

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

July 20, 2011

Facilitator's Summary

Facilitator: Robin Gumpert

The following notes are a summary of issues that are intended to point out future actions or issues that may need further discussion at upcoming meetings. These notes are not intended to be the "record" of the meeting, only a reminder for TMT members.

Meeting Minutes

TMT members had an opportunity to comment on the Official Minutes and Facilitator's Summary from the 6/24, 7/6 and 7/13 TMT meetings. No comments were made on these notes, but Doug Baus, COE, said edits had been made to the 6/22 and 6/24 Official Minutes that were not reported on yet, so he walked TMT through the changes.

Action: The Official Minutes from today will capture the 6/22 and 6/24 Minutes revisions noted by Doug.

McNary Transportation

Paul Wagner, NOAA, reminded everyone that the start of transportation operations at McNary between July 15 and 30 described in the BiOp is based on in season adaptive management. He reported that FPAC had discussed this issue and while current flow conditions would not drive the recommendation, the outfall conditions (and predation concerns) were the basis for NOAA recommending the COE initiate collection and transportation as soon as possible. Paul noted that the outfall issue is expected to be fixed by next year.

TMT members weighed in and were polled on the recommendation to begin collection and transportation at McNary:

- Idaho – Do not oppose the recommendation. This will allow a few additional Fall Chinook to be included in the current transportation study transport group, but this will also impact the in-river fish for this study that will be more vulnerable to predation at the bypass because they will be the only fish being bypassed.
- Washington – No objection.
- Oregon – No objection.
- Montana – No objection.
- USFWS – No objection.
- CTUIR – Not the best operation, but no objection.
- Salish-Kootenai Tribe – No objection.
- Reclamation -- No objection
- BPA – Support the operation.
- Nez Perce – No objection (not in attendance during the meeting but contacted via phone after the meeting).

Action/Operation: The COE planned to initiate collection of fish at McNary today, and transportation will begin tomorrow.

Spill Priority List

Doug Baus, COE, reminded TMT that per the 7/13 TMT meeting, the action agencies committed to switching the spill priority list to that proposed by the salmon managers as soon as possible. The COE posted the current spill priority list in effect, reflecting that the change had been made for both Levels 1 and 2. The spill priority list remains a living document and proposed changes will be coordinated with the region. Tony Norris, BPA, shared a link and reported on the action agencies' use of the prior list (with Chief Joseph at the top for Level 2 to manage lack of market spill), noting that there was a total of one hour of lack of market spill, on 7/16, but no additional spill was implemented at Chief Joseph at that time.

Dworshak Operations

Steve Hall, Walla Walla District COE, shared a water temperature comparison chart for the period 7/4-29. This chart projected Lower Granite would not reach 65 degrees through July 30. He said the COE has determined there is no need to change the current operation of 14 kcfs outflows at the project, which was currently at elevation 1596.7' and ranging 108-109% TDG. Flows remained high in the Snake Basin. In response to a question, Steve said the August 31 elevation projection would depend on inflows, and that with 14 kcfs outflows, Dworshak was projected to reach 1545' by the end of August. It was noted that the temperature model is tracking very close to actuals. Steve said the COE has been working to improve and sharpen the model over the last year, and it tracks well especially when temperatures exceed 60 degrees. Russ Kiefer, Idaho, commented that he supported the current operation. The COE and TMT will continue to track this operation as the summer progresses.

Finally, Steve reported on the minor leak at Unit 3 and said it had stabilized since he last reported, and the COE was watching it closely. The COE will take the unit out as soon as possible in September and have designed a temporary fix so it can get back up quickly. Longer term, the unit will need to be overhauled and out of service for much longer – the earliest this will happen is 2012-2013.

TMT will revisit Dworshak operations at the next face to face TMT meeting, 8/3, unless conditions change such that the COE needs to rethink current operations.

Lower Granite MOP Operations

As follow up from the last TMT meeting, Steve Hall reported that the annual surveys contract will be let very soon and crews will start working on a survey early in August, starting at the confluence and moving downstream. Results will likely be available during the second week of August and the COE will present those to TMT. The survey intent is to determine if the distribution of sediment in and around the Federal navigation near the Port of Lewiston has shifted with this year's high flows, and whether there continues to be a need to operate outside MOP for navigation safety. Longer term, after a Programmatic EIS is completed (expected around December 2012) and the Sediment Management Plan is finalized, the COE will look to begin dredging (approximately 2013). Steve said this issue is primarily only seen in the Lower Granite pool because it is

the only pool with significant unregulated tributaries which bring in sediment. Lower Granite was currently operating under MOP +1.5 per the COE decision reached in the spring in response to the Towboaters' request and TMT input.

SOR 2011-03

Tom Lorz, CRITFC/CTUIR, presented this request on behalf of the signatories (USFWS, WDFW, ODFW, Nez Perce Tribe, Shoshone-Bannock Tribe) and said CRITFC was unable to sign on due to on-going court and other procedures. The request asks for implementing spill at Little Goose up to the gas cap while the Lower Granite pool is operating above MOP for navigation safety, as a way to make the river 'whole' and allow for the best passage conditions for fish. Tom added that the concern is with water particle travel time, and 2009 data shows the highest survival at Little Goose.

The following is a summary of comments and poll results from TMT members on their level of support for the requested operation:

- Idaho – During early spring discussions of the towboaters' request for operating Lower Granite outside MOP, the COE invited the salmon managers to consider and bring forth options for making the river 'whole' during various points of operating that project outside MOP. The salmon managers saw the most impact would happen when flows recede to a level prompting MOP+2, and this SOR was offered as a preferred option for offsetting that impact. Idaho did not sign on to the SOR given the biological 'gray areas' around this issue, but does feel strongly that the issue needs to be resolved by next spring and would like the COE to work with the region to get a plan in place by then. No objection to the SOR.
- NOAA – Given that Fall Chinook's propensity to migrate goes down this late in the migration season, NOAA does not feel a need for an adjustment operation at this time. That said, a solution and plan for next spring is needed. The COE should present TMT options for addressing the Lower Granite pool issue, including emergency dredging. No objection to the SOR.
- USFWS – Signed on and supports the SOR as a reasonable request to help balance the intent of the BiOp.
- Oregon – This is a reasonable operation and we would like to see it implemented.
- Washington – Signed on and supports the SOR.
- Montana – Questions about next year, but does not see a compelling biological reason to implement the request at this time. No objection to the SOR.
- Salish-Kootenai Tribe – No objection.
- CRITFC – Unable to comment due to other procedural obligations.
- BPA – Unable to comment; need to discuss internally.
- Reclamation – No objection.

Action: The COE will discuss the proposed operation internally and make a decision on this as soon as possible. An email will be sent out to TMT members with the decision, and this will be an agenda item at the next TMT meeting.

John Day TSW Operation

Rick Kruger, Oregon, brought the John Day TSW operation back to TMT to request that in the future, this and other issues that are important to the region be brought forth in the FOP or another appropriate planning document, and also discussed at a regional forum meeting with enough time for input to the decision. Other TMT members commented that with multiple plans in place (Fish Operations Plan, Fish Passage Plan, Water Management Plan), it is difficult to track all operations and might be one reason this issue was missed. Suggestions for correcting this included consolidating the plans in to one document, documenting fish passage structure operations somewhere in one of the plans, and making all plans consistent with one another. Doug Baus, COE, added that the FOP is an appendix to the FPP. It was also noted that the TSW issue was discussed at FPOM and this year, the TSWs will remain on.

Operations Review

Reservoirs – Ted Day reported on Reclamation projects. Hungry Horse was at elevation 3557.17', with 11 kcfs in and 7 kcfs out. Outflows will steadily decrease to allow the project to reach full by the end of the month. Grand Coulee was near full, at 1289.2'. Doug Baus reported on COE projects. Libby was at elevation 2447.55', with 26.6 kcfs in and 11 kcfs out. Albeni Falls was at elevation 2062.35' with 61.2 kcfs in and 63.1 kcfs out. Dworshak was at elevation 1596.8' with 8.5 kcfs in and 14 kcfs out. Lower Granite was releasing 80 kcfs; Priest Rapids was releasing 207.4 kcfs; McNary was releasing 298 kcfs; and Bonneville was releasing 301.1 kcfs.

With regards to Libby operations, questions were asked about the COE's intended plan moving forward. An SOR is currently being developed by the Kootenai Tribe for shaping in September to support a habitat project – this will be presented at a TMT meeting soon. Jim Litchfield offered Montana's preference for maintaining steady summer flows and/or gradual ramp downs, and suggested bull trout minimums should also be factored in to the COE's considerations. Kristian Mickelson, Seattle District COE, confirmed that the COE did have those goals in mind. It was pointed out that the STP run shows flows increasing at Libby, to which the COE responded they were not relying on that model to make projections because it only showed flows outside the normal range. It was uncertain at this time whether Libby would meet its draft target or be adjusted for the multiple needs and conditions this year. Libby operations will be discussed in more detail on 8/3.

Fish – Cindy LeFleur, Washington, reported that adult summer Chinook and sockeye passage was winding down with about 500-800 observed per day. Steelhead numbers were picking up but still only about half the 10-year average. Fall Chinook counts will begin August 1 and the preliminary forecast is 760,000. Paul Wagner, NOAA, reported that the subyearling Chinook passage is past its peak, with about 4,000/day at Lower Granite, 200,000/day at McNary and 55,000/day at Bonneville –all screens were back in place at Bonneville as of this morning. Lamprey passage numbers at Lower Granite were 200, and 500 at McNary.

Water quality – Laura Hamilton, COE, shared the July TDG report, 7Q10 average day flow exceedances and the June TDG summary. Generally, the system had calmed down with flows receding and less involuntary spill. She also reported that the Cascade Island

gauge was completely destroyed and would need to be replaced. Portland District planned to install a temporary fixed monitoring station by mid-August and a permanent by September or October. TMT members questioned the need for the temporary station, to which Laura said that decision was under the discretion of Portland District.

Next Meeting, TENTATIVE Conference Call, 7/27

Notice will be sent out and posted on the TMT web page by 2:00 pm on Tuesday, 7/26 as to whether this meeting has been cancelled.

Next Face to Face Meeting, 8/3

Agenda items include:

- Dworshak Operations
- Lower Granite MOP Operations/Survey Update
- Libby Operations/SOR
- SOR 2011-03 Decision Update
- Operations Review
- Other?

Columbia River Regional Forum
TECHNICAL MANAGEMENT TEAM OFFICIAL MINUTES

July 20, 2011

Notes: Pat Vivian

1. Introduction

Today's TMT meeting was chaired by Doug Baus, COE, and facilitated by Robin Gumpert, DS Consulting. Representatives of Montana, BOR, Idaho, the COE, BPA, Oregon, USFWS, NOAA, Washington, Salish-Kootenai Tribe, CRITFC/Umatilla Tribe and others attended. This summary is an official record of the proceedings, not a verbatim transcript. Any questions or comments should be directed to the TMT chair.

2. Review Meeting Minutes

Baus read TMT changes he posted to the official notes for June 22 and 24 after they were finalized. These edits are in the official notes posted online, based on comments Baus received from TMT members.

June 24 official minutes:

- In the third paragraph under Spill Priority List Update, delete "...with spill evenly distributed among..." and replace with "at." In the second sentence of this paragraph, add "this addresses" and replace "about" with "at." Replace "BiOp" with "FOP" minimum spill.
- In the last sentence of the fifth paragraph under Spill Priority List Update, add, "it measures TDG in the spillway."
- In the last two sentences of the seventh paragraph under Spill Priority List Update, add "Filardo suggested..." and "Filardo further contended..."

June 22 official minutes:

- At the end of the first paragraph under Spill Priority List Update, delete "All turbines at Grand Coulee and throughout the system are generating to maximum capacity, which leaves spill or environmental redispach as the only recourse to lack of generation." Tony Norris and Scott Bettin, BPA, explained the redaction is appropriate because inaccuracies can occur in paraphrasing and the deleted sentence doesn't account for reserves.
- At the end of the second paragraph under Spill Priority List Update, add, "Scott Bettin, BPA, pointed out that spill at CHJ is reducing TDG by 8% when you compare the forebay gage of CHJ to the forebay gage at Wells."

- At the end of the second to last paragraph under Spill Priority List Update, add, “Tony Norris stated that this would not likely change the level of TDG at MCN because the project is turbine limited.”
- In the last paragraph under Spill Priority List Update, replace “consensus” with “feedback” and “data are” with “information is” needed.

There were no other changes to meeting notes today.

3. McNary Transport

The BiOp says transportation will begin at McNary between July 15-July 30 and NOAA recommends initiating transport now, Paul Wagner said. The reason is the McNary outfall location exposes fish to eddies and predators in the tailrace. Yesterday FPAC members had no objections to NOAA’s recommendation to begin collection today and transportation tomorrow.

TMT members were polled on their views of the proposal:

- **Idaho** – Starting transport now would negatively impact the fall Chinook transport evaluation study now underway. Transporting all migrants except the few bypassed fish for the study would put them in the McNary tailrace without other fish to swamp predators. That said, Idaho does not oppose the recommendation.
- **Oregon** – Does not oppose the recommendation.
- **Washington** – Does not oppose the recommendation.
- **Montana** – Does not oppose the recommendation.
- **USFWS** – No objection.
- **Umatilla** – This is not the best strategy, but no objection.
- **Salish-Kootenai** – No objection.
- **BOR** – No objection.
- **BPA** – Supports the proposal.
- **Nez Perce** – Did not attend meeting but contacted after the TMT meeting and did not object to the operation.

Hearing no objections, the COE will initiate collection today and transportation tomorrow at McNary.

4. Spill Priority List Update

TMT followed up today on the Salmon Managers' proposed change in spill priorities when conditions are such that Chief Joseph is no longer needed for overgeneration spill. The proposal, presented at TMT on July 13, called for moving John Day and The Dalles higher on the Level 1 and 2 of the spill priority list. The COE is operating to the amended list, which is linked to item 4a on today's agenda.

Tony Norris, BPA, gave an example of how the list works. At hour 7 on July 16, lack of market spill drove Lower Monumental flows to 28 kcfs. John Day turbine discharges decreased and spill increased, while spill at The Dalles also increased. Spill at Little Goose and Lower Granite went up to the 40 kcfs range, and to 80 kcfs at Ice Harbor. McNary powerhouse discharges decreased, while Bonneville was already spilling at the gas cap and couldn't spill more. There were no questions or comments on spill priorities today.

5. Dworshak Operations

The latest model results show Lower Granite tailwater temperatures hovering in the 62-64 degrees F range through July 30, Steve Hall, COE, reported. Therefore the COE sees no need to change the operation for temperatures at Lower Granite during that time. This trend is expected to continue. The model, which the COE has spent the last few years improving, appears to be working very well.

Dworshak reservoir is currently at elevation 1,596.7 feet, with 14 kcfs discharges and tailrace TDG readings of 108-109%. Tom Lorz, CRITFC, asked about projections for the August 31 elevation. That largely depends on inflows, Hall replied. Discharges of 14 kcfs will probably raise the elevation to 1,540-1,545 feet, around 5-10 feet above the target elevation of 1,535 feet. Idaho supports the current operation because it is probably the best option available.

Hall gave TMT some good news: The leak in the head seal on Dworshak unit 3 appears to have stabilized or decreased. The COE plans to take the unit out of service in September for a short-term repair by filling the leak with copper and welding the joint shut. A longer term overhaul will require the unit to be unstacked; the earliest that could happen is 2012-13. TMT will revisit Dworshak operations at its August 3 meeting.

6. Lower Granite MOP Operations

The COE has instructed the contractor to begin surveying the federal shipping channel at the confluence of the Lewiston and Clarkston rivers and work downstream, Hall reported. Data showing where the federal channel is not in

compliance with navigation standards should be available by the second week of August. As flows decrease, the COE intends to provide more than MOP depth to avoid shoaling hazards. TMT will revisit this issue in mid August.

7. SOR 2011-3 Nighttime Spill to Gas Cap at Little Goose

This SOR was signed by USFWS, Washington, Oregon, and the Nez Perce and Shoshone-Bannock tribes. Tom Lorz presented it as vice chair of the Salmon Managers. The SOR requests an increase in nighttime spill at Little Goose to the 115%/120% gas cap whenever navigation safety requires going outside MOP at Lower Granite. The goal of the SOR is to operate as closely as possible to the intent of the BiOp in light of navigation safety requirements.

Baus asked for an explanation of the biology behind the request to implement this operation. Going outside of MOP increases pool depth, which increases particle travel time, an indicator of fish travel time, Lorz replied. The Salmon Managers determined that it made more sense to change operations at Little Goose because survival through the spillway is highest at Goose compared with bypass and turbine passage. Excess spill at Goose would therefore support the route with highest survival.

TMT members were polled on their views of this SOR:

- **Idaho** – Didn't sign the SOR but does not oppose it. Gray areas regarding declining numbers of subyearlings made it a close call this time. Idaho's main concern will be in springtime. If next year is a low flow year, impacts of this operation on spring migrants could be significant.
- **NOAA** – Wasn't close to signing, but agrees with Idaho on spring migration concerns. A change in MOP operations will affect travel time. NOAA would like to see this dredging issue resolved sooner than 2014. This will become more of an issue next spring.
- **Montana** – Has some of the same concerns as Idaho and NOAA. No objection, but doesn't see a compelling biological reason to move forward with this SOR.
- **USFWS** – Signed the SOR. This is a reasonable operation to request.
- **Oregon** – Agrees with USFWS position.
- **CRITFC/CTUIR** – Supports the SOR.
- **BPA** – Deferred because of insufficient time to review the SOR.
- **BOR** – No objection and no comment pending further discussion.

- **Salish-Kootenai** – No objection.

Hall said the COE will give TMT a presentation on emergency dredging vs. following the EIS schedule, which calls for dredging in the winter of 2013-14. The COE will review relevant data and give TMT more information on this operation as soon as possible.

8. JDA TSW Operation

This issue was added to today's agenda in response to concerns voiced by Rick Kruger, Oregon, regarding the rollover operation of the TSWs at John Day. The option of turning off the TSWs at John Day was not specified in the 2010 FOP operation for summer, and Kruger said all future intended operations including rollovers should be clearly specified in the FOP.

Scott Bettin agreed that fish passage structure plans need to be specified in writing, but more thought is needed on whether the details should be spelled out in the FOP or the FPP. Russ Kiefer, Idaho, suggested having a single fish operations plan to cut down on procedural confusion. Bettin said the John Day TSW operation is a good example of an issue that was successfully addressed at FPOM; he encouraged TMT members to continue participating in that forum.

9. Operations Review

Reservoirs. Hungry Horse is at 3,557.17 feet elevation, a little under 3 feet from full. Inflows are around 11 kcfs and outflows are 7 kcfs, about to drop to 6 kcfs tomorrow. Grand Coulee is at 1,289 feet elevation, hovering around full. Drafting will probably begin in a few weeks.

Libby is at elevation 2,447.55 feet, with inflows of 26.6 kcfs and outflows of 11 kcfs. The COE anticipates an SOR on Libby operations later this season. The Kootenai Tribe is hoping for lower flows in September to accommodate a habitat project, Kristian Mickelson, COE Seattle, reported. The COE estimates a flat flow of 8-13 kcfs will be needed from now through the end of September to meet the target of 2449 feet. The tribe will probably want bull trout minimum flows in September, Jim Litchfield, Montana, added. Montana would prefer 11 kcfs out.

Dave Wills, USFWS, said the recent STP forecast showed steadily increasing flows through the next 3 months. The anticipated end of September elevation at Libby is 2,049 feet. Kiefer asked whether decreasing flows in September for habitat work means that TMT will change flow discharges to meet the BiOp draft target. The COE is currently considering this information and will provide TMT with an update on Libby operations soon. .

Albeni Falls is at elevation 2,062.35 feet, with inflows of 61.2 kcfs and outflows of 6.1 kcfs. Dworshak is at elevation 1,596.8 feet, with inflows of 8.5 feet and outflows of 14 kcfs.

Lower Granite inflows are 79.9 kcfs with outflows of 80 kcfs. Priest Rapids outflows are 207.4 kcfs. McNary average outflows are 298 kcfs. Bonneville outflows are 301.1 kcfs.

Fish. Adults: Summer Chinook passage is winding down, Cindy LeFleur, Washington, reported. Sockeye passage is down to 500 fish per day at Bonneville. Steelhead passage is picking up, but is still half the 10-year average so far. Fall Chinook passage which starts August 1 is expected to be substantial this year. Snake River sockeye passage is above the 10-year average while upper Columbia sockeye passage is about average, Paul Wagner reported.

Juveniles: The two-week passage index for fall Chinook is 4,000 per day at Lower Granite, Wagner reported. At Little Goose, 5,000 per day; Lower Monumental, a few hundred thousand per day and trending down; John Day, 100,000 per day; Bonneville, 55,000 per day. Lamprey passage is down to a few hundred per day at Lower Granite and 500 per day at McNary. Lamprey passage comparisons from year to year are difficult to make because lamprey are counted more intensively now, Kiefer commented. The forecast for fall Chinook is 760,000 fish this year at the mouth of the Columbia, including jacks, LeFleur said. Upriver bright passage is forecasted at 400,000 fish.

Water quality. Laura Hamilton, COE, reported that involuntary spill has ended everywhere except McNary and Bonneville. She showed TMT a chart of how many days 7Q10 flows were exceeded from May 18-July 8 (7Q10 means water quality standards no longer apply). Chief Joseph, John Day and the dams on the lower Columbia had the highest number of days with 7Q10 flows. The highest was 36 days at John Day.

On May 18 the Cascade Island gage below Bonneville Dam was destroyed. Replacement will include buying extensive parts, so the COE plans to put in a fixed monitoring station in the meantime. Cascade Island gage should be back on line by mid August.

Power. There was nothing to report today.

6. Next Meeting

A conference call was tentatively scheduled for July 27. The next regular TMT meeting will be on August 3.

| Name | Affiliation |
|----------------|--------------------|
| Jim Litchfield | Montana |

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|----------------|------------|
| Ted Day | BOR |
| Russ Kiefer | Idaho |
| Lisa Wright | COE |
| Scott Bettin | BPA |
| Rick Kruger | Oregon |
| David Wills | USFWS |
| Paul Wagner | NOAA |
| Doug Baus | COE |
| Tony Norris | BPA |
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| Laura Hamilton | COE |
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| Kristian Mickelson | COE |
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| Richelle Beck | DRA |
| Doug Vine | Thompson Reuters |
| Bill Crampton | CBB |
| Tom Lorz | CRITFC/Umatilla |