

COLUMBIA RIVER REGIONAL FORUM

TECHNICAL MANAGEMENT TEAM

CONFERENCE CALL

July 24, 2006 Meeting

FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS

Facilitator: Robin Harkless

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.

McNary Spill

BPA requested that spill at McNary for today and tomorrow (July 24-25) go to 40% (normally 60%), and swap to spill 60% at the project on Friday and Saturday (normally 40%). The pattern change was requested upon completion of a spill test at the project, and to address acute temperature/load issues in the region. TMT members did not object to the straight swap.

Libby / Hungry Horse Operations

Cathy Hlebechuk, COE, reported that Libby would be operated down to 3 units starting Tuesday evening, July 25, to about 14.5 kcfs through the end of August. Tony Norris, BOR, reported that he would notify TMT when the BOR's official position was known for Hungry Horse operations this summer. If targeting a 10' draw by the end of August, flows would be around 1 kcfs. If releasing 3 kcfs, the elevation would likely draw down to about 15' by the end of August. There will be an update on this at the July 26 TMT meeting.

Dworshak Operations

Jim Adams, COE, reported that Dworshak had been operating at 13.6 kcfs outflows (full powerhouse plus 3.9 kcfs through the RO's). Lower Granite tailwater temperatures have remained just below 68°. Orofino temperatures were around 80° with a flow rate of 2.4 kcfs; Anatone temperatures were around 76°, and flows were around 22-28 kcfs. Temperatures were running high in the area but expected to moderate some in the coming week. The COE posted an updated/revised volume graph for Dworshak, forecasting with 50% confidence that with the current operation, flows would need to drop below 10 kcfs before August 31 to have any remaining volume for flow augmentation.

The COE suggested that Dworshak could operate all units in undershot mode and effectively reduce temperatures by about 1°, to around 42-42.5°. NOAA recommended, given the updated flow augmentation forecast, reducing project discharge to 12 kcfs with all units in undershot mode and revisiting the operation during the TMT meeting on Wednesday, July 25.

Dave Statler, Nez Perce, noted that during this challenging year, there has been success in arresting temperatures, and that while the Nez Perce interest is in maintaining flows through the summer (by reducing outflows to 10 kcfs as soon as possible), did not object to the short term proposed operation. USFWS offered that while reducing temperatures out of Dworshak below 43° was not optimum for the hatchery, did not object to the recommendation as a short term balanced approach. Other participating TMT members agreed to the recommendation as a reasonable approach. BPA and COE coordinated and planned to have the operation change implemented by late Monday evening, July 24. It was noted that the temperature impact from the changed operation would likely not yet be observed at Lower Granite by Wednesday's TMT meeting.

Next Meeting, July 26, 9am-noon

A face to face TMT meeting is scheduled for Wednesday, July 26. Please regularly check the TMT web page for agendas and any scheduling changes.

Technical Management Team Conference Call

July 24, 2006

1. Greetings and Introductions.

Today's TMT conference call was chaired by Cathy Hlebechuk and facilitated by Robin Harkless. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at today's meeting. Anyone with questions or comments about these notes should contact Hlebechuk at 503-808-3942.

2. Check-In on Dworshak and Lower Granite Temperature Situation.

The tailwater temperatures at Lower Granite have, except for a short excursion, remained below 68 degrees F., said Jim Adams; Dworshak is releasing 13.6 Kcfs, with 3.9 Kcfs through the regulating outlets. Daytime flows past Anatone have been 22-28 Kcfs at 76 degrees; flows past Orofino have been as high as 82 degrees at about 2.4 Kcfs. Basically, we're holding our own, temperature-wise, at Lower Granite, Adams said. I don't see lot of opportunity to reduce Dworshak discharge at this point, Paul Wagner said. There isn't much moderation in sight, in terms of air temperatures, Adams said.

The Corps noted that they have updated the available flow augmentation volumes at Dworshak; the NWS forecast was 320 kaf available for flow augmentation in July and August. We did a reality check last week, and according to our model runs, we only have about 240 kaf available from Dworshak, Hlebechuk said. That means we're going to need to reduce outflow

below 10 Kcfs at some point if we're not going to be below elevation 1535 by August 31, Hlebechuk said. Even if we would have reduced Dworshak outflow to 10 Kcfs last Friday, we would be half a foot below the 1535 target elevation on August 31, she explained; every day we maintain this higher rate of Dworshak outflow puts us farther into the hole.

In looking at the Dworshak thermocline, we're about 3 degrees warmer this year than we have been in previous years in Dworshak, Adams said; the bottom line is that although the Dworshak release temperature is still holding at about 43.5 degrees F., we're running out of cold water. We might be able to achieve 1-degree drop in temperature by dropping the unit that is currently in overshot mode into undershot mode, Adams added; it won't make that much difference in overall release temperature.

After a brief discussion, it was agreed to reduce Dworshak discharge to 12 Kcfs, immediately, while dropping the unit that is currently in overshot mode into undershot mode, to produce a slightly lower discharge temperature. At Bonneville's request, it was agreed to accomplish the unit changeover later tonight, during light-load hours. It was agreed that the TMT will revisit this operation during Wednesday's meeting.

3. McNary Spill Operations.

As most of you are aware, under the current spill program, McNary is doing two alternating days of 60% spill and two days of 40% spill, said MacKay. We were hoping to spill 40% the next two days, then swap to deliver the 60% spill over the following two days, given the extreme hot weather in the region. Basically, we would do 40% spill today and tomorrow, and provide 60% spill the following four days, MacKay explained; this would give us the flexibility to generate more over the short term, when loads are extremely high. Temperatures are supposed to be moderating, but yesterday was supposed to be cooler, and it really wasn't.

After a brief discussion, no TMT objections were raised to this change in McNary spill operations; it was agreed that McNary will spill 40% of total river flow today and tomorrow, followed by 60% spill on Wednesday, Thursday, Friday and Saturday.

4. Libby/Hungry Horse Operations.

The Libby operation was discussed by the Corps' policy people last week, and the decision was to reduce Libby outflow to three units beginning tomorrow night, Hlebechuk said; this will produce about 14 Kcfs discharge initially. At Hungry Horse, I'm still waiting to hear Reclamation's final decision, said Tony Norris; I should know the answer by the end of the day. We will need to drop down to about 1 Kcfs in order to meet the 10-foot draft by August 31, although

we would need to increase flows later in order to meet the Columbia Falls minimum, Norris said; if we release 3 Kcfs, we'll be about 15 feet from full by August 31. I'll relay Reclamation's final decision at Wednesday's TMT meeting, he said.

5. California Temperature Situation.

California temperatures are breaking records, said MacKay; we have set our system up to deal with this hot spell to the greatest extent possible. Should California get in trouble, we may need to declare a power system emergency, and call a supplemental TMT meeting on very short notice, she said – I just wanted the TMT to be aware of the situation in California.

With that, today's conference call was adjourned. Meeting summary prepared by Jeff Kuechle, BPA contractor.

TMT Meeting Participants July 24, 2006

Name	Affiliation
Robin Harkless	Facilitation Team
Jim Adams	COE
Scott Bettin	BPA
Paul Wagner	NOAAF
Tony Norris	USBR
Margaret Filardo	FPC
David Wills	USFWS
Cindy LeFleur	WDFW
Bruce MacKay	Consultant
Russ Kiefer	IDFG
Dave Statler	NPT