

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

June 5, 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 1 meeting, pending the following edit to be made for Reclamation’s water supply update on Hungry Horse Dam: Chris Runyan clarified that the 2020 CRSO EIS and consultation "...expanded from the previous 10 or 20-foot draft limit at Hungry Horse, to a 10 to 20-foot sliding scale draft." Facilitator’s summaries from the May 17 and 22 meetings were also approved, and official minutes from May 8, 17, and 22 are still pending and will be reviewed at a future TMT meeting.

Lower Monumental Dam Adult Delay – Doug Baus, Corps, reported that the Corps adjusted the spill operation at Lower Monumental Dam (LMN) today, in accordance with the adult migration delay protocol for spring spill operations at LMN and Lower Granite Dam (LWG), as noted in the 2024 FOP (pg. 19). Doug emphasized this adjustment only pertained to LMN. Since early May there have been 8 days of delay at the project, regional conversations have resulted in holding off on reducing to 40% spill; due to ongoing adult delay, the Corps reduced spill this morning to 40% for 8 hours/day. The Corps plans to closely monitor the situation and will revert back to gas cap spill once adult delay is no longer observed, as described in the FOP.

Kelsey Swieca, NOAA, reiterated the extended period of adult delay from Ice Harbor (IHR) to LMN, noting that from NMFS’ perspective, it is prudent to adjust operations following the protocols outlined in the December 2023 MOU and 2024 FOP. She added that the adjustment in operations will run from today through Friday with a reevaluation on Saturday; depending on if there is observed delay on Saturday, the current operation will continue or revert to gas cap spill on Sunday, as Doug noted.

TMT Members had a robust discussion, sharing their entity’s perspectives on whether a change in operations is needed and which data should be used to determine such an action. The conversation highlighted concerns regarding use of the DART “black dots” tool, given the two calculations of ‘delay’ (single point of departure and daily cohort), and concerns around the efficacy of using the daily cohort calculations. Many State and Tribal Salmon Managers, including the Nez Perce Tribe, Confederated Tribes of the Umatilla Indian Reservation, and the States of Idaho, Oregon, and Washington, voiced strong preference for using the single departure calculation method. From NMFS’ perspective, it is important to reduce spill to address the issue of adult delay using the agreed-on protocols outlined in the MOU/FOP, which specified using the daily cohort calculation method. Kelsey noted that NMFS recognized the importance of the concerns and is interested in having off-season deep-dive discussions with the region.

Comments from the discussion include:

- Action Agency policy teams are aware of the adult delay issue, as well as concerns presented about the discrepancy between the DART tool calculation methods.

- IDFG emphasized the single departure method should be used, from their perspective, as errors have been identified in the daily cohort calculation method. They urged the AAs to consider this, noting the agreement from State and Tribal Salmon Managers, as well as University of Washington, who developed the tool.
- ODFW noted concern for this operational response, emphasizing the negative impact of these operational changes on fish passage measures. They emphasized that the tool does not provide mechanisms of observation or biological conditions but responds simply to counts. ODFW desires a more foundational agreement within the TMT on how to approach issues like adult delay.
- The States and Tribal Salmon Managers also expressed perspective that changes in operations often result in a reduction of juvenile fish passage measures and the need for a more holistic approach to adult delay and fish passage; they emphasized that TMT should be utilized for real-time in-season management decisions.
- NMFS was open to discussion about use of the single departure method for the future, noting the language in the MOU/FOP associated with the adult trigger addressed reevaluating this tool after the first season. They also noted that for the majority of the datapoints, there is not a discrepancy in the data between the single point departure and daily cohort.
- The Nez Perce Tribe looks forward to post-season refinements of these tools and triggers.
- WDFW posted the following link into the chat:
https://www.cbr.washington.edu/dart/wrapper?type=php&fname=pitreachdist_1717604460_93.php

Kelsey noted that for now, NMFS recommends using the daily cohort calculation method to determine adult delay and decide when to revert to gas cap spill. The Nez Perce Tribe, Confederated Tribes of the Umatilla Indian Reservation, ODFW, WDFW, and IDFG requested that NMFS and the Action Agencies relay their request to use the single departure calculation to their internal teams. NOAA heard these concerns and will report back to their policy level; they remain willing and interested in looking at which method is most appropriate during off-season discussions.

Doug also reported observed delay at Little Goose Dam (LGS), noting the possible need to look at options to help adult delay at other projects. Chris Peery, Corps, reported that there is some Tribal fishing in the tailrace at LGS, which could be contributing to the issue, although no specific details were known. Jay Hesse, Nez Perce Tribe, will try to get more information on this fishery and report back to TMT.

Questions and Comments from Members of the Public – Erin Cooper, FPC, noted that counts at LMN yesterday were 166% of the counts at IHR, emphasizing that the issues with delay are resolving without changes to operations. Erin also requested more information on the tribal fishery below LGS.

The next scheduled TMT meeting is on June 12, 2024, at 9:00 AM.

**Columbia River Regional Forum
Technical Management Team
OFFICIAL MINUTES
Wednesday, June 5, 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 – May 1 Minutes; May 17 & 22 Summaries

- May 1 Minutes – Chris Runyan, Reclamation, had an edit:
 - Page 1, under 'Water Supply Forecasts': ".....expanded from the previous 10 or 20-foot draft limit at Hungry Horse, to a 10 to 20-foot sliding scale draft....."
 - It was not either a '10 or 20' it is a 10 and then you interpolate up to a 20.
 - Approved pending change from Runyan.
- May 17 Facilitator Summary – Approved. Minutes still pending.
- May 22 Facilitator Summary – Approved. Minutes still pending.

2. Lower Monumental Dam (LMN) Adult Delay – Doug Baus, Corps-NWD, & Kelsey Swieca, NOAA

- Baus shared that the Corps adjusted the Spill Operation at LMN today (June 5).
 - According to the [2024 Fish Operations Plan](#) (FOP), pg. FOP-19, There is a provision regarding Adult Migration Delay Protocol for Spring Spill Operations at Lower Granite (LWG) and Lower Monumental (LMN) dams.
- At LMN there are currently 8 days of delay that have occurred at the project.
 - As identified in the FOP, if adult delay criteria are met, spill is reduced to 40% of project outflow for 8 hours per day until the delay resolves.
 - This change occurred this morning.
 - Spill at Hour 5: 40.7% spill.
 - Reduced from Hour 4: 82.5% spill.
- The Corps plans to continue to operate as described in the FOP.
 - They will continue to monitor adult delay at LMN and will revert back to the Gas Cap Operation as described in the FOP, once delay is no longer observed.
- Swieca spoke from NOAA Fisheries perspective. She said that we have experienced an extended period of adult delay in the Ice Harbor (IHR) to LMN reach. She said from NMFS' perspective, they think that it is prudent to adjust those operations following the protocol as Baus highlighted.

- These were captured in the December 2023 MOU as well as the 2024 FOP to try to address that issue.
- It is Swieca's understanding that this will run Wednesday through Friday, with a check-in on Saturday and an evaluation following protocols from there.

Jonathan Ebel, ID, said that they have had a lot of discussion on this one. He said as usual there are disagreements between technical experts at the States and NMFS on this regarding what might be going on here. He asked if the fact that counts at LMN jumped significantly yesterday have been taken into account in terms of how long this operation is going to occur. He said that he knows that the FOP says that we are going off the "black dots", which do not reflect a lot of biology but there are lag times that go on in these things and counts increased significantly before the Corps took this action suggesting that whatever was slowing fish (or Ebel thought there were a lot of slow fish there) kind of went away without action. He asked if we are just going to implement the FOP as written or are we going to take that bump in counts, which Ebel guesses will be sustained or will change the "black dots" really quickly. He asked if they would take that into account.

Swieca said that from NMFS' perspective, she thinks that it is important for us to do the 40% operation for three days to ensure that this issue is addressed. She said again, this will include a reevaluation on Saturday for a potential reversion on Sunday to the 125% TDG. She said that from NMFS' perspective she thinks that we will be following the protocols outlined in the FOP in this instance.

Tony Norris, BPA, said that it is also notable that they did come off Min-Gen in the afternoon when that peak of fish came through, when we were at the gas cap.

Ebel said that he saw that, and he said that it is interesting that something else happened yesterday as well that at the South Ladder fish moved in the morning and fish have been using the North Ladder but that was before the increase in generation occurred. He said that it just highlights what we do not know about Adult Chinook behavior around LMN.

Swieca said that she fully agrees with that. She said that there is a lot of information that is at play here and she repeated, as she has said a number of times, this is the reason that NMFS would like to take a deep dive with the Salmon Managers (SM) on these issues in the off-season to make sure we have all the pieces, and we can truly get at this holistically.

Erick Van Dyke, OR, said that there has been a lot of conversations about this, some discomfort, and what he wanted to ask explicitly is if Policy Level at USG have been made aware of the observed issues with the Black Dot tool. He asked if that has been shared with them.

Swieca said she can only speak from NMFS' perspective, and others can weigh in on their entities associated with USG. She said that she will say that NMFS Policy are aware of the concerns presented about the tool.

Baus said that the Corps was tracking. He said that there was an FPC memo regarding concerns over the DART tool.

Norris said that BPA was involved in those discussions as well.

Ebel said that he had a question because this is important for reverting back to 24-hour gas cap spill operations. He asked what method, because there are now two options, one is mathematically correct, single or daily cohort, which version is going to be used to make the decision to revert back to 24-hour gas cap spill. He shared that he said that because the difference can be one fish. One PIT-tagged fish can flip this in either direction, depending on whether you use a single departure or the daily cohort method.

Baus said that it his understanding, that he, representing the Corps, go about looking at this is he goes to the DART tool and in consultation with University of Washington on this topic, go to ‘Reach Distribution’. It is his understanding that when he gets to the ‘Set Departure Event Calculation’, the default ‘Daily Cohort (Original Departure Calculation Logic)’ which populates. Baus said that it is his understanding that that are continuing to use that. He said that if he is incorrect could Swieca please clarify because it is his understanding the other tab ‘Single Departure Event per TagID’ was an adjusted toggle switch that has been added based on some feedback.

Swieca said that she could expand on that a little. She said, as everyone has recognized, and they have had a couple of conversations amongst the SM, there was recently an additional way added to the DART website to calculate adult delay. A simplified explanation of the one thing that it does is that it incorporates fallback in a different way than the daily cohort calculation does. So, there were discussions at FPAC about which was the most appropriate method for quantifying this. Throughout the season the two calculation methods have largely been in agreement. There are only a couple of instances where the single departure event produced a different “Black Dot” vs. “No Black Dot” situation on a daily calculation that the daily cohort method. She said from NMFS’ perspective because the daily cohort calculation was the one present at the time that the MOU was signed as well as the 2024 FOP was finished that will be the calculation used over the weekend if there is a discrepancy between the two calculation methods. They understand that there is a potential for some discrepancy, and they are willing to and interested in looking at which calculation method is the most appropriate in the off-season discussion. Should there be a discrepancy over the weekend NMFS’ recommendation would be to rely on the daily cohort calculation method that was encapsulated in the December 2023 MOU and the 2024 FOP.

Ebel said that it was discussed at FPAC and at least the State and Tribal Managers agree that the single departure event is the one that should be used, and University of Washington agrees. Ebel asked if NMFS’ does not. He said it is like we are using the wrong calculation. It is incorrect and when we get into a situation where the tag numbers go down that is where they start to get discrepancies. He said that it is like they are saying the same thing, and they are saying adult delay, we keep saying adult delay, but it is like 50% of fish are going a little slower than the typical season average scale. He asked NMFS to consider because the people who made the tool think that this is the correct one to use now as well as the State and Tribal Fish Managers agree that if you are going to use this tool at all that the single departure is the one that you should be looking at. He asked them to please consider that again.

Swieca responded to Ebel, she said that she is not saying that NMFS is disagreeing with all of the State and Tribal Co-Managers and disregarding the input provided by the University of Washington and others in that discussion at FPAC. She explained that what she is saying is that there has been consistency in the two calculation methods for the majority of the season. And again, this is an issue that NMFS feels should be addressed in the off-season discussion that incorporates all of these questions. NMFS is amenable to those conversations and hopeful that these two calculation methods will agree when it comes to Saturday for the reevaluation, but she is not saying that NMFS is disregarding the potential for single departure event in the future. But they have not had the time to fully dive into that and they think that conversation belongs in the off-season and because the daily cohort method was the one used in the guiding documents if there is a discrepancy come Saturday that would be their recommendation for use.

Stranz commented on the lack of break for TMT this season.

Van Dyke said he had two things. First, he said please quickly he recommends that Swieca do a simple calculation of the deltas between the two tools to reconcile her view of how the tools differ between the two options because they are not the same. He said more importantly, he asked about the USG and when they USG and this was inserted into it, was there an understanding of how the tool functioned such that you could understand the problem that has been identified.

Stranz asked if Van Dyke was asking somebody specifically.

Van Dyke said that he is talking to the USG as a whole because the agreement is a product of that process.

Swieca responded, in the language associated with the adult trigger in the MOU, as well as, in the FOP there is a discussion in the last paragraph that talks about reevaluating this tool through FPOM after this first season. She said that she thinks that is something that we are going to be doing as a group with USG and other participation.

Van Dyke said that he would take that to mean that they did not evaluate it at all, and they just inserted it as the primary metric that you will use to make a change without really understanding its function. He said that it maybe the limits to it, even though for a decade they have been talking about how this tool functions, and provided plenty of input on their concerns about it not really meeting the grade for what we are using it for. He said that it is concerning that they are getting that response right now and he appreciates that NOAA is sharing their thoughts openly on it. But he thinks it is unfortunate that there have been operational changes that have altered some of agreements foundation, in particular putting more water through the powerhouse so a fundamental change in operation that was written into that agreement. And right now, they are taking a position to uphold a tool that you know has a flaw in it that has already been addressed by the keeper of the tool and yet, NMFS is going to hold on to this knowing that problem is here and wait to somehow discuss it later when in fact the evidence of the issue is in front of all of us. He said that this is disappointing and does not show a very strong commitment to the agreement that was signed by many.

Swieca said that she does not agree with Van Dyke's characterization of a misunderstanding of the tool. She said that she thinks that is maybe a little bit hasty. She

said that she thinks within the USG Commitments, there was outlined an adult migration delay protocol that was signed by all of the signees to that MOU and was also captured in the FOP. She said that she understands that there is a lot to learn about adult delay, she thinks that we all have acknowledged that in many realms, in conversations among the SM, as well as, here at TMT, and the USG including NMFS is committed to exploring that in the off-season. She said that she does not think that it is an honest characterization to say that we fully did not understand the tool and the implications associated with that tool. NMFS is committed to those conversations and look forward to having those conversations. They understand the frustration that is being expressed but Swieca thinks we need to do a deep dive on this question, and it requires a lot of extended conversation that NMFS feels should happen in the off-season.

Van Dyke said that it is fair enough for Swieca to be responsive that way. He said he thinks that his statement was related to the build up to deciding to add it to an agreement. He said that it does not appear that there has been the kind of effort put into understanding how to toggle functions if in fact there is no recognition of the problem prior to bringing it to attention. He said that it might be semantics and NOAA is not the only one in the room that signed the agreement.

Stranz said that a lot of those who were in those conversations are not in the room so it is hard to go back and at this point get a sense of what they understood and what they missed.

| *from Charles Morrill to everyone: 9:21 AM*

| https://www.cbr.washington.edu/dart/wrapper?type=php&fname=pitreachdist_1717604460_93.php

Morrill said he posted a link in the chat function. He said that we have spent a lot of time of time focused only on a selective reach, IHR > LMN, and that is where the dots do show that delay pattern. Yet holistically, in terms of travel time from the DART tool, there are no black dots except early on in the season. When you look at the holistic passage using the DART tool from Bonneville to Lower Granite. Over the years we have consistently focused on reaches between LMN > LGS , LGS > LGR, IHR> LMN; and with different operational things that have happened over the years some of those have been productive and in Morrill's opinion effective tools of helping move fish upstream. Morrill said that the DART tool is mechanistic, and it does not take in the biology of the fish. He said he understands and disagrees with NOAA's assessment and their decision, Morrill recognizes that it was identified in the agreement as the tool to use but he thinks that his colleagues will also agree that it is a mechanistic tool. It is not holistic; it does not consider the biology and many other factors that go along with that. Morrill showed the link and said right in front of you is the DART tool and there are no black dots at this point in time. This is a 14-day, so it is not current but the 3 Dot (4 Dot) Rule, Morrill does not think it represents the biology of fish movements during the season. He said that is what he wanted to share, give a little more perspective other than just looking at the conversion of IHR to LMN.

Tom Lorz, Umatilla, said NOAA was involved with the conversation when they talked about the single departure versus the old methodology because his interpretation is that it was mathematically incorrect. This was because you take one fish out of a cohort, you

suddenly could not get 100% just because the fish was in a different cohort. That is just a mathematical boo-boo that no one had caught. He asked if there is something about that, that we need to drill down into if on Saturday because the only time this is really noticeable is when we are in low PIT tagged detections. He said unfortunately that is where we are. If we get bit by that on Saturday what additional information would NMFS need to feel comfortable to use single release. He said that he is surprised that they would continue to use the old methodology when he thinks there was a mathematical error in it. He asked if there is something else NMFS needs from that of is this just that they need more time to review it. He said that he is trying to understand what the hesitancy of using that is for especially since we are in a real-time, and this is actually real-time management and that is what TMT is supposed to be doing.

Swieca said that she understands, and she thinks that it is the latter. NOAA needs more time to fully understand conceptually what it means. She added that she thinks that they are committed to doing that in the off-season. She again pointed out that though people are pointing out that there is the potential for discrepancy between the two calculation methods, she highlighted that the instances of that have been rare throughout the season so there is a chance that the two calculation methods are going to be in full agreement this Saturday. That is where NMFS' recommendation stands at the moment. Again, hoping that there is no discrepancy between the two calculation methods, and we can delve into this conversation in the off-season to ensure that we fully understand the implications of both calculation methods.

Lorz said that answers that questions, hope and a prayer methodology for Columbia Basin Management sounds about right. He said that the other one he wanted to try to kind drill down into is that he believes that TMT is supposed to be Adaptive Management as much as possible when we have opportunities. He said that he is a little surprised that look at the adult counts yesterday when we saw the fairly large change before we made any other changes. Lorz asked what the benefit is of making another change continuing forward even though we have already seemed to have made the change, the fish have already decided to, for whatever reason, started to move again. He asked if we are going to make things even more confounded when we try to do an analysis of this say like they already started moving now we change the operation again, does that mean more or less fish moved. He said that it seems like that is going to confuse our ability to discern what is happening even more so by adding another variable into this calculation.

Swieca said that she will point again to the need for the deep dive in the off-season conversation. Those are all variables that would be considered when we are trying to figure out whether this adjustment worked, whether this adjustment was the correct choice and the efficacy of our management actions as long as outlined in the adult delay trigger. She said that she thinks that is the point of why NMFS is encouraging that off-season conversation because each time that we do a management action and we are observing delay, there are a number of variables that are being changed at the same time. So, this isn't unique to this situation where we are having changes in flows, changes in counts, observing delays. Each of these instances will need to be separated so that we can understand the actual mechanisms behind that adult delay and NMFS believes that conversation belongs in the off-season.

Lorz said he appreciates that, but he thinks that it will muddle the waters and it will make an analysis impossible. He said that he is also a little disappointed that, yeah, he would love to push everything off to the off-season too, but we need to make real-time decisions. He said that he is surprised that we are not doing a better job of using the data we have in hand. That is what we are supposed to be doing at TMT, it is like, we just got information yesterday, we took a look at it. We should be factoring this into our calculus instead of saying, like, hey, I'm confused, let's just wait until the off-season, because this unfortunately has impacts real-time. That is what we are supposed to be doing at TMT. If that is not what we are going to be doing or we are going to push everything to the off-season and redo it then that unfortunately undercuts the functionality and the ability of the region and TMT to actually make good decisions.

Swieca responded said that she fully understands that perspective, and she thinks that is heard loud and clear. She said that she will emphasize the fact that there was an effort to delay the change to the 40% Operation, if you see based on the daily cohort method, there are eight days of the black dots. She said that there was some in-season management that went into waiting a couple of additional days before making that modification. She said that she understands Lorz' perspective, but she wanted to point that out.

Stranz said that she would step in real quick. She said that this is a tough one and all of the agencies have a lot that they are thinking about and there is a lot of different layers in decision making and a lot of different conversations that are happening. She said that she wanted to remind everyone that the people who are here in this room having these conversations are representing much larger entities and so sharing information and perspective is really helpful, everybody here can take back what they are hearing to internal conversations. She said but let's remember, please be easy on the people and tough on the problem because she can tell that this is one that is frustrating and Swieca is in the hot seat representing and Stranz wants TMT to remember that.

Jay Hesse, Nez Perce, said that the Nez Perce Tribe looks forward to the post-season refinements of these tools and triggers. He said he wanted to make that known. In the meantime, it is their recommendation that if there is a discrepancy between the two variants in the DART tool, that the single departure methodology be strongly considered application. He said that he believes that is consistent with the intent of the Commitments Document and that would be their desire for Saturday's consideration.

Stranz said thank you and that would be something for Swieca and others to take back internally, that we have heard from the Nez Perce, Oregon, Washington, Umatilla and Idaho a desire to use the single departure calculation,

Swieca said that she had heard that, and she will take that back.

Van Dyke gave a tutorial. He asked the presenter to scroll down to the 'Daily Data' that DART provides, it is a table near the bottom. He said that it is the three-day moving average calculation, it is largely generated from this information. He pointed out that Day 2 in the target zone for the DART tools' 'black dot' and tomorrow we will be informing fully June 3rd departures from IHR. He said that the sum of those departure events is the value that is being used to generate then black tools' value based on account of those three days arrivals at IHR. He said that another way to look at this is to simply look at the table's percentages for Day 2 and June 1 is 50%, June 2 is 85.7%. He said that we could

figure out exactly how likely it is that we will be outside of a black dot by tomorrow based on this alone. Van Dyke said that it looks quite promising that the black dot is going to disappear. He said that the point that is important is all these changes to operation did not occur in a location that is equally distributed for all of these dates. So, it disproportionately represents reality. This has been expressed for quite a while now looking at the tool and Van Dyke said that he thinks that it might be an opportunity for Lorz' favorite activity of betting the beer on what we see tomorrow. But what we will not get past is the fact that this reaction happens after the fact and does not represent the full suite of information that is available. He said that they have been saying that for quite a long time. He said that the factors that are involved here are many, and the presentation of the is commonly narrowed to just spill activities with the notion that somehow, we have to put water through the powerhouse in more mafs in order to have passage of fish. He said that it is a troubling situation to hear that when we talked about this earlier, that BPA actually increased flow through the powerhouse again, whether that was a power reliability reason or some other purpose, it is really disappointing that that component of the agreement is still being leveraged to remove fish passage measures and Van Dyke hopes that others are keying in on that concern and are taking it back to those are listening and making decisions on what to do. He thinks that is a reasonable request.

Norris said that he thought that he was explicitly clear, when that operational change was made that the increase in generation had no relation to power system reliability or anything other than trying to facilitate the decrease of flow fluctuations and exceedances outside of MOP. That generation is just getting shifted around from project to project and there is no Marketing or Reliability -issue related to that increased generation.

Ebel asked Norris if just yesterday if BPA got up against the gas cap. He said that he thought that was what Van Dyke was referencing.

Norris said yes, we hit the gas cap and came off minimum generation, and that is the planned operation. He said that he thought that Van Dyke was referring to the increase in generation due to the LMN barge transit.

Van Dyke said that he is trying to lump all of the things that have happened this year and the rationale for making changes and how they do not really add up to always meeting the agreement's intent. He said that both those things mattered. He said that it is kind of ironic that we are making this change right now at the moment when we are going to actually achieve meeting a gas cap. There are a lot of components that are confusing and disappointing. Rather than following a plan there has been several steps where we have made changes, those changes have always resulted in a reduction in some fish passage measure, and they seem to always result in an increase in flow through the powerhouse. Van Dyke said that those things are being recognized, and he thinks that it is important that this group recognize that.

Baus said that he has a closing question. He said since we are on the topic of adult delay, he is glad that TMT is watching those. Baus said that we already articulated that we have the provision for LWG and LMN. We are implementing the LMN provision. Baus said that he wanted TMT to know that delay at LGS is still occurring as well. He said as Morrill commented earlier about being holistic and acknowledging issues. Baus said that he is hopeful that through this year's operations that we can potentially look ahead to the

future to see if there are other options that could be on the table to help with adult delay at other projects such as LGS. At this time, we do not have, other than the current operation at LGS, any identified operations in the FOP. Baus said that he believes that there has been three days of adult delay at LGS as well and he did not want that to go by without notice.

Peery said that he wanted to say something along the same lines, we are seeing delay at LGS, but they did get confirmed that there is tribal fishing in the tailrace and that maybe what is contributing to some of that delay. He said that he did not know about the fishing going on at LGS until this morning. He said that could at least explain what they are seeing there.

Morrill said that he appreciates that this is a tough discussion. He said that he wants to point out that while we are focused on adults, there is another concern for the managers, and that is passage of juveniles downstream. Morrill said up until the delay metrics came up we had a pretty consistent operation through the entire system, and we have done well following the FOP. So, there is another aspect of biological concern that has been impacted by the change in the operations and the concerns and different opinions over the cause of and the actions taken to address adult delay. Morrill said that he wanted everyone to realize the other side of that coin too.

3. Public Comments:

from Erin Cooper to everyone: 9:49 AM

Can we get some more details on that fishery at LGS?

Peery said that he does not have more details other than they contacted folks at LGS dam and they confirmed that there is fishing going on. Peery said that he does not know what the plan is, or how much longer it might be going on or any details along those nature. He said that he will see if he could reach out or if anyone from TMT might know who to contact.

Erin Cooper, FPC, thanked Peery.

Morrill said he can ask if it is a Tribal Fishery, but he is not aware of it.

Hesse said that there was tribal fishing happening in that area earlier in the season and it is open until closed. He said that he will follow up to see what they know about magnitude of pressure. He said that it an open fishery so it is not counter to rules and regulations.

Morrill asked if it is a hook and line fishery.

Hesse said that he does not know the nature of the fishery.

Van Dyke said that this emphasizes how this tool does not really provide us with mechanisms of the observation. It simply responds to counts. The effort of all of us to understand how and what is involved in producing these things has been part of our conversation for a long time. He said that the use of it as a catch all for a statement about impacts from a specific fish measure have continued and will continue in the rhetoric that

we are listening to about it until we get to a more foundational agreement on how we approach some of these things Van Dyke said that he does not think that is disappearing. He said given TMT's role in making decisions on the fly saying that explicitly in this conversation is important.

Cooper said that she wanted to emphasize that counts at LMN yesterday were, using the one-day lag, 166% of the counts at IHR. She said that she knows that Swieca said that she really feels, or NMFS really feels like they have to address this issue by reducing spill but aware that it is ___ itself before you reduce spill. She said that she understands as per the FOP this is the operation, so she is not implying that we need to go through it again, she just wants it on the record that the problem is being solved.

4. Set agenda for next meeting – May 8, 2024

- a. Dworshak 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), Lisa Wright, Aaron Marshall
US Fish & Wildlife Service	Dave Swank
Idaho	Jonathan Ebel
Montana	Brian Marotz
Spokane Tribe	
Nez Perce Tribe	Jay Hesse
Warm Springs Tribe	
Confederated Salish and Kootenai Tribes	Tom McDonald
Bonneville Power Administration	Tony Norris, Scott Bettin, Ben Hausmann

Other Attendees (non-TMT members):

COE – Dan Turner, Alexis Mills, Tom Conning, Tiffany Stoeckig-Dixon

Oregon DEQ – David Gruen

Washington Ecology – Thomas Starkey

DS Consulting – Emily Stranz (Facilitator), Colby Mills

CorSource – Andrea Ausmus (BPA note taker, Contractor)

Energy Keepers – Eve James

Northwest Power and Conservation Council – Kate Self

Chelan PUD – Jay Fintz

Snohomish PUD – Mike Shapely, Kevin Costella

Fish Passage Center – Erin Cooper