

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

September 20, 2023

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/2023/>. 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 and facilitator summary from the August 30 meeting.

2024 Water Management Plan (WMP) – Lisa Wright, Corps, reported that the 2024 WMP will be ready and posted on the TMT website for the first round of comments starting October 1 through October 24. The second draft will be posted on November 10, with the final posted by December 31. In response to questions, Lisa clarified that the draft 2024 WMP will be the operating document as of October 1 and there are no changes to date in the chum operations from 2023.

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

- **Hungry Horse:** midnight elevation was 3,545.1 feet, with inflows averaging 450 cfs, and outflows at 2,300 cfs. The project drafted about a foot last week, operating to Columbia Falls minimums (3,600 cfs) while staying above the requirement of 3,500. Precipitation in the basin for this WY is around 75% of average; runoff is about 72%. Rain is expected in the area soon.
- **Grand Coulee:** midnight elevation was 1,280.1 feet, with inflows yesterday averaging 59.3 kcfs, and outflows of 46.5 kcfs. The project filled about a foot over the last week. Lake Roosevelt is targeting refill of 1,283 feet by mid-October.

Flow augmentation out of the Upper Snake River was completed by end of August, with releases of 452 kaf of this year.

Lisa reported on Corps of Engineers projects:

- **Libby:** midnight elevation was 2,441.9 feet, average inflows of 3.7 kcfs, outflows of 8.5 kcfs;
- **Albeni Falls:** midnight elevation was 2062.1 feet, average inflows of 7.5 kcfs, outflows of 11.3 kcfs;
- **Dworshak:** midnight elevation was 1,521.5 feet (operating to the Dworshak Board's September operation), average inflows of 0.7 kcfs, outflows of 4.1 kcfs;
- **Lower Granite:** average outflows of 21.8 kcfs;
- **McNary:** average outflows of 65.5 kcfs; and,
- **Bonneville:** average outflows of 72.7 kcfs.

Leon Basdekas, Corps, provided an update on Libby Dam operations. Outflows have been at 8.5 kcfs since about July 5. The project is tracking to hit 2,439 feet elevation around October 1 or 2 and will ramp down to minimum flows once minimum elevation has been met.

Aaron Marshall, Corps, provided an update on the Lower Granite navigation lock gauge. Corps Walla Walla staff relocated the navigation lock tailwater elevation gauge, completing the work August 15-16. The gauge is back online in its relocated spot about 20 feet down the wall from its previous location. The previous location was affected by debris pile up, resulting in abnormally high water readings. Current data are available in Data Query as "LWGW". Aaron noted that the elevations are consistent between the gauge locations and, based on observations, the gauge will be much less susceptible to debris at the new

location. Project staff will continue to monitor the site to ensure the gauge is functioning well. In response to a query, Trevor Conder, NOAA, confirmed that discussion is ongoing between NOAA and the Corps on the impact of different spill patterns at Lower Granite and their effect on the project's tailwater gauges. TMT will be informed as soon as there is anything to report.

Chris Peery, Corps, provided an update on spill bay repairs at Lower Monumental Dam. During spill bay inspections last week, project staff discovered that the first reduction gears at the second reducer of the gate hoist in spillbay 8 with the RSW have worn down over 50%; the hoist and spillbay was removed from operation. Repairs were intended to be complete this past Monday, with only one missed day of overshoot spill. Repairs have taken longer than anticipated and the project staff hopes to have bay 8 back in operation by Friday evening, however, additional delays are possible. So far, three days of steelhead spill have been missed and Chris asked TMT for their preference on how to make up the missed spill:

- 1) Schedule consecutive surface spill next week after repairs have been made; or,
- 2) Deep spill at bay 6 for 4-hour blocks (in lieu of the RSW) prior to the RSW being back online.

Fish Managers voiced concern over using deep spill instead of surface spill, as surface spill is known to be a better passage route. They also expressed the need to document the outage and impact. A brief caucus was held for Fish Managers to discuss their preferred operation. Upon returning from caucus, Trevor noted that NOAA appreciated the opportunity to modify operations to mitigate the unintentional, but unfortunate situation, and provide a passage option for overshoot steelhead. NOAA also requested official documentation, or MFR, to describe the operation and impacts.

Fish Managers agreed on the following recommended action:

- The morning of September 21, implement a 4-hour block of deep spill to help facilitate passage through the project, in the hopes of the Corps being able to complete their repairs and bring the RSW back online by the end of Friday.
- If the RSW is online by Saturday morning, provide surface spill and continue through the next week with makeup surface spill to get back on schedule.
- If repairs are not completed by the end of Friday, implement a block of deep spill on Saturday morning.

The Corps confirmed their ability to operate according to the recommendation from Fish Managers. The Corps will provide an update end of day Friday, and if repairs do not go as according to planned, the TMT can reconvene on Monday to discuss spill options for the coming week.

- **ACTION:** The AAs will implement a deep spill 4-hour block via spillbay 6, which is the closest available bay to the RSW, on Thursday morning; they will implement another deep spill block on Saturday morning if the RSW is not available at that time. The Corps will notify TMT Friday afternoon if repairs at Lower Monumental have been completed as expected. If not, an unscheduled TMT meeting will be held Monday, September 25.

Chris noted that communication was not sufficiently coordinated as this event progressed, and he expects more coordination support by Monday. He will put together an MFR stating what was agreed upon through next Monday.

- **ACTION:** Chris will send out an MFR to detail the agreed upon actions, and will make note that this is not a typical steelhead operation, and not the preferred option for fish.

Water Quality: Dan Turner, Corps, reported that TDG levels are less than the state WQ criteria on the Lower Snake River. He noted that the McNary TDG has seen two days of 110% (standard in Oregon is 110%) during steelhead spill. If a value at 111% or more is observed, for at least 2 days, Dan will evaluate what kind of change is appropriate and will review the notification process for communicating exceedances with ODEQ. These higher values haven't been observed in years past with this operation.

Fish: Trevor reported that adult fall Chinook are declining at Bonneville, with a count yesterday of 5,624. The project saw a peak of just over 41,000 on September 1, and YTD is just over 454,000, or 109% of the 10-year average, which is similar to last year at this time. Jack Chinook count yesterday was 100,210, tracking about 96% of average; steelhead count yesterday was 531 with YTD at 74% of the 10-year average, 123% of the 4-year average. Coho count yesterday was 2,193 with YTD at 140% of the 10-year average.

At Lower Granite, the index yesterday was 1,103 for adult fall Chinook, YTD at 166% of the 10-year average; jacks are continuing to come in; steelhead YTD is 130% of the 10-year average; and Coho is 1,133% of the 10-year average, possibly indicating an early return.

For juveniles, between 0-100 sub-yearling Chinook are passing each day at the four projects monitored for index.

Dave Swank, USFWS, reported on the tail end of the adult lamprey run. Between 8-18 passed Bonneville last week, and he noted a large drop in numbers between Bonneville and The Dalles, which is pretty typical. It looks like this year's run will be well above the 10-year average, probably the best run since 2017.

Charles reported via chat that:

“TAC met on September 18 and reviewed Chinook and steelhead run size information and lower river Chinook harvest data. TAC estimates through September 17, a total of 82,473 A-Index steelhead (including 31,331 unclipped fish) and 17,601 B-Index steelhead (including 4,690 unclipped fish) have passed Bonneville Dam. TAC maintained the A-Index steelhead run size update at Bonneville Dam of 91,300 total A-Index fish including 34,000 unclipped A-Index fish. TAC updated the total B-Index steelhead run size to 24,100 including 6,000 unclipped fish. TAC also updated the upriver fall chinook run to 394,000 URBs, 64,000 PUBs and 155,000 BPH at the mouth of the Columbia River. TAC will continue to meet weekly and provide run size updates as appropriate during the fall management season.”

Power System: Tony Norris, BPA, reported energy use is down with the cooler weather; rain is expected in the region in the coming weeks.

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 October 4, 2023, at 9:00 AM.

**Columbia River Regional Forum
Technical Management Team
OFFICIAL MINUTES
Wednesday, September 20, 2023
Minutes: Andrea Ausmus, BPA (contractor, CorSource Technology Group)**

Today's TMT meeting was held via conference call and webinar, chaired by Lisa Wright, 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 – August 30

- August 30 – Approved

2. 2024 Water Management Plan – Lisa Wright, Corps-NWD

a. 2024 WMP Website

- Yearly reminder that the draft 2024 WMP will be available on the website. Timeline for review and comments is consistent with previous years.
- First draft will be posted for review and comments by October 1 and the comment period will be open until October 24, 2023.

b. Review Schedule Timeline

- October 1
 - 2024 WMP – Draft 1 will be posted by Action Agencies (AA) for review on the following WMP website;
<https://pweb.crohms.org/tmt/documents/wmp/2024/>
- October 24
 - Due date to submit requested revisions to the 2024 WMP – Draft 1, .docx file in track changes and email to the AA TMT reps.
 - Please refrain from submitting requested changes in a format other than in track changes (e.g., general comments in an email) in the .docx file because it can be difficult for the AAs to make assumptions about requested revisions if they are not clearly identified in the .docx file.
- November 10
 - 2024 WMP – Draft 2, will be posted by AAs.
- November 17
 - Submit requested revisions to the 2024 WMP – Draft 2, .docx file in track changes and email to the AA TMT reps.
- December 31
 - AAs post the final 2024 WMP.

Jay Hesse, Nez Perce, asked Wright for a reminder of what the operational guidance document will be October 1. He asked if it will be the draft document or if it would be the operations that were in the 2023 finalized document.

Wright said that it will be the draft 2024 document for operations starting October 1. She said that, as the group knows, the agreement that is currently in place is extended through October 31 so there are some moving pieces in terms of what the operative document might be that they are basing the operations on after October 31, based on how the negotiations go. It is a little inconsistent with the timing in terms of the operations start October 1 but may change based on regional negotiations prior to the final on December 31. Any operations that start October 1 will be included in the draft.

Hesse asked if there are any significant changes that would be implemented starting October 1 that TMT should be aware of in the draft plan.

Wright said that there is nothing that she is aware of outside of the bounds that has been done in previous Water Management Plans.

Charles Morrill, WA, asked if the chum operations would be the same as laid out in the 2023 Water Management Plan as that would be the draft going forward for 2024.

Wright said it would be in the 2024 Draft Water Management Plan.

Morrill asked if at this point in time whatever was in the 2023 plan would carry forward into the 2024 plan and Wright is not aware of any significant changes in the 2024 plan that would apply to the Chum.

Wright said not at this time.

3. Operations Review

a. Reservoirs

Reclamation – Chris Runyan

- Hungry Horse Dam
 - Water YTD (Basin): 75% of median
 - Dry year
 - Water Runoff YTD: 72%
 - Looking at some rain coming into the area in the next three days.
 - Days 8 – 10 show another potential system.
 - Wetter trend
 - Inflows (4-day average): 450 cfs
 - Outflows: 2300 cfs
 - Midnight elevation: 3545.1 ft.
 - Drafted a foot last week operating to Columbia Falls

- Columbia Falls: ~3600 cfs
- Columbia Falls req'd: 3500 cfs
 - Staying above requirement.
- Grand Coulee Dam
 - Inflows (9/19/23): 59.3 cfs
 - Outflows: 46.5 cfs
 - Midnight elevation: 1280.1 ft.
 - Over last week filled a foot.
 - Lake Roosevelt Target: 1283 ft.
 - Mid-October
- Upper Snake
 - Flow Augmentation out of Upper Snake
 - Completed by end of August.
 - Released 452 kaf of flow augmentation.

Corps – Lisa Wright

- Libby Dam
 - Midnight elevation: 2441.9 ft.
 - Inflows: 3.7 kcfs
 - Outflows: 8.5 kcfs
- Albeni Falls
 - Midnight elevation: 2062.1 ft. (Hope gauge)
 - Inflows: 7.5 kcfs
 - Outflows: 11.3 kcfs
- Dworshak Dam
 - Midnight elevation: 1521.5 ft.
 - Operating according to Dworshak Board September Operation.
 - Inflows: 0.7 kcfs
 - Outflows: 4.1 kcfs
- Lower Granite average outflows: 21.8 kcfs
- McNary average outflows: 65.5 kcfs
- Bonneville average outflows: 72.7 kcfs

Libby Operations – Leon Basdekas, Corps NWS

- Libby Outflows: 8.5 kcfs

- Been at 8.5 kcfs since July 5, 2023.
- They are tracking to an elevation of 2439' a couple day after September 30.
- They will hold 8.5 kcfs until then it should be October 1 or 2 when they will cross the 2439' elevation and then they will ramp down to minimum flows.

Brian Marotz, MT, said the 8.5 kcfs operation since July has been absolutely fabulous for the river. He said good work and thanks.

Basdekas said that he does not know if they can claim too much, he thinks a lot of it is just natural conditions, but it is good to hear feedback that it is good for the river.

Lower Granite Nav Lock Gauge Update – Aaron Marshall, Corps-NWD

- Corps of Engineers staff from Walla Walla District went out to Lower Granite in mid-August to relocate the navigation lock water elevation gauge.
- Work was completed over the course of two days, August 15 and 16.
- Gauge came back online once it was relocated ~20 feet down the wall from where it was.
- Goal was to get it out of the location where it was tucked in a corner and subject to debris accumulation that would cause abnormally high water-level readings when debris would accumulate.
- The gauge was surveyed and calibrated.
- Data are available on Data Query.
 - Gauge ID: LWGW

Hesse asked if there is no debris obstructing the readings are the elevations consistent with the two locations.

Marshall responded yes.

Morrill asked if temperature readings match with what they expected and were observing.

Marshall said that the gauge only reports water levels and the tail water was as expected.

Morrill thanked for the correction.

Jonathan Ebel, ID, said that Marshall has said that two gauges were consistent. Ebel asked if the two gauges Marshall referred to be the previous gauge and the new location or the powerhouse gauge and the nav lock.

Marshall said that he was referring to the previous location and the new location as being consistent.

Ebel said thank you. He also shared that he had just pulled it up and what Conder had brought up at one point about the spill induced drop in the powerhouse gauge is very apparent with the steelhead overshoot surface spill going on.

Van Dyke restated that the reason it was moved was debris piling up. He asked Marshall if it was in his interpretation of the similarity or consistency between the two sites.

Marshall said he was not sure if he understood Van Dyke's question.

Van Dyke said that there were several rationales for moving the gauge, one was debris.

Marshall said that the debris was the reason because the gauge was tucked in a corner where it was subject to frequent debris accumulation.

Van Dyke said that the simple statement that it is consistent does not necessarily provide TMT with information to understand whether debris is still a problem or not. It could, in that statement, be part of the soup. He said that he is just trying to make sure that when it was moved, and you compare the data did they make sure that there was not any debris compiling on the instrument.

Marshall said that the staff did that and confirmed that there is no debris, and it will be much less susceptible to debris accumulation – twenty feet down the wall.

Van Dyke asked if that was based on observations not on assumptions, a professional judgement.

Marshall said that this was based on a report that he got from those that went out there and relocated the gauge. He said that it was a known issue for a number of years, they finally had the funding and the opportunity to get out there and do it.

Van Dyke said that we could hope that could be spread to other places. He said thanks to Marshall for the extra.

Stranz said that she is sure that it will be continued to be watched to see and make sure that debris is not being piled on moving forward.

Marshall said yes that they will have people go out there and do their typical field visits to confirm that.

Morill said that he thought that NOAA was discussing with the Corps about the impact of different spill patterns at Lower Granite and the effects on the tailwater elevation gauges. He asked if that discussion is still ongoing.

Conder said yes, that they are having that discussion upcoming in the next week or so. He said that there may be some follow on after that. He said that they are working on that issue and are trying to understand it better. Conder said that they will let TMT know as soon as they have anything to report.

Lower Monumental RSW — Chris Peery, Corps NWW

- Last week project staff were doing climbing inspections of spillbays at Lower Monumental.
- In spillbay 8, the first reduction gears of the second reducer – the splines on the gears had 50% wear.
 - Removed the hoist from operation.
 - Original plan was to take the gearbox from Bay 5 and place it into Bay 8 – Bay 5 was already tagged out because they were already replacing the seals on that Spillbay.

- The gearbox from Bay 5 was found to also have excessive wear – they had been inspected a year ago and passed inspection. It appears that something had gotten misaligned.
 - Peery had not heard whether Bay 5 had been inspected recently.
 - Bay 8 was inspected because the RSW is inspected annually.
- They moved to Bay 7 to find the gearbox to place in Bay 8.
- They then had the challenge of removing the gearbox from Bay 8. They worked through the weekend, they hoped to have it done by Monday – would have caused missing one day of the overshoot spill which would have been easily made up.
- To get the gearbox out of Bay 8 they had to partially disassemble it to get the parts out and get the working parts from Bay 7 in, in doing so it ruined some of the bearings. They had to order new bearings.
 - Bearings are scheduled to be delivered by Friday and they should be able to have Bay 8 returned to operation by Friday evening.
- Plan is to make up the missed hours of RSW spill through consecutive days of surface spill, unless recommended otherwise by TMT.
 - Wright and the project have been discussing different options.

Conder said that he appreciated Peery's update of the unfortunate scenario. He said that his preference – understanding that deep spill is probably not as good as surface spill based on our basic understanding of fish movement with both of those types of spill -- it is better than waiting until the repair is completed and then making up the spill on consecutive days. Conder said that he thinks his preference would be to get a block of spill through a deep bay as soon as they can just in case there are some overshoot adults waiting to pass, so that they do not attempt to go through the units or something like that. He said that he thinks that it would be better than waiting and then patching them all together. He said at least get one day of the deep spill, and then when the RSW returns to service Friday or thereafter the plan to make up the rest of the missed days sounds sufficient to him.

Stranz asked Peery if he was looking for a decision, recommendations, or just input. She wanted to know what level of conversation he was looking for from TMT.

Lorz said that was one of his topics. He said that he appreciated the update and the follow up data. He said that we are now outside of the FOP Operations by quite a bit, and it does not seem like we have a very good process for dealing with this. He said that he will be looking to the Corps to see how they will be reporting this out – if they will just report at the end of the month report. He said he also concurs with Conder, he thinks that if we could get a block on Thursday and a block on Friday it would be preferable to waiting to Saturday. He said that is if everything is able to get done, he does not mean that they would not be trying to but the dams are getting old and trying to replace stuff is a pain in the butt. He said that this is going to be a problem because it keeps cascading until we start putting more money towards O&M. He said that he thinks that Conder is probably right about using deep spill until we get it back up and running. He added that TMT needs to have more discussion about how this stuff gets reported out, or why a phone call

was not made to say that we were going to be a week without overshoot spill to ask for the preferred operation.

Stranz said that Lorz included a couple of questions and an endorsement of Conder's recommendation. She asked if the Corps had any kind of process perspective that they could clarify what type of input they are looking for and also the reporting piece.

Peery said first he would like to ask if there are any objections of moving forward with deep spill starting today (September 20). He said he would like to first confirm that versus overshoot or surface spill later, knowing that there is a chance that they may not get the repairs done by Friday. It is the plan to complete the work, but plans can go wrong sometimes.

Stranz asked Peery for clarification, she said it would not be INSTEAD of surface spill later, it would be an AND.

Peery said that they have so many hours of spill they were supposed to be doing this week and they are behind on that schedule. They are looking to make that spill up.

Stranz said one option is a deep spill ASAP, today if possible, and then once the repairs are done restart the surface spill.

Wright said she wanted to clarify that what we are choosing between is either deep spill now, according to the schedule, or consecutive days of RSW spill next week. She said it is an OR. There are at this point three days of missed spill to make up. Wright said that if there is deep spill today, tomorrow, and Friday then they would not have any make up days next week. She said that they can do it, they can do it as soon as today. The closest bay available to RSW is Bay 6, so it would be an equivalent rate through Bay 6 for 4-hour blocks. She said that she would like to make sure that the preference is to spill through deep spill in lieu of the RSW and then once the RSW is returned to service they would go to RSW spill because the other option is to wait until the RSW is back and do consecutive days of spill to make up for those days. Wright said that is the decision point that she would like to be clear on.

Scott Bettin, BPA, asked Wright what days we were supposed to spill this week.

Wright said that it was the default schedule of Sunday, Wednesday, Friday. So it would be today, September 20, and then Friday, September 22.

Bettin said that they would need to make up for Sunday.

Wright said correct, that there are two missed days to make up, if they spill today through bay six and then Friday. They could spill Bay 6 in lieu of RSW or they could do make up RSW starting on Saturday assuming it is returned to service.

Bettin asked if there are any restrictions on which spill bay they can use if they are working on the hoists.

Wright said no that they can spill through Bay 6 and can do it as early as this morning.

Morrill said he is not thrilled about using deep spill to try to pass adult steelhead and he would ask his colleagues to join him on the other comments too. He would prefer to see additional days of surface spill to make up for the lack of surface spill.

Stranz said that TMT had heard from both Conder and Lorz that they would support a deep spill. She said that she is wondering right now if it would be a good time to caucus and let the Fish Managers talk it out on their own and see if they can come to a consensus on which of the options sounds better.

Conder asked if that would be necessary. He reminded Morrill that they do not have the opportunity to use surface spill until this is fixed. He asked Morrill if it is his preference to just wait and then use surface spill once it is fixed and not have any overshoot spill this entire week.

Morrill said that is his preference.

➤ The fish managers decided to caucus to make this decision.

After caucusing, Conder first gave NOAA's perspective by sending his appreciation to the Corps for allowing the opportunity to modify operations to mitigate, adjust, or makeup for this and try to provide some passage for overshoot steelheads during this unforeseen outage. Some of this you cannot really help so providing an option, being flexible, and listening to us is important to NOAA. There is a request to describe the likely impacts from this operation from other fish managers in the form of an MFR, or something on that order, an official document to describe what happened and what the effect was and comments as necessary from co-managers. He said that the operation that they discussed and that they came to an agreement that everyone can accept is:

- Tomorrow morning, whenever operations begin, a block of deep spill to help facilitate passage through the project for the fish that are waiting to get through.
- Friday, everyone is hoping for a successful repair of the RSW, but there is an understanding that the Corps will still be working on it in the morning and so it will be unlikely that they will be able to provide morning RSW spill.
 - If online, then: Saturday, provide a surface spill block Saturday morning and then continue the operation through the next week with whatever, however, many blocks or days of makeup RSW surface spill that the Corps need to get back on schedule.
 - If unable to get the repair done, then make up the Saturday with a deep spill block on Saturday morning and work through that issue as necessary with coordination throughout the next week to try to come up with something acceptable.

Conder said the hope is the Corps can get it repaired on Friday and continue the RSW operation and make up so that Thursday would be the only deep spill for the operation.

Stranz asked to make sure that Conder mentioned that the fish managers wanted to get in writing via an MFR or something of the like.

Wright said from the Corps' perspective they can do that. She said that she appreciates the fish managers taking the time to think of a solution here and a proposal to provide spill in the meantime and to make up for the days that they have missed. She said that they can do deep spill tomorrow morning. They typically do RSW spill blocks from 0500 to 0900 so they will see 8 kcfs tomorrow through Bay 6, which is the closest available spillbay to the RSW, from 0500 to 0900. Then the Corps would look to Saturday for RSW spill, assuming it is available. She asked if the RSW is not back by Friday, do we want to continue with the deep spill next week on the Sunday/Wednesday/Friday schedule. She asked Conder if that was what his understanding was, that they would do tomorrow through bay 6, then Saturday with the RSW and resume the normal Sunday/Wednesday/Friday schedule, plus making up the two days that the Corps missed last week. But if the RSW is not back in service, she asked Conder what the preferred plan would be at that point if it is not returned on Friday.

Conder said that they did not go over that nuance so he cannot speak for the other managers on that.

Stranz reminded Conder that he did suggest a deep spill on Saturday if there is not RSW spill on Saturday.

Conder said yes but replacing the entire next week they had not gone over that.

Wright said okay and thanked Conder and Stranz for the clarification on Saturday. She appreciated it, from her perspective it sounds like something that is reasonable and they can do. She said that she will defer to Peery to talk about FPOM coordination.

Ebel said he had contemplated that, and if this turns into a much longer outage. He asked if that was what Wright was referring to.

Wright said that is just sometimes how these things go, they do not come back when we think they will. She said if it does not come back on Friday, and they work through the weekend. She asked what the preference would be because TMT members do not work through the weekend so in terms of coordination, we are not going to have an opportunity to coordinate that operation. She said that they would normally spill on Saturday and then start their normal week on Sunday. Wright asked if the RSW is not back whether the managers want them to do those two days as deep spill in lieu of the RSW or reconvene on Monday. She said that she would like to have a clear plan in place for this weekend in case the RSW does not come back.

Ebel said that he would not want to speak for everybody, but he would do the schedule with deep spill to provide a route that is not a turbine or bypass.

Van Dyke said that he would prefer that we have a status update on Friday if in fact things are not working. Whatever comes from that will be guidance to moving forward.

Stranz said what they are talking about is Sunday because there is already guidance for Saturday. So, the question would be if the RSW is still down on Sunday whether or not to start a deep spill on Sunday. She said that Van Dyke suggests waiting until Friday and see how things are going and get a status update at the end of the day, Friday. Possibly reconvene on Monday, if needed, to have further conversations. Sunday would be the one day that they either could hold off spill.

Conder said it is optional, those days are not set in stone. So, we could hold off on that Sunday and have a discussion Monday to determine the best way to move forward.

Wright said yes, that is a good point. She said that it is flexible, and they can certainly flex up to Monday and this is all just in the event that the RSW is not back. They will send an update as soon as it is available. It was her understanding that it will be by the end of business Friday, so they will work until they cannot. It will be late, but they will send that update as soon as it is back in service, or not.

Stranz confirmed that they will send an update by close of business on Friday, and then if needed, if the RSW is not going to be back in service then we will reconvene on Monday to talk about what spill looks like next week. She asked if there were any concerns with that approach.

Wright said that will work for the Corps.

Peery said that Lorz had a comment and a question about the communication and coordination during this event. Peery said that was on him. He said that they had hoped to have the bay back in operation on Monday, which means it would have been an easy shift of couple days of spill until they were back on schedule. He did not find out about the delay until Friday. Peery said yesterday he was out of communication all day, so he was not able to coordinate any further. Normally they would have a second biologist in the district that would be able to handle that, but they are still down a person in that position, so they did not sufficiently coordinate as this event progressed. He said that they will try to solve that, hopefully they will have someone in the office Monday to assist him with some of the fishery coordination in the district.

Lorz said appreciated that, he asked if Peery would provide an MFR or something like an after action on this one.

Peery said yes, it sounds like we want to have this documented. He said that he can put together an MFR that describes what was agreed to through Monday of next week.

Stranz said that something to include, and she caveated that it may be self-explanatory, but she thought she heard that it is important, that this was not a typical operation. Make sure to capture that this was coordinated because it had to be, but not because it was the preferred approach for the fish.

➤ Possible Meeting on October 2, 2023, watch emails for update on Friday

b. Water Quality – *Dan Turner, Corps*

- TDG is looking good on the Lower Snake.
 - Below the 120% TDG Tailwater standard.
- McNary TDG standard in Oregon is 110%.
 - It is lower now.
 - There have been two days of 110% - right at the threshold.

- If Turner sees a value at 111% TDG or more, he will wait for a second exceedance before making any changes. He will evaluate the data to see what kind of change is appropriate at that point if it occurs.
- Have not seen this in years past. Turner said that he thinks these are some of the highest values they have seen with this operation.

Van Dyke said thank you, he had not been tracking that as closely as Turner does. He said thank you for sharing that with TMT and appreciates Turner's thoughts on what he will do. Van Dyke asked Turner if he sees something that goes over 110% TDG if that will include an interaction with Water Quality Agency, Oregon DEQ. David Gruen has been on the TMT call often but is not on today.

Turner said there is a notification process that they need to follow to let ODEQ know that they have exceeded the standard. Turner said that he will review that and make sure that he is available or that he is up to speed on that if that happens.

Van Dyke asked for clarity if TDG goes over 110% but so far there has not been an exceedance.

Turner said that was correct.

c. Fish

Salmon – Trevor Conder, NOAA

- Adults
 - Bonneville Counts
 - Fall Chinook: 5,624
 - Declining
 - Peak of just over 41,000 on September 1.
 - YTD: ~454,000
 - 109% of 10-year average.
 - Similar number last year at this time.
 - Jack Chinook: 1,210
 - Tracking 96% of average
 - Steelhead: 531
 - Down from peak of 4,218 on September 2.
 - 74% of ten-year average.
 - 123% four-year average possibly indicating that we are turning the corner for steelhead.
 - Coho: 2,193
 - down from peak of 9,164 on September 1.

- 140% ten-year average.
- Lower Granite Counts
 - Fall Chinook: 1103
 - Peak of 2,762 on September 13.
 - 166% of ten-year average
 - Jack: 214
 - Continuing to come in.
 - Steelhead: 2921
 - 130% of ten-year average
 - Coho: 319
 - 1133% of ten-year average
 - Possibly an early return.
 - Decent numbers coming through.
- Juveniles
 - 0-100 individuals each day at the 4 projects.
 - Continue to monitor.

Lamprey – Dave Swank, USFWS

- At tail end of adult lamprey run
 - Between 8-18 at Bonneville last week.
 - Small numbers still trickling through at this time.
- Typical drop between Bonneville and The Dalles.
 - 63000 at Bonneville and a little under 18000 at the Dalles
 - Swank thinks they must be holding between Bonneville and the Dalles and then move the following season.
- This year run well above average relative to the 10-year average.
 - Best run we have had since 2017.

TAC Update – Charles Morrill, WA

from Charles Morrill to everyone: 10:21 AM

TAC Update: TAC met on September 18 and reviewed Chinook and steelhead run size information and lower river Chinook harvest data. TAC estimates through September 17, a total of 82,473 A-Index steelhead (including 31,331 unclipped fish) and 17,601 B-Index steelhead (including 4,690 unclipped fish) have passed Bonneville Dam. TAC maintained the A-Index steelhead run size update at Bonneville Dam of 91,300 total A-Index fish including 34,000 unclipped A-Index

fish. TAC updated the total B-Index steelhead run size to 24,100 including 6,000 unclipped fish. TAC also updated the upriver fall chinook run to 394,000 URBs, 64,000 PUBs and 155,000 BPH at the mouth of the Columbia River. TAC will continue to meet weekly and provide run size updates as appropriate during the fall management season.

d. Power System – *Tony Norris, BPA*

- Last days of summer this week.
- Fall is here though and energy use this time of year is typically lower.
- Rain coming in the coming weeks.

4. Public Comments:

5. Set agenda for next meeting – **October 4, 2023**

Today's Attendees:

Agency	TMT Representative(s)
Army Corps of Engineers	Lisa Wright (Chair), Aaron Marshall
Bonneville Power Administration	Tony Norris, Scott Bettin
Bureau of Reclamation	Chris Runyan
NOAA Fisheries	Trevor Conder, Kelsey Swieca
US Fish & Wildlife Service	Dave Swank
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	
Warm Springs Tribe	
Kootenai Tribe	
Spokane Tribe	

Other Attendees (non-TMT members):

COE – Dan Turner, Leon Basdekas, Chris Peery

NOAA – Dana Bethea

DS Consulting – Emily Stranz (Facilitator), Colby Mills

CorSource – Andrea Ausmus (BPA note taker, Contractor)

Chelan PUD – Jay Fintz

Columbia Basin Bulletin – Mike O'Bryant

Clearing Up – K.C. Mehaffey

Portland General Electric – Ruth Burris