

COLUMBIA RIVER REGIONAL FORUM

TECHNICAL MANAGEMENT TEAM

June 1, 2005

FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS

Facilitator: Donna Silverberg

Notes: 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.

Comments on Notes

There were no comments on the notes at this time.

Hanford Reach Update

Russell Langshaw, Grant County PUD, reported on operations for weeks May 16-22 and May 23-29. No exceedances occurred during the week of May 16. While the Hanford Reach agreement ended May 23, the PUD agreed to provide additional flow after talking with NOAA. Unable to provide protection flows as requested over Memorial Day weekend, the PUD plans to provide protection flows June 4-5. BPA said they could not commit to weekend protection flows, but will do what they can. There will be an update on this at the next TMT meeting.

Dworshak Operations Update:

Cindy Henriksen, COE, reported that inflows receded over Memorial Day weekend, and the snow pack is nearly gone. Outflows are currently at 7.3 kcfs. The COE will likely ramp outflows down for the remainder of June, as was discussed at TMT the past few weeks, depending on in-flows. The reductions will occur, if needed, on Mondays and Fridays. It was noted that current volumes are up somewhat. The salmon managers agreed with the operation and suggested that if there is a great increase in flows, to put additional water on late spring migrants.

Priest Rapids Operations

The action agencies reported that they have been targeting 135 kcfs, and Priest Rapids flows averaged 138.8 kcfs last week. The target this week is 125 kcfs. Inflows to Grand Coulee appear to be dropping so the action agencies would like to reduce the flow target to 120 kcfs or lower next week (prefer 110 kcfs), to assure refill of Grand Coulee and avoid a drop at the end of June. The salmon managers shared an interest in not dropping flows significantly at the end of June, and preferred operating to 120 kcfs next week until an updated forecast and the latest model run and Grand Coulee elevation can be reviewed.

ACTION: The action agencies will begin targeting 120 kcfs at Priest Rapids on Monday, June 6. TMT will have a conference call Wednesday (June 8) morning to look

at the latest model run and use the latest information to inform operations. One question to consider with the model is: What consistent flow would ensure refill of Grand Coulee by the end of June? What scenario would ensure that flow rates do not drop below 100 kcfs at the end of June?

Libby Operations Update

The sturgeon pulse operation at Libby began on May 19 at 1500 hours. Due to colder water temperatures in the river and at the hatchery, the USFWS requested that flows drop to 18 kcfs over Memorial Day weekend and into this week. The COE agreed to meet the request. However, a drowning incident in the Kootenai River over the weekend prompted the COE to reduce flows to 11 kcfs Sunday (5/29) evening through Monday (5/30) at noon to aid in the search. The project went back up to 18 kcfs and will be held through Thursday (6/2) to allow USGS to complete their study. The COE then plans to operate the project to an outflow that can be held steady through August to target elevation 2439', likely ~14.5 kcfs. The COE expressed appreciation to the USFWS for working closely with them through the weekend on this issue. It was noted that other external issues (lightning) have caused some minor changes to the operation, and a line outage on 6/9-6/10 will cause a slight reduction in outflows.

NOAA said they share an interest in flat flows to support fish, and want to avoid spikes. They suggested increasing outflows to about 16 kcfs until the end of June to ensure Grand Coulee refill, then drop to ~12 kcfs in July/August. This could also help avoid the double peak. A concern was raised that this could reduce the likelihood of refilling Libby, and there might be less water available for summer operations. It was clarified that this would be a different shape, NOT a different volume of water.

ACTION: TMT will revisit Libby operations during a conference call on Wednesday, 6/8, and discuss the potential impacts of the different proposed options.

John Day Operations

The Dalles has been spilling at less than the 40% target, so to enhance overall fish passage, the action agencies operated John Day to spill 40% during the day and 60% nighttime beginning on 5/20 as requested by the salmon managers. The gas cap was exceeded so there was no daytime spill on 5/21. A TMT conference call was held on 5/25 to discuss the salmon managers' request to continue day time spill at John Day, suggesting flatter flows out of John Day to promote higher spill during the day. The action agencies agreed to continue the operation (60% night, 40% day spill) through 5/30. The salmon managers were encouraged by the operation, and requested that this continue as long as there is an impact at The Dalles (i.e. a volume for volume spill operation). The action agencies responded that they have completed the request to try to enhance migration during the short period when a lot of fish were passing. The action agencies clarified that they had not agreed to a volume for volume operation, and do not intend to continue daytime spill at John Day. They noted that yesterday (5/31), The Dalles spilled 39.9%, which is .01% short of the 40% target. The salmon managers added that the tail end of migration is important, and the fish would benefit from continued daytime spill at John Day.

Operations Review

Reservoirs—Tony Norris, BOR, reported that the Cascade filled, opening up BOR space and the rental pool. The BOR is expecting additional volume for flow augmentation the Upper Snake but has not yet quantified the amount. Grand Coulee is at elevation 1268.2' and inflows are dropping. Hungry Horse is at 3555', with 3.6 kcfs outflows and inflows dropping. There is less snow pack in the area than previously expected. Libby is 21' from full and filling slightly. Dworshak is at elevation 1597.8'. Priest Rapids flows averaged 132 kcfs in May and 100 kcfs in April; Lower Granite averaged 90 kcfs in May and 42 kcfs in April; and McNary averaged 230 kcfs in May and 135 kcfs in April.

Fish – Juveniles: The juvenile chinook migration is winding down; numbers in the Lower Columbia are still high. Steelhead in the Snake and Lower Columbia are still in the system, indicating a late spring migration. There was a spike in fall chinook subyearling numbers late last week at Lower Granite, indicating an early run of predominantly hatchery summer migrants.

Adults: Fishery managers are counting spring chinook through June 15 this year, with summer counts starting June 16, a change from previous years. The change was made last year to distinguish between listed and non-listed fish counts (Snake River summer and Upper Columbia spring chinook are very similar). The spring run is expected to be 95,000, still far below the forecast. Summer numbers are projected to reach 62,000.

Water quality – Exceedances occurred in the McNary forebay (119.8% on the Oregon side). Few exceedances from the John Day daytime spill operation occurred (just above 120%). A number of exceedances occurred at Lower Monumental due to high flows. Jim Adams, COE, also provided a tally sheet of gas caps at the projects.

Next Meeting, Conference call Wednesday, June 8, 10:00 am

Agenda Items include:

- Priest Rapids Flows
- Libby Flows

Next Face to Face Meeting, Wednesday, June 15, 9am-noon

Agenda items include:

- Sea lion presentation – Bob Stansell
- Hanford Reach review
- Operations Review

1. Greetings and Introductions.

Today's meeting of the Technical Management Team was chaired by Cindy Henriksen and facilitated by Donna Silverberg. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at this meeting. Anyone with questions or comments about these notes should contact Henriksen at 503/808-3945

2. Review of Notes.

No comments on the recent TMT notes were offered at today's meeting.

3. Hanford Reach Update.

Russell Langshaw said that, for the week ending May 23, the flow band, which varied between 40 and 60 Kcfs, was not exceeded. The Hanford Reach weekend protection flows ended on May 22, although, after talking with NMFS, we decided to add another two days of weekend protection flows, on June 4 and 5, he said. And what was the reasoning for that? Henriksen asked. Logistically, and because of short notice, we just couldn't put it together for Memorial Day weekend, Langshaw replied. John Wellschlager noted that Bonneville was ready to support the Memorial Day weekend protection flows, but the Mid-Cs decided not to implement them. Langshaw replied that his understanding was that there was a disconnect between BPA's upper management and water managers. Wellschlager said that, while BPA will do what they can to provide appropriate flow levels for the coming weekend, they cannot guarantee implementation. We'll have to wait and see what happens, said Silverberg.

For the week ending May 28, the flow band (30-150 Kcfs) was exceeded on May 26 and May 28.

4. Dworshak Operations Update.

The last time we met, we discussed an operation under which Dworshak would fill slowly over May and June; the current elevation is 1597.3 feet, said Henriksen. Over Memorial Day weekend, inflows did not respond to the warm weather, which indicates that the snowpack in the basin is pretty much gone. Current Dworshak outflow is 7.3 Kcfs, she said; our expectation is that, for the remainder of June, we will slowly ramp down outflow, to bring the project up to elevation 1600 by June 30. The gradual flow decreases will likely occur on Monday and Friday, as needed, depending on what the inflows give us, Henriksen said. If we get a significant rain event in the area, we may have to increase outflow, but the snowpack is basically gone.

Looking at the Dworshak available flow augmentation volume graph, said David Wills, this is based on the May final forecast? Correct, Henriksen replied. Julie Ammann noted that the -122 kaf figure shown is likely short of reality; obviously Dworshak is not drafting at the moment, and the project is expected to fill this year. Wills said the salmon managers will generally be satisfied with a gradual refill, although Ron Boyce noted that, if opportunity arises, it would be desirable to put as much water as possible on the fish to benefit the tail end of the outmigration.

5. Priest Rapids Operations Update.

Tony Norris said that, last week, the action agencies targeted an average flow of 135 Kcfs at Priest Rapids; however, Grand Coulee inflows are now on the downward leg, and it's time to reduce the flow target at Priest Rapids. We would like to target 125 Kcfs this week and 120 Kcfs next week at Priest Rapids, he said.

Wellschlager said his preference, at this point, would be to set a target minimum flow at Priest Rapids in order to facilitate Grand Coulee refill. Grand Coulee is currently at elevation 1268.2 feet, with 20 feet yet to fill in June. Our preference would be 110 Kcfs at Priest Rapids next week, said Norris. My understanding was that we could keep Priest Rapids flow at or above 120 Kcfs through the month of June and still achieve the refill target, said Boyce. You may have inferred that from the model runs, but they're only model runs, Norris replied. At this point, we would prefer to reduce Priest Rapids flow to 110 Kcfs next week, in order to avoid a steeper drop-off in flow at the end of June.

In response to a question from Cindy LeFleur, Norris said Grand Coulee inflows are difficult to model. Adding to the difficulty is the fact that the latest forecast for that system is somewhat old. We're just going off the best available information and our experience, he said, but our feeling is that, with inflows dropping, we need to reduce Grand Coulee outflow. Boyce said he would like to avoid early refill at Grand Coulee. Norris replied that, with 20 feet yet to fill in Lake Roosevelt, this is an unlikely eventuality. We update the models every week, said Henriksen, so we'll have better information next week.

So you're willing to maintain 125 Kcfs at Priest Rapids through this Sunday? asked Rich Domingue. Correct, Wellschlager replied. I guess I would like to see a new model run, using the most current information, before we make the decision to drop flow at Priest Rapids, said Boyce. Wellschlager suggested that the action agencies target 110-120 Kcfs at Priest Rapids next week, with the understanding that, once next week's STP run is available, the TMT will meet to fine-tune this operation. It was agreed that the TMT will meet next Wednesday to discuss this operation; it was further agreed that the action agencies will target 120 Kcfs at Priest Rapids next week, at least on Monday and Tuesday, until the TMT has an opportunity to revisit the operation on Wednesday. My main concern is that I don't want to see a big drop-off in Priest Rapids flow on Monday or Tuesday, particularly given the fact that it has been raining, and we may have more water than we think, said Boyce. Understood, Wellschlager replied. And your goal is still to refill Grand Coulee to 1290 by July 4? Cathy Hlebechuk asked. Correct, Norris replied.

6. Libby Operations Update.

Henriksen reported that the 2005 sturgeon pulse began on May 19; the project maintained full powerhouse outflow from May 23 through last Friday, May 27. The plan at that point was to reduce Libby outflow to 15 Kcfs; however, due to concerns about low Libby water temperatures, the Fish and Wildlife Service asked that the Corps maintain 18 Kcfs for a few extra days. That request was granted. Over the weekend, there was a drowning incident below Dworshak, and on Sunday evening (through noon Monday), Libby outflow was reduced to 11 Kcfs to help the local sheriff's department locate the body. Those efforts were ultimately unsuccessful, and Libby outflow was again increased to 18 Kcfs, a rate of flow that will be maintained through Thursday, June 2. After that, we will need to choose a steady outflow to achieve elevation 2439 at Libby by August 31, said Henriksen. That rate of flow will likely be in the 14-15 Kcfs range.

Henriksen noted that, following a lightning strike yesterday, Libby was forced to run speed-no-load (2 Kcfs) for about 20 minutes. Also, on the morning of June 9, discharge will need to be reduced to about 12.5 Kcfs for a scheduled power line maintenance outage. The reduction will last until 2 pm on June 10; after that, outflows will once again increase to 14-15 Kcfs. Henriksen noted that, while the timing may not seem optimal, the line maintenance work in the Flathead Valley is paying significant dividends in terms of smoother Libby operations.

Domingue said that, from NMFS' perspective, it would be preferable to maintain 16 Kcfs outflow from Libby through the month of June, in order to bolster Grand Coulee inflows and ensure that the full Libby draft makes it downstream during the summer period. Henriksen replied that, even at 14 Kcfs outflow, Libby is unlikely to refill in 2005. So your preference would be to front-load the available Libby flow augmentation volume into June? Wellschlager asked. Yes, Domingue replied. I'll need to consult my colleagues at BPA before I can agree to that, said Wellschlager; I'm sure Montana will have an opinion on this as well.

7. John Day Spill Update.

Henriksen said The Dalles, as the TMT is aware, is limited this year in terms of the volume it can spill while spillbays 3 – 6 are operating with fixed openings. That spill volume has been limited to 80 Kcfs. Last week, the Lower Columbia flow exceeded 220 Kcfs, which meant that the 80 Kcfs of available spill was less than the 40% of total river flow called for in the UPA. As a result, the action agencies agreed to provide 40% daytime spill at John Day Dam, beginning May 20. On May 21, we had to reduce daytime spill at John Day to zero, because of TDG concerns downstream. Gas levels receded, and we then restored daytime spill at John Day.

Wills said that, at last Wednesday's TMT conference call, the salmon managers, after reviewing the available flow and outmigration date, requested

that spill continue at John Day, using the flattest possible flows. The Corps, BPA and the Bureau of Reclamation agreed to continue the John Day spill operation through at least May 30, with the understanding that we would revisit it today, he said.

Henriksen said the Corps had agreed to provide 40% spill during the day and 60% spill at night at John Day, through the end of the day on May 30. That operation is now over, she said. Wills said the salmon managers have reviewed this operation, and were somewhat encouraged – we feel it has had biological benefit. However, we would like to see the John Day spill operation continue, if possible, he said – as long as spill at The Dalles remains below 40% of total river flow.

Henriksen noted that the action agencies never agreed to provide a volume-for-volume recompense for the reduced spill volume at The Dalles. She noted that river flows are receding and the outmigration is on the decline. It was an unexpected blessing that flows were as high as they were, she said; however, we're now getting back to spilling 40% at The Dalles, as total river flow recedes. Yesterday, we were spilling 39.9% of total river flow at The Dalles, Laura Hamilton observed. In other words, you don't intend to re-initiate the additional spill operation at John Day? Silverberg asked. That's correct, Henriksen replied – our intention is to provide 60% spill during nighttime hours at John Day, with zero spill during the day.

We understand, said Wills, but would observe that, although the outmigration is on its downward leg, the tail of the run is as important as the beginning and middle. NMFS agrees, said Domingue. In response to a question, Henriksen said the gate opening in Bays 3-6 will soon be reduced to 6 feet. She added that, when this change occurs, there will be one day of zero spill to allow divers to inspect the spillway apron for erosion.

8. Operations Review.

Norris reported that Grand Coulee is at elevation 1262.2; Hungry Horse is at elevation 3555. Inflows are dropping at both projects; again, there was little inflow response to the recent warm weather. Libby is 21 feet from full, said Henriksen; Dworshak was at 1597.8 feet as of midnight last night. The flow at Priest Rapids averaged 132 Kcfs in May. Lower Granite's average flow was just over 92 Kcfs in May. McNary flow averaged 230 Kcfs in May. April flows were significantly lower at all of these projects, so the spring seasonal average will, as expected, be below the UPA target.

From a fish perspective, Wills said chum emergence is now complete. The minimum tailwater elevation requirement at Bonneville was lifted some weeks ago, Henriksen said. Boyce said both combined yearling chinook and steelhead indices are winding down, although the numbers are still significant at both the

lower Snake and lower Columbia projects. Subyearling Snake River fall chinook indices also increased sharply earlier this week, he said; the bottom line is that there are still a significant number of juveniles migrating downstream – there are still quite a few spring migrants, as well as unexpectedly high numbers of summer migrants.

LeFleur said the fishery managers will continue to count spring chinook through June 15, rather than June 1. On June 16, they will switch over, and begin to count summer chinook. The total spring chinook run is now estimated to be 95,000 fish; the summer chinook estimate is 62,000 fish this year. The reason for changing the management period is that we have discovered that Snake River summer chinook are more similar to spring chinook than we thought. LeFleur described some of the physiological and timing differences between listed Snake River and unlisted Upper Columbia summer chinook.

Henriksen noted that the sea lion exclusion devices (SLEDs) have now been installed at Bonneville. Wellschlager said there are no significant power system issues to report, although the Columbia Generating Station refueling is continuing. Jim Adams updated the group on recent water quality exceedences, noting that, for the majority of the additional spill period at John Day, the Corps was able to keep downstream TDG levels within the state standards. High flows and involuntary spill have, as usual for this time of years, made it challenging to maintain acceptable TDG levels.

9. Next TMT Meeting Update.

A TMT conference call was set for Wednesday, May 8. The next face-to-face meeting of the Technical Management Team was set for June 15. Meeting summary prepared by Jeff Kuechle.

TMT Participant List

June1, 2005

Name	Affiliation
Cindy Henrikson	COE
Ray Gonzales	COE
Tony Norris	USBR
Ron Boyce	ODFW
Tom Lorz	CRITFC
Donna Silverberg	Facilitation Team

John Wellschlager	BPA
Cindy LeFleur	WDFW
Russ Langshaw	Grant PUD
Brenda Andersona	BPA
Glenn Traeger	Avista
Bruce NackKay	Consultant
David Benner	FPC
Cathy Hlebechuk	COE
Tom Le	PSE
Julie Ammann	COE
Tom Haymaker	PNGC
Robin Harkless	Facilitation Team
Rudd Turner	COE
Russ George	WMCI
Ruth Burris	PGE
Laura Hamilton	COE
Jim Adams	COE
David Wills	USFWS
Mike Buchko	Powerex