

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

February 18, 2015

DRAFT Facilitator's Summary

Facilitator, Emily Plummer; Notes, Tory Hines 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. These notes are not intended to be the "record" of the meeting, only a reminder for TMT members.

Review of Meeting Minutes

The January 21st and February 4th Official Minutes and Mediator's Summaries were approved.

Water Supply Forecast

Doug Baus, COE-NWD, provided an update on the official February water supply forecast which is posted on the TMT website. Mary Mellema, BOR, noted that the volumes for the final February forecast for Hungry Horse Dam:

- January-July: 2,313 kaf (114% of the average);
- April - August: 2,207 kaf (114%); and,
- May-September: 1,930 kaf (114%)

Mary also noted that the minimum flows downstream of Hungry Horse are as follows:

- Columbia Falls: 3,500 cfs
- Hungry Horse: 900 cfs

Doug provided official February forecasts for USACE projects:

- The Dalles April-August: 83 maf (95%),
- Lower Granite April-July: 19 maf (98%),
- Libby April-August: 5,523 kaf (94%), and
- Dworshak April-July: 1,922 kaf (79%),

He continued with the NWFC forecast, noting that as of February 18th, The Dalles is at 91% of average and 79 maf, resulting in a slight reduction from the February 6th final forecast. Doug also stated that the snow water equivalent in the Cascade Region is well below 50%, between 50-69% in Idaho and the northern panhandle and 90-100% in the Canadian Rockies. He noted that the forecasts are available on the TMT website.

Chum Spawning Operation

Charles Morrill, WA, noted there is nothing to report on the current chum spawning operation. Paul Wagner, NOAA, added that an update on forecasted chum emergence will be provided at the next TMT meeting; however, it is likely that emergence will be earlier than normal this year. Paul noted that forecasted emergence for the Hanford reach is February 28th, which is earlier than usual and it is reasonable to expect this to hold true for other reaches as well.

- ACTION: NOAA will provide an update on the chum emergence forecast at the March 4th TMT meeting.

Spill Priority List:

Doug Baus, COE-NWD, shared per discussions at FPOM, the Corps looked into how they can meet the interest of nuancing spill to assist kelt or steelhead passage at The Dalles and Bonneville. Doug shared that the intention is not to change the SPL, however, provide direction to the projects to prioritize the corner collector at Bonneville and the ice and trash sluice way at The Dalles prior to spilling involuntarily at the remaining projects on the spill priority list. He continued that the short duration of the operation would occur during periods of involuntary spill. Doug noted the Corps recognizes this is not a long term operation, however it is a good solution for the interim; a longer term solution is being discussed at FPOM. He noted that the Corps is interested in hearing TMT feedback on utilizing the Bonneville corner collector, then the ice and trash sluice way at The Dalles, while maintaining the current SPL. TMT members thought this was a good operation for the short term, however, Tom Lorz, CRITFC, noted that there may need to be some fine tuning. He elaborated that considerations about the spill test at McNary should be reviewed. Dave Statler, Nez Perce, noted that the operation is somewhat opportunistic in that it occurs only during involuntary spill, he asked if there was an alternative when spill was not involuntary. Doug noted that the current operation is only a short term solution based on discussion at FPOM to address the matter immediately. Dave requested more information on what the long term solution would look like, to which Doug noted it would involve revising the Fish Passage Plan. Erick Van Dyke, OR, noted that spilling is also intended to assist passage for fish that have overwintered in the system. He noted that more information on the mid-Columbia adult steelhead utilization of the Columbia and Snake rivers can be found on Oregon Fish & Wildlife website:

http://www.dfw.state.or.us/fish/CRP/mid_columbia_river_plan_WASTB_workshop.asp

Scott Bettin, BPA, stated that FPOM is addressing the need for more information on the impact to fish migrations at McNary; they are looking at where fish are going and for how long.

- ACTION: The AA's will prioritize involuntary spill at the Bonneville corner collector and The Dalles ice and trash sluice way prior to allocating spill to the remaining projects on the SPL in an effort to provide a surface passage route for adult steelhead at BON and TDA as discussed during the previous FPOM meeting.
- ACTION: Tom Lorz will contact Doug Baus to discuss options to further fine tune the operation if necessary.

Operations Review

Reservoirs: Mary Mellema, BOR, reported on Reclamation projects:

- Grand Coulee elevation was 1,271.1ft. The project continues to draft for drum gate maintenance.
- Hungry Horse elevation was 3,539ft with 6.3kcfs outflow; the project will decrease to 6kcfs outflow tonight (2-18-15).

Doug Baus, COE-NWD, reported on Corps projects:

- Libby was at elevation 2,412.26ft , with 6.6kcfs inflow and 4.0kcfs outflow.
- Albeni Falls was at elevation 2,053.46ft, with 39.4kcfs inflow and 39.8kcfs outflow.
- Dworshak was at elevation 1,566.36ft with 9.1kcfs inflow and 9.9kcfs outflow.

- Lower Granite average inflow was 62.2kcfs.
- Bonneville average inflow was 250.1kcfs.

Paul Wagner, NOAA, noted that the end of the month flood control target for Dworshak is 1,560ft, and if the forecast holds through the end of March this will result in an end of March elevation of 1,572 ft. The 10 day forecast suggests little precipitation will occur through the end of this month. Paul asked whether the Corps is planning to modify the Dworshak operation should precipitation forecasts stay the same or decrease for next month. Steve Hall, COE-NWW, noted the Corps is running a forecast analysis and they are considering modifying to help round the corner and not hitting 1,560ft at the end of March. He noted that this would require the Corps to request a flood control deviation, which they have not formally requested at this point, however, the TMT discussion aids in the Corp's decision to apply for a deviation. Dave Statler, Nez Perce, stated the Nez Perce formally request the Corps pursue a deviation on the flood control operation; he also requested that details of the risk analysis are shared with TMT. Bill Proctor, COE-NWW, said that it is not necessary for the Salmon Managers to provide the Corps with an SOR, today's conversation is sufficient for the Corps to understand their interests. Brad Bird, COE-NWW, noted the Corps will work with Steve to provide any information needed to perform the risk analysis and submit a timely deviation request. Steve continued that the risk analysis should be completed by the end of the week and a response from Division staff is expected shortly thereafter; TMT members will be notified of the Corps decision (via e-mail) no later than Wednesday, February 25th.

- **ACTION:** The COE will perform a risk analysis looking at the forecast and flood control; they will provide the risk analysis and COE decision on whether or not to deviate from the flood control targets to TMT no later than Wednesday, February 25th.

Fish: Paul Wagner, NOAA, noted there was nothing to report on fish.

Water Quality: Bill Proctor, COE, noted that they are currently spilling at Bonneville and McNary, and all projects are below the State's 110% TDG requirement.

Power System: Nothing to report.

The next TMT meeting will be a conference call meeting on March 4th at 9:00am.

**Columbia River Regional Forum
TECHNICAL MANAGEMENT TEAM – OFFICIAL MINUTES
February 18, 2015**

Notes: Pat Vivian

1, Introduction

Doug Baus, COE, chaired this TMT meeting facilitated by Emily Plummer, DS Consulting. Representatives of the COE, NOAA, USFWS, Washington, Oregon, BPA, Nez Perce Tribe, Montana, Idaho, BOR, CRITFC/Umatilla Tribe, and Colville Tribe participated. This summary is an official record of the proceedings, not a verbatim transcript.

2. Review Meeting Minutes – January 21 and February 4

The official minutes and facilitator's notes for these two meetings were approved as final.

3. Water Supply Forecast Update

a. Official water supply forecasts. Baus and Mary Mellema, BOR, gave an update on the February NWRFC (with 5 days QPF), BOR and Corps water supply forecasts. More information is linked to this item on today's agenda on the TMT website.

- Hungry Horse (January-July) – 2313 KAF, 114% of average
(April-August) – 2207 KAF, 114% of average
(May-September) – 1930 KAF, 114% of average
- The Dalles (April-August) – 83 MAF, 95% of average
- Lower Granite (April-July) – 19 MAF, 98% of average
- Libby (April-August) – 5523 KAF, 94% of average
- Dworshak (April-July) – 1922 kaf, 79% of average

Mellema reported that minimum flows at Columbia Falls downstream of Hungry Horse are 3500 cfs, and Hungry Horse minimums are 900 cfs.

b. Current conditions at The Dalles. The Dalles forecast as of February 17 decreased from 95% down to 91% of average from the official forecast released on February 6. See the link to this item on today's TMT agenda for more information.

c. NRCS SNOTEL snow water equivalent (SWEs). As shown in the link to this item on today's agenda, SWEs in the Cascades are generally less than 20% of normal. SWEs in northern Idaho are generally 50%-69% of normal. SWEs in western Montana and Idaho are generally 90 to 109% of normal.

d. NWRFC Snow. Current snow station conditions on the RFC site are linked to today's agenda. The Canadian Rockies have some of the basin's most abundant snowpack.

4. Chum Spawning Operation

Paul Wagner, NOAA, said there's nothing new to report on chum spawning. Joe Skalisky, USFWS, asked when emergence is expected. Emergence at the Duncan Creek trap is forecasted earlier than usual this year, Charles Morrill, Washington, replied. The projected date of emergence at Hanford Reach is February 28, compared to late March of most years, Wagner noted. Chum emergence will probably be early this year due to warmer than usual river temperatures.

5. Spill Priority List

Doug Baus, Corps, said during the February 8 FPOM meeting there were discussions associated with the desire to provide kelts and overwintering adult steelhead with surface passage routes via the Bonneville Dam (BON) Powerhouse Two Corner Collector (B2CC) and The Dalles Dam (TDA) Ice and Trash Sluiceway (ITS). Providing these passage routes would involve spilling during a time when these projects are currently not spilling. Subsequently, in the short term it is unlikely these operations could be implemented because longer term policy discussion would need to occur prior to implementing these operations. However, upon further consideration the Action Agencies (AAs) have considered one way to implement these operations in the short term without the long term policy resolution would be to prioritize allocation of involuntary spill to these two locations (BON B2CC and TDA ITS).

Baus, said, subsequent the the FPOM meeting the Corps provided guidance to BON to operate the B2CC during periods of involuntary spill and accordingly the B2CC is currently operating and passing involuntary spill. The AA's would like feedback from the TMT if prioritizing involuntary spill via the TDA ITS is an operation the TMT would like implemented in order to provide adult steelhead with a surface passage route. The Corps showed how the AA's would prioritize involuntary spill using the spill priority list (SPL) that was attached to today's agenda. The SPL demonstrated how involuntary spill is currently prioritized to be routed via the BON B2CC and how it could be prioritized to be routed via the TDA ITS prior to its opening on March 1 as described in the Fish Passage Plan.

Scott Bettin, BPA, further clarified that two involuntary spill conditions—lack of turbine and lack of load—could serve as cause for opening the ice and trash sluiceway. Any spill at The Dalles going forward would most likely be due to lack of load.

Tom Lorz, CRITFC/Umatilla, said the effort to use the ITS is appreciated and makes a lot of sense, but it may need some fine-tuning. Other factors should be taken into account first, such as spill testing at McNary for steelhead passage that is

scheduled to be happening now. Lorz will confer with NOAA and get back to the COE with a recommendation on whether to proceed with the ITS proposal.

Bettin reported that McNary is currently spilling 10 kcfs through the RSW and the rest through the spillway. The spill pattern is evenly distributed, with all bays operating except one. A spill test at McNary is supposed to be happening now, but scheduling blocks of spill vs. no spill is not an option with flows around 180 kcfs. There aren't enough powerhouse units to handle all that water.

Dave Statler, Nez Perce, asked whether another operation could meet the passage needs of kelts if the system lacks involuntary spill. TMT's focus shifted to a long-term solution, which would involve revising the Fish Passage Plan. That is being discussed at FPOM, Baus said.

Erick Van Dyke, Oregon, pointed out that spill benefits not only kelts, but fish that have overwintered in a reservoir upstream of their tributary of origin. These fish need flows to move them through the system to their spawning location. Increasingly, studies are highlighting this phenomenon as something that needs to be addressed.

Skalisky and Van Dyke asked for a comparison of how many steelhead overshot their native spawning grounds vs. the number of kelts. To help answer that question, BPA is doing long-term research on B-run steelhead location and migration patterns, with more information to come, Bettin said. Additional information on research into migration patterns throughout the hydro system is available on the ODFW web page at: http://www.dfw.state.or.us/fish/CRP/mid_columbia_river_plan_WASTB_workshop.asp.

Action: Baus said based on the feedback from the TMT the AA's will prioritize involuntary spill at the BON B2CC and TDA ITS prior to allocating spill to the remaining projects on the SPL in an effort to provide a surface passage route for adult steelhead at BON and TDA as discussed during the previous FPOM meeting.

6. Dworshak Operations

Paul Wagner indicated according to the Corps official Dworshak February runoff forecast (dated February 4) set a 1560' end of February flood control elevation. Since the issuance of the forecast it appears that the water supply has decreased therefore he inquired if the Corps was still planning on operating to achieve 1560' end of February. The concern would be maintaining 10 kcfs outflows in order to reach 1560' end of February and then significantly reducing outflows to 2kcfs in order to reach 1572' end of March despite an apparent reduction in the water supply in conjunction with the continued forecast that lacks precipitation. During yesterday's FPAC meeting there were discussions associated with the desire to have an end of February flood control elevation above 1560'.

Steve Hall said the COE Walla Walla office is already conducting a risk analysis should the COE decide not to draft to 1560' end of February. The end of February flood control elevation is determined based on local not system flood control therefore the Corps is not able to shift flood control to Grand Coulee for the end of February. Results of the COE risk analysis will help determine whether the Walla Walla office submits a deviation request to the Division.

Several of the Salmon Managers present—Idaho, Nez Perce, Washington—formally supported a flood control deviation request and expressed willingness to submit an SOR if that would help expedite the process. If Dworshak flows continue on their current track, Statler said, the project could be reduced to minimum flows through the month of March—which would be bad for fish and lamprey. Hall assured the Salmon Managers that their request is taken seriously without the formality of an SOR. The risk analysis should be completed by the end of this week, and a change in Dworshak operations could occur before the weekend.

Baus said the goal will be for the Corps to email TMT regarding an update on Dworshak operations by February 20 if an update is available and if an update is not available he will provide an email update no later than February 25. He will schedule a conference call on Dworshak operations next week if necessary (the next regular TMT call is March 4). The Salmon Managers expressed interest in hearing not only the decision, but what information went into the analysis.

7. Operations Review

a. Reservoirs. Mellema and Baus reported:

- Hungry Horse is at elevation 3539', discharging 6.3 kcfs, which will drop to 6 kcfs tonight and continue through the end of the month.
- Grand Coulee is at elevation 1271.1', still drafting for drum gate maintenance.
- Libby is at elevation 2412.26' with inflows of 6.6 kcfs and outflows of 4.0 kcfs.
- Albeni Falls is at elevation 2053.46' with inflows of 39.4 kcfs and outflows of 39.8 kcfs.
- Dworshak is at elevation 1566.36' with inflows of 9.1 kcfs and outflows of 9.9 kcfs.
- Lower Granite inflows are 62.2 kcfs.
- Bonneville inflows are 250.1 kcfs.

b. Fish. There was nothing to report today on fish migration. Wagner said the adult return forecast is good for this year, but future years are unknown.

c. Water Quality. Bonneville and McNary are both spilling, as are other projects throughout the system. All projects are operating within the 110% state criteria for total dissolved gas.

d. **Power.** There was nothing to report today.

8. Next TMT Meeting

TMT will have a conference call March 4. The next meeting in person will be March 18.

Name	Affiliation
Charles Morrill	Washington
Paul Wagner	NOAA
Joe Skalisky	USFWS
Erick Van Dyke	Oregon
Doug Baus	COE
Tony Norris	BPA
Dave Statler	Nez Perce
Scott Bettin	BPA
Tory Hines	DSC
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Sheri Sears	Colville
Mary Mellema	BOR
Dave Benner	FPC
Barry Espenson	CBB
Steve Hall	COE