

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

June 3, 2026

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://public.crohms.org/tmt/agendas/2026/>. Suggested edits for the summary are welcome and can be sent to Colby at colby@dsconsult.co.

Review Meeting Summaries & Minutes

TMT Members deferred approving the May 21, 26, and 27 official meeting minutes and facilitator's summaries until the next TMT meeting; June 1 and 2 minutes and summaries are pending.

FPAC Request for Treaty Flow Augmentation

Tom Lorz, Umatilla/FPAC Chair, had no requests to report at this time.

Adult Passage

Tom reported that data are just starting to come in from NOAA's recommended operation for John Day Dam (JDA): to reduce spill to 40% of project outflow for 8 daytime hours (targeting starting between 0400–0800 and concluding no later than 2000 hours) for at least 3 consecutive days starting June 3.

The Corps clarified that the current operation is being implemented as described in an email sent to TMT on Monday afternoon, and the intent is to continue the operation for at least 3 days, through Friday, until the DART delay tool shows a "non-black-dot" day. ID noted that past spill-reduction responses have shown clearer, more immediate fish response when spill was the issue. From their perspective, if a black dot remains on Friday, it will indicate the current operation is not adequately addressing the underlying problem and that another response should be considered. NOAA confirmed that the intent of the current plan is indeed a 1-day no-black-dot requirement for returning to prior operations.

TMT Perspectives on Delay

TMT Members discussed whether the observed delay is linked primarily to conditions at the north fishway, the south fishway, or broader project operations. Chris Peery, Corps, explained that the current reduced-spill operation is specifically intended to improve passage at the south shore fishway by reducing tailrace back eddy formation that can mask attraction flow. Jonathan Ebel, ID, and Kelsey Swieca, NOAA, noted that recent conversation and data have also raised concerns about the north ladder; the issue may be more complex than a single fishway issue.

Tom Iverson, CTBYN, asked whether analysis had been done to determine if delay differs between the north and south ladders; from the Tribes' perspectives, this type of split analysis could help determine whether one ladder is functioning better than the other. No analysis has been produced yet. WA emphasized that fish are still passing, and DART shows overall conversion is within a range seen in past years. WA expressed frustration that the AAs reverted to a spill response without fully exploring other options; they support incorporating more information in future analyses.

Alternative Recommendations

Jay Hesse, NPT, presented draft recommendations for broadening the response beyond reducing spill:

1. Apply fish PIT-tagged upstream of McNary Dam (MCN) query within DART-base assessments of JDA fish passage conditions; continue to monitor and consider Snake Basin-specific tag query.

Convene FPAC to no later than June 9 to examine logic path for using Snake Basin-specific PIT-tags rather than larger aggregate of spring Chinook PIT-tagged upstream of MCN.

2. Expand NOAA recommendation to include formal pursuit of adaptive management options for restoring/maintaining efficient passage via south ladder.
 - a. Convene FPOM no later than Friday, June 5, to provide update on JDA south ladder temperature differential resolution status AND explore temporary structures to provide immediate relief.
 - b. Convene FPOM no later than Friday, June 5, to review turbine unit priorities and merits of using Unit 2 rather than Unit 3 or in response to Unit 3 being unavailable.
3. Expand NOAA recommendation to include changes to unit priority, spill patterns, and/or spill volumes (>40%) on Saturday, if black dot persists on Friday. When significant deviations from expected passage rates are no longer observed, restore 125%/24/7 spill, but maintain other non-spill volume related adjustments.

Jay emphasized that the above suggested operations provide assurance that the group will not just wait for spill reductions to expire but will explore other operational options if passage doesn't improve.

Action Agency Response

The Corps and NOAA responded that some of Jay's suggestions are potentially useful, however there are process and timing limits. The Corps could not commit to the proposed Friday FPOM meeting; the next scheduled FPOM meeting is June 11.

ID noted the issue at JDA is complex and could benefit from a deep dive into unit priorities, spill patterns, temperatures, and adaptive management; this should happen both immediately and in off-season planning, not be deferred indefinitely. The Corps noted a special group could be useful, but it would be hard to organize by Friday. Additionally, upcoming bubbler work is planned at JDA, but parts are still pending.

TMT Process and SOR Concerns

Tom asked whether the Corps would provide a formal written justification or SOR for the change in spill, noting that from CTUIR's perspective, the current operation seems to have been implemented without the kind of written request typically expected by TMT for operational changes. The Corps responded that the operation is documented in Monday's email and will also be described in the FOP implementation report posted on the TMT website; Tom emphasized that an implementation description is not the same as a formal justification.

Aaron Marshall, Corps, reported that the Corps will take the request back to legal and policy staff for internal discussion and follow up with TMT. Doug later reiterated that the Corps sees existing mechanisms for both DART-related discussion through FPAC and operational modifications through FPOM and the Fish Passage Plan (FPP) change form process. He emphasized there are processes in place for a deeper dive on FPP operations, acknowledging the meeting's timeline request may not be realistic.

ID was also concerned that data on spill and related project operations were not consistently available on The Corps' website, including data that were expected for June 1 onward. The Corps acknowledged that there were known omissions; they are aware of the issue and investigating, though there is no return-to-service date. ID appreciates being able to track the data using the usual available tools.

DART Tool and Release Groups

Jay asked for a determination by Friday which DART query will be used to assess Saturday's operations. NOAA needed additional information from DART before using the MCN-above spring-summer Chinook release group as the primary evaluation group, because the DART tool's description of that release group is incomplete relative to the others. NOAA has already reached out to the DART contact, who is expected to send more information later this afternoon; Kelsey will relay that information to the TMT by Friday if

possible and will check in with AAs on process. Any broader conversation with DART staff will need to happen later because the timeline is too tight for a full deep dive before Friday.

Some TMT Members supported the idea that DART staff could be brought in for a longer-term discussion to explain how the tool and release groups are structured. BPA noted that the upper-river option using fish above Lower Granite (LWG) has only been added this year to provide more data. WA requested involvement in any broader discussion about whether the MCN-above or LWG-above group should be used, because the choice affects how black dots are interpreted for the Columbia and upper Columbia systems.

Possible FPOM Task Group

Jay clarified that main near-term items for a task group were temperature differentials, unit prioritization, and spill patterns. Chris P. noted that assembling a full FPOM response by Friday will be difficult, they will check whether a task group can be formed to work on the issue sooner than the June 11 FPOM meeting. Nick Bertrand, Corps, later confirmed he will confer with his team and send an email back to the TMT by COB with their capacity and whether a task group could meet sooner than June 11.

Other Operational Impacts

ID expressed concern that the JDA operation might interfere with an eight-hour flex spill operation at Little Goose (LGS). BPA explained that the risk of that occurring is low because the spill priority list is used for lack of market spill, and the lower-ranked projects are unlikely to be displaced; any effect would be a real-time operational consideration, not a guaranteed interruption. ID emphasized that this still represents a meaningful prioritization issue, especially because the JDA operation is being used to respond to a black dot condition while another known adult-passage issue exists at LGS. From ID's perspective, it seems problematic to prioritize the JDA response without first considering whether a more concrete adult-passage issue at LGS might be more urgent.

Next Steps

The TMT agreed that a future discussion with DART staff could be useful, but not on an urgent timeline before Friday. Follow-up will continue for release-groups, the possibility of a task group or FPOM discussion, and continued monitoring of adult passage conditions and data availability. The following links were added into the meeting chat for TMT Members to review:

- https://public.crohms.org/tmt/documents/fpp/2026/final/FPP26_04_JDA_03-25-2026.pdf
- [John Day Hourly - Friday June 14, 2019](#)
- https://public.crohms.org/ftppub/water_quality/spill/202606.html
- https://www.nwd-wc.usace.army.mil/dd/nwdp/project_hourly/webexec/rep?r=ihr&ago=5

Set Agenda for Next TMT Meeting

The group requested the following agenda items for June 10, TMT Members may send additional items to Doug Baus or Emily Stranz. A draft agenda will be posted to the TMT website by Monday COB.

1. Potential FPAC Treaty Flow Augmentation Request (*standing agenda topic*)
2. Non-Court Ordered Operations Review
3. Review data response from current JDA spill operation for adult passage (future agenda item for a broader assessment of fish response to operational changes at both LMN and JDA)

Questions or Comments from Non-TMT Members

There were no questions or comments from non-TMT Members.

The next regularly scheduled TMT meeting will be on June 10 at 9AM PDT.

**Columbia River Regional Forum
Technical Management Team
OFFICIAL MINUTES
Wednesday, June 3, 2026**

Today's TMT meeting was held via Microsoft Teams and conference call, chaired by Doug Baus, Corps, and facilitated by Nancy Pionk, DS Consulting. Minutes were collected by Andrea Ausmus, BPA (contractor, CorSource Technology Group). A list of today's attendees is available at the end of these minutes.

1. Review Meeting Summaries & Minutes – Emily Stranz, DS Consulting

a) May 21, 26, 27, June 1, 2 Summaries and Minutes

Kelsey Swieca, NOAA, asked if TMT could delay approval until the next TMT.

Jay Hesse, Nez Perce, said that he also needed more time.

Charles Morrill, WA, said that he would also support that request.

Tom Iverson, Yakama Nation, said that he had sent in just a couple of qualifiers for the notes for some of the things that he had spoken on and he wondered if they were received.

Colby Mills, DS Consulting, thanked Iverson and said that DS Consulting had received his edits.

| *Wright, Lisa S CIV USARMY CENWD (USA)9:08 AM*

| *If you have any edits to the summaries or minutes, please send those to me as well as Colby.*

2. FPAC Request for Treaty Flow Augmentation – Tom Lorz, Umatilla/FPAC Chair, and Tony Norris, BPA

- No requests this week.

3. John Day (JDA) Adult Passage – Tom Lorz, Umatilla/FPAC Chair; Doug Baus, Corps; Tony Norris, BPA

a) Introduction – Lorz

- TMT has had several meetings on this and Fish Managers (FM) received the data the morning of June 3.
- It looked like there was some improvement to the FMs, but it was hard to say how much.
- Starting a new operation this morning, FMs would collect data from that and move forward.
- Since the decision had already been made at yesterday's meeting this is a wait and see issue and they would address as need be.

Pionk said that she knew from yesterday's meeting there was a conversation about potentially discussing any potential operational changes starting on Friday. She said that she did not know if that was a place that TMT wanted to go or if folks want to also talk about the current conditions, other people have comments around that.

Lorz said that he would look to his colleagues to fill that in but this operation had been going on for less than five hours so it was going to be hard to determine anything. And we do not even have any data from this new operation, so we have no idea. He said that he thought people talked about looking at black dots, if black dots were clearing, we would expect to see this operation terminated and go back to the FOP operation.

Iverson said that he unfortunately could not attend yesterday, June 2. He said that it was his understanding that this was going to be a three-day operation. He said that he would like to understand what the federal agency's perspective was on this operation. He asked what the trigger was that would stop it and just some clarity on what the federal government was thinking on this operation so that TMT could contribute some more useful information.

Baus asked BPA and NOAA to chime in but as far as the operation goes, the Corps was implementing the operation, an email was sent out. As Lorz noted, TMT has been talking about this for quite some time and the email was sent out on Monday afternoon. He said that he wanted to highlight for Iverson the details of the planned operation that the Corps was implementing, all the details are there in the email. He said that TMT did talk about this topic again yesterday, so in the spirit of not creating any confusion by talking about new information, he wanted to highlight the operation is contained in the email, and TMT did discuss it yesterday. If Iverson had any specific questions for Baus he was happy to answer those.

Iverson said that he did pull up Baus' email, he thanked him for reminding him when it was sent. He said that it said that the Corps would continue this operation until a non-black dot day occurs. So that was the intention, to maintain this operation until the DART tool indicates there was no longer delay. He asked if that was correct.

Baus said that was correct.

Norris said that the operation was a minimum of three days through Friday.

Iverson said that he got it.

Jonathan Ebel, ID, said that he wanted to note that he received the email after 8:00 pm MDT on Monday. He wanted to bring up how much flexibility there is on that idea of continuing this operation until there is "no black dot on the DART tool" and he would ask the Action Agencies (AA) to reconsider that. In the past when a spill reduction had been implemented to improve adult passage, you can tell when spill was the issue because the fish respond very quickly. Last week at Lower Monumental (LMN) the black dot disappeared, but it was really only like a PIT tag or two which could have been random passage. We did not see huge movement of "delayed fish" with implementation of that. Now at other times in the past, when spill had been reduced, if that was actually the problem, the fish would move. We have seen this, we have discussed it here, where we have seen a thousand fish move a couple of days in a row that were kind of sitting, hanging around. So he recommended that if there was still a black dot on the DART tool on Friday then that indicates that the operation is not solving the perceived issue or not adequately addressing the perceived issue and that something else should be done.

Pionk asked if Ebel also wanted to see what kind of flexibility there was in this operation around that black dot. She asked Baus if there was anything that he was able to say around that.

Baus said that the Corps heard the comment. He told Ebel that it was his understanding that TMT had walked through this yesterday. It was his understanding that the Corps was

hearing the recommendation again today and he noted that. But as noted, the Corps was implementing the operation that was coordinated.

Ebel said that the Corps was implementing the first day of a minimum three-day operation that has been left open-ended with a trigger to end it that does not even say how many days without black dots need to be seen. He said that he guessed from his perspective and how TMT had operated in the past, is there is a coordinated operation, some of these last for multiple days, things can still be revised to be more appropriately tailored to the problem at hand.

Pionk said that what she heard Baus saying was that the Corps was taking that recommendation into consideration.

Kelsey Swieca, NOAA, said that she was going to provide a comment rather than a response and actually a clarification. She said that she wanted to clarify Ebel’s one question, or statement, about the operation not being totally clear about if it was just one day of no black dot and she wanted to clarify the intent as written was to be just one day of no black dot requirement for a change back in operations.

Ebel said that was helpful, because just thinking back when there were triggers at LMN it used to be multiple days, so thanks.

Jay Hesse, Nez Perce, if it was possible to look at the ladder counts for today. He asked if Lisa Wright, Corps, could do her magic on the two, the North and South ladder counts.

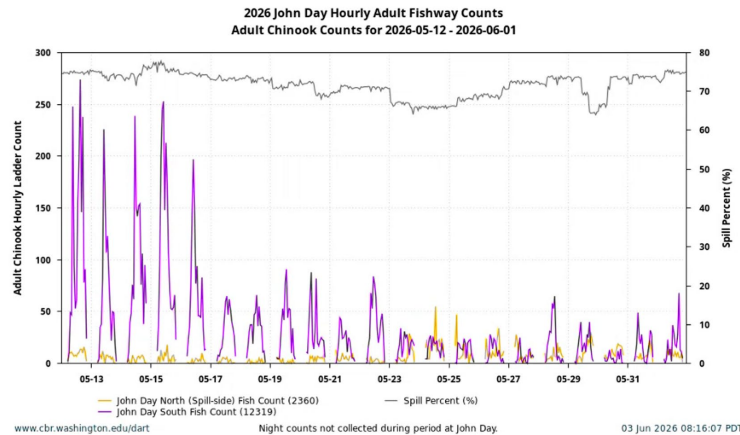


Figure: 2026 John Day Hourly Adult Fishway Counts. Adult Chinook Counts for 2026-05-12 - 2026-06-01. Night counts not collected during period at John Day.

Hesse said that there had been much discussion about the motivation and data motivating this discussion and concern level and he thought for all of TMT it was first and foremost about efficient adult passage past the dam, regardless of which of the ladder(s) those fish are using. As part of the discussion the importance or desire to have functional, both ladders being efficiently used, has been expressed by some and the recommended operation is aimed at improving passage in the North Shore ladder. While our discussions have point out and some have expressed their opinions that the slowing of passage from our expected passage rates is more a function of slowing passage at the South ladder the action that is in place is expected to have more fish passing in that North ladder and likely not do anything on the South. So, the recommendation that has been coordinated says nothing about improving or addressing South ladder passage and Hesse was concerned about that.

b) Hesse's Draft Recommendations

[Hesse requested that Wright pull up the recommendation that he had sent her via email] In that spirit Hesse said that he was proactively offering recommendations to move us forward in a way that he hoped added some clarity and efficiency in this. Hesse recommended, said that the recommendations are draft in his mind and subject to modification by any, and all, of the TMT representatives on this call.

- 1) Apply fish PIT tagged upstream of McNary query within DART-base assessments of John Day fish passage conditions; continue to monitor and consider Snake Basin specific tag query. Convene FPAC to NLT June 9th to examine logic path for using Snake basin specific PIT tags rather than larger aggregate of spring Chinook pit tagged upstream of McNary.
- 2) Expand NOAA recommendation to include formal pursuit of adaptive management options for restoring/maintaining efficient passage via South ladder
 - a. Convene FPOM NLT Friday June 5th to provide update on John Day South ladder temperature differential resolution status AND explore temporary structures to provide immediate relief.
 - b. Convene FPOM NLT Friday June 5th to review turbine unit priorities and merits of using unit 2 rather than Unit 3 or in response to Unit 3 being unavailable.
- 3) Expand NOAA recommendation to include changes to unit priority, spill patterns, and/or spill volumes (> 40%) on Saturday, if black dot persists on Friday. When significant deviations from expected passage rates are no longer observed, restore 125/24/7 spill, but maintain other non-spill volume related adjustments.

- Hesse's first recommendation that TMT moved forward with applying the query that is based off PIT-tag fish released upstream of McNary Dam (MCN) of Spring/Summer Chinook in this discussion, he thought as a primary indicator of black dots within the DART tool.
 - This recommendation was not hardwiring the prioritization of the DART tool.
 - Hesse thought TMT's commitment was still to use all available tools but there has been confusion about which release group query to use, whether it was all above MCN or just Snake River Basin stocks.
 - Given that it is the same species of fish, Spring/Summer Chinook, and the physics associated with this passage with hydraulic condition should be equally applied, and our sample size is the most robust with that query that should be the primary one used to assess black dots in that portion of our assessments.
 - Hesse recommended FMs should convene FPAC no later than next Tuesday to examine the validity of that logic path for using Snake Basin specific PIT-tags rather than the larger aggregate.
 - If there was some logic path that said Snake Basin fish of the same species and same run timing are physically impacted differently by the hydraulic condition, then that group should look at that.
- Second recommendation is to expand NOAA's recommendation to include the formal pursuit of adaptive management operations for restoring or maintaining efficient passage at the South ladder.
 - When we spill less to improve passage at North shore ladders we are impacting juvenile passage.
 - We are trying to find ways and commitments and urgency within this process to restore adult passage within our expectations but do it in a way that does not impact juveniles.
 - Convene an FPOM meeting no later than this Friday.
 - Specifically provide an update on the JDA South ladder temperature differential and where we are at in resolving that long-term and explore real-time temporary structures that can provide some immediate relief to that.
 - Motivated by the observations of the temperature differential that TMT had discussed over the last couple of days.

- Second request within the examination of South shore Ladder efficiency is associated with turbine units.
 - Unit 4 had been turned on, and Unit 3 had been turned off, this was restored back to the FPP priority.
 - Look at the merits of using Unit 2, if Unit 3 becomes unavailable.
- Final recommendation is associated with what happens after three days.
 - With the USG decision and action that was put in place prior to any TMT action, as described for at least three days.
 - Hesse wanted to include language that said if fish are not passing within our expectations, or significant deviations with that, we are not going to sit here and wait it out. We need to be doing additional things to restore passage within some sort of reasonable expectation.
 - It does not mean necessarily clearing dots, it could mean a discussion within three days, a 45% passage within three days, is that good enough or are there other options to modify the operation beyond just the spill that we can engage in.

Hesse said that he was hoping that this type of certainty builds upon the clarity that we want to do things to improve South shore ladder passage efficiency and we are not willing to just sit here and wait indefinitely having an impact on juvenile passage while we hope for adults to pass better just through the North shore. Hesse said again, offered as draft language for modification to go forth.

Chris Peery, Corps, said that he wanted to address the question about the North versus South shore fishway conditions. He said that he is not the expert on JDA but in general this reduction in spill is to improve passage on the South shore fishway. We know that the condition that develops when we have really high spill and certain flow conditions is that there is so much water coming out of the spillway, it is literally backing up in the tailrace and overcomes the flow coming out of the powerhouse. That is when you generate the back eddy on the powerhouse side of the river. In this case, it is the South shore and that back eddy that mask the attraction flow to the South shore fishway. So, by reducing spill, reducing that back eddy formation, it should improve attraction and passage on the South shore fishway. This operation is specifically to improve passage on the South shore fishway. He said that he wanted to make that clear because he had heard a couple of statements in the last couple of days that really contradicted that.

Swieca said that she was going to respond to a couple portions of Hesse's proposal. She thought that we need potentially a little bit of additional information from the Corps and BPA to understand if these are even viable options before we dive too deeply into them. What are our options for potential temperature relief in a very short time frame and if there was even anything on the table at this point in time. She said she also wanted to comment on Hesse's recommendation to use the specific release group of the broader one of all tagged above MCN. She said that she thought that we need a little bit more information from DART before we make that decision. She said in the DART delay tool, there is a description of most of the release groups at the top of the page except the one that Hesse was hoping to use to evaluate this operation and so she thought we probably need to have some communication with DART before we were to determine that was an appropriate release group for evaluation of this operation. She said that she wanted to point out that at this point in time NMFS is not fully comfortable with that. NMFS needs

some assurances from DART, some additional information from DART, and until then it was their preference to continue to rely on the group that is described as preferred in the DART adult delay tool.

Hesse asked for TMT to look at that one. He said that what he had heard was that what Swieca was seeing of his recommendation did not exist yet and that was not his interpretation.

Swieca said that it did exist but under the release groups there are bullet points that describe how the release groups are formed and what is included in them. There are four release groups provided in the drop-down menu in the adult DART delay tool, there are three bullet points that describe those release groups and the one for the Spring/Summer Chinook juveniles released above MCN is the one that is not described in those bullet points on the site.

DART PIT Tag Adult Reach Distribution and Delay

Data Courtesy of [Pacific States Marine Fisheries Commission](#)

Select Year, Release Group

2026 | Mark-based Spring/Summer Chinook, juveniles released at/above McNary

- Date-based adult detection "Spring/Summer" Chinook, juveniles released at/above Lower Granite (preferred): includes all Chinook detected during spring spill period
- Mark-based Spring/Summer Chinook, juveniles released at/above Lower Granite (non-preferred): includes fish tagged as Spring-run and Summer-run as well as Unknown-run tagged at LWG in April and May (default population 2018-2025). This option is maintained for historical reference.
- Mark-based Fall Chinook, juveniles released at/above Lower Granite includes fish tagged as Fall-run as well as Unknown-run tagged at LWG after June and Unknown-run tagged by coord_id "WPC"

Selection for Release Group determines options available for Reach and Date Period.

Hesse asked if she wanted to see the specificity of what that box includes. The box is there, they are running it, Swieca was just not sure what it includes because it is not spelled out. He asked if that was what he was hearing.

Swieca said yes. She said all she was saying was that she would need to understand what was intended in it to be comfortable with considering that as a mechanism for determining efficacy of the operation.

Hesse asked if that could be part of the assignment to FPAC.

Swieca asked if that was something that Lorz would reach out to DART for the additional information on as FPAC Chair.

- | *Ben Hausmann (Unverified) 9:32 AM*
- | *As I've mentioned before, I am happy to have DART staff come to TMT to discuss how the delay tool is used.*

Lorz said that he did not think that he had to be doing this, he thought that pretty much anyone could reach out to them. He said that they would probably respond better to Swieca.

Swieca said that she was happy to reach out to get that additional information. She said that Hausmann had put a note in the chat that he was happy to request DART to present at some of these meetings to describe some of the details. She said that it could also happen at FPAC or FPOM as it had previously.

Pionk said that there were a couple of ways and Swieca was happy to look into that release group, but you also want to understand viability from the AA's perspective before we go there.

Iverson said he had two questions. One, had anyone dug into the data to determine if the delay is different between the two ladders. He asked if the sample size was high enough that we could evaluate adult delay at the North ladder versus the South ladder to try parsing this apart. He asked if one ladder was performing and the other one not. He said that he thought that would be a very important analysis if no one had done it yet. He said that he had not seen a report on that. He said that his second point was that he had not seen where the spill changed that would trigger the delay that we had seen. We know the temperatures have changed in the South ladder and we know the unit priorities changed right about the time we started seeing the delay. He said that he should not even start unwrapping that onion, focus more on moving forward, and that is if we could figure out if one of the ladders is the problem we could focus on the individual ladder.

Pionk asked if anyone had an answer to Iverson's question about the analysis.

Swieca said that she believed that the information was put into the chat yesterday in the meeting, live. She said that it was challenging for many of us to track what was going on in the chat while we were also engaging in the verbal conversation, so she did not recall it off the top of her head. She said that others might, but she believed that the information was shared out yesterday.

Pionk said that there was potentially a way, either through the minutes or summary.

Iverson said that he would recommend in Hesse's proposal here that it be part of the analysis as FPOM investigates alternatives that we look through that lens as well.

Ebel said that he would like to speak to Peery's clarification on the spill impacts on the South ladder. And then he wanted to provide a little bit of a revision to the recommendations that are on the screen in front of us. He said that Peery said that the reduction spill is specifically focused on improving passage of the South ladder. Yesterday and the day before NMFS was really focused on and BPA was putting figures in the chat showing the relationship of spill with hourly passage and with changes in the hourly passage of the North ladder. He said that it was his understanding that the basis of NMFS recommendation was to reduce spill to improve passage at the North ladder. Additionally, the ERDC trip was done by the navigators in February before they decommissioned the JDA model looking at any formation around the lock on the north side of the river. He said that he guessed that he understood what Peery was saying regarding how spill is overwhelming the flow out of the powerhouse and then causing an eddy on the South side of the river potentially obscuring the ladder, that makes sense in general, however almost everything has been focused on the North ladder. Almost all other discussions have pointed at that and even concerns from the navigation community about spill have been focused to the North. He said that he wanted to bring that up and regarding the recommendations that Hesse typed out, he would recommend if there was not observable and clear improvement in passage by Friday afternoon then this operation should change, and it should either change to 60% or if groups are able to be formed and come up with alternative solutions that deal with unit priorities or spill patterns then those should be implemented afterwards. He said that he had already said his perspective on how quickly we should see this resolve if spill is the problem.

Swieca said that she tended to agree with Ebel's assessment of impacts on the North ladder. She said that she agreed that the Corps' assessment of the back eddy coming over from the spillway on the powerhouse side is valid and based on what we know historically that certainly could be an issue at play here as well. She said that she thought conversations on the North ladder over the last couple of days has been based on the

general observation that this year, the passage at the North ladder under the current operation with the current flow conditions has been particularly concerning and particularly low which seems to suggest, on top of what Ebel mentioned about the navigation concerns that have been raised, seems to suggest that there may be something happening with this spill operation and this flow operation that is also potentially impacting passage on the North side. She said that she just wanted to clarify.

Norris shared a video time lapse from 2019 that shows the transition from 120% gas cap spill, which was ~140 kcfs spill, to 32% at ~65 kcfs spill. He said that he thought it would be appropriate to see what that back eddy looks like during high spill level.

Lorz said that he would caution, videos are great, but they only show what is happening at the surface. They do not show the full picture, that is why we use full physical models and use dyes and all that. He said there is a big eddy there, we know that, we appreciate the additional information.

Ebel said that he had looked at this, he appreciated Norris sending it to him yesterday, but the thing was that we had spill all Spring until May 21 that was driving this eddy, but we did not have any problems, there was just no passage on the North Shore. He said that he had to ask the relevance of this based on the data that we see or that we have with the patterns that we have observed this year and in the past.

Pionk asked if there was anything else that Norris wanted to add to this video to give context.

Erick Van Dyke, OR, said whether they add anything or not, he would like to get information on when this video was taken, start to finish that might be helpful.

Norris said June 14, 2019.

Van Dyke asked from when to when.

Van Dyke asked if Norris could find out for sure rather than probably.

Dan Turner, Corps, said that it was 10:50 – 11:00 AM.

Van Dyke said it was twenty minutes. He said that it would be hard to do much with that given the fact that the data that is available is either hourly or daily, but maybe some help on recognizing more of the detail should be quantified with the actual records of what was going on at that time. He said that would be helpful to know.

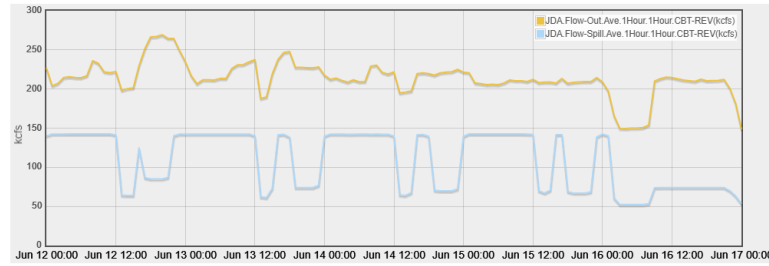
Pionk said she was wondering what specific data he was requesting.

Van Dyke said the general operations data that was provided in CWMS at the site in the five-minute, was what he thought they had use before to help recognize some details. There are some puzzling things about this it is 20 minutes when we go to a physical model, we commonly have to wait an hour or more for things to represent what was expected at certain settings. This is a 20-minute video on some transition that we are not really sure how all the details that go into that could potentially influence what we are looking at with the caveat that Lorz provided earlier about caution how you view a video that shows surface pattern.

| *Tony Norris, BPA (Unverified)9:45 AM*

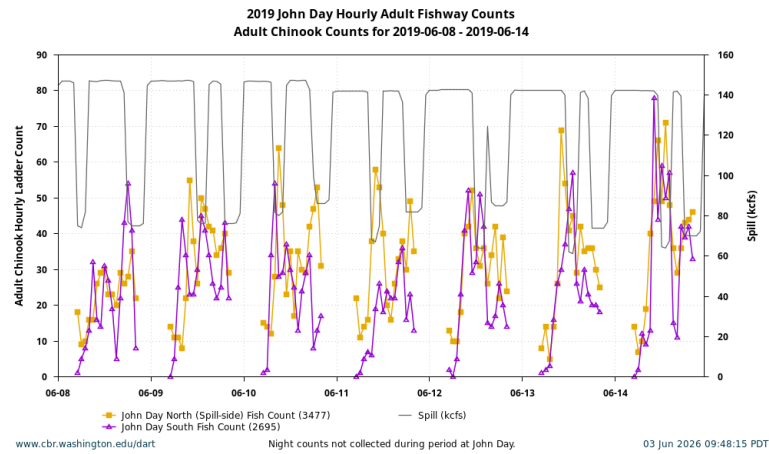
| [*John Day Hourly - Friday June 14, 2019*](#)

| *Jonathan Ebel (Unverified)9:46 AM*



| *That's the hourly spill and total outflow for that period in the 2019 video*

| *Tony Norris, BPA (Unverified) 9:48 AM*



| *Jonathan Ebel (Unverified) 10:05 AM*

| *Tony, what is the intent of putting this up. It is showing a north ladder pattern again. But showing that passage overall increases with reduced spill during that 2019 period is masked by the fact that spill reduction occurred daytime hours. The vast majority of adults pass during daytime hours regardless of spill level. What's really interesting is that hourly counts increased before the spill reduction occurred on some of those days.*

Pionk said so it would be helpful for you to have the data related to that time frame.

Van Dyke said it was almost all the information; it is getting to more information that the group will have available to make a clear understanding of what to make of all the details that he was really interested in.

Pionk said before we move to hear from the AAs around these recommendations put forward by Hesse, she wanted to check to see if any of the other FMs wanted to offer comment around that and you certainly will have a chance after but if there was anything else to elaborate on that would be great. She said that she would look to the Corps, Baus, and the BPA, whoever wanted to go first. She said that it sounded like Swieca had a question about viability.

Hesse said just process check for consistency, in terms of the original recommendation, if these were going to be considered it should be a polling process.

Pionk asked if she heard Hesse correctly that it should be through the polling. She said that she was aware of that. She said that she just wanted to first get all the discussion out there on the table and then when we think we are ready with the recommendation, that it was clear that people felt like it was sufficient enough and people agree that it was the final version of it, then we can take a poll. Or if we need to poll on different options, we can do that too.

Swieca said before Baus responded that she wanted to be more specific in her comments so we can be more productive here. She said that an important part of Hesse's recommendation was centered around taking immediate action to address temperature differentials in the ladder. She asked if somebody from the Corps could speak to if that was even a possibility before we lean too hard into that. She said that she was not sure that the Corps came prepared to speak to that because it looked like maybe this email was just received fairly recently, so that may need to be a check back in situation.

Baus said that he agreed with Swieca's assessment. There were some email communiques recently on the topic. He said that he just wanted to acknowledge that and he looked forward to seeing how that all plays out. He said that he did not have any additional information beyond that.

Pionk asked if the Corps wanted more additional time to be able to consider this. She asked if it would be helpful to caucus now or what kind of time would they need.

Baus said that it was his understanding that there was some ongoing dialogue right now. He was confident that would continue to play out. With respect to the other recommendations, he did not see the need to poll on that. He said that he saw some recommendations that Hesse provided, and he thought that they would play out in the near term. He said that he did not see any Corps action item on there. He saw additional FPAC conversations and then a request for an FPOM meeting. Baus said that he could not commit to that at this time. He was not the FPAC Chair, however he could follow up with the Corps. He said that it was his understanding that we do currently have FPOM scheduled for Thursday, the next meeting would be Thursday, June 11. He said that he wanted to acknowledge that recommendation. He said that he saw Hesse's recommendation, he cannot change it at this time, he would look into it. The next meeting scheduled is June 11. He saw the recommendation and he would follow up after the meeting and reach out to the Corps' FPOM chairs to see any movement on that. He said that he believed that he had responded to the three comments. He said that he was hearing Hesse's request to poll on these and said that he would leave that up to him but he was understanding the request and he believed that he responded to the request and he would pause there and turn it back to Hesse or Swieca or others that have any additional questions for the Corps.

Ebel said that we are kind of going around process wise, and he did not know what to do about that but guessed that he was going to express what he saw as an appropriate path forward in the following way. The issues at JDA that have become apparent in the last couple weeks of May through today just have a lot of complexity around them, there were a lot of moving parts between units and flow changes and all the stuff that we have discussed over the last few days. He said that what he would really like to see, and he would commit to, is that we need to do a deep dive into this issue to figure out how to adapt the system or what needs to change moving forward when we have a situation of flows below seasonal flow objectives and orders or guidance (guiding operative documents) that suggest, that say, that the Corps is going to spill at these levels. In order to do that deep dive, the AAs are going to need to be open for data. He said that he was

just thinking about and looking at turbine units and this concept that it has got to be the eddy, well, if you are using the main Unit 4 and that has a range based on blade angle of 10 kcfs, that is 20% of the powerhouse flow. He said that he was not sure how fast that can change but_ This issue that we have observed this year at JDA is like a fractal, you could just keep going and we need to figure out where that ends, like which one is it. He said that he would really like to see a commitment from all of us to figure this one out in such a way that we can alter some of the detailed operations, the stuff that the court does not look at: unit priorities, spill patterns, real fine tuning adult attraction flows. Just to get beyond this issue and not see it again in the future. He said that he wanted to put that out there and it is going to take being open with data and opening minds to alternative reasons for why we are seeing the patterns that we are seeing.

Pionk asked if this request was looking in the future or was it immediate with making decisions.

Ebel said that we could kick a lot of things, like a lot of things get kicked down the road like we will do that in the off-season and they never get done. This one really needs to get done. JDA is a big project, and it is an important project, there are a lot of folks pushing in different directions for different things at JDA and this should be the highest priority for current discussion and off-season discussion of how we address these issues of JDA. He said when he thought back to last Summer when we had a big blockage of Fall Chinook down there and it pretty much slaughtered them, so this is something that was coming up and we are just beating around the bush. But we need a full-scale commitment from everybody to address to figure out and then address whatever issues are occurring at JDA in the Spring, in the Summer, and again now in the Spring.

Pionk asked if that would look like a special group, like a sub-meeting, looking at this.

Ebel said that he would let his colleagues_ Some of those have worked and some them have not, in terms of special groups but maybe we need to do something different regarding JDA because it is just, it is like Grand Coulee, it is just a quagmire project. No offense to anybody, but it is an important project that everybody want it to operate the way that they want it to operate for whatever reason and it creates a socio-ecological political issue.

Lorz said that it was super easy, the two FPOMS chairs, Chris Peery and Nick Bertrand, are on the call, so we can probably coordinate them right now. He said that he did not know if we really need to do that offline.

Pionk said that Peery had his hand up and she did not know if he was responding to that at all.

Lorz said that Peery is proactive that way.

Peery said that he was going to try and Bertrand is on too so he can comment, this is a Portland District project. Peery said that they could put together a task group for JDA operations, it would be a challenge to come up with the people and the information by Friday but not to say that they could not do it sooner than off-season, Ebel's concern there. And to touch on the temperature differential question, there are places to put bubblers in at JDA this year, similar to the work trials at MCN and LMN. He said that it was his understanding that they are waiting on parts, so the data to when that would go in is not yet firmed up. He said that may address some of the things that Hesse was asking about for that recommendation. He said that he did not have any details about that. He said that would be Ryan Lowry or maybe David Miller could answer that, or Bertrand.

He said lastly, regarding his comments on fishways, he did not mean to contradict NOAA's recommendations on their analysis on it. He said he was probably overstating things there, but he definitely was providing his opinion on what he thought was going on in JDA and reduce spill is undoubtedly going to improve tailrace conditions on both the North and South side. He said that was what he was trying to say.

Pionk said that she wanted to check in with Bertrand around the FPOM question, similar to what Peery was speaking to. She asked Bertrand for his thoughts.

Bertrand said that he thought that Peery summed it up correctly. He said to try and attempt to get something together by Friday would be a challenge. His initial thought would be to target the FPOM next week to address this data request. He said that he knew that was kind of pushing out on time, which he knew was a concern for this whole topic but in trying to make a cohesive and organized presentation and to give sufficient time for folks to fully engage, he thought that was significant effort. He said that the latest he had on implementing the JDA bubbler system was that it was still probably a little way out, but they have orders in to get the components from Canada. The exact date for arrival of those components to be installed is still uncertain.

Iverson said that it was his understanding that when the Federal Government makes a change in operations that they would write up an explanation and justification for what they did. He said that he was wondering when FMs might be able to see that. He said that he still was not seeing a convincing argument that there was a change in spill directly tied to the appearance of black dots in the DART tool and he was anxious to see that. He said on the broader question were the FMs going to see a write up, they requested an SOR and did not get it. Even on the LMN FMs got a Spill Adjustment sort of paper. On this one FMs had not seen any formal write up and he was wondering when they might be able to see that.

Baus said as far as documentation goes, he already referenced the email documenting the description of the operation that the Corps was currently implementing and the plan moving forward. He also wanted to highlight the monthly FOP Implementation Report. That would be an example of where the operation would be described and that link was available on the TMT website.

Iverson said that he understood describing the operation, he was wondering if FMs were going to see a justification for the change.

Baus said as far as justification goes, the email that went out on Monday, the justification was centered around the nine days of adult delay. He said that he thought that was a noteworthy motivator regarding justification for implementation of the operation and that was on Monday.

Iverson said we are not going to see where the change in spill happened that caused the black dots. He said that it was his understanding that we modified spill because we got a bunch of black dots, but we have been doing the same spill operation all season with no black dots. We did not change the spill and all of sudden we got black dots. He said that he was missing the linkage that the remedy to the black dots is reducing spill versus some other remedy. He said that was what he was hoping to see, an explanation of that.

Baus said that as far as explanation goes we have observed significant delay at the project, we are reverting back to an operation in the past that had facilitated the passage of adults, we have significant concerns regarding the magnitude of the delay, we are implementing an operation that we have done in the past that has facilitated passage, and

we have rolled that out. He asked Iverson to repeat the question; he said that he was not quite sure what information he was asking him to provide.

Iverson said that there was no change in the spill program, that he was aware of, through the entire migration season until we got towards the tail end of the run there were no black dots, but the spill operation did not change when the black dots appeared but somehow the remedy is to change the spill operation to solve the black dot issue and he was not seeing the linkage, the connection, between delay appearing and some change in spill or flow. Why the remedy to the black dots is reducing spill versus something else. He said that we do not need to talk this out.

Baus said that he thought that he was tracking and that he could respond to that now and thanked Iverson for clarifying. He said as far as linkages go; he would just highlight that all on the phone appreciate the complexity of project operations. He said to highlight the linkage issue, he just thought it was as folks noted, there has been a complicated conversation regarding unit priorities, spill patterns, temperatures, etc. He said acknowledging it is a complicated operation that changes throughout space and time with various flows across the season highlighting the complexity of it. The expectation of it being a static conversation that would not change throughout space and time is kind of indicative of the plan moving forward just to recognize that the complexity that is out there to recognize that there will be flows that change over time, there will be temperatures that change over time, there are various parameters that will change over time and accordingly until we can get something else, a more rigorous look at project operations, defaulting back to 40% spill operation that has been effective at passing adults at JDA is prudent at this time to stop the delay. He said that he thought we were on Day 10 or 11 today. He said that was the thought process, and the relationship between spill as it relates to how it may change throughout the course of the Spring spill season.

Lorz said to add a fine point to this, there would be no SOR or written up justification for this operation. The Corps would only have what they are calling the monthly report where they would describe what happened. There would be no formal SOR as it is for those that have to write SORs on the other side and there is a stipulation agreement that said SORs are supposed to be required. He said that they are just a little confused as to why we are not following this process. He said that they understand why the Corps wants to do this, but it has been the guidelines and has been beaten into the FMs that they have to write a Situational Operations Request to make a change. He said that was why so many of the FMs were confused because without that they really do not have much to react to, it is really hard to react to anything just in verbal form. He said going forward we need this for our record keeping and for records moving forward to know what we have done in the years past and potentially why, so we can learn from that and see if it actually made a difference or did not make a difference. Not writing anything down makes that much more challenging.

Aaron Marshall, Corps, said that he appreciated explanation and Lorz' elaborating on the request. He said that they would take that back to their legal and policy folks and have some internal discussions and let him know their response.

Lorz said that they look forward to it.

Ebel asked when FMs expect to see data availability beyond project outflow for the Snake River projects. He said that he went to look at Little Goose (LGS) this morning to see if JDA had to be prioritized over LGS in terms of generation, but the data had not been available since June 1 for spill. He said that he did not know if that was for now but

it was related to this conversation, not directly to Hesse's recommendations, but it was something that he would like to see addressed or would like to know when FMs would be able to see this again.

Baus asked Ebel to clarify because he was looking at average spill. He said that he recognized and appreciated that there are numerous mechanisms out there regarding accessing data, various websites. He said that he was looking at it.

Ebel said DataQuery 2.0, DART, and he believed FPC as well, but he did not have that data. He said that it does appear on the spill bay flow data and could see it for today but nowhere else, like he could not find it elsewhere and it was not a means that he usually would use.

Baus said that there was an outstanding_ Van Dyke was on the phone. Baus said that he appreciated that there had been some ongoing inquiries regarding data. He said that he recognized there are some omissions out there, however he wanted Ebel to know that he was looking at the average spill percentages right now on the TMT website and that is populated at LGS effective today. He said that he was happy to share that with Ebel if he would like.

| *Wright, Lisa S CIV USARMY CENWD (USA)10:12 AM*
| *You can access spill data here.*
| https://public.crohms.org/ftppub/water_quality/spill/202606.html

Ebel said that he would find it, it was just the stuff that he usually used was not working. He said that he could find other places. He said that it was just a notification that some of this was not working.

Baus said that he heard him and thanked him for his feedback. He said that the Corps was aware of the issue. He apologized that he did not have a return to service date on that but the Corps was looking into some data omissions that are currently out there on the website.

| *mike buchko (Unverified)10:12 AM*
| *no hourly spill data available for lower snake project for last several days*
| *for last several*
| https://www.nwd-wc.usace.army.mil/dd/nwdp/project_hourly/webexec/rep?r=ihr&ago=5
| *it broke he9 on May 27* https://www.nwd-wc.usace.army.mil/dd/nwdp/project_hourly/webexec/rep?r=ihr&ago=7

| *Wright, Lisa S CIV USARMY CENWD (USA)10:19 AM*
| *Thanks Mike. We're looking into the why those data aren't reporting and will get it resolved asap.*

| *mike buchko (Unverified)10:26 AM*
| *no problem , not in a rush for anything just wanted to let you know when it happened.*

Pionk said that she would like to summarize where she thought TMT was at. She said that it was kind of a question for Hesse and the other FMs. She said that she heard some responses. Swieca said that NOAA was needing some more information on the DART data. She said that she was hearing from Peery and Bertrand that the FPOM was unlikely

to be able to pull together something as quickly as requested but they are willing to consider putting together a task group to look more deeply at this issue. She said that she was wondering in terms of this recommendation, if there was anything that needed to be revised or things added to. She asked what they would like to do next.

Hesse said that he heard several suggestions for refining the assignments to FPAC and specifically in terms of looking into the PIT-tag groups that are included in the upstream of MCN query. Beyond that he did not hear specific changes in scope to those recommendations. He said that he had made changes to his draft to reflect that first one on looking into MCN PIT-tag groups. He said that he heard a question on process, whether this requires a polling because it does not associate any operational changes out of this. Hesse said that he did not know how to handle that. He said that what he would share was he drafted this because the content in my mind is specific to the request that is being implemented as it relates to its encompassing of alternatives that do not require spill reductions and as such, he thought it fit as a modification to the existing request. If these types of details would have been included in the request that was polled on yesterday his position would have likely been different. He said that he was fairly dogmatic yesterday in terms of the process and he wanted to apply that same standard to recommendations that he puts forth that he had suggested for others. He said that he was trying to be consistent with that and for our entire group. If the group feels that this is different in nature and does not require polling he would defer to the entire group. He said that he needed some certainty and commitments by this group that we are going to look into things other than just reducing spill and he still did not feel like he had gotten that commitment. Waiting until June 11 for the FPOM process is not responsive enough in terms of time and what we are looking at. The reality is that this operation, in terms of the higher spill, goes away on June 15 anyway and we revert to Summer spill operations at that point. The temperature differentials will remain a concern; they were a huge concern last year and impacted Fall Chinook passage at JDA in particular, and Hesse was fearful that we are about up to that standard. He said that he was a little wary that black dots are instantaneous triggers if it can reduce spill but if it was a black dot related to anything else he was feeling (he said that was him feeling sensitive) that people just let that go. He said that he was trying to put some certainty on the table that we are reacting holistically in our responses and just not with the easy button and reducing spill that has a negative impact on juvenile fish passage. He said that he was trying to get transparency and accountability to doing some stuff beyond just the easy button and he was asking for help from all of TMT on how we provide that certainty with or without polling on this language or a modification thereof.

Pionk asked what thoughts people had. She said that she was hearing Hesse say that these are recommended modifications to the operation that is occurring right now and you want to see what other approaches would give certainty and action to potential modification. She said that she was wondering if anybody had any proposals. She said that she was hearing, one thing from FPOM, from Peery and Bertrand, that it seemed like there was support for pulling together a special task group. She asked if June 11 was the soonest, or if something could be done sooner than that but not as soon as Hesse had asked.

Bertrand said that he would need to check in with his folks to see what their capacity was to actually gather all that data to be able to answer that question.

Van Dyke said on this point, the data was not the problem, it is the personnel to compile it, was what it was sounding like. He said if he was wrong about that he was happy to hear it. He said that he did not believe that it was the data that was restricting, it was more

whether someone was available to actually compile it in a way that folks can use it. He said that there was some concern there. He said that his other point, that he thought was important to bring up here. Unbeknownst to this group, a few days ago, the powerhouse was restricted in what flow was being used and there was a change recently in what unit was being operated. So this level of detail is just another one of the pieces of information that needs to be included in any evaluation that we look at. We have done a lot of work on this in the past, but the precision of the tools that we have used to understand it has been somewhat uncertain. He said that he was hearing a lot of things being said here, he was still curious what the process was going to be on how we move forward in that. Yesterday we polled on things, we expressed our objection to the change and spill primarily because there were other changes that were available, this list includes those. And that was the pragmatic approach to start with that, now we are hearing that we are not going to be able to even look at this until June 11 in reality. That is close to when the spill operation will change as Hesse had pointed out. Van Dyke said that this lack of urgency is not new, it has been observed at all of the projects where it has been observed like this at all of these projects where there are issues like this. It is not last year, not five years ago, it is decades old. That urgency has put us in a position where some are using what they see as available at an instant before actually evaluating all of the factors, whether they have a trigger or an action that can be done at an instance moment primarily because lack of urgency has had little action applied to it to address the problems we are looking at and that is a huge problem that Van Dyke thought has been a conversation piece for quite a while. He said that he guessed he was saying a lot more than maybe he should to avoid moving forward in today's meeting but those are the kind of ideas that are the thought process that had been applied by many in coming up with what they are asking we consider and evaluate. He said that he hoped there was some movement forward on this, he was not feeling real confident that we would see that. He thanked TMT for letting him address those two points before we go any further.

Swieca said unfortunately she did not have a proposal. She said that she thought that this point this was sort of a process question and centered around potential process issues in which she would defer to her AA colleagues to discern how to move forward on that front. She said that she did want to take a couple of seconds to push back on what appears a building narrative that there is a knee jerk reaction to lean on the "easiest" option of reducing spill when adult delay is observed. She said that she did not think that was in line in any way with NMFS' position. NMFS' goals are to optimize both juvenile and adult fish passage in the projects. When we observe what NMFS considers to be meaningful adult delay pushing up over a week of delay observed at the projects, we think it is prudent to take an action that we know will reliably and expect to reliably address the issue based on historical information. We hope that is going to be the case in this operational adjustment again today. She said that we do not need to dive in this too deeply but she wanted to say that she did not think that it was a fair or accurate assessment of NMFS' position. She said that she thought that we are using the information that we have to the best of their availability to balance both juvenile and adult passage at the projects when we are observing what we consider to be an issue with adult passage, we are advocating for action to address that. With that being said, Swieca said that she thought moving forward these types of conversations what are being raised today NMFS recommendation would be to start these conversations earlier in the process. She said that she thought she had made it clear that from NMFS' position, when we are seeing adult delay at the projects of this magnitude for this number of days, again she recognized there was some conversation to be had there, and folks may not be fully on board with NMFS' assessment of what they consider to be adult delay at the projects, but

when we are seeing them of this magnitude we are put in a position where we feel the need to address the issue in a very timely fashion. If we can start these conversations and start exploring how to look at unit prioritization, etc., NMFS' recommendation is to start those conversations earlier, not to wait until we have observed 7, 8, 9 days of delay to even begin the exploration process about other potential operations. She said that she just wanted to put that out there as a recommendation moving forward. Then just to clarify, what she saw as an incomplete narrative about NMFS' position about passage of both juveniles and adults at the project.

Pionk said that it sounded like the start of the conversation, early, goes with many of the other folks in talking about both the urgencies but also being able to look at this from a deep dive that would be another place to start thinking and having that conversation. So, adding to the idea that this needs to be looked at with a view towards solving those root causes where possible. From process perspective Pionk said that she wanted to honor_

Lorz said as much as he supports and usually agrees with Swieca, he was going to have to push back a little bit on this one. The AAs have the ability to bring these issues up, they do not have to wait for the FMs, but the FMs were actually the ones who started this discussion last Thursday. There were opportunities to do more work and that kind of stuff if there was a great concern. The AAs and NOAA could have had more discussions and that kind of stuff back there. He said that he was going to push back a little bit on that saying that the FMs are not the only ones that look at this stuff. Other people can and should, because he believed they have management authorities and management obligations to do so. So it rings a little hollow for him to say that FMs should, that somehow it has been on us to be doing that. He said that he felt this was a group effort, there are plenty of players in this and it was the FMs that brought this up. And we can get all caught up in the dots and that kind of stuff but Lorz did not want that message to be out that somehow the FMs have suppressed this ability to talk about things he said that he was surprised by that.

Swieca said that she was just going to say that it was not her intent to insinuate that it was only non-NMFS parties' responsibilities to raise this issue. She thought that it was her intent was to request that if this issue was raised earlier there would be a fruitful discussion about the potential options earlier on the process. She said that she and Lorz were potentially leaning into both of us what has been historically occurring when these discussions have been raised and she thought we have an opportunity to move forward to understand the perspectives of multiple parties and do what we can to have a productive conversation knowing the positions that folks are in. She said that she thought it was also worth acknowledging we are in a little bit of a funky space right now as she thought all folks on the phone know but she did not mean to in any way insinuate that it was only a non-NMFS responsibility to raise this issue and she thought going forward NMFS was going to advocate for the beginning this conversation earlier and she hoped that there would be a willingness to fruitfully engage in that conversation. She said that she had heard what he was saying and it was potentially just an unclear point that she hoped she had clarified now.

Ebel said that he wanted to point out that it was not beginning this conversation earlier in the future. This conversation has begun like in some ways he was looking next year. He said that he was looking right now and next year. Let's do it.

Pionk said that she was hearing more of that, there is a desire as people are speaking of let's get ahead of this for the future while we deal with our current concerns and really go deeply.

Van Dyke added a little more because he said that this group probably was not as aware of what has happened in the past. Because we are talking about a black dot tool and NOAA's suggestion of starting earlier was not really sharing all the information on what had been going on in these retrospective conversations, including one that was pretty lengthy about the black dot tool, its development and use. He said that it seems like right now we are being a little reactive and that might now be helpful on moving forward in this process but the number of fine details that are out there and available that could have us bounce back and forth in this conversation are quite large. He said that he thought that the points had been made and hoped that we could move on.

Pionk said that she appreciated Van Dyke acknowledging that. She said to her the sense was that TMT all really cared about what was happening here with adult passage and that you have been looking at it from various ways and so it can be very easy as we have been having these conversations from day to day to get frustrated. She said that she thought that the idea to remember is that this is something that you are engaged with and that everyone has had those concerns so let's be careful not to read into assumptions that may not have been intended, even though it can feel that way and talk about what we can do right now in the moment with the information that we have. She said that she wanted to honor the guidelines that TMT had agreed to in the past and also knowing that she had not been TMT's traditional facilitator for support with those so she would need TMT's help with this. She said that she saw a couple of paths forward and if folks had other proposals as she put these out, she would encourage TMT to bring them up.

- She said that it seems to her part of what she had heard was that the SOR process has been the main process where you are requesting the operational changes. She said that she heard Hesse frame his recommendations as recommended modifications. She said that she did not know if this was something that Hesse would like to be framed as an SOR or could be. She said one thing to do would be to consider it from that perspective, poll the members to see where people stand. It is helpful to understand, we have gotten a lot of perspective, but this is the information that is out on the record as well as getting the comments, anything that should be considered or any differentiation from the recommendation. And then we could look for the Corps and BPA to consider this, not necessarily in this meeting, but to take that into consideration and take that forward as a next step.
- The other thought she had was if FPAC wanted to connect either today in a caucus or to come back with a more specific SOR request.

Pionk said that she would put it out there to TMT as to next steps.

Morrill said that he appreciated the discussion. He said that he thought one of the things that he wanted to step back and note again, we have clearly seen differences in passage conditions for the North and South ladder. The black dot has been the tool that NOAA and the Corps have utilized to justify a change in operations. There are other tools available to look at and Morrill thought FMs had made that abundantly clear in our discussion yet there has been no ability or desire as far as he could see to consider those. The key issue in terms of passage is that fish are still passing the projects. There is information on DART that the overall conversion is a little less than what we have seen in past years, but it is not out of the range of a realm of what we have seen. He said that he thought as a Fish Manager, it was disappointing that we revert to "a spill operation" that is known to work while we impact juveniles. If it made a difference for adults, at least for now the black dots are still there. He said that he thought that the frustrating part

of this process from his perspective, and he thought that Hesse's suggestion to incorporate more information is something that we need to do in the future. Whether we have the time and resources to do the dye necessary to have this data asap, Morrill said that he did not think so, but it was certainly an option and something he thought TMT should be ready to engage in the future. He said that he thought Hesse's suggestions were reasonable in terms of how we could have addressed this and how we need to look at this in the future, but he was not sure that we were going to get there prior to going into Summer spill. But the bottom line was, and NOAA said it in their response, they are concerned and their objective is passage for both adults and juveniles. The managers are focused and the system agreement is that we have a spill program that is designed to keep juvenile salmonids out of the powerhouse for long term survival. He said that it was disappointing that we have reverted to measures that had been "proven" to improve passage without looking at other options.

Baus said he would like to share some of the Corps' perspective. He said that it was his understanding again, the topic at hand was the current operation, we have highlighted and we have talked about the current operation. Then with respect to the process issues, it was his understanding that there are mechanisms and processes in place to address these issues. He said that if he was reading the email correctly, it does cite, look into the FPAC process to continue more dialogue with respect to DART functionality and perhaps making adjustments. He said that the Corps recognize that request could be achieved through that mechanism with respect to modified unit operations, whether it be adjusting unit priority or spill pattern, we have a process in place for that via FPOM. He said that we have an FPP change form process where the Corps generally coordinates. When regional sovereigns would like to see something different regarding how we operate projects through the FPP we do have a change form process through that. So it was his understanding with the magnitude of the conversation today, that perhaps folks would like to take a deeper dive into modifying FPP operations there is a mechanism through that through FPOM. He said it was his understanding that to get that this issue regarding taking a deeper dive we have a process in place for that. He wanted to highlight, he recognized the request and he believes there is a process in place for that. He said that he recognized that we may not be able to achieve the timeline of that request, he recognized in the email it was asking for a date no later than this Friday. Unfortunately, the Corps provided a response to the effect that there may not be sufficient time to prepare and provide meaningful conversation and hoped to postpone that conversation to June 11. He said that he thought that there was one last outstanding issue regarding temperatures, ladders and fishways. He said that he recognized that they heard the concern, there is some ongoing dialogue regarding that topic, and they recognized the timeliness would be sooner rather than later, but the Corps was currently investigating the bubbler at JDA. He said that he wanted to highlight from a process standpoint moving forward that it was his understanding on behalf of the Corps that there are mechanisms in place to address some of the narrative however he recognized that there are some concerns with respect to the timeline.

Ebel said that he understood that but take it for what it is, the Corps is saying use our process to initiate and evaluate and make these changes when NMFS and the AAs ignored their process and made a change effectively overnight but to undo that change or to do an alternative it could take weeks through the actual processes. He said that he understood these are slow moving ships or it takes a long time to move a big ship, well unless you guys want to move it quick. But he understood what Baus was saying; fully committed to that process to fully hash out and get alternative ready for implementation

but to implement a change in a couple of days that takes weeks if not an entire season of process to undo it was laying it on a little thick,

Pionk said again concerns about process and timing and desire that this applied to all parties, that all parties are respecting the process.

Hesse said that it seemed so him that in the Draft Recommendation #1 that was the remaining nexus to the NOAA operations given the discussion that had taken place. And specifically, it is what group of tagged fish would be used on Friday to determine if the operation persists on Saturday and beyond. He said that he was wondering if there was a way process-wise to get clarification or determination. He said that he assumed it defaulted to NOAA on their interpretation of this. That it is that fault falls in their_ It does not seem like this is a discussion and debate, so he requested that NMFS examine that tool and send out to the Corps their determination by Friday of which query dictates Saturday's operation and it was his recommendation that it be the MCN and above query until further and detail assessments could be placed. He said that he has justification to that which are complex and he would not go into those for time today, but it seemed like that is a specific nexus to the concerns raised by Fish and Wildlife Managers about the duration of this operation.

Pionk asked Swieca if that was something that she could undertake.

Swieca thanked Hesse for the explicit request. She said that she would noted that she already have an email out to Susannah Iltis at DART to get a little bit of additional information on that. She responded as she always does, so quickly, that she is out of the office this morning but would get that information to Swieca by this afternoon. Swieca said that she would distribute that information to the group. From her perspective at NMFS that seemed like a reasonable request to clarify that information to the Corps no later than Friday. She said that she would check in with the AAs to see if they were comfortable moving forward what that path in terms of process as well.

Baus said that the AAs would have to continue additional dialogue after this meeting.

Pionk said that he was going to take it into consideration. She asked Hesse about the other things in his recommendation in terms of the FPOM process and timing.

Hesse said that he was not hearing as written and what he had heard was if we polled on those, they would be just rejected based off feasibility and timing, so he did not know how to promote and establish the commitment to explore the other avenues as soon as possible, so he was open to suggestions. He said that he did not know how to proceed with that.

Pionk said that she was wondering if there was a timeframe from Peery or Bertrand if they have a timeframe that they might be able to propose or was there something else that they would need to move this forward with the FPOM group.

Bertrand said that he would ask for a little bit of clarification as to what, if we were to have a task group meet as soon as it is feasible, before June 11, what the actual goal of that task group would be because he had heard two different things over the course of the conversation. One is kind of an immediate want to try and evaluate the quantitative information we have, to potentially propose an alternative response for the AAs and NMFS to entertain. And a second kind of longer-term effort to evaluate this situation as a whole for future proofing and dealing with this in the future. He said that he wanted to understand which of those two targets the nearest term meeting would be trying to

achieve and if he had gotten those completely wrong he asked the FMs to help him work through that.

Hesse said that he thought the discussion points include the ways that we have and the status of manipulating ladder differentials. If there was something that could be put in place before Friday, which he did not think would be the case, would be to confirm that and have it ready to go. He saw that as a little bit longer likelihood, but one that certainly needed a kick in the butt to get going faster and maybe that was the point for the temperature differentials. If looking at this for assignments that are the most tangible for immediate operation implementation consideration it is the unit prioritization and having a discussion of the merits and risks and abilities of using units, Unit 2 or a different, to help with that. He said that was the clearest that he could do. He said that there was also the discussion of spill patterns and spill percentages, whether is 40%, 60% of some alternative spill pattern. He said that he thought the two latter, unit priorities and spill patterns/volumes, could happen on a fairly short turn around and could be in place. He said that it was reasonable, with an extra effort, to have some suggestions in place before Saturday if there was a stomach for doing more, if the black dots persist. He said quite frankly he was not hearing folks have the stomach to do that in the near term.

| *Ben Hausmann (Unverified) 10:51 AM*

| *I would ask that the meeting with DART staff occur at either TMT or FPOM to be able to include Action Agencies in the presentation. I think we would all benefit from a better understanding of the tool and be able to participate in any potential modifications.*

| *Brian Marotz - Montana (Unverified) 11:04 AM*

| *I would prefer that DART staff present at TMT rather than just FPOM.*

Pionk said hearing that she would look to Peery and Bertrand and say of the things that Ebel and Hesse have talked about what kind of timeframe do they need to be able to consider what they could do or were they aware of a timeline that they could consider one of those things within the near future, within the next week given the fact that the next meeting is June 11. Is there something that could be done. She said that she was just getting a sense of what the timelines could be for them to consider these requests to find out what their capacity is and/or was there something that they felt they could move forward sooner.

Bertrand said what he was going to commit to was that he would answer that question today. He needed to do some coordination with some folks on his team that he did not have direct supervisory control over. He needed to check in and see what their capacity was to entertain that. He thanked Hesse for the incredibly helpful breakdown if there was anything that was missed in Hesse's breakdown that folks wanted to bring up he said that he would love to get that now because he was going to go back to his people and ask what of these do they have capacity to do. He said that he would send out an email to this group to give a breakdown of what we have the capacity to do today and then he thought it was reasonable to try and get a task group up. He said that he would propose a time at which we could have that task group meet based on our capacity to get the work done. He said that he thought that we could do better than June 11 at this point, but he did want to check that out further.

Pionk thanked Bertrand for being willing to consider all of that and to be able to get back with some more certainty by the end of the day. She asked if there was anything else that

others wanted to add to the list that Hesse talked about that they would want Peery or Bertrand to consider. Pionk asked if there was anything else on this recommendation that he wanted to see if we could get a little more clarity or certainty in terms of timelines, etc.

Hesse said that he did not think so about these specific recommendations. He said that it seemed like we had some baby steps identified, which was appreciated. He said that he had another aspect of this ongoing operation that he had a question about before we end.

Pionk said that she wanted to summarize right now. She said that she appreciated Hesse bringing forward the recommendations and the discussion that occurred in terms of looking at these and considering what can be done.

- Swieca committed looking at the information related to the release group by Friday.
- Swieca also needs to check in with the Action Agencies, who are going to consider this and take it under advisement.
- Bertrand will take the different recommended ideas to review back to his team and will get back to TMT today on what there is capacity to do, propose a timeline for a potential task group, think about what can be tackled.

Pionk said that Hesse had one more element.

Hesse said it was in follow up to Ebel's question about the risk or potential of the 8-hour spill operation at LGS being suspended or deprioritized to implement this joint operation. He asked if TMT could discuss the realities, potential reality of that. Whether that was real or not, and if it was real could TMT have a discussion of management priorities.

Ebel said that he would like to say that it is real, it is in the operation, but whether it was probable. He asked what the risk of that was happening.

Norris said that the risk was low. The spill priority list is used when we have lack of market spill. With both of those projects down at the bottom, it is unlikely that would occur. Even then it would probably not be for the entire time, or it would just delay the start time. Based on the way the guidance is written, LGS probably would not be interrupted. You would probably still get your 8-hours in most likely even if there was a delay in the start. You would potentially have lack of load conditions early in the morning but once the morning peak begins. So it would just be the start might be delayed. Norris said that it was important that the BPA operators have this guidance listed so that they know how to respond to conditions when they arise.

Pionk asked if it was possible to know how soon that something like that change would be made.

Norris said that was a real-time consideration, every hour can be different, and every day can be different. But that was the guidance in place during this JDA operation and the likelihood of that occurring all depends on how much energy people use.

Ebel said that he did not know why the AAs needed fifteen minutes to caucus about that if that was true. He said essentially the AAs have made a change to the spill priority list, it is not that they are low on the list. JDA is number six overall, number 1 in level 2, with LGS_ So now that the problem is that we need a secondary spill priority list if these operations are actually going to be implemented at JDA because, from his perspective, prioritizing reduced spill at JDA regardless of the probability that it happens or the amount of time that it happens. A known causal agent of adult passage issues is gas cap

spill at LGS. He said why one would prioritize an operation that was not directly or not concretely attributable to adult passage issues at JDA for something that was pretty concrete at LGS was beyond him. He said that he was happy that BPA was finding load, that would change if fish got blocked at LGS.

Pionk said that it sounded like something to add to the task force in terms of considering adult passage issues at JDA how to manage that as well. She asked if knowing the low probability addressed Hesse's needs for now.

Hesse said that it was an issue that Ebel raised and he did not want it to fall off the table.

Pionk asked if Ebel needed anything more on that right now.

Ebel said not at the moment, we will see what happens. He said if that was going to be their response that could have been the response when he asked the question yesterday instead of going into a 15-minute caucus and then never addressing the issue. He said that it seemed odd, the order of operations was off there. He said from where he sits he was concerned yesterday and went to look at it today to see if that prioritization was actually implemented and if there were not finding load for the additional generation the morning at JDA. He said that he was glad that they found it because otherwise with that in place, that would cause a problem, we know that.

Pionk said that it was good to hear the information, it would have been helpful to hear it earlier, yesterday. Within this we know there is urgency so to that extent, there is also a need for all of TMT, at different levels, to balance being able to make real-time decisions with being about to have time to consider issues together. She said that she wanted to encourage them to be as transparent as they can within that because that helps maintain trust and helps people find solutions. And to give each other grace when you know that sometimes people are going to need to deliberate longer in their caucuses or take time to have those conversations. We want to make sure that people feel that they have both of those things. She asked if there was anyone else who had anything to add in terms of the tasks moving forward, any request of each other. She said that there had been some communication in chat around having somebody from the DART staff present.

4. Additional Comments

Hesse had a few comments about the DART black dot tool. He let Swieca know that he was available to be included in her discussion with DART whenever that happened prior to Friday. He said that being collaborative was his preference over a unilateral decision by NOAA. He said either way he expected a determination by Friday. Hesse also asked for clarification on process on how the Corps determines which of the operations would be on Saturday or subsequent days based off of the DART tool content. He asked if that required a notification from someone to the Corps or if there was a Corps representative on point for tracking that.

Baus said as far as the DART process is concerned, the Corps would be watching the DART tool, and we would be using that to inform changes in the operation.

Hesse asked who 'we' was and how would he be confident that they are going to know what rule set to use.

Baus said that 'we' would be the Corps, and they would be monitoring and tracking that issue. They as an agency would be collectively watching that and make sure there was sufficient eyes on that at the Corps. He said that he did not feel comfortable providing Hesse a specific name or POC.

Hesse said that he would put the ball in Swieca's court, assuming Swieca was going to be the messenger of whatever is determined to be the query to use. He said that he would rely on Swieca to be confident in who she shares that information with being on the same page and tracking it appropriately going forward.

Morrill said that Washington would have an interest in engaging in any discussion with DART on looking at the Snake above Lower Granite versus those fish above McNary. He said that Washington would like to be engaged in a discussion if one should occur.

Van Dyke said that he heard that as a potential special FPAC and said that he was available too.

Swieca said that she was hearing the expanded conversation around release groups she said that she could not commit to that at this point in time, prior to Friday. She said that she did not know Susannah's availability. She said that she wanted to make sure that the record was clear, that she would see what she could do and what information that she could gain. She said that we are working on a really tight timeline with external parties so she could not commit to that prior to Friday.

Hesse said that he did not necessarily need to hear the Susannah discussion. If possible he wanted to have the processing of that information from Swieca's brain, and other's brains.

Morrill said that he could understand that too, he just wanted to make the strong point that Washington certainly would appreciate an explanation, if NOAA and the AAs did not want to use "above McNary", of why that would not be.

Van Dyke said that he did not think that it was necessary for a DART representative to evaluate some of the details that have been pondered on here in that every time you push the button the information that is used in the tool is available. He said that there was some uncertainty here on the level of evaluation folks are needing and how to go about do that. We have been for quite a long time about this tool and its development and its applications and components we are maybe not labeling ourselves experts but the level of scrutiny that is possible may not require a representative from DART to provide a level of understanding that was being requested now but that is not clear.

Pionk said that it was her understanding that this was for Swieca to get some clarity on information and that was the follow-up that was going to happen. And then at some point to consider having more conversation with the DART folks, have them come to TMT.

Hausmann said that he wanted to say, and he hoped that this did not add confusion. He said that this year was the first year that we added that option on DART to include those fish in the lower river that were above LWG and the idea was just to have more data. He said that maybe it does not feel helpful but that was where DART staff could walk TMT through how they do it and why they do it. He said that he would not suggest that we take it off but if we have a choice to which we focus on that would be fine. He said that he wanted to clarify that if folks were struggling over why this was now an issue it really was that we added a little bit of an expansive use of tagged fish just this year, and that was all.

Morrill said that if one was really interested you can go into the DART tool and look at the groups that are represented. He said that to him it was a straightforward question for NOAA and the AAs whether they were comfortable with looking at both regions. If they were not Washington and the rest of us would want to know why.

5. Agenda Items

Next Meeting Scheduled: Wednesday, June 3, 2026

Meeting Location: Microsoft Teams

Next Week's Agenda Topics

- Adult Passage
- FPAC Request for Treaty Flow Augmentation
- Operations Review

There was discussion in the group about the “ripeness” of the DART presentations. Swieca thought the timeline provided enough time for a deep dive with DART to address the one topic prior to Friday and should be looked at longer term. Hausmann and Morrill agreed on the long term. Hausmann also noted that it would be good to have the presentation in a forum with a wider audience.

Pionk and Ebel suggested leaving the Adult Passage on the agenda. Ebel thought the follow up should answer the question of if the fish responded and could be included in the Operations Review.

Van Dyke said that if FMs do not put something on the agenda it may not be available for us to discuss following past changes in how TMT deals with that. Van Dyke asked for the black dot information to be discussed in the agenda. Pionk said that the request to have the information that Swieca was researching could be included with the adult passage update review conversation.

Future Agenda Topics

- Adult Passage Assessment of LMN and JDA
- DART Presentation

Today’s Attendees:

Agency	TMT Representative(s)
NOAA Fisheries	Kelsey Swieca
Oregon	Erick Van Dyke
Washington	Charles Morrill
Kootenai Tribe	
Confederated Tribes of Colville Reservation	Dennis Moore
Umatilla Tribe (CRITFC)	Tom Lorz, Pete McHugh
Yakama Nation	Tom Iverson, Keely Murdoch
Bureau of Reclamation (BOR)	Chris Runyan
Army Corps of Engineers (COE)	Doug Baus (Chair), Aaron Marshall, Lisa Wright
US Fish & Wildlife Service	
Idaho	Jonathan Ebel
Montana	Brian Marotz
Spokane Tribe (STOI)	Brent Nichols
Nez Perce Tribe (NPT)	Jay Hesse
Warm Springs Tribe	
Confederated Salish and Kootenai Tribes	
Bonneville Power Administration (BPA)	Tony Norris, Ben Hausmann

Other Attendees (non-TMT members):

COE – Megan Biljan, Lean Hamilton, Evan Farley, Jessika Solleder, Chris Peery, Tiffany Dixon, Nicholas Bertrand, Kenneth Sears, Michelle Yuen, David Miller

BOR – Ryan Fosness

BPA – Tammy Mackey

Washington Ecology – Thomas Starkey

Oregon DEQ – David Gruen

DS Consulting – Nancy Pionk (Facilitator), Colby Mills,

CorSource – Andrea Ausmus (BPA note taker, Contractor)

AVA – Mike Dillon

EKI – Eve James

Columbia Basin Bulletin – Mike O’Bryant

NPCC – Kate Self, Stacy Horton, Windy Schoby, Rudy Salakory

FPC – Noah Campbell, Gabe Scheer, Erin Cooper

PGE – Phil DeVol

GCPUD – Joseph Akers

Energy EPS – Joshua Rasmussen

PSE – Mitch, Jessica

Unaffiliated – Patty O’Toole, Prasun Banerjee, Mike Buchko, Eric Wood, Kimberly Randolph, Dillon Bragg