will target full pool elevation of 1,289.3 feet before July 15. Chris noted that being 0.7 feet from full accounts for the Lake Roosevelt Incremental Storage Release Program (ISRP) to make up for irrigation withdrawals. Aug 30, GCL's draft will be 12 feet for flow augmentation and additional 1-foot for the Lake Roosevelt ISRP on August 31.

Upper Snake Flow Augmentation: the current estimate has changed slightly to 484 kaf. Reclamation is still looking for additional rentals from storage holders above Milner to get above 487 kaf. The deadline to provide rentals is July 16. The current estimate of 484 kaf includes: 185 kaf from storage of reservoirs in the Upper Snake by Milner, 178 kaf from the Payette system, 43 kaf from the Boise system, and 77 kaf from purchasing of natural flow rights. Flow augmentation is releasing past Milner at 3 kcfs to complete around July 23. The Boise system is just finishing up over the next day or two. The Payette flow augmentation will let out through the end of August (operation reliant on water quality concerns in Cascade Reservoir).

Jonathan appreciated Reclamation's work and noted getting water out earlier above Milner should be a consideration for the future, especially in a dry year. Reclamation was open to looking at that idea for a solution that works best for all parties.

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

- **Libby (LIB):** outflows yesterday were 11 kcfs, inflows are currently 29 kcfs, and pool elevation is at 2,450.5 feet. The project is holding higher than expected, the slight increase in outflows is to help manage refill this summer and meet the end of September draft target.
- **Albeni Falls (ALF):** inflows yesterday were 25 kcfs, outflows are currently 27 kcfs, and pool elevation is at 2,062.0 feet (middle of summer operating range); the project plans to continue holding within that output band.
- **DWR:** inflows yesterday were 3 kcfs, outflows are currently 7.5 kcfs, and pool elevation is at 1,599.4 feet.
- **LWG:** inflows yesterday were 38 kcfs, outflows are currently 36 kcfs, and pool elevation is at 733.7 feet.
- **McNary (MCN):** inflows yesterday were 151 kcfs, outflows are currently 147 kcfs, and pool elevation is at 338.2 feet.
- **Bonneville (BON):** inflows yesterday were 168 kcfs, outflows are currently 146 kcfs, and pool elevation is 73.5 feet.

Aaron noted that all four Lower Snake River projects are operating in the normal MOP range.

Water Quality: Alexis Mills, Corps, reported that all 8 fish passage projects are operating at summer spill levels with TDG levels below the summer water quality standards. There was a data issue at the Lower Monumental (LMN) tailwater gauge, this will be replaced by this afternoon.

Fish: Kelsey Swieca, NOAA, reported on juvenile and adult passage. The vast majority of juvenile Chinook in the system are sub-yearlings, although yearlings pass a couple of projects periodically. Sub-yearling passage indices are in the thousands in the lower Snake, and in the tens of thousands in the lower Columbia over the past week. There was a notable uptick in sub-yearling passage at LWG on June 29 of about 22,000; the majority which originated from hatchery releases at 4 different complexes above the project. Juvenile steelhead continue to pass the lower snake projects daily, with a passage index of less than 100.

Adult Chinook, steelhead, sockeye and shad continue to enter the system at BON; 74% of the 10-year average for Chinook, 129% for steelhead, 67% for shad, and 227% for sockeye. Kelsey noted that this includes both Upper Columbia and Snake River sockeye, and that numbers at LWG are at 77% of the 10-year average. NOAA is hopeful for passage increase at LWG prior to the heat wave.

Jonathan Ebel, IDFG, reported further details on Snake River sockeye. Generally, the run size for Snake River sockeye is lower than expected, and different from Upper Columbia River sockeye, likely approaching the 50% passage date at BON. Snake River sockeye are typically 1 week to 10 days later than those from the upper Columbia. The total estimate from PIT-tag expansion (hatchery fish only) at BON to-date is 845 Snake River sockeye, which contrasts with the window count at 565,000. Sockeye are clearly moving through the system, with the benefit of pretty good conditions. PIT-tag expansion at LWG is 108.

BON to the Dalles (TDA) conversion is high, with the same or higher from TDA to John Day (JDA) at the moment. BON to MCN is at 52% so far (early run fish). Numbers will change significantly over time, specifically at Ice Harbor (IHR) to LWG, and BON to LWG. Jonathan compared this season's conditions to 2022 and 2023, noting that sockeye are being watched closely this year as dry and hot conditions are similar to 2023 which resulted in disappointing runs. Currently travel times are fast with good conditions for the start of the sockeye run, this will continue to be monitored closely. Sockeye updates will be provided on a weekly basis until August 1.

Dave Swank, USFWS, reported that juvenile lamprey numbers at BON have decreased, and not many at MCN over the past couple weeks which is not too unusual for this time of year. Adult passage at BON is well under the 10-year average, currently at 56% of the 10-year average based on ladder window counts. It looks like a well-below average run this year based on counts, with the run almost halfway through.

Jay Hesse, Nez Perce Tribe, noted that window counts are not the only way fish get past BON, and that these are index counts for lamprey. He also noted that effective passage of adult lamprey past mainstem projects remains very low. Translocation programs continue to be implemented by the four lower river Treaty Tribes, with collection at BON, TDA, and JDA. Changes were made to some lamprey passage structures at BON this year, to include additional traps. This has resulted in increased collection of adults for translocation. The Nez Perce portion of fish had a record 1-day transportation event last week with over 800 fish transported in a single day up into the basin upstream of LWG.

Charles Morrill, WDFW, noted that over the last several years there has consistently been more juvenile lamprey through the JSS as part of the smolt monitoring index program, which from WA's perspective, reflects success of the translocation program. He also noted that there is still passage of sub-yearling Chinook through the system, with spikes in passage likely reflecting hatchery releases. This migration is expected to slow down over the summer, and a critical component is the wild Clearwater stock that will be migrating for the rest of the season. Charles posted a link for passage index into the chat: https://www.fpc.org/smolt/smolt_queries/Q_smolt_daypassindexhistoricproportion_dataquery.php

TMT – July 3, 2024

Power System: Tony Norris, BPA, noted incoming hot weather for up to 4 days, and BPA expects to meet load reliably.

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 July 10, 2024, at 9:00 AM.

**Columbia River Regional Forum
Technical Management Team
OFFICIAL MINUTES
Wednesday, July 3, 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

- a. Draft Minutes for May 17, May 22, and June 12
 - Jonathan Ebel, ID, requested another week to look at the May 17 Draft Minutes.
 - May 22 Minutes – Approved
 - June 12 Minutes – Approved
- b. Draft Summary & Minutes for June 26
 - June 26 Minutes and Summaries – Approved

2. Dworshak (DWR) Temperature Augmentation Update – Willow Walker, Corps-NWW

- a. Current Hourly Data
 - Roughly within the top half foot of full pool.
 - Starting to draft
 - Increasing releases since Monday (July 1) every evening about 2 kcfs per day.
 - With a goal of getting up to the full powerhouse by the end of the day.
 - In anticipation of high heat coming in the forecast,
 - With the flow increase over a couple of days they have not been having to draft the pool until now, with the July 4 holiday coming up, for recreation reasons it is always nice to have the pool in the top 2 feet for the weekend.
 - DWR will not quite meet the 2 feet. It looks like they will be in the top 4 to 5 feet.
 - Nice easy start to temperature augmentation.
- b. Snake and Clearwater Rivers Temperature Data
 - Anatone (Snake River): ~68°F
 - Only going up
 - Orofino (Clearwater Mainstem): ~64°F

- Expected to increase significantly with >100°F days.
- Lower Granite Tailwater: ~66°F
 - 2°F from the 68°F BiOp upper limit.
 - Which is why they are starting to take a closer look and start to talk about and start temperature augmentation.
- c. Lower Granite Forebay Temperature String
 - With the warm temperatures we will see the top of the forebay temperatures increase but the 15/20-ft mark there is still nice stratification where most of the mixing is happening for the tailwater temperatures.
- d. Dworshak STP Extended Inflow Forecast
 - Forecasted summer STP flows are still a little below average.
 - No changes.
- e. 10-Day Regional Forecast (July 4 – July 14)
 - Day 2 – 10: Red-level temperatures (>100°F) stay throughout the entire ten-day forecast.
 - Regionally they are in the 100s and further widespread in the 90°F temperatures.
- f. Weather Forecast for Lewiston, ID
 - Very hot.
 - First day over 100°F is expected to be Saturday.
 - Over 105°F on Monday.
 - Stay really hot until the following week.
 - Cloud cover comes in on Friday July 12.
 - Ideally more cloud cover moves into the region and the temperatures fall off harder.
 - This would be helpful for temperature augmentation.
 - The Corps is keeping a close eye on this right now watching how this will play out.
- g. Model Results – Updated July 3, 2024
 - Update does not show huge changes from what was shared in FPAC on July 2.
 - DWR is getting to full powerhouse tonight (July 3) and holding it throughout the remainder of the ten-day.
 - Note:

- Starting on July 4, the Orofino and Anatone temperatures get above the 68°F line. This is where we start to see the need for cooling water to combat that.
- Reminder:
 - Because it is earlier in the season DWR has to send water 3 days ahead of when we are going to see the warm temperatures, which is why DWR started to step up over the last couple of days.
 - Once DWR is significantly over 68°F in the Orofino and Anatone temperatures that is where we will need the full powerhouse to be hitting.
- July 11/12:
 - Projected LWG tailwater is pretty close to 68°F.
 - This is what Walker was referring to as to depending on how hot it holds and whether there is cloud cover or not, there may be a need to spill about three days before that, Monday night or Tuesday morning. This is still dependent on whether we are able to squeak by on the full powerhouse. The Corps will keep a close eye on this.
- Because DWR spilled earlier than usual, they were able to pass inflow at ~3.5 kcfs rather than be all the way down at minimum powerhouse. That helped keep the stratification nice for this long and has been a benefit to temperatures downstream.
 - With the big heatwave and expecting the temperatures to increase fast we are at the end of where we are going to see that benefit.

Jay Hesse, Nez Perce, commented saying that on the forebay string graphic the addition of the black vertical line at the spillway crest level is very helpful. He said good job for adding that.

Ebel asked if there is an updated status of has anything happened in terms of fire prevention actions or clearing or prescribed burns around the transmission lines running out of DWR since last year.

Tony Norris, BPA, said that he is not aware that BPA does any prescribed burns. He said that BPA Transmission are always diligent with managing any vegetation issues that could impact transmission to maintain power system reliability. He said that would be something that he would have to get back to Ebel on.

Ebel said that he was curious because this is going to be one of those situations where, with that forecast, in the past we have had fires that have caused the shutting down of the transmission lines and so he was bringing it up. He said that if there is a potential hiccup that could be caused that it should be on everybody's radar. He said if we lose control of temperature this early than we are going to be in deep trouble.

Norris told Ebel to remember that it is not always an actual fire under the lines that causes those issues, it can be severe amounts of smoke in the area with lots of particulate matter which can increase the risk of fault to ground. That can happen if there are a lot of fires in the region.

Ebel said that was horrifying. He said that should be something for everyone to keep their eye on. He said that TMT will deal with it if it occurs and hopefully everyone is safe with their fireworks in that area because it does impact our cooling abilities.

3. Operations Review

a. Reservoirs

Reclamation – Chris Runyan

- Hungry Horse Dam
 - Inflows (July 2): 3.8 kcfs
 - Slowly receding over the last week.
 - Received 1.5 inches of precipitation so inflows hung in longer than normal.
 - Outflows: 4.5 kcfs
 - Anticipate holding through next week.
 - Midnight elevation: 3555.8 feet
 - Drafted since last week: 0.2 feet
 - Feet from Full: 1.2 feet
 - Current Operation: Incrementally adjust outflows down while meeting 20-foot end of September Draft Target. Do this as slowly as possible to minimize double peaking at Columbia Falls.
 - Streamflow @ Columbia Falls: 14 kcfs
- Flathead Lake
 - At Full Pool.

Charles Morrill, WA, said that he was surprised to hear that Flathead is at full pool. He said that is good news.

Runyan said that it is good news. He said that they have been full for a couple of weeks, and they are passing inflow that is quite a bit over their minimum outflow. Things are looking really good there this year.

Morrill asked if that was anticipated earlier.

Runyan said that it was not. They were concerned especially in February, March, and early April but we got a pretty cool May – June that let the runoff come off at a slow pace and not super quick. We are doing much better than the worst case that we were looking at earlier in the year. This was a good improvement.

- Grand Coulee Dam (Hope Gauge)
 - Inflow (July 2): 139 kcfs
 - Weekly average: 73% of average

- Relates to Water Supply Forecast, it has been there most of this Spring.
- Outflows: 122.2 kcfs
- Midnight elevation: 1286.2 feet
 - Feet from Full: 3.8 feet
- Current Operation: For the July 4 weekend, Thursday and through the weekend, GCL plans to be in 1286' range and limit fill to no more than 0.5 foot. GCL will target its full pool elevation for 2024 of 1289.3' sometime before July 15.
- Reminder: The 1.7 feet from full counts for the Lake Roosevelt Incremental Storage Release Program where GCL misses refill to make up for irrigation withdrawals, which accounts for the 0.7 feet. A little further out, August 31, we are in a dry year draft which is going to be 12 feet for flow augmentation and then an additional 1 foot for the Lake Roosevelt Incremental Storage Release Program.
- Upper Snake Flow Augmentation
 - Total Storage: 484 kaf
 - They are still looking to see if they can get any additional rentals from storage holders above Milner to get to 487 kaf, they are still 3 kaf short of that.
 - Deadline: July 16
 - Current Estimate of 484 kaf comes from the storage of reservoirs in:
 - Upper Snake above Milner: 185 kaf
 - Payette System: 178 kaf
 - Boise System: 43 kaf
 - Natural Flow Rights: 77 kaf
 - Releasing the flow augmentation:
 - Past Milner at a rate of 3 kcfs and will be completed around July 23
 - Boise System will be finishing in the next day or two.
 - Payette will be letting the flow out through the end of August. The operation is reliant on Cascade Reservoir water quality concerns.

Ebel told Runyan thank you for the update. He said as we go into next year concerning the water, particularly above Milner, there were some pulses and there was a lot of concern about just releasing some as spill and flood control and things like that. He said that we really need to get a handle on that so we can get that water out earlier in a year like this. Ebel said that it just seemed to keep getting pushed back. He said that he wanted to put it in the notes. He said that he appreciated all the effort that Reclamation has made to working with water users to get this water this year.

Runyan said that he thinks that BOR is open to looking at that. He thinks there might be interest from most of the parties and this year is a good example of the challenges we

have with accounting and maybe we can use this to help us figure out something that works a little better for everyone. Runyan said that he appreciated the comment.

Corps – Aaron Marshall

- Libby Dam (Lake Koocanusa)
 - Outflows: 11 kcfs
 - Midnight elevation: 2450.5 feet
 - Inflows (July 2): 29 kcfs
 - Inflows have been holding higher than expected this is the reason for slight increase in outflows to help manage refill this summer and also meet the end of September draft target.
- Albeni Falls (Lake Pend Oreille)
 - Inflows: 25 kcfs
 - Outflows: 27 kcfs
 - Midnight elevation: 2062.0 feet
 - Currently in the middle of the summer operating range and Albeni Falls will continue holding within that 0.5-foot band.
- Dworshak Dam
 - Inflows: 3.0 kcfs
 - Outflows: 7.5 kcfs
 - Midnight elevation: 1599.4 feet
- Lower Granite Dam
 - Inflows: 38 kcfs
 - Outflows: 36 kcfs
 - Forebay elevation: 733.7 feet
 - All four Lower Snake projects are operating within MOP range.
- McNary Dam
 - Inflows: 151 kcfs
 - Outflows: 147 kcfs
 - Forebay elevation: 338.2 feet
- Bonneville Dam
 - Inflows: 168 kcfs
 - Outflows: 146 kcfs
 - Forebay elevation: 73.5 feet

b. Water Quality – Alexis Mills, Corps

- TDG
 - All eight Fish Passage Project are operating at Summer Spill levels.
 - TDG are below the Summer Water Quality Standards.
- Data Issue
 - There was a data issue at the Lower Monumental Tailwater Gauge.
 - Should be replaced by this afternoon.

c. Fish

Salmon – Kelsey Swieca, NOAA

- Juveniles
 - Yearling Chinook
 - At a couple of the Projects periodically.
 - Subyearling (past week)
 - Passage Indices in the thousands in the Lower Snake River.
 - Frequently into the tens of thousands in the Lower Columbia River.
 - Notable uptick in passage at Lower Granite: 22,000 (June 29)
 - Majority originated from hatchery releases at four different complexes above the project.
 - Steelhead
 - Continue to pass in Lower Snake River Projects
 - Typically less than a hundred.
- Adult Salmon Counts
 - Bonneville (BON)
 - Chinook, Steelhead, Shad, and Sockeye continue to enter the system at BON.
 - Chinook: 74 % of ten-year YTD average
 - Steelhead: 129% of ten-year YTD average
 - Shad: 67% of ten-year YTD average
 - Sockeye: 227% of ten-year YTD average
 - Includes both Upper Columbia and Snake River
 - Lower Granite (LWG)
 - Sockeye: 77% of ten-year YTD average

- We have had the benefit of having some cool temperatures for this season so far, but things are expected to warm a little bit. Hopefully we can get those numbers up at LWG before the heat spike.

Adult Snake River Sockeye - Ebel

- In general: the run size for Snake River Sockeye is lower than expected, which makes it different than what we are seeing with Upper Columbia Sockeye.
 - Approaching the 50% passage date at Bonneville.
 - The difference between Upper Columbia Sockeye and Lower Snake Sockeye is that Lower Snake Sockeye are a week to ten days slower than Upper Columbia Sockeye.
 - Snake River Sockeye (SRS)
- Total Estimate from PIT Tag expansion at BON to date: 845 SRS
 - Contrasted with window count: 565,000 total
 - All hatchery fish (not tagging wild fish)
 - Fish are in the system and are moving through the system with pretty good conditions.
- PIT tag expansion at LWG: 108 SRS
- Reach Specific Conversion Rates:
 - BON to TDA is high.
 - Not shown is TDA to JDA is higher
 - BON to MCN: 52%
 - Early run fish that made it through, fast movers passing multiple dams a day.
 - IHR to LWG and BON to LWG will change over time.
 - Ebel noted that the contrast in the right with 2022 and 2023. 2022 we had quite a bit of water in June that persisted, and temperatures stayed low and we had high conversion rates throughout the system and a good proportion of the fish start to fall out above the dam as they fall to cumulative thermal stress. 2023 was much different than 2022 and a lot more similar to conditions that we are seeing in 2024, in terms of flows and temperatures into next week. Where BON to MCN conversions ended in 2023 at 53% with only 65% conversion in the Snake, and overall conversion from BON to the Basin of 6%. Disappointing when the run size at BON was 4500 fish and in contrast to today, we are looking at 845 fish.
 - Watching Sockeye closely and we are fortunate to have fast travel times at the beginning of the run. They are watching that, so it does not change.

Stranz asked if Ebel will be doing these updates on a weekly basis.

Ebel said that he will be doing the weekly updates until August 1.

Lamprey – Swank, USFWS

- Juveniles
 - Juvenile lamprey at BON have decreased.
 - Not many have shown up except at MCN.
 - They tend to dwindle this time of year.
- Adult
 - Numbers of lamprey being seen at Bonneville are well under the 10-year average.
 - BON Window Counts: 56% of 10-year average.
 - Feels especially low because we were well above the 10-year average.
 - Looks like we are in for a year that is well below the 10-year average based on the counts so far and we are halfway through the run at this point.

Hesse said he wanted to add a couple of things in terms of lamprey:

- Reminder: The window counts at BON are not the only way those fish get past BON. These are indexed counts for lamprey, even to a greater extent than other species.
- Reminder: Effective passage of adult lamprey past the Mainstem Projects remains really low in terms of effectiveness and the Tribes continue to implement a translocation program where adults are collected at three of the Lower Projects: BON; TDA; and JDA. This program is implemented by the four Lower River Treaty Tribes.
- There were changes made to some of the lamprey passage structures at BON this year to include additional traps and those traps have resulted in increased collections of adults for translocations. For the Nez Perce portion of the fish that get translocated they had a record one-day transportation event last week with over 800 fish being transported in a single day up into the Basin and upstream of LWG.

Morrill said that over the last several years they have seen more juvenile lamprey in the JBS as part of a smolt more index program, which very likely reflects success, in Morrill's opinion, of the translocation program. He thanked Hesse for his comments about the lamprey. Morrill also said that while we are focused on Adult Sockeye, we still have passage of Subyearling Chinook through the system and he had posted the link to the current daily passage proportions. He said it was just a reminder that we have Subyearling Chinook still, the spikes still reflect the hatchery releases, but we can expect the Subyearling migrations to slow over the summer. He said that the critical component is the Bio Component Clearwater stock that will be migrating for the rest of the season.

| *Charles Morrill*

| 09:39

- | https://www.fpc.org/smolt/smolt_queries/R_smoltdaypassindexhistoricproportion_resultsv7.php
- | Jonathan Ebel
- | 09:45
- | https://www.fpc.org/smolt/smolt_queries/Q_smolt_daypassindexhistoricproportion_dataquery.php
- | Then you can just use the query for subyearling
- | Colby Mills, DS Consulting
- | 09:46
- | clicking the link directly doesn't work, have to copy and paste the link into a new browser window
- | Charles Morrill
- | 09:47
- | ahh... thanks Colby
- | Charles Morrill
- | 09:47
- | and Jonathan

Note: There were some issues accessing the links in the chat. There was some commentary about how Swieca had touched on Morrill's points in her fish update and that there were alternative ways to access the data that Morrill had provided. Ebel said that Morrill was trying to present the data in a visual graph form.

- d. Power System – Tony Norris, BPA
 - Extensive hot weather is coming up but BPA expects to meet load reliably.
- 4. **Set agenda for next meeting – July 10, 2024**
 - a. Dworshak Update
 - b. Snake River Sockeye Update

Today’s Attendees:

Agency	TMT Representative(s)
NOAA Fisheries	Kelsey Swieca
Oregon	Erick Van Dyke
Washington	Charles Morrill
Kootenai Tribe	
Colville Tribe	
Umatilla Tribe	Tom Lorz (CRITFC)
Yakama Nation	Keely Murdoch
Bureau of Reclamation	Chris Runyan
Army Corps of Engineers	Doug Baus (Chair), Julie Ammann, Lisa Wright, Aaron Marshall
US Fish & Wildlife Service	Dave Swank
Idaho	Jonathan Ebel
Montana	
Spokane Tribe	
Nez Perce Tribe	Jay Hesse
Warm Springs Tribe	
Confederated Salish and Kootenai Tribes	
BPA	Tony Norris, Ben Hausmann

Other Attendees (non-TMT members):

COE – Alexis Mills, Willow Walker

Oregon DEQ – David Gruen

Washington Ecology – Thomas Starkey

DS Consulting – Emily Stranz (Facilitator), Colby Mills

CorSource – Andrea Ausmus (BPA note taker, Contractor)

Clearing Up – K.C. Mehaffey

Columbia Basin Bulletin – Mike O’Bryant

Chelan PUD – Jay Fintz