

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

May 21, 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.

Lower Monumental Dam – Adult Conversion

At the request of Salmon Managers, TMT Members convened an unscheduled TMT meeting to interpret recent adult passage “black dots” at Lower Monumental Dam (LMN), with Tom Lorz, CTUIR/FPAC Chair, emphasizing the need to discuss in-season management opportunities under the Preliminary Injunction/FOP process. They also worked to clarify what the 2026 FOP requires the TMT and the Corps to do when adult delay or conversion concerns arise.

Several Salmon Managers asked for clarity on how the Corps interprets the 2026 FOP/process and if there are defined biological/other criteria, or a preset operational response when adult delay is observed. The Corps noted that the 2026 FOP does not include the prescriptive operation that existed in the 2025 FOP. From the Corps' perspective, LMN adult passage is being monitored through the TMT process using visual counts and the DART tool; any operational change must come through TMT discussion and recommendation rather than a pre-defined trigger. The Corps emphasized this meeting was an opportunity to listen and consider recommendations, but not for them to announce a pre-set action in response to the recent black dots.

Throughout in-depth data review of DART, PIT-tag, adult count comparisons, and passage data, key concerns and questions raised by TMT members included:

- Do the recent black dots mean there is an actual adult conversion problem at LMN, or just a temporary slowing in passage? Salmon Managers that shared their perspectives did not believe the presence of black dots demonstrates issues with passage or migration delay that warranted immediate action.
- Focusing too narrowly on one metric is not sufficient, assessing/understanding travel time and passage requires system-level and life-cycle context.
- Are the data strong enough to justify a change in operations, given low PIT-tag counts on some days and the possibility that the dots could be influenced by limited sample sizes?
- PIT data show slower travel times throughout the lower river of late, this could be a slower cohort moving through the system rather than a passage issue.
- Are there operational changes since May 13 that could explain the dots: e.g., spill patterns, unit operations, tailrace conditions, lock passage, fish pump outages, or fishing pressure? The Corps was unaware of any operational or condition changes that would cause a reduction in travel time.
- Would a flex-spill operation be feasible under current conditions; would it affect lower Columbia flows or create within-day flow fluctuations?

Chris Peery, USACE, confirmed there have been no changes in LMN spill, unit operation, or fish pumps, and little to no broader district change. Jonathan Ebel, ID, noted this could be a normal seasonal slowdown and recommended staying the course with current operations; Charles Morrill, WA supported this perspective. Jay Hesse, NPT, offered that questions around potential flex-spill operations could wait until a later discussion. The Corps confirmed it will continue the LMN spill operation as noted in the

2026 FOP. Kelsey Swieca, NOAA, added that NOAA would continue to monitor the situation. Trevor Conder, NOAA, requested more information from FPC regarding slowing travel times and the potential for this to be a slow cohort of fish, as from NOAA's perspective, broader system passage did not look to be slow.

To conclude, TMT Members agreed there is not enough evidence of a blockage or a system-wide problem to justify an operational change at this time, so the current LMN spill operation will continue, with continued monitoring.

ACTIONS

- Continue monitoring LMN passage via TMT process over the weekend until the next meeting.
- Corps will keep current operations in place at LMN.
- FPC will distribute supporting graphs/data on the travel time patterns for TMT Members to review the cohort analysis in more detail.
- Further analysis of the travel-time interpretation, if current fish are a slower-moving cohort or a broader passage problem.
- Revisit flex-spill questions later if conditions change.
- Revisit the issue at the next TMT meeting, on May 27.

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 May 27 at 9AM PDT.

**Columbia River Regional Forum
Technical Management Team
OFFICIAL MINUTES
THURSDAY, May 21, 2026**

Today's Unscheduled TMT meeting was held via Microsoft Teams and conference call, chaired by Doug Baus, Corps, and facilitated by Emily Stranz, 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. Lower Monumental Dam (LMN) – Adult Conversion – Tom Lorz, Umatilla/FPAC Chair

- Black Dot Update
 - The Fish Managers (FMs) noted that yesterday (Wednesday), the DART adult delay tool graph was showing two black dots, indicating potential delay, and were waiting to see if a third dot would show up.
 - A third dot showed up on Thursday, May 21.
- Ice Harbor (IHR) Passage Observations
 - FMs also noted that there was some decent passage at IHR.
- Unscheduled TMT Meeting
 - The FMs said that they are in a monitoring mode at this point.
 - FMs wanted to meet and have a discussion and see where people were on this topic and see what the path forward was.
 - According to their read of the preliminary injunction, if adult delay is noted or is being observed then TMT should meet. FMs said that they were doing what made sense under the injunction.
 - Lorz said that he was also looking to the Corps of if this process how TMT was going to proceed moving forward.

Stranz asked Lorz if FPAC got together to talk about the three dots and any concerns, thoughts or suggestions.

Lorz said not really considering that they had meetings all morning. He said that he had thought that TMT was going to do 11:30 so that there was hope that FPAC could have a meeting at 11:00 but the Corps scheduled the TMT meeting at 11:00 so we are going to back-to-back-to-back meetings.

Stranz said now is the opportunity then. She asked if it was helpful to pull up any information or if TMT members wanted to jump in with their thoughts and thinking.

Charles Morrill, WA, said that he would like to look at DART data. He said that he could share his screen. He said that you can look at side-by-side comparisons of adult counts at McNary (MCN) and at IHR. They both exhibit the same patterns, a drop on May 14, a hike back up and then a drop back down. He said that they are doing the same thing, we are seeing the same pattern that fish had just passed moving slower through the system at MCN, and that pattern is being reflected at IHR a couple of days later.

Jonathan Ebel, ID, asked to hear from the Corps before TMT goes to far on this.

Stranz said yes, and asked what Ebel would like to hear from the Corps. She asked if he had a question or something specific.

Ebel said what Lorz said, how does the Corps view the process.

Stranz asked as far as coordination.

Morrill said that made sense.

Stranz asked Baus for help with the process.

Baus said as far as the process goes, it is the Corps' understanding that, as noted yesterday at TMT, there were some conversations regarding adult conversion at LMN and as described in the FOP there is a provision there that notes to monitor and manage adult conversion rates in-season by TMT process in the FOP. Based on the brief discussion yesterday, the Corps did hear recommendations to have a meeting today, so that is why they moved forward to have a meeting today. From a process standpoint, that is where the Corps is. Beyond that he did not know what the meeting would entail, but the Corps was there to listen. He said that they were hoping to hear some TMT conversation today, what folks want to talk about and that was what he knows now. He asked if Ebel had a specific question that he could answer.

Ebel said that he was trying to see how different entities view how TMT was going forward and were thinking about how to make this productive, and how the Corps were planning to react or if they were going to react to that black dot. He said that he was not as close as other folks to the interpretation of the footnote in the FOP. That was why he was asking.

Stranz said that what she was hearing from Baus was that the Corps was at TMT to listen right now.

Tom Iverson, Yakama, said that he was along the same lines as Ebel, what is the process for determining if we have an adult conversion problem and that the Corps would take an action. He asked if there were biological criteria. He asked if we were using the DART dot model. He asked if we are going to use a conversation. He said that TMT came out of the box with Morrill making a biological argument. He said maybe the dot should not be the tool; he did not know if the black dots are the tool. He said that he would like more ground setting of what the process is. He said that at FPAC it sounded like it appeared that we should be looking in, that maybe there is a conversion issue happening, but he felt like we were trying to jump out ahead of something that we do not really know we are jumping in front of a train or what. He said that he would like a little more clarity. He said that he was quickly looking in the FOP, but he was not finding the adult conversion language. He said that he would like a better understanding of if there were biological criteria if we see adult conversion what the response is. More context setting if we could.

Jay Hesse, Nez Perce, said that it was his interpretation and read of the FOP that says that adult passage at LMN will be handled through the TMT process, and monitored using visual counts and the DART tool, but there is not a predetermined response described in the [2026 FOP](#). It just has that we are going to monitor and manage it in-season through

the TMT process. He said that it was his expectation that we are monitoring that and that the TMT process had the discussion forum for considering a change in conditions and that change in conditions is undefined and would be subject to our recommendations. He said that his assumptions, which he guessed would be nice to confirm if somebody had a different one, is that we are not going to change operations, there is not a default pre-established aspect to that until somebody makes a recommendation and then we follow the TMT process. He said that was why he thought we were here to discuss the conditions and Hesse said that he kind of had a list of things that he could walk through in terms of assessing conditions and options and that kind of stuff when and if we get to that point.

Chris Peery, Corps, said that he was basically going to say the exact same thing Jay had said. Previously there were in the FOP criteria and prescribed remedies, those are gone and so we are here to see what TMT thinks is going on, if there are any options, desires to do any changes in operations, and then the Corps can consider those. He asked Baus if he was saying anything out of line there.

Baus said no, and he agrees. He said as Peery already noted that specific provision that was in the previous document, the 2025 FOP, is not in the 2026 FOP, so if we are doing something different than what is in the 2026 FOP that would need appropriate legal coordination. He said that he was trying to be clear on that. He said that he thought that he was agreeing with what Peery was saying [Peery agreed]. He said that he guessed that the Corps' position at this time, he hoped that he was setting up sideboards, but it was the Corps' understanding that as described we are monitoring passage at LMN through TMT as noted in the 2026 FOP but beyond that the Corps was at TMT to listen today and hear what folks have to say about LMN conversion.

Stranz asked if Baus was also on the same page, as far as, what we had heard from Hesse and Peery regarding it not being a pre-described remedy in the FOP and it is for TMT to discuss any options or desires for changes in operations and for the court to then consider those. She asked if that was all aligned with how Baus was seeing this.

Baus said that he agreed that pre-described operation, as Hesse had noted, is not included in the 2026 Fish Operations Plan so the Corps was at TMT to listen.

Ebel said that was helpful.

Erick Van Dyke, OR, said that he thought that the conversation was helpful in enlightening folks about a few things, especially since, what he had recognized in the past when TMT had these conversations is we fall into these issues of nuances where we lose sight of all the information that is available and focus in on some we have listed in the document as it being included. He said that he thought that the Footnote 27 (FOP-20) is an example of what he was trying to express that these conversations need to recognize all the information and what he was seeing in the footnote is that the two detailed inclusions really narrow down to isolated focus rather than, for instance, a life cycle perspective on how conversion functions in the system. He said that he was listening as well and appreciated the input so far.

Stranz said that she did not know if everybody had the footnote that Van Dyke was referring to in front of their faces. She said that she did not and asked if it was easy for Lisa Wright, Corps, to navigate to it so that everyone could see it, that might be helpful.

²⁷ The agencies will use all available information including adult dam counts and the current Columbia River DART's Reach Distribution and Delay for PIT Tag Adult Returns tool ("Running 3-day DART tool") to monitor adult delay. See top panel, in-season graphics of Cumulative Arrival Percent by Days in Route to Lower Monumental Dam.
https://www.cbr.washington.edu/dart/query/pitadult_reachdist

She added thinking back to recent conversations that we have had at TMT, we received, at least she had received some perspective and input that it would be helpful to have the TMT conversations kind of separated out in the biological observations, thinking information, and then operations. She asked if that was a good way to kind of organize today's conversations around this and if so, if TMT all wanted to switch over now that we have got the process clarified a bit more, switch over and look at some of the information that they have and have some dialogue around what they are seeing, what they are not seeing, and what conclusions they can draw at this point. She said that Hesse had mentioned that he had some more thinking to share. She asked if he wanted to lead us off.

Hesse said that he could. He asked if there were others that wanted to. He said that he had his thought process organized but he did not want to dictate. If someone else had an opinion.

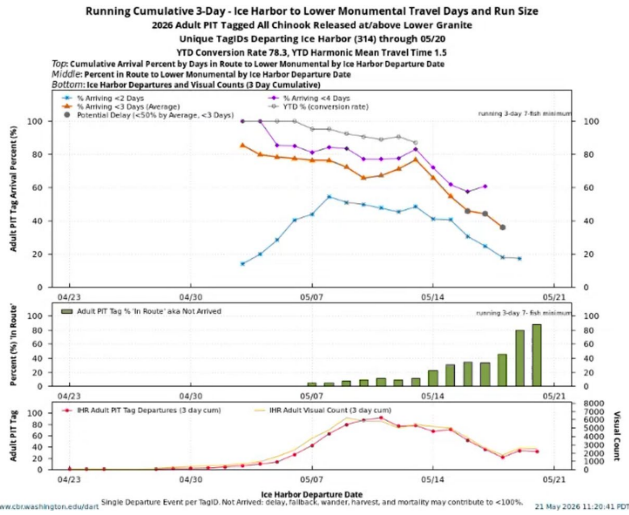
Stranz said that she promised to give everybody time and space who wants to add. She said that Hesse could start and then TMT could go to others.

- Biological Observations

Nez Perce

Hesse said that his assessment of where we are at for fish passage is that adult fish passage at LMN is not at a blockage stage. That there are still a significant number of fish passing LMN on a daily basis over the last week. Those daily numbers have ranged from 571 to almost 2000 fish passing LMN daily.

The DART tool that has a pre-established threshold of 50% passage in two days, or in less than three, has not been met in the last three days, so we have three black dots.



However, that 50% threshold was met on the third day, so less than four days in all of those cases.

If we think about overall fish passage through the Lower Snake in total, looking at the triple reach part of the DART tool, there are no black dots in that triple reach analysis that has a seven-day threshold for flagging a passage level.

As he looked at the passage rates throughout the System, at all of the other Projects, there has been a general slowing of passage rates at almost all of those Projects over the last ten days.

So, there are some nuances, details about the DART tool. The guiding documents, the FOP, highlight that it is not just the DART tool that we look at and that is consistent with the Fish Managers (FMs) thought process in these types of situations.

LOWER MONUMENTAL DAM																				
DATE	CHINOOK ADULT	CHINOOK JACK	SPRING CHINOOK ADULT	SPRING CHINOOK JACK	SUMMER CHINOOK ADULT	SUMMER CHINOOK JACK	FALL CHINOOK ADULT	FALL CHINOOK JACK	COHO ADULT	COHO JACK	TOTAL STEELHEAD	UNCLIPPED STEELHEAD ²⁾	SHAD	SOCKEYE	LAMPREY	LPS LAMPREY ²⁾	CHUM	PINK	SOURCE	
05/14/2026	1917	73	1917	73	0	0	0	0	0	0	0	0	n/a	0	0	n/a	0	0	0	USACE
05/15/2026	1037	83	1037	83	0	0	0	0	0	0	2	1	n/a	0	0	n/a	0	0	0	USACE
05/16/2026	747	79	747	79	0	0	0	0	0	0	0	0	n/a	0	0	n/a	0	0	0	USACE
05/17/2026	795	66	795	66	0	0	0	0	0	0	0	0	n/a	0	0	n/a	0	0	0	USACE
05/18/2026	574	62	574	62	0	0	0	0	0	0	0	0	n/a	0	0	n/a	0	0	0	USACE
05/19/2026	571	88	571	88	0	0	0	0	0	0	0	0	n/a	0	0	n/a	0	0	0	USACE
05/20/2026	666	125	666	125	0	0	0	0	0	0	1	1	n/a	0	0	n/a	0	0	0	USACE
YTD	17969	812	17969	812	0	0	0	0	0	0	1011	706	n/a	0	0	n/a	0	0	0	USACE

The visual and abundance passage numbers summarized by the FPC also show a slight decrease or lower passage number at LMN than what would be anticipated, but not a substantial decrease in that. So that is another way to say fish are still passing, but maybe not quite as fast as what we would expect.

There is the reality that within the days that these black dots have occurred, that there are two days within that, even though this is a three-day running average and analysis, the guts of the DART tool, that two of those days there were very low numbers of PIT-tagged fish passing. Five in one day and six in another, that are within the average, so we are still above the seven fish criteria for running the DART tool, but Hesse thought that TMT should be aware that there are a couple of days with very low numbers and folks should be aware that yesterday’s passage at IHR was only four PIT-tag fish, so we are working with some days of limited data within that.

ADULT PIT TAG		Cumulative Arrival Percent										Total Lower Monumental Entry Events for Fish departing IHR during period	Percent Not Arrived for period	Adult Visual Counts Ice Harbor for period	
Running 3-Days End Date (departure events >= 7) = shaded red: Arrival on Avg (2) Day = 50%	Departure Events Ice Harbor for period	Lower Monumental Calendar Days after Ice Harbor Departure = shaded gray: 50% arrival day = shaded gold: ConRate < 85% (at least 7 fish; fallback, delay, wander, harvest, mortality can all attribute to <-100%) = shaded green: Prediction Range based on departures and detections for individual days included in 3-day cohort													
		0	1	2	3	4	5	6	Conversion Rate						
2026-05-20	32	0	0.0	[12.5 - 25.0]	[12.5 - 84.4]								4	87.5	2501
2026-05-19	34	6	0.0	17.6	[17.6 - 73.3]	[20.6 - 91.2]							7	79.4	2256
2026-05-18	22	8	0.0	18.2	36.4	[54.5 - 77.3]	[54.5 - 90.9]						12	45.5	1771
2026-05-17	36	22	0.0	25.0	44.4	61.1	[63.9 - 72.2]	[66.7 - 80.6]					24	33.3	2569
2026-05-16	52	32	0.0	30.8	46.2	57.7	61.5	[83.5 - 87.3]	[65.4 - 82.7]				34	34.6	3836
2026-05-15	71	48	0.0	40.8	54.9	62.0	66.2	67.6	[69.0 - 78.9]				49	31	4972
2026-05-14	68	53	0.0	41.2	66.2	72.1	76.5	76.5	77.9				53	22.1	5203
2026-05-13	78	68	0.0	48.7	76.9	83.3	87.2	87.2	87.2	87.2			69	11.5	5396
2026-05-12	77	70	0.0	45.5	71.4	77.9	87.0	88.3	89.6	90.9			70	9.1	5020
2026-05-11	92	82	0.0	47.8	67.4	77.2	85.9	87.0	88.0	89.1			82	10.9	5826
2026-05-10	88	80	0.0	50.0	65.9	77.3	86.4	87.5	89.8	90.9			80	9.1	5849
2026-05-09	80	74	0.0	51.3	72.5	83.8	87.5	88.8	91.3	92.5			74	7.5	6243
2026-05-08	64	61	0.0	54.7	76.6	84.4	85.9	90.6	93.8	95.3			61	4.7	4798
2026-05-07	43	41	0.0	44.2	76.7	81.4	83.7	90.7	95.3	95.3			41	4.7	3771
2026-05-06	27	27	0.0	40.7	77.8	85.2	88.9	96.3	100.0	100.0			27	0	2376
2026-05-05	14	14	0.0	28.6	78.6	85.7	92.9	100.0	100.0	100.0			14	0	1595
2026-05-04	10	10	0.0	20.0	80.0	100.0	100.0	100.0	100.0	100.0			10	0	971
2026-05-03	7	7	0.0	14.3	85.7	100.0	100.0	100.0	100.0	100.0			7	0	668
2026-05-02															537
2026-05-01															439
2026-04-30															378
2026-04-29															24

There was a drop in total adults passing IHR yesterday, only 258 past IHR there. So, as we look at monitoring fish passage over the coming days folks should be aware of not only the total drop in fish and the low number of PIT-tags passing IHR yesterday.

DATE	ICE HARBOR DAM														SHAD	SOCKEYE	LAMPREY	LPS (LAMPREY%)	CHUM	PINK	SOURCE
	CHNOOK ADULT	CHNOOK JACK	SPRING CHNOOK ADULT	SPRING CHNOOK JACK	SUMMER CHNOOK ADULT	SUMMER CHNOOK JACK	FALL CHNOOK ADULT	FALL CHNOOK JACK	COHO ADULT	COHO JACK	TOTAL STEELHEAD	UNCLIPPED STEELHEAD ²⁾									
05/14/2026	1557	107	1557	107	0	0	0	0	0	0	0	0	0	0	0	0	n/a	0	0	USACE	
05/15/2026	1318	119	1318	119	0	0	0	0	0	0	0	0	0	0	0	0	n/a	0	0	USACE	
05/16/2026	644	91	644	91	0	0	0	0	0	0	0	0	0	0	0	0	n/a	0	0	USACE	
05/17/2026	317	80	317	80	0	0	0	0	0	0	0	1	0	0	0	0	n/a	0	0	USACE	
05/18/2026	515	124	515	124	0	0	0	0	0	0	2	0	0	0	0	0	n/a	0	0	USACE	
05/19/2026	1349	171	1349	171	0	0	0	0	0	0	0	0	0	0	0	0	n/a	0	0	USACE	
05/20/2026	258	84	258	84	0	0	0	0	0	0	1	1	0	0	0	0	n/a	0	0	USACE	
YTD	22328	1143	22328	1143	0	0	0	0	0	0	256	189	1	0	1	n/a	0	0			

It is also important to know that the DART tool, though structured around a three-day running metric, also has daily numbers within that so a number of us look at those daily passages.

The forecasted river conditions, the reality of what we are dealing with, it that currently the flow at LMN is about 57,000 ft³/sec, and while that is lower than what the ESP predicts, the ESP is predicting stable flows over the next week or so, so Hesse thought that was generally likely however there is a scheduled reductions in the Dworshak (DWR) flow augmentation starting now and over the next few days, and that drop will be about a 3 kcfs reduction. And there is likely to be reductions in the amount of Upper Snake flow coming down through the System over the next week or so. And so even if runoff kind of stabilizes a little bit there are some slight reductions in supplemental flows that might reduce us but gradually it is in that mid-50 to 60 kcfs range for flows.

The ten-day weather forecast is not completely dry, but certainly not drippy. The temperatures within that are very comfortable from a human standpoint, they are not going to be hot, they are not going to be cold. The nighttime temperatures in the Lewiston area are still predicted to be in the upper-40s and low-50s, so not a heatwave by any means predicted in the next ten days.

Water temperatures currently in the Snake Mainstem are above average, so if we look at the tailrace temperatures at IHR on May 18, IHR tailrace was 57°F, roughly 2°F above

the ten-year average and 3°F above the twenty-year average, and similar to 2015 when things did not work well for fish. Temperatures at Lower Granite (LWR) tailrace are slightly colder than that and the differentials from the ten to twenty-year averages are less, but they are still about a degree above those averages.

With those relatively low flows, total dissolved gas (TDG) in the LMN tailrace is currently at ~116% TDG.

Hesse said that was the lay of the land for assessing that. He said that if he were to start thinking about the mechanisms of what had changed and where we are at, why we are seeing the black dots and reductions in fish movement, he starts thinking about how that relates to previous flows. He said that the percent spill that is currently happening at LMN is similar or lower currently than days when passage rates were meeting the two-day criteria, so he started thinking about whether there are any operational differences or changes since May 13. If you look at the various passage indices, both DART and fish passage, it is really kind of the May 13 timeframe when you start to see some changes.

There were flow volume increases May 13 – May 15, things jumped up to 100+ kcfs during that time frame, those increases were from both natural runoff and some reservoir management because of the variable MOP at LWG during that time frame. There was the percent spill at LMN increased between May 13 and May 15 to a slight degree because of the increased volumes and being at min gen spill the rest essentially. Given the powerhouse capacity limits at Little Goose (LGS), we started to experience significant within day flow fluctuations May 12 – May 16, trying to meet or maintain the 30% spill criteria for the eight hours of flexibility at LGS, so there were increases in within-day flow fluctuations at LMN during that four-day period.

There are several components that Hesse said that he needed help understanding if there are differences now relative to the May 13 or before timeframe.

- Hesse asked for help confirming or looking into whether there are changes in the spill patterns that are being implemented now.
- Are there any differences in the turbine units that are being operated now and have we seen any difference in the tailrace elevation of LMN project in the IHR pool during this time frame and what occurred prior to May 13.
- Whether or not the number and timing of lock passage events have changed during this time frame.
- Has there been any changes in out-of-service equipment and function, are there changes in fish pumps that had changed during this time frame?
- Look at any fishing effort with its impact to potential fish passage.

Thinking about the past practices when we have seen black dots and what was in the 2025 FOP for the predetermined operation, knowing that it is not predetermined now, but that predetermined operation in the past was to reduce or implement a flex spill operation for 8 hours/day at 40% spill. Under the current conditions of 57% flow, implementing a

40% spill operation would require about an increase in generation by 22 kcfs, which is about 150 MW by his calculations. He said that his question was if it was possible in the coming days to implement. If so, would that increase in LMN generation result in a decrease of flows from the Chief Joseph (CHJ) area? Would there be an impact to actual flows in the Lower Columbia by accommodating the flow operation at LMN? And if we implement a flex operation at LMN, could it be done under these current conditions in a way that does not result in within-day flow fluctuations, so could we keep within-day flow fairly flat under these current conditions of mid-50 to 60 kcfs? He said that these were a couple of questions for BPA or the Corps.

Hesse said that was kind of his lay of the land in terms of what he was seeing for conditions and mechanisms and starting to discuss potential changes.

Washington

Morrill said that he had posted the link to the DART webpage that shows the adult accounts at IHR and MCN and the pattern that we are seeing.

He said that he wanted to compliment Hesse on doing an excellent job presenting the full picture of all the components that go into what is going on.

Yakama Nation

Iverson said that Hesse did an excellent job on all of that.

He said that the one thing that he did not hear is if there is a recreational fishery on IHR pool going on right now. He said if there is, with such a low PIT-tag count, it seems like you could randomly catch a couple fish and really dictate the black dots, but that is the only outlying question he had.

Morrill said no there is not.

Oregon

Van Dyke said that this was another good point. He said that he appreciated all the input so far and trying to change our operation focus to this subset of information. He said that he wanted to reiterate that there is a lot of information out there that has been provided on the life cycle components that are important to us and how we use those to manage operation planning. He said that he did not think this conversation is going to get to that. He said that he wanted to make it clear that he thought that those are very important components that need to be thought through in a conversation like this one. He said that he could give references to memos and other things, he did not think that would be helpful right now, but he just wanted folks to recognize that there are some concerns still on what we are trying to manage at this moment in terms of its stepwise components, a smaller scale, in the annual cycle, or the life cycle of the fish we are trying to help migrate.

Stranz said okay, so broadening out to that bigger perspective, longer term perspective and keeping that in mind.

Van Dyke it is maybe it is the label of the Biological Aspects that maybe is not sitting right for everybody. It is just the impressions and the interpretations of details like that

are not always the same for everybody on the phone, do he is trying to be cognizant of that. So much of the tool components are still not fully agreed to as a biological reference that is part of the bigger picture issue, but that folks are recognizing and understanding that nuts and bolts of how these things are functioning so we are kind of working on two different levels of thinking which makes it hard in a conversation like this one to provide all the information. He asked if that made sense.

Stranz said that she thought so, although it is all complicated and her level of understanding of all of this is lower than his. She said that she was just wanting everybody to focus first on the condition, the environment, and the fish before we shift into talking about any operations or suggestions. She apologized for not using terminology that made sense for all of it.

Fish Passage Center

Ebel said that Scheer looks into these processes and studies this at the FPC. He said as Scheer has expertise in this in the analysis of adult passage, he requested as a TMT member that Scheer be able to say what he was thinking now.

Scheer said that he wanted to add that he thought Hesse did a good summary, but Scheer had been digging around on the individual PIT-tag information surrounding the black dots and one thing that he had noted is, as Hesse had mentioned, that there are very few fish, just five and six fish on May 17 and 18, and that is sort of where these black dots show up. One thing that FPC had looked at previously, and NOAA has done some analysis that shows it as well, is that one of the best predictors of travel time between projects is an individual fish's previous travel time. Because there are not that many fish on these days, Scheer had looked at that, specifically because we had seen pretty good passage a couple of weeks ago under very similar conditions on the river. It is kind of trying to figure out what is different and one thing that stood out is that the cohort that passed on May 18 all had pretty long travel times, like significantly longer than anything in the past two or three weeks. He said that it was something to point out, that was something that was materially different about the cohort of fish that is moving through the river during the black dot situation and is just another biological component to keep in mind.

Ebel asked if Scheer meant travel time below IHR or from Bonneville (BON) to IHR.

Scheer said BON to IHR times.

Stranz asked if he was saying that this was sort of a slow-moving cohort all the way up the system.

Scheer said yes, essentially what they look at when they look at all the years and all the fish under all the different environmental conditions, that slow fish tend to travel slowly, fast fish continue traveling fast regardless of conditions. He said that it is one of the most predictive variables that predict future travel times upriver. He said that he thought it was something that he thought might be important to highlight. Specifically on May 18, you have a cohort of fish and none of them have passed IHR or LMN yet, and all those fish had pretty long travel times. He said that he could send a graph of it, it is noticeably longer than other recent passages.

Corps

Peery said to respond about operations, there has been no change in the Corps' spill operations or unit operations. They are at min-gen spill the rest and they are using Unit 1 right now and that has been the operation this whole time.

There has been no change in fish pumps and for the most part all fishways have stayed within criteria, there have been a few minor deviations that have been noted in the reports.

Operations have been relatively consistent the whole time.

Peery did not have information about Navlock crosses.

Van Dyke said to get to Scheer's input, it really defines the System as functioning together, we are focused on one site. He said that he did not think that Chris came prepared for all of the potential variabilities but given the observation of slowness from BON up to where we are talking about now, is there any other relationships that would fit these questions that Hesse requested. He asked if the other dams are also using the identical spill, units off, units on, and whether the fish pumps and the criteria are characterized the same way.

Peery said that as far as he knew there had not been any major change in our operations for the Walla Walla District Projects over the last month or so. The only main change was that LWG changed from using Pump 1 to Pump 2 and that should not have caused any impacts downstream.

Van Dyke said that he agreed with that.

Peery said that they have had some gate changes at MCN that they have talked about in their previous updates, but nothing that he could think of that would cause a systemwide decrease in fish passage or conversions.

Van Dyke said that was helpful, and to be fair to Peery, he is Walla Walla District rep and is most alert on those things. So, it would probably take someone else to get to the detail that he had brought up.

Idaho

Ebel said that he would like to get to his perspective and then maybe TMT could move towards conclusion with that.

He said one observation that he would like to add is that this is that time of year, and a couple of the FMs were discussing it Monday or last week, saying that is we were going to see the black dots pop up it is probably going to be this week because that is when we passed the peak of the run, we are left with slower fish. He said this is what we have seen the last few years. It is kind of interesting that, even though the flow has dropped almost 40% over this time frame that we are talking about, and flows are low this year, lo and behold, it is happening again, which has put this as another data point or another year of observation on, as we continue to learn what is going on with the passage patterns and when it is and when it is not associated with spill, or whether changing operations with respect to percent spill may be a solution to a problem. Ebel said that actually did not

think that we had a problem right now. He said that he recommended that we continue to watch this and he had to do some digging into identifying what he considers those fish are and where they are going to. In the meantime, he recommended that we stay the course or, that the Corps stay the course with operations and that we keep monitoring this.

Morrill said that he agreed with Ebel's recommendation.

- Restating Questions

Stranz asked Hesse to restate his questions to see if there was anyone that could respond in real time.

Hesse said that the questions related to implementing a flexible operation, if we are not going to consider that as a potential knob to turn at this point, maybe just hold those questions until our next discussion. Foreshadowing those topics,

- How would shifting generation or absorbing that extra generation would impact Lower Columbia flows, and could it be done without within day flow fluctuations?
- These would be key questions if we ever get to the point of considering that as a tool.

- Corps Response

- Stranz asked if the Corps was comfortable with the input received for their partners of continuing to hold tight with the operations, continue to monitor, and if needed, in the future explore Hesse's questions regarding the flex spill.
- Baus said that the Corps is continuing to implement the LMN spill operation identified in the FOP.

Hesse asked for some feedback from NOAA about what they heard and what they are seeing.

NOAA

Swieca said that NOAA has been listening to the perspectives that all the folks have presented. She said they also continue to monitor this issue, and they are looking at all the available data and are continuing to evaluate as we move through time.

Stranz said that they did not have any specific recommendations other than continuing to monitor and keep an eye on data at this point.

Swieca said correct.

Hesse asked if there was data unique, that he did not touch on that NOAA would like TMT to be thinking about as well.

Swieca said that from her perspective, Hesse provided a good suite of data and considerations. She asked Trevor Conder if he had anything that he would like to add that NOAA would continue to look into and evaluate.

Conder said that just hearing the points that Scheer had made, he would like to look into that more. He said that if we are relying heavily on that because he was not seeing a lot of black dots throughout the system or significantly slow passage indicating those are indeed slower fish. He said that he was wondering how much slower they are. He said that he was not seeing a lot of low fish past LWG. LGS to LWG looks relatively fast, so he was not seeing an indication that those are really slow fish. He said that he would like to look at that in a little more detail if that is something that we are relying heavily on because you would think that if it were really slow we would see other indications that they were slow. He said that he did not know how significant the slowness is that we are citing there. That would be the one thing that he heard today that he had not looked at that closely.

Swieca also clarified that her response was specific to the data raised by Hesse.

Van Dyke said talking about data, data is used to observe things, that characterization of a metric for instance, is a label, it is not data. He said that he thought that he was tracking the nuances folks were trying to bring into the conversation at this point. He said that he felt that it was important to draw out.

Stranz said that she thought she heard while Scheer was speaking that he had a graph that he could share around. She asked if that was something that he could share out, it sounds like it might be helpful for folks to see what Scheer was seeing. She asked if TMT was ready to close out this special session or if there was more that they needed to discuss today.

Lorz said that he thought that TMT was at a good stopping point. He said that he felt obligated, since he was the one who said that TMT should have a special meeting to just make some comment. He said that the main reason we had this was that we are about to enter a long weekend, and we wanted to have a touchstone and check in and see if there are any concerns. He said that he thought that the FMs all feel that it is not an ideal situation and they would prefer to not see black dots but from his standpoint, he felt comfortable letting this operation run at least through the weekend and then FMs would review on Tuesday as FPAC always does, and if they see something that needs to be done quickly FMs can easily contact their partners in the Action Agencies.

Stranz thanked Scheer and Peery for jumping in and sharing their expertise, and all of the TMT members who did as well.

2. Agenda – *Wednesday, May 27, 2026*

Meeting Location: Microsoft Teams

- a) FPAC Treaty Flow Augmentation Request
- b) Non-Court Ordered Operations Review

Today’s Attendees:

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

Other Attendees (non-TMT members):

COE – Megan Biljan, Kenneth Sears, Sean Tackley
Chris Peery, Leah Hamilton

DS Consulting – Emily Stranz (Facilitator),
Colby Mills

CorSource – Andrea Ausmus (BPA note taker,
Contractor), *recording only*

Clearing Up – K.C. Mehaffey

NPCC – Kate Self

FPC – Erin Cooper, Noah Campbell, Gabe
Scheer

Energy EPS – Joshua Rasmussen