

**COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM**

April 22, 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](mailto:colby@dsconsult.co).*

**Review Meeting Summaries & Minutes**

Official meeting minutes and facilitator's summaries from the April 8 and 15 meetings will be reviewed at the next TMT meeting.

**FPAC Request for Mid-Columbia Flow Objective**

Tom Lorz, CRITFC-Umatilla/FPAC Chair, presented a [written operational request](#) asking Action Agencies (AAs) to increase releases from Chief Joseph (CHJ) as soon as possible on/or after April 23, to achieve an average of 155 kcfs or higher/day until April 30. The request was sought to address concerns noted last week from some TMT Members and was intended to align with CHJ as the compliance point, per guidance from the AAs during last week's discussion on SOR 2026-01.

Dennis Moore, Confederated Tribes of the Colville Reservation, and Brent Nichols, Spokane Tribe of Indians, noted they had been consulted and had no major concerns with the revised request through April 30. Brent noted the 0.8 feet/day drawdown constraint at GCL could create operational limits. Dennis added that the request addressed many of the resident fish concerns raised with last week's SOR.

*TMT Discussion*

AAs asked for more biological context and data to support the request, including whether Salmon Managers had continued to observe early smolt passage at McNary (MCN) and Lower Granite (LWG) or whether there was any "flattening" in the run timing. Salmon Managers responded that PIT-tag data and daily passage plots show fish moving earlier than historical timing, with fish still in the system and likely taking 10–20 days to clear downstream reservoirs. They stated that the justification for the SOR from the previous week was applicable to this request. From a fish perspective, additional water now would improve travel time and survival, especially if fish reach below Bonneville (BON) before May 15.

AAs asked whether the Salmon Managers' request was justified when Priest Rapids (PRD) is expected to continue to meet or exceed the 135 kcfs seasonal flow objective. Chris Runyan, Reclamation, emphasized that Reclamation's interpretation of the water management plan (WMP) and Biological Assessment (BA) does not allow additional GCL storage releases when flow objectives are already being met, and as such, Reclamation could not implement the request. He noted PRD is currently averaging above the flow objective and is projected to remain above through June 10. Additionally, this operation is outside of how and when GCL water is used for flow augmentation. Chris encouraged Salmon Managers to consider flow requests in June, noting the need to ensure there is sufficient flow for later migrating stocks. He noted that for these types of requests, they need to be within the framework of the BA, presented as an SOR, with data and analysis of the fish tradeoffs. Additionally, it is helpful to socialize the concept with the AAs prior to TMT meetings.

Charles Morrill, WA, and others stressed that the relevant biological objective is not simply the seasonal average at PRD, but also supporting improvements and benefits to listed fish, travel time, and survival. Salmon Managers requested clarity on where the flow objective was being measured and on what time

scale; noting that flow objectives are averaged over a specific time period, and currently forecasts are being used to assume that the seasonal target is going to be met. There was a request for everyone to be specific to the location of compliance points, time period, and constraints that are assumed when talking about flow objectives.

Jonathan Ebel, ID, asked for information from the AAs regarding any potential constraints to the AA’s mission as a result of the potential operation. Chris responded that it is shifting water from one period to another, which could have tradeoffs for multiple purposes.

TMT Members were polled on the request, with some providing rationale for their polling response:

TMT Member	Polling Response	Rationale (Optional)
National Oceanic and Atmospheric Administration	Abstain	
Oregon	Support	
Washington	Support	WA appreciated the discussion, reiterating concern for the time sensitive issue that may not get resolved. They may choose to elevate this to RIOG. They are very concerned how this, and future flow requests will be addressed, noting the need to support fish when they are moving through the system.
Confederated Tribes of the Colville Reservation	No Objection	
Confederated Tribes of the Umatilla Indian Reservation	Support	
Confederated Bands and Tribes of the Yakama Nation	Support	
US Bureau of Reclamation	Object	
US Army Corps of Engineers	Abstain	The Corps noted that they have not been able to coordinate with policy folks or partners on this issue.
US Fish & Wildlife Service	Abstain	
Idaho	Support	ID emphasized their concern that from their perspective, non-federal agencies are being asked for detailed fish analyses and tradeoffs, while tradeoffs and impacts to power generation, flood control, project refill, recreation, etc., are not being considered or shared as part of the conversation.
Montana	No Objection	
Bonneville Power Administration	Object	

*The Kootenai Tribe of Idaho, The Spokane Tribe of Indians, The Nez Perce Tribe, the Confederated Tribes of Warm Springs, and the Confederated Salish and Kootenai Tribes were not present to register a polling response.*

#### *Action Agency Implementation*

Chris reported that Reclamation would not implement the request as written. He will seek additional clarification on the exact locations referenced in the WMP and indicated that Reclamation's current interpretation of guidance documents relates to flow objectives at PRD rather than broader system-wide fish passage.

Fish Managers expressed frustration that from their perspective, the biological case for supporting fish in the moment via adaptive management is not being weighed strongly enough against the AAs interpretation that current flows already satisfy objectives. Charles noted that WA will reach out to their RIOG representative to elevate the request, Tom added that CRITFC/CTUIR will also consider elevating.

#### **FPAC Request for Treaty Flow Augmentation**

Tom reported on a forthcoming FPAC request for Treaty flow augmentation; highlighting that BPA usually needs 3-5 days to process requests, and the advance notification is for situational awareness.

Tony Norris, BPA, and Chris clarified that while Treaty flow augmentation and GCL operations are separate, any Treaty release into GCL passes GCL and contributes to flows.

Tom clarified the Fish Managers' caution about starting Treaty augmentation now; once initiated it may not be easy to pause unless Treaty flows increase, or conditions change. They are concerned about using the Treaty augmentation flows too early and leaving less flexibility for June, when flows could be more challenging.

Chris reiterated that any future Treaty flow discussion should be coordinated carefully and that, if flows drop later in the season and the basin is no longer meeting objectives, a different request could be considered. The issue will be added to the next meeting agenda.

#### **Non-Court Ordered Operations Review**

*Storage Reservoirs* – Chris reported on Bureau of Reclamation projects:

- **Hungry Horse (HGH):** midnight elevation was 3,544.7 feet, with inflows of 6.7 kcfs and outflows of 8.2 kcfs. Inflows are projected to rise with forecasted precipitation into the basin. The project will continue to target April 30 before transitioning into VARQ flows.
- **GCL:** midnight elevation was 1,253.1 feet, with inflows of 124.2 kcfs and outflows of 110.8 kcfs (3-day average of 127.9 kcfs). PRD yesterday was 151 kcfs, averaging 140 kcfs last week. GCL is passing inflow; any additional storage water released will be passed through the project.

Kasi Underhill, Corps, reported on Corps of Engineers projects:

- **Libby (LIB):** midnight elevation was 2,369.5 feet, with average 1-day inflows of 13.6 kcfs and current outflows of 19.5 kcfs. LIB is holding full powerhouse through at least the end of April.
- **Albeni Falls (ALF):** midnight elevation at the Hope gauge was 2,055 feet, with inflows of 43.2 kcfs and outflows of 41.4 kcfs. ALF is holding outflows to accommodate higher inflows.
- **Dworshak (DWR):** midnight elevation was 1,572 feet, with inflows of 10.6 kcfs and outflows of 13 kcfs. Planned releases will continue through the end of the month before transitioning to refill. A second snow flight is planned for mid-May.

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*Fish* – Kelsey reported first on juvenile indices (rather than individual numbers) for mainstem projects. Yearling Chinook continue to move through the Columbia River system, increasing twofold at Lower Granite (LWG) since late last week, averaging just below 40,000/day this week. At MCN, passage has increased over the past week from less than 10,000 to about 17,000. Sub-yearling Chinook are also migrating downstream through LWG and MCN, with a large bump at BON. Steelhead have averaged an index of about 18,000/day at LWG, 4,000 at MCN, and less than 1,000 at BON over the last week.

For adults, spring Chinook and Steelhead are entering the system at BON at an average of 503 individuals and 14 individuals per day, respectively, over the past week. These adults are making their way past MCN and into the Snake River projects.

Dave Swank, USFWS, reported that juvenile lamprey numbers at BON have been unusually low for about 10 days, and are still being investigated. He clarified that the large BON sub-yearling Chinook peaks are due to two separate Spring Creek Hatchery releases.

*Power System* – Tony had nothing to report.

### **Set Agenda for Next TMT Meeting**

The group set the following agenda items for April 29, 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. Follow-up on treaty water augmentation, flow projections, latest ESP traces, and potential benefits of using treaty water when available
2. Review of PIT-tag data, daily and cumulative passage index plots
3. FPC/Erin Cooper to provide clarification of confidence intervals on passage plots, including how they are calculated, years included, and how last year's data compares to this year

### **Questions or Comments from Non-TMT Members**

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

**The next scheduled TMT meeting will be on April 29 at 9AM PST.**

**Columbia River Regional Forum  
Technical Management Team  
OFFICIAL MINUTES  
Wednesday, April 22, 2026**

Today's 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. Review Summary and Minutes – Emily Stranz, DS Consulting**

- a) April 8 Summary and Minutes, April 15 Summary (minutes pending)
- Chris Runyan, Reclamation, requested more time to review.
  - April 8, 15, 22 Minutes and Summaries to be reviewed next week.

**2. FPAC Request for Mid-Columbia Flow Objective – Tom Lorz, CRITFC-Umatilla/FPAC Chair; Chris Runyan, BOR**

a) FPAC Request

“Starting as soon as possible on/or after April 23<sup>rd</sup>, increase flows from Chief Joseph Dam (CHJ) in the range of 12–18 kcfs (if Grand Coulee (GCL) is releasing in the 140’s kcfs range) to achieve 155 kcfs or higher per day average until April 30<sup>th</sup>. It is estimated that this should be no more than 4 – 5 feet draft at GCL depending on inflows.”

- FPAC sent a request to the Action Agencies (AA) to start releases at GCL as measured at CHJ.
- FPAC provided this request in response to the discussions at TMT last week and some of the concerns about last week’s SOR.

Stranz asked if FPAC was able to connect with all the TMT members who had shared concerns (Spokane and Colville Tribes).

Brent Nichols, Spokane, said that they were able to connect and they did not have any major concerns on this proposed request through April 30. He said that he did remind a couple of people that the daily drawdown rate at GCL changed a couple of years ago to 0.8 feet/day and that might create some constraints, but he did not think that it would.

Dennis Moore, Colville, said that they had discussed it and this does address many of the resident fish concerns that they had for the previous SOR, so they are okay from that perspective.

b) FPAC Request Discussion

Runyan said he received this request at 4:30 pm yesterday. He said that it said, “increasing flows from CHJ dam to achieve 155 kcfs”, but what they are really saying is increase outflows from GCL to get flows at CHJ to 155 kcfs. He asked if that was correct.

Lorz said that the AAs told the Fish Managers (FM) that CHJ was the better compliance that point and that it made more sense to them, so the FMs were following that recommendation.

Runyan said that he knew last week the flow request was based on fish in the system, he asked if TMT could look at some data about how that was looking at MCN and LWG to see if there was early passage or if things were flattening out at certain locations. He asked for context about what this request is because from the BOR’s perspective, the request is out of the ordinary time of when GCL has helped meet flow objectives. He asked for more information about the biological justification and data that the FMs were looking at.

Jonathn Ebel, ID, told Runyan that the fish were there last week and it takes a while for them to migrate through the system of reservoirs, so they are still there.

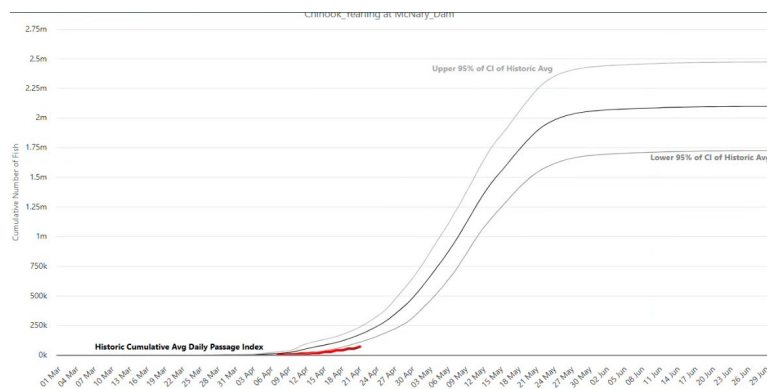
Stranz asked if someone could bring up some of the graphs to help illustrate that.

Runyan asked what graph would show what Ebel was talking about.

Ebel said that it was everything that TMT had looked at last week.

Runyan suggested looking at MCN Cumulative Index Passage Plot for Yearling Chinook.

*Fish Passage Center > Smolts > Smolt Data > Passage Index > Cumulative Passage index Graph “MCN” & “Yearling Chinook”*



Ebel said that TMT had talked about this last week and he was not going to engage in this but if TMT wanted to go back through the fish metrics he would. He said that the last time that there was a request at CHJ was before the last week of April 2020 (or 2021). He said that the passage index is a metric that uses the collections at the dams in the sample tanks and adjusts those for spill percentages, basically the flow through the powerhouse, to come up with a number. He said that this has been around for a very long time and is highly influenced by spill percentages. Essentially you are multiplying small numbers by very small fractions and so you can get a lot of variation. He said that we have been looking at this but it is not telling the whole story because the historic cumulative average daily passage index includes a lot of years where spill percentages were much different from today, as were passage efficiencies and collection efficiencies, all of which have been acting funny at the higher spill percentages. If we look at cumulative PIT tag

compared to the last five years for wild fish, we see that we see the opposite of what the cumulative figure shows. Ebel asked if another FM could forward the five-year average data.

Runyan said that what he had heard is that we are getting earlier passage and that was why the FMs were making the request. He said that this data was not showing that, and this data showed that passage is later than average.

Ebel said that it was not necessarily showing that it was later than average, but the overall passage index could never achieve two million fish this year. So it could be that at the end of the year, when we look at this, it still could have reached the inflection point of ~95% passage, where the cumulative passage could still be on May 12 or 15, but the Total Cumulative Passage Index could be a significantly lower value.

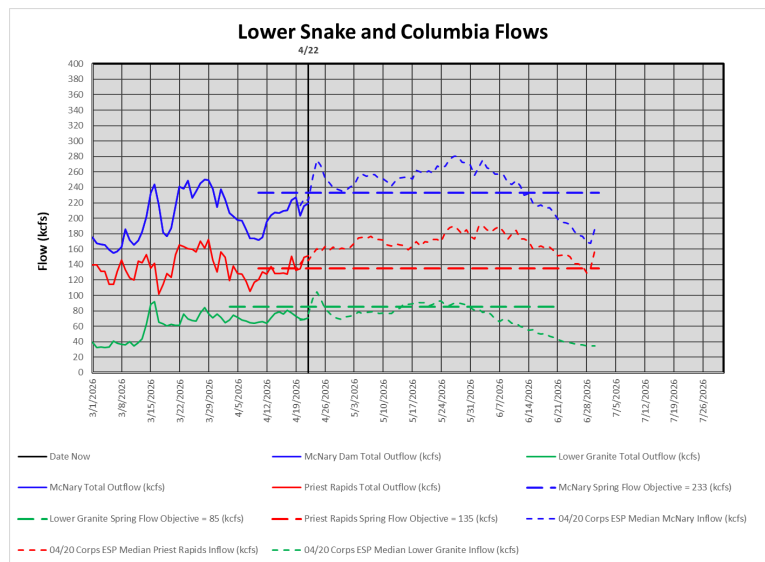
Runyan said that he was looking at the shape and it looked flat right now and he was assuming that it would get steeper at some point regardless of the total number. He asked if that was correct.

Ebel said maybe because we do not know what the end value is going to be.

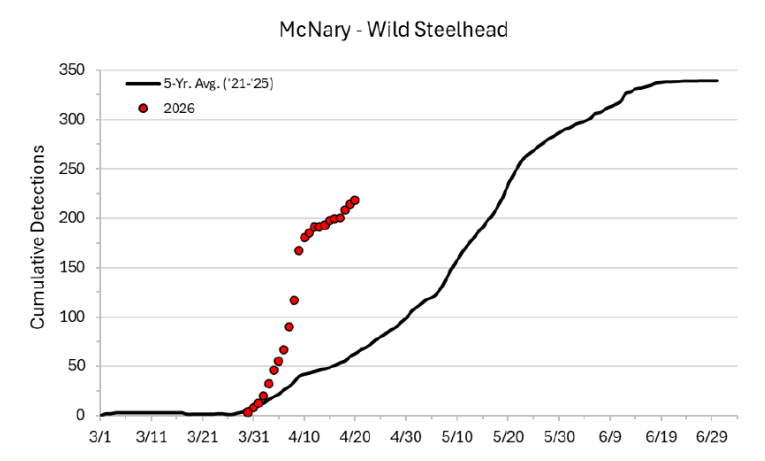
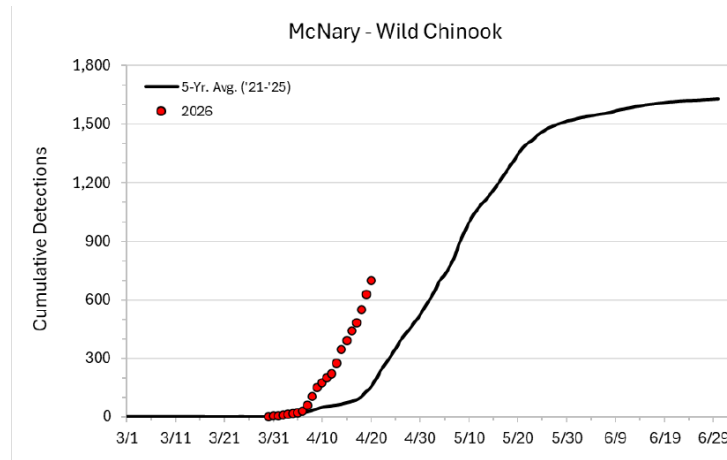
Runyan asked to look at the data to support the justification of the flow request. He said that the Cumulative Index Passage was what he was looking at.

Stranz thanked McHugh for sharing the graphs so that TMT could look at them. She also shared that Cooper had shared a link for more information.

| Tony Norris, BPA (Unverified) 9:20 AM



| *Pete McHugh (Unverified) 9:21 AM*



| *Erin Cooper (FPC) (Unverified) 9:22 AM*

| *For more details on the Passage Index, the FPC put out a memo on this recently. <https://www.fpc.org/documents/memos/28-26.pdf>*

Lorz said that he had sent Wright and Runyan graphs so they should have them. He said that FMs get the graphs daily from the FPC. They are the PIT-tagged numbers of fish compared to the previous year’s number of PIT-tagged fish. He said that this makes more sense to the FMs because you are not masked by the concerns from the graphs that are based on old spill efficiencies, when we were spilling a lot less. Now that we are spilling 125% TDG at MCN the graphs are not going to characterize the run at large as well as they should be. He said that was why the FMs are using the other PIT-tag graphs to get at this issue. He said that the FMs showed last week that those fish were coming a little bit earlier and they have not seen anything in the graph that showed that had really slowed down much, there has been some up and downs. Once the fish are moving, it takes ten to twenty days for them to get out of the System. They are in the System and they are moving, putting water on them to move them through the System faster is a good idea. If we can get the fish below Bonneville (BON) before May 15 it shows a marked increase in SARs, that is why there is a sense of urgency on the FMs side. They want to get as

large a majority of fish to below BON before May 15 as possible and there are large indications that the population as a whole is moving sooner than they would historically, likely in part due to the Winter operations, it was a warmer winter and there was a much higher growth rate. The fish are bigger and are ready to move out much sooner than they would have been under a normal cold year.

Pete McHugh, Umatilla/CRITFC, said that the graphs he shared were the latest version of what was included in last week’s SOR. He said that they were the figures that Lorz and Ebel were referring. They capture what the representative marking of wild Chinook timing is versus the run at large, which includes extensive hatchery fish as well. We should be familiar in terms of what the SOR had, and he believed that this was what Lorz had forwarded to Runyan and Wright. McHugh was that this was cumulative production upstream. He said that there was a table that they had\_

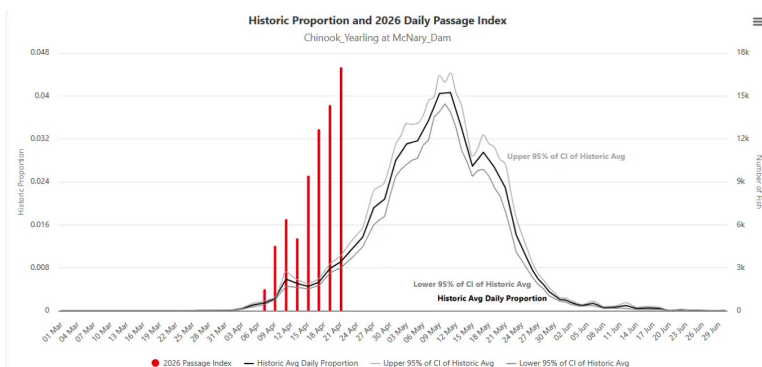
- | Chris Runyan (BOR) (Unverified)9:26 AM
- | Which basin did these pit tag fish come from? Snake or other?

McHugh said that it includes Columbia and Snake. It is cumulative above MCN. The MCN Wild Steelhead graph was the same aggregates above MCN and the same rationale, the wild production that was tagged.

- | Chris Runyan (BOR) (Unverified)9:27 AM
- | Pete, can you show the individual years as well as the 5-yr avg line?
- | Pete McHugh (Unverified)9:30 AM
- | I don't have that display at my immediate disposal, but we could plot it that way.
- | Chris Runyan (BOR) (Unverified)9:30 AM
- | For next time that would be helpful. thanks Pete.

Charles Morrill, WA, said if you go back to the FPC’s Cumulative Distribution Curve and instead look at the Daily you would see what the FMs are talking about in terms of timing. It does not show it on the cumulative, it shows it on the daily.

Fish Passage Center > Smolts > Smolt Data > Passage Index > Daily Passage index Graph “MCN” & “Yearling Chinook”



Morrill said that this was what the FMs have been looking at so far, in terms of daily collection run at MCN. The timing graphs reflect what it has been historically, and you can do the same thing at Lower Granite (LWG). They drive home the point that we have yearling chinook moving through the System earlier. The PIT-tag data supports that for both MCN and LWG. So, we have those fish in the System moving, any additional water that we can push through is going to benefit fish both Snake River stocks and middle Columbia River stocks once they reach MCN. He said that it is a better way to look at it for right now and fits in with the figures that FMs have shown for MCN PIT-tags for both Steelhead and Chinook. This is the reason that FMs are asking for additional water.

Stranz said okay the data showed the fish moving earlier and FMs are requesting a pulse of water to support moving those fish out of the System. She asked Runyan and the AAs representatives what other questions or clarifications they had.

Runyan said that was all of the questions that he had, but he would let others ask questions before he responds with some thoughts from Reclamation.

Ebel asked what the impacts were to the missions of the AAs associated with granting these flow requests.

Runyan said that was a really big question. One of which is shifting water into one period for certain fish can take water out of another period and in a year where we probably will not be able to meet the flow objective for the entire period that we know fish will be passing through. He said that they are very cognizant of that and it was one thing that the AAs are really thinking about.

Stranz asked said that was also something that the FMs partners also were thinking about.

Ebel agreed and asked if there were other aspects in terms of the missions. He said within each of the TMT entities we have agencies within the entities that have missions that are associated with fish and they recognize that water taken, when you are moving water in time, has tradeoffs from a fish passage perspective. He asked if there were implications from irrigation delivery, refill, power production, flood control aspect of this.

Runyan said that he had communicated with Morrill last Friday about this type of flow request. He thanked Morrill for picking up the phone and giving him a call. He said essentially GCL is available to help shape flows as described in the 2020 BA and as described in the Water Management Plan (WMP). He said that BOR interprets it during times where the flow objective is not already being met. Runyan said when he talked to Morrill on Friday, and it was looking like the flow objective would be naturally met from the current operation Runyan said that this was not going to be accepted. He said that the first time he heard of the request, because he was travelling, was 4:30 pm yesterday. He said that no one had picked up the phone to call BOR to ask about whether the request was going to be challenging or not. He said that he was kind of responding in real-time and he asked for TMT to understand. He said that the second thing was the flow target at Priest Rapids is 135 kcfs. Last week we averaged 143.9 kcfs and the projections are showing weekly averages ranging from 161 – 182 kcfs through June 10. He said that flows were above the objective last week, and they are projected to stay above the objective through June 10. He said that he wanted to make that clear. GCL is essentially

passing inflow right now so if there was additional water that comes down from other sources, if it is a concern of accounting, the accounting is real simple: GCL is passing inflow so that water will pass as well. He said based on BOR's interpretation of their governing documents; his level of water management does not have the discretion to begin releasing additional storage water from GCL for years where the objective is already being met by the existing operation. He said that there are other pathways to get to this request but it is beyond him. He said that he was going to say what he told Morrill, the BOR cannot accept this flow request right now, they would be available for further discussions and when we have issues with a drop in flow or hypothetically if the runoff comes off quick, like it has this year in all the other lower basins, and we are struggling in June and we have fish in the System trying to pass, then BOR is open to additional conversations. He said that the BOR was trying to take a balanced approach right now, we are hitting the flow objectives, and the BOR will not implement this flow request.

Morrill said that what Runyan had just said did not fly with what they had shared last week. He said that the 135 kcfs is a target and Runyan had shared with him that 170 kcfs was a target, not the Biological Objective. So, when Morrill looked at the ESP traces on Monday and looked at what we had, the elevations, he saw an opportunity for us to request water out of GCL to support fish migration, improve travel time, and improve fish survival. He said that he was upset with Runyan's characterization that they had talked about 135 kcfs. He said that they had talked about 170 kcfs so correct him where he was wrong on this one.

Runyan said that if that was the number that Morrill had heard, he did not say that, if for some reason he had said that number instead of 135 kcfs he would apologize. He said that he highly doubted that because he had no idea why we would start targeting 170 kcfs since the flow objective for this year was 135 kcfs. He said just know that it was nothing personal. He said that he would not be going back on what he said but that was a mishearing of numbers and that was what caught him off guard because he and Morrill had talked on Friday. He apologized to Morrill, saying that the 170 kcfs number was never in his mind.

Morrill said that he had heard it clearly and that was why he took it to this point that he did. We have additional water up there and it would be clearly a benefit. He said that he was uncomfortable with Runyan's characterization of since we are meeting the 135 kcfs, we do not need to do more to benefit fish. He said that we are talking about the survival of a listed fish, we are talking about a change in timing, we are talking about not impacting the Tribal concern and being able to improve fish travel time, fish survival and BOR, to his understanding, was saying no they do not want to do that.

Stranz said that she had heard Runyan say that he was responding in real-time and that he was travelling. She said that she knew that often with new operations the AAs need to have time for internal coordination, and for with operation requests that are outside of their operating documents they often need to go bump up to Policy. She asked a process question of if this was the type of request that with TMT consensus he would take the request up to Policy. She asked if Runyan already had an opportunity to have the conversations internally and knew that this was a firm no.

Runyan said at this point that was where they were at, they are fully open to FMs doing more documentation and trade-offs between one fish and the next fish based on periods. He said he could not make this call with his discretion based on his policy discussions with others. He said that FMs would have to use a different avenue to elevate because this is outside what we have done before and what is described in the documents. It is not a time thing. He said that he was caught off guard a little, traveling and getting it yesterday at 4:30 pm but he did not need more time to make this call today. He said that he was open to other suggestions and it was well done thinking outside of the box but FMs would have to go about it a different way to get this kind of change.

Lorz added a point of clarification. He said that this was the whole reason we have the pre-TMT calls. He said that TMT had one yesterday and that is why he had gone through this exact request and then the AAs had asked for this request to be written. He said that it was unfortunate that BOR was not on there. It was his understanding that the AAs were going to call Runyan, unfortunately it sounded like he could not be reached. Lorz said that he felt like they had followed the rules of engagement on this one. He said that the only thing that they did not do was write up a full SOR. If that was the path that the AAs wanted to take going forward the FMs can do that. He said that TMT had a very long and struggling conversation with the SOR last week and he thought that the SOR process may have gotten people a little agitated. He said that the FMs were trying to do more of the legwork ahead of time for the operation request. He said it was the FMs view that how flow timing is regulated and is wholly in their purview to be able to make requests for, so they had thought that they were in the right on that and that was their read of things. He said that if there was a difference in agreement on that then TMT would have to have that policy discussion. He said that he would like to correct that the FMs had not followed the rules of engagement as best as they could. If Runyan had some other suggestions on how the FMs are supposed to make requests, he was saying that the FMs could not do the SOR and now they are saying that this is not a very good way. He said if the AAs had suggestions for how the FMs are supposed to make requests please let them know because that is the reason we have TMT.

Runyan said that he would like to respond. He said please pick up the phone. Ebel, pick up the phone. He said that they both have his phone number and that would be his only suggestion.

Stranz clarified that it was so that Runyan would have better heads up but it sounded like from what he said that he had already had internal conversations on this and know that it is a no go from BOR Policy.

Runyan said that if Lorz or Ebel had called him on Tuesday they could have talked about the request.

Ebel said that he could not hear a word that Runyan was saying but Runyan was invoking his name. He said that he does leave voicemails and he was not the one making this request, this request was coming from FPAC. He said that he was the one that presented the SOR last week. He said that they had also discussed that over the phone. He said that he would encourage the AAs to reread the language in the proposed action regarding seasonal flow objectives and then determine whether the season flow objective looks like

it going to be met. He said that it is not an upper limit, it is a seasonal average from the beginning of April to the end of June at MCN.

Swieca asked for a point of clarification so she could understand the context of the position. She said that when she reads the language in the WMP she can clearly see the portion that he referenced about operating GCL to meet flow objectives. She said what she was missing was the direct connection to that flow objective being only the flow objective at Priest Rapids Dam (PRD). She said that she was curious if it was BOR's interpretation of the language in the WMP was explicit in meeting the PRD flow objective or if it included the objectives at MCN.

Runyan said in the WMP it speaks to flow objectives and because MCN has the Snake River coming in GCL cannot fully control the flow, it can help, but PRD is a more connected location. He said that he could go back and get more clarification on that exactly. He said that he would get back to Swieca about exactly the locations. PRD makes sense but obviously we all know if the Snake is super low you are not going to be able to do much at MCN.

Swieca thanked Runyan. She said that she thought it would be important for TMT to have a full and complete understanding of the interpretation between the connection of a request in the springtime like this and where the measurement point is for meeting or not meeting the flow objectives. She said that there is another layer of the flow objective conversation and that is it is a seasonal average but as FMs do not have all of the complete flow information, up to date and at the timescales that the AAs have, but when she looks at it the STP that is available to the FMs it looks like it is likely to meet the seasonal flow objectives on the seasonal average at PRD but that is not the case based on the information that we have at MCN. She said that she was curious to see what the measurement point is from the AAs perspective and the interpretation of the WMP. She said that she thought that was going to be an important piece of this conversation moving forward.

Runyan asked said that Tony Norris, BPA, had more historical experience and nuance. He asked Norris how it happened historically, if we were targeting one or the other more often.

Norris said that we have typically only implemented or received flow requests when we were well below the flow objective at PRD, typically when in a low flow year and discharging just to meet the Hanford Reach minimum. Or we have finished or completed the April 10 to April 30 FRM draft and then there is a drop in flow before the freshet begins and that can happen even on a big year where we would incrementally draft GCL to avoid a significant drop at MCN. He said that this was the first time that AA have been asked while we are exceeding the seasonal average and forecasted to exceed the seasonal average at PRD to incrementally draft GCL further to affect just a few species that have been identified as migrating earlier. Moving water early is going to take away water from fish later and that has typically been part of the conversation, how much water would you move out of the future periods for the benefit of fish in the immediate period. He said that this is typically a conversation that usually occurs when we have had very low flows and not when we are having average to above average flows out of GCL.

Swieca said that clarifies it for her, the interpretation and the historical uses are based on low flows. When Norris references low flows, he is referencing low flows in the Upper Columbia at PRD. That was the information that she was looking for.

Ebel said that he wanted to give a little context. She said that PRD's April – September WSF at TDA is 90 maf. Ebel said that he had done this quickly in RFC.

WSF (at present):

Ice Harbor:	~18.2 maf	(or 20% of WSF at TDA)
Priest Rapids:	~70 maf	(or 78% of WSF at TDA)
Snake abv Brownlee:	~5.7 maf	(or 6% of WSF at TDA)

Ebel said that the distribution of water in this basin right now is so skewed that he is struggling with the conversation because essentially what FMs are hearing is that there is no ability to augment flow from where all the water is. He said that he wanted to point out that we have a very skewed distribution of water in this basin right now.

Stranz said that she wanted to go back to process because that is what TMT can fall back on. Most if not all the FMs are asking for a request and last week it came in as an SOR, and this week it came in as a sentence on a piece of paper. She said that TMT had heard from Runyan that it would have been helpful from his perspective to have a phone call between last Friday and yesterday. She said that she wanted to clarify when FMs have consensus or near consensus requests what would be the best way to get it to him. She said that she had also heard that it would be helpful to see some or hear some assessment of tradeoffs because that is one of the things from the early season to the late season fish with the water management on those different runs. She asked what, either now or in the future, would be helpful for the AAs to get from the FMs in order to be able to entertain these types of requests that are new and in season.

Runyan said within the construct of our current BA and other documents, flow requests, when we are already exceeding and projected to exceed flow objectives, is, for now, a nonstarter. He said hypothetically say come June this runoff happens quick and flows are lower, and Ebel had made a good point, the Snake is dry, so we can assume that we are going to have some challenging conditions potentially in June for fish traveling up that reach as well. If we get to where we are not meeting flow objectives during this time, he thought it would be a good time to submit a SOR including looking at the passage data, with a good analysis of the tradeoffs between different fish species. And making sure we get good alignment with the FMs – everyone has different species that they are specializing in. He said then to socialize it, have some calls and let us see what options there could be and what could not. He said that the flow requests that have come in – one was can we draft GCL 1 maf of additional storage which we have never done before, that was a nonstarter. And this one, where we can add flows when we are meeting flow objectives and we know we might have lower flows later in June. He said those were nonstarters, but once we get down to those and we are struggling to meet the flow objectives that type of information would be very helpful.

Lorz said that it sounded like Runyan wanted another step in the process. Part of this was why we had the pre-TMT meetings. He said that it was unfortunate that Stranz and

Runyan could not be there. He said that it sounds like it is critical that if you cannot be there to make sure someone is there to be able to get this information to the FMs, because Runyan was not there. Lorz said that was why the AAs asked for the request to be a written request and Lorz had submitted that. He said that he was sorry he could not get it to Runyan sooner, but he has a bunch of other people he needed to make sure that the request met their needs. He said that was why we had the pre-TMT call. He said that people tried to call Runyan, but he was traveling so he was not there. Lorz said that he thought that someone was on from the BOR, but we need to make sure that who is there is going to coordinate and take messages to you and that kind of stuff because otherwise that is a whole other step for us in the process already. He said that we need to figure out our transition or what our master plan is going to be for this moving forward if this is what the AAs are encompassing otherwise, he was trying to figure out why we have a pre-TMT or if we need a pre- pre-TMT call.

Runyan said that maybe if you start to work on it on Monday maybe give him a heads up to whatever agency this would fall to. He said that it was just a suggestion and you do not have to do it.

Stranz said that it sounded like that was what happened. It sounds like coordination happened other than gap of Runyan not being at pre-TMT. She said the deciding factor on this one is that from BOR's perspective you are not going to add water when you are already meeting your flow objectives. She said that it sounded to her that it was not so much that the process or coordination did not work, this time it is more that the request is not something that BOR is interested in entertaining because you are already meeting your flow objectives. She asked if that was accurate.

Runyan said that was accurate and if it is a novel request, as in something that we have not done before, a little bit more pre-coordination is appreciative, but for this specific case the coordination and the quick timeline was just more of an inconvenience. He said that he is traveling but he talked to lots of people last night and at 7:00 in the morning. He said that it was all good there, but going forward if it is something out of the box, any heads up is much appreciative.

Swieca said that she wanted to put in the request that when we make statements like meeting our flow objectives, we specify where and one what time scale so that we have a complete understanding of the constraints.

Erick Van Dyke, OR, said that what Swieca just said was very important and was uttered many times, only the way it was uttered by the different individuals who were talking about it were a little different. He said that he was not sure that everybody on the call really understood that the way that it was being presented when someone says they are meeting their flow objective at the beginning of the time period or scale it is hard to consume because the period has not been completed. To complete the averaging component, we need all the data points, right now most of them are forecasted and we all know how that conversation goes in this group. He said what was really being said is their status right now is that they feel like they are meeting their flow objective. He said that FMs are asking for an augmentation for passage but the information that is being demonstrated and shown there in these graphs is not really being recognized as a need at the moment, not a need at the end of the period. Which is where folks have put their

voice on where flow will be needed after June. He said that it is all the little components being brought into this conversation that makes it really difficult to remain cognizant. It is because of those who are describing what they are doing, not necessarily focusing in on the objective of a fish passage improvement but instead water management action. He said that he felt like we have tried our best to look at all these details and combine them in an adaptive approach that really focused on trying to get to more of the objectives than just the flow objective. That needs to be understood. He said that he understood that some are frustrated because they are receiving information with not much time to think about it. Unfortunately, that is what this group was really built to do, to adapt to observed patterns and try to provide some suggestions for making tweaks that could help. If TMT cannot do that then it is not really meeting objectives, it is more meeting a primary objective. He said that he thought that Swieca's input was important he just did not think that everybody understood the detail of what she was really saying and he felt compelled to say more.

Morrill asked what the process is going forward from here. He asked if TMT would vote on this. He said that it was not a formal SOR, but it was an operational request.

Stranz said that TMT could do polling. If the TMT representatives would like to register polling, she could do round of polling on this. It had been done in the past.

Runyan asked if TMT had polled on non-SOR requests. He asked if the guidance said that.

Stranz said that TMT can do what we need to do, our guidelines do not say anything about not polling or prohibit polling on any request. She said if it was helpful for Runyan or others to register where all of the TMT agencies are on this, she would be happy to do that.

Ebel said that he thought that BOR had made it clear that they are not implementing it and any other agency can elevate that decision if they choose regardless if it was poll bound or not. He said to him he thought it was probably unnecessary, and that the notes and the minutes would reflect entities' positions.

Stranz said to some extent the will. She asked if any TMT members felt strongly that it would be helpful to have a polling on this.

Lorz said that it does clarify for the notes what the decision process was and who was for and who was against. So, if anyone was taking look at it down the road, they can know who had the issues and that is whom they should work with in the future. He said that it was going to take five minutes, and he thought it was worth the five minutes.

Stranz asked if there were any objections to doing a round of polling.

c) Polling

<b>Agency</b>	<b>Poll</b>
<b>NOAA</b>	Abstain
<b>OR</b>	Support
<b>WA</b>	Support
<b>Colville</b>	No Objection

<b>Umatilla</b>	Support
<b>Yakama Nation</b>	Support
<b>BOR</b>	Object
<b>Corps</b>	Abstain
<b>USFWS</b>	Abstain
<b>ID</b>	Support
<b>MT</b>	No Objection
<b>BPA</b>	Object

d) Responses to Polling

<b>Agency</b>	<b>Response</b>
<b>ID - Ebel</b>	<p>Non-Federal Agencies keep being asked for more and more information on the fish side of things and for trade-offs between fish, when you are making trade-offs between those who are in the purview and are clearly in the decision-making process behind these requests by those with the responsibility to manage these fishes. What I have not heard and have asked, what are the trade-offs or the numerical impacts to power generation, flood control, irrigation delivery, project refill, recreation which are in the purview of the Federal Action Agencies. I have heard a lot of the trade-off, the focus had been on pitting fish against fish but just simply not being provided any information on impacts outside of that beyond what those responsible for the fish have provided. I would be certainly interested in the future with that being an explicit part of the discussion.</p>
<b>WA – Morrill</b>	<p>I appreciate the discussion; it has been an informative discussion but a difficult one. Jonathan emphasized the role the Fishery Managers have and the role that the Corps and BOR have. This is a time sensitive issue, it may not get resolved quickly but at this point my guidance would be that Washington would choose to elevate this for regional discussion because it is a significant issue for the Fishery Managers to request water when it is available to benefit fish survival, fish travel time for listed stocks, for endangered species and I think this needs to be attempted to resolve or at least have that discussion at a higher level than what we're doing right now.</p>

	We've made the best technical arguments we have for needing water for fish and the rejection because it's out of the box and they are quote "going to meet a seasonal average" doesn't help fish, doesn't improve survival. It doesn't decrease that risk of disease going extinct at some point in time. So in Washington's opinion, we're very concerned about this distinction and how it's going to be addressed now and in the future.
<b>Corps – Aaron Marshall</b>	Marshall provided some rationale behind the Corps' position of abstaining. He said that they have not had adequate time to coordinate with their own Legal/Policy folks or with some of their partners on this one.

Swieca asked for clarification on Morrill's comments. She asked if he offered an elevation to RIOG. She asked if we should be planning a RIOG meeting or if it was something else, something less.

Stranz said that Morrill may need to check in with his RIOG representative, but it sounded to her that he wanted to elevate.

Morrill said that he would confirm with Charlene but in the discussion, they had the other, at this point in time he thought that we need to elevate this.

Swieca said that he was indicating he may, but we will wait to hear a follow-up via email for confirmation on that.

Lorz said that they would probably do the same thing, talking to internal Policy, and will let Swieca know if Policy want to elevate.

**3. FPAC Request for Treaty Flow Augmentation - Tom Lorz, CRITFC-Umatilla/FPAC Chair; Tony Norris, BPA**

a) Treaty Flow Augmentation

- This is water that is stored and we make flow requests when to start and when to use this water. There are two typical periods, Spring and Summer.
- One compounding issue with it this year, as in some years, there is Rainbow Trout fisheries program out of Arrow that requires continuously increasing flows. Once you start a request you have to maintain or increase.

b) Fish Manager Strategy

- They are still trying to figure out the best strategy.
- At this time FMs do not have a request to start that flow augmentation yet, but it could be from their understanding that BPA needs 3 – 5 days to process.
- FMs will notify BPA in the future when they decide on a start time.

c) BPA Clarifications

- Treaty requests are made on Thursday and Friday of each week.

Norris asked if BPA was expecting a request today.

Lorz said at Tuesday's meeting there was no request for it but given the conversation we just had he did not know if that changed anyone's mind. He said if everyone was fine going forward with where we are at then we are kind of done with this topic.

Norris clarified on increasing, if we were to begin increasing now, if treaty flows roughly stayed the same, the flow out of Arrow cannot be decreased after. It is possible that treaty flows could come up, which would potentially allow you on a week-to-week basis to decrease or pause treaty flow augmentation release if treaty flows came up. So there would potentially be an opportunity to pause the release if in-season conditions allowed.

Lorz said that they understood they have done that in years past and they had talked to Eric from BPA about that situation. He said that it unfortunately is not their first rodeo. But the concern is that with the uncertainty, because the ESP seems to be changing erratically so that gives them some pause because there are also concerns that if we use all the water now, what does that do for later. He said that was why they were trying to figure out the best trade-offs possible, and that was why they started with the flow request at GCL. He said that he would ask the FMs if they thought they needed to have a caucus or if they were fine letting it sit until their discussion next Tuesday.

Runyan asked for clarification. He asked if the request for GCL was to increase flows and we know we are not doing that, but this request for treaty flow would also increase flows, why are the FMs are not looking at pursuing this right now. He said that he was a little confused.

Stranz said that was what TMT was checking in on.

Runyan said that the treaty flow does the same flow increase.

Ebel said that we have been treating these as separate, in deference to negotiations and structure and the sheer complexity of treaty-related augmentation across the border. He said given the discussion that we just had regarding flow out of GCL there is no guarantee in the short or medium term that if this was requested starting May 1 that we would see any appreciable change in flow from the perspective of fish at MCN. These are separate issues. Although it all moves through a choke point or constriction in the river called GCL.

Norris said if treaty flow augmentation is released now through refill it gets passed because GCL is going to operate close to April 10, and they are going to operate to April 30 FRM, and they are going to refill. Anything that comes into GCL passes GCL.

Ebel said that the FMs know that – we have discussed this and that it passes.

Norris said that he had just told them that it didn't.

Ebel said that it ends up being spread out. The issue that the FMs have tried to focus on is the use of water to target specific stocks of fish. It is clear that when you calculate out

when you have inflow coming into a reservoir and you have a refill period, it is input equals output plus storage in the long term, or output equals input plus storage, whichever way you want to do it at a seasonal scale, or an annual scale. That is clear. But that does not achieve the objective of using pots of water to target individual stocks of fish.

Runyan asked to clarify the fish that FMs were advocating to get more flow from GCL release, those fish are still there today. He said that these are two different buckets, what he heard was that the FMs may not want to use the second bucket for those fish as opposed to using the GCL bucket for those fish.

Ebel said because they cannot target that water from that flow augmentation release across the border to what the FMs have identified as priority stocks this year.

Swieca said that she thought that if we would like to continue this conversation it warrants a caucus among the FMs. She said that she thought that we were getting to a point that we are tying other folks up in knots and she was not sure that we are going to get our messaging very clear if we continue down this conversation. She said that she was going to advocate for either moving on the next agenda item or polling for a caucus request.

Lorz said that part of the reason that FMs are reluctant to start that flow augmentation right now is because they do not have the same level of controls because there are other things, like Norris noted if flows drop or start constant we have to keep that water coming whereas, the GCL operation was a very concise time limited operation and we had much more control over that. Whereas the Canadian operation is more open-ended and has other constraint that we could not control. So that was why they are a little more concerned about starting that right now given the variability we are seeing in the ESP because then we are going to use all of the water now which the AAs said we were greatly concerned about. Then we would not have that water in June. It goes both ways which is why they were hoping to use the GCL water now and reserve the Canadian water to help at a later or different time and that would give us more flexibility.

Van Dyke said that he wanted to respond to Runyan's comment. Specifically that the FMs are talking about a dynamic system where we are trying to respond when we identify things that they believe require some response. Van Dyke said that the FMs started that last week because they had identified the need, which they had pointed out in the SOR with detail. The forecasting of water and how you store it is something that he thought that we all understood as dynamic but we also understand as a moving target. He said that he thought that they have tried to reconcile that in the SOR that the AAs got last week. Now we are talking about other details that fit within all of that conversation and to characterize it the way Runyan did just seems like it misses the point that we have an opportunity at a moment, if we take that action, we could do something. By waiting we just watch the data compile to show that we should have done something. He said that he thought that was maybe where the contrast was at this point between how Runyan was describing what he is describing and how FMs are trying to convey what they are trying to convey.

| Charles Morrill (Unverified) 10:27 AM

| Erick's comments ... fully agree with

Stranz asked the FMs if they wanted to caucus. There were no votes for caucus.

#### 4. Non-Court Ordered Operations Review

##### a) Storage Reservoirs

###### Reclamation – Chris Runyan

- Hungry Horse Dam
  - Conditions:
    - Precipitation is forecasted and inflows are projected to rise.
  - Inflows (04/21): 6.7 kcfs
  - Average Outflows: 8.2 kcfs
  - Midnight elevation: 3544.7 feet
  - Operations:
    - Continuing to target April 30.
    - Followed by a transition to VARQ flows.
- Grand Coulee Dam
  - Inflows (04/21): 124.2 kcfs
  - Outflows: 110.8 kcfs
  - 3 Day Average Outflows: 127.9 kcfs
  - Midnight elevation: 1253.1 feet
  - Priest Rapids: 151 kcfs
  - Priest Rapids week average: 140 kcfs
  - Notes:
    - Any additional water released as in storage water, such as treaty flow, will be passed through GCL.

###### Corps – Kasi Underhill, Corps

- Libby Dam (Lake Koocanusa)
  - Midnight Elevation: 2369.5 feet
  - Avg. 1-Day Inflows: 13.6 kcfs
  - Current Outflow: 19.5 kcfs
  - Operations:
    - LIB is holding full powerhouse through the end of April.
- Albeni Falls
  - Midnight Elevation (at Hope Gauge): 2055 feet

- Avg. 1-Day Inflows: 43.2 kcfs
- Current Outflow: 41.4 kcfs
- Operations:
  - ALF is holding outflows to accommodate higher inflows.
  - Lake elevation is expected to increase later this week.
- Dworshak Dam
  - Midnight Elevation: 1572 feet
  - Avg. 1-Day Inflows: 10.6 kcfs
  - Current Outflow: 13 kcfs
  - Operations:
    - DWR is planning to continue to release outflow through the rest of the month.
    - Then will transition to refill DWR is expected to move down to 7.5 kcfs in early May, adjusting as necessary to keep a steady refill.
    - 2<sup>nd</sup> snow flight is planned for mid-May.

b) Fish

Salmon – Kelsey Swieca, NOAA

- Juveniles (Average Indices)
  - Yearling Chinook
    - Continue to move through the Columbia River system.
    - In some Projects passage has increased roughly twofold.
    - LWG (since late last week): under 40,000 /day
    - MCN: 10,000 – 17,000/day
      - Incrementally increasing over the past week.
  - Subyearling Chinook
    - Migrating downstream through LWG and MCN.
    - At BON late last week there was large bump in passage due to a relatively large hatchery release and have passed through at this point in time.
  - Steelhead
    - LWG: 18,000 /day
    - MCN: 4000 /day
    - BON: less than 1000 /day

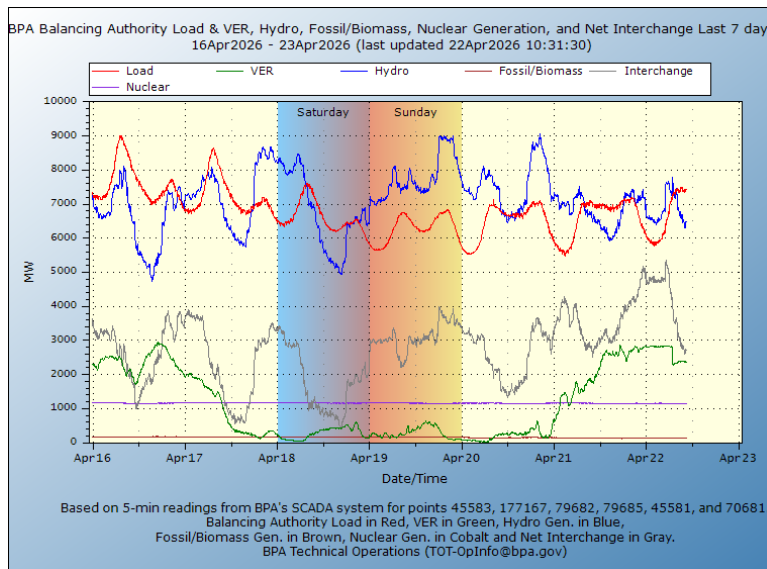
- Adult Salmon Counts (Passage Counts per Day)
  - Spring Chinook and Steelhead are entering the system at BON. They are also making their way past MCN and into the Snake River. They are not all the way through the system yet but we are starting to see them at MCN and IHR.
  - Spring Chinook
    - Bonneville: 503
  - Steelhead
    - Bonneville: 14 fish

b. Lamprey – Dave Swank

- Juvenile Lamprey at BON
  - There have been unusually low numbers over the past ten days.
  - The collection is unusual, especially when we were over 2000 at one point earlier in the month.
  - Swank is still looking into this for points of concern.
  - There are low lamprey numbers throughout the System.

Swank said that Swieca was right that the Subyearling Chinook at BON a few days back the reason for the two large pulses was that Spring Creek did two separate releases, one on Friday and one on Monday. That is why we see the 693,000 and then 570,000 a few days apart.

c) Power System – Tony Norris, BPA



5. **Agenda – Wednesday, April 29, 2026**

Meeting Location: Microsoft Teams

- a) FPAC Request for Treaty Flow Augmentation

- Treaty Water Augmentation Updates
  - Update of Flow Projections
  - Latest ESP Traces
  - ESP Benefits for Treaty
- b) Chinook and Steelhead Fish Passage
- Review of Wild PIT-tag passage data
  - Cumulative passage index plots
  - Daily passage patterns.
  - Confidence interval calculations of Daily Passage (FTC)
  - Previous five years of individual traces

Morrill said for the confidence limit and calculation and how they are derived was an FPC thing. He said that he would ask them to provide a brief write up and explain that information and share that at TMT. Erin Cooper, FPC, said that she would dig into this. Runyan said that he would like to confirm that all the data years fall into the data bands. He wanted to make sure that what it was showing was truly unique.

**Today’s Attendees:**

<b>Agency</b>	<b>TMT Representative(s)</b>
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	Keely Murdoch
Bureau of Reclamation (BOR)	Chris Runyan, Peter Cooper
Army Corps of Engineers (COE)	Doug Baus (Chair), Aaron Marshall, Lisa Wright
US Fish & Wildlife Service	Dave Swank
Idaho	Jonathan Ebel
Montana	Brian Marotz
Spokane Tribe	Brent Nichols
Nez Perce Tribe (NPT)	
Warm Springs Tribe	
Confederated Salish and Kootenai Tribes	
Bonneville Power Administration (BPA)	Tony Norris, Ben Hausmann

Other Attendees (non-TMT members):

COE – Chris Peery, Megan Biljan, Oscar Espinoza, Grant Bell, Leah Hamilton, Steven Lee, Kasi Underhill, Alexis Mills, Catherine Dudgeon, Tiffany Dixon, Tony Garcia Morales, Patricia Madson, Kenneth Sears

BPA – Carolina Andes, Eric Nielson

Washington Ecology – Thomas Starkey

DS Consulting – Emily Stranz (Facilitator), Colby Mills

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

EKI – Eve James, Travis Togo

AVA – Mike Dillon, Patrick Maher

Columbia Basin Bulletin – Mike O’Bryant

Clearing Up – K.C. Mehaffey

PSE – Jessica, Mitch

NPCC – Kate Self

FPC – Erin Cooper, Noah Campbell

CHPM – Jay Fintz, Lance Beyer

PGE – Phil DeVol

GCPUD - Eve Stites, Joseph Akers, Shaun Harrington

Energy EPS – Joshua Rasmussen

Unaffiliated – Eric Wood