

COLUMBIA RIVER REGIONAL FORUM

TECHNICAL MANAGEMENT TEAM

May 13, 2009 Conference Calls

FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS

Facilitators: Erin Halton & Robin Gumpert

Notes: Erin Halton

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.

SOR #2009-2

Paul Wagner, on behalf of the signatories to SOR #2009-2, reviewed the request to increase discharges at Dworshak to 10 kcfs beginning today and maintain for a period of up to five days. Wagner noted the justification for the request was to support Spring Chinook and steelhead passage. He clarified that signatories to the SOR felt it was essential to maintain higher flows through this weekend and based on conditions observed in prior years, weather conditions were likely to see increased temperatures and flows were likely to increase naturally as May and June unfold.

Jim Adams, COE, said that since the SOR had been received at 3 p.m. on Tuesday, the COE had little time to consider the request. However, they did produce an ESP graph posted to the agenda that was their interpretation of the effects of the proposed operation. Adams noted the May 12 ESP run that could be found off the TMT home page showed fairly similar inflow forecast comparisons and flow augmentation volumes might be expected whether the SOR was implemented or not. Steve Hall, Walla Walla District COE, said that although the new forecast information (increased by 100 KAF) suggests more flexibility to manage flows than was discussed at last week's TMT meeting, actual conditions over the next month might negatively impact the COE's ability to refill the project by June 30. Rudd Turner, COE, asked whether NOAA could clarify whether there is any implied flexibility in the 2008 BiOP regarding the June 30 date for refill of Dworshak; Wagner stated that as refill at Dworshak has been achieved between July 4th and July 7th in recent prior years, yes - there is some flexibility around the date.

The COE asked for those parties present during the call to weigh in on the request:

- Dave Statler, Nez Perce Tribe: more thorough analysis and additional STP runs for May 12 – June 30 would help provide input on the request. Based on the data shared today, the proposed operation is not likely to negatively impact fish on the Clearwater. No objection to the SOR, but would suggest a gradual the flow increase and subsequent step-down over a couple days.
- BOR: Do not object to SOR, but defer decision to the COE.
- BPA: Do not object to SOR, but defer decision to the COE.
- OR: support SOR as written.

- USFWS: support SOR as written and acknowledge balancing act between maintaining flows for passage now and flows/cool water available to support fish later in the season; opinion is it is more important to provide flows as specified in the request though this weekend.
- ID: support SOR as written and acknowledge that signatories did not enter in to this SOR lightly; the updated forecast is encouraging and think the SOR is the right decision for spring smolts.
- Kyle Dittmer, CRITFC: general agreement to the principles in the SOR, but also have concerns for refill of Dworshak.

After a brief caucus, the COE suggested more time for internal analysis and discussion of the request and asked to resume the conversation at 3:00 pm.

As the afternoon portion of the conversation began, the COE reiterated that while it recognized the near term potential benefits of the request, they had reached a decision to implement a compromised operation: daily average outflows of ~7.9 kcfs (one big unit and one small unit) beginning at 2200 hrs on 5/13; shift down to ~5.6 kcfs (1 big unit) on 5/16; shift down to ~4.6 kcfs (2 small units) on 5/18; finally, shift down to minimum flows on 5/19. The COE said that the rationale for this compromise was to maintain reserves in case they are needed next week and to also meet the seasonal flow objective of 100 kcfs specified in the BiOP. The COE added that Brownlee may be stepping up flows over the weekend. The following TMT members provided feedback to the COE on their decision.

- Paul Wagner, NOAA: the request was intended to support steady flows through this weekend; acknowledge that natural flow levels ahead are hard to predict. The compromised plan is a step in the right direction, but if the COE could re-consider the SOR, it would be appreciated.
- Russ Kiefer, ID: would commit to not asking for higher flows next week if the COE would be willing to implement the request as it was written.
- Rick Kruger, OR: also would commit to not asking for higher flows next week if the COE would be willing to implement the request as it was written.
- Dave Wills, USFWS: also would commit to not asking for higher flows next week if the COE would be willing to implement the request as it was written.
- Cindy LeFleur, WA: the COE's ESP run shows that refill would be achieved on June 30 if the request were implemented as written – what information was used to make the decision? Answer: The compromise was a decision made based on technical and policy-level input.
- BPA: defer to the COE.
- BOR: defer to the COE.

Action: The COE planned to implement the compromise operation as stated above.

Next TMT Meeting: May 20th Face to Face

Agenda items include:

- Finalize 4/22, 4/29 and 5/6, 5/13 Facilitator Summaries and Official Meeting Minutes.

- Dworshak Operations
- Hanford Reach Update
- Sturgeon Operation at Libby
- Snake River Flow Augmentation Volumes Update (placeholder for any new information)

**Columbia River Regional Forum
Technical Management Team Conference Call
May 13, 2009**

1. Introduction

Today's TMT call was chaired by Jim Adams (COE) and facilitated by Erin Halton and Robin Gumpert (DS Consulting), with representatives of COE, NOAA, BPA, BOR, USFWS, CRITFC, FPC, the Nez Perce Tribe, Idaho, Oregon, Washington, and others participating. The following is a summary (not a verbatim transcript) of the topics discussed and decisions made at the meeting. Anyone with questions or comments about these notes should provide them to the TMT chair or bring them to the next meeting.

2. Dworshak Operations – SOR 2009-02, Snake River Migration

Today's meeting split into two segments, a morning discussion and an afternoon regrouping so the COE would have time for technical and policy review of SOR 2009-2, which was submitted late yesterday afternoon and covers Dworshak operations over the next week.

Paul Wagner (NOAA) introduced the system operational request, signed by NOAA, USFWS, Oregon, Idaho and Washington, which calls for Dworshak Dam to support Snake River spring Chinook and steelhead migration by operating as follows: Beginning tonight, increase Dworshak outflows to full powerhouse (approximately 10 kcfs) for up to 5 days, tentatively through May 17 as needed to help achieve 100 kcfs flows at Lower Granite Dam. The SOR is attached to today's agenda.

The purpose is to aid yearling Chinook and steelhead spring migration. In almost half the years during which the effects of transportation were studied, steelhead who passed Lower Granite after mid-May never returned to spawn, regardless of whether they were transported or allowed to migrate in-river. May 20 appears to be a pivotal date. Not all of the Salmon Managers signed the SOR, and later in the meeting the non-signers gave their reasons for not signing.

Adams showed TMT Attachment 2b to today's agenda, which depicts the projected effects of the proposed operation as the COE interpreted it on short notice. The graph puts Dworshak outflow volumes at 10 kcfs (full powerhouse) on May 13-15; 7 kcfs on May 16, 6 kcfs (one big unit) on May 17; and back to minimum flows on May 18. For the sake of comparison, the Dworshak augmentation volumes chart available on the TMT page under ESP Forecasts depicts Dworshak operations during the same timeframe without implementation of the SOR.

Steve Hall (COE Walla Walla) then presented comparative ESP predictions for this week and last week, when 20 of the 44 years of record would have had no water volume left for augmentation. This week's inflow forecast is markedly improved by a 100 kaf increase – which is subject to the same kind of sudden change downward again. Runoff volume could be 2.4-2.8 maf, which will make a big difference in terms of how much water is available to release. The risk of not refilling is markedly less this week than it was last week according to these ESP data. Refilling the project is a high priority for the COE. There's still a significant risk of not refilling, even if the project continues to release minimum flows, Adams said.

Signatories to the SOR are aware of forecasting inaccuracies as well as the tradeoff between the spring freshet and summer flow augmentation, Wagner said. While they recognize that refilling Dworshak remains a high priority, they believe it's possible to achieve both. They have also considered the balance between the risk of not refilling and the risk to migration now if supplemental flows are not provided. The SOR represents their consensus on the best way to achieve balance between the spring and summer operations.

The BiOp states refill targets for some projects in terms of probability percentages, but it just says Dworshak will refill sometime near June 30, Rudd Turner (COE) said. Does this mean it would be permissible under the BiOp to refill Dworshak in early July and start drafting then? Typically Dworshak doesn't start drafting until after the 4th of July weekend, which will be July 7 this year, Wagner said. So yes, there's some flexibility in the Dworshak refill date. *{Editors Note: The 4th of July is on a Saturday in 2009, so the weekend will end the night of July 6th}*

Dave Statler (Nez Perce Tribe) expressed doubt that the Dworshak pool elevation will rise after July 1 unless inflows are substantial and/or due to water demands downstream for cooling the lower Snake River. If water temperatures on the lower Snake stay low, it's possible that inflows could be passed during that time and the pool held steady. Wagner recalled that last year, the pool filled on July 5 and maintained near its full elevation until July 10.

Adams asked, if Dworshak pool ends the 2009 season at 8 feet below full and never gets to within a foot or two of full, would that be construed as meeting BiOp criteria? It would be if a decision today to implement SOR 2009-02 led to that consequence, Wagner replied.

Statler asked about the relationship of STP runs to ESP flow predictions. What would be the impact of 10 kcfs flows now on conditions later during refill, not only in terms of refill probability but discharge patterns while refill is occurring? The April-July single trace volume was 2.56 maf, which would have been 70 kcfs, so instead of flows of 6.4 kcfs for a month, flows would have gone to about 2 kcfs for a month, Greg Bowers said. The COE is planning a

presentation on ESP and STP forecasting methodologies at a future TMT meeting, Adams said.

Adams asked, what would the impacts be on the Clearwater River of a 25% increase in flows from Dworshak, or 10 kcfs outflows, then dropping to 7 and 6 kcfs and back to minimum flows? Unregulated flows in the Clearwater will probably be increasing over the next week, which would tend to dampen the impacts of such an operation, Statler replied.

Adams asked, if inflows at Lower Granite are still 90 kcfs or less by May 15, would the SOR signatories expect 10 kcfs outflows to continue for another day? Yes, the weekend operation is really driven by other reservoir operations in the basin, Wagner replied. The intent of covering the weekend in the SOR is to include expected releases from Brownlee Dam. If natural flows come up, Dworshak could drop back down to minimum flows and still meet the intent of the SOR. There was discussion of how to establish a flow level for the weekend, given that project operators won't be able to respond to updated forecasts.

Hall asked, if weather predictions for 80 degrees on Sunday don't materialize, will the fish managers want another 4-5 days of full powerhouse releases? There was discussion of ramp rates for the proposed operation. Half a day to ramp up would be acceptable to the Nez Perce, Statler. Dave Wills (USFWS) asked what period of time is covered by the augmentation volumes in Attachment 2b. The graph covers May 12 through the end of June, Hall replied.

TMT members stated their views of SOR 2008-2 for the record.

Nez Perce – Didn't sign the SOR due to concerns that it might force operations in the later spring freshet to go to base flows. In light of the latest forecast for an additional 100 kaf, a revised operation would be more acceptable than a full 5 days of 10 kcfs outflows from Dworshak. Gradual ramp rates of at least half a day are preferred.

CRITFC – Agrees with the principles of the SOR but refrained from signing because CRITFC supports the Nez Perce position on balancing refill with flow augmentation.

BOR – Would not object if the SOR is implemented. Deferred to the COE on this decision.

BPA – Deferred to the COE on this decision. Recommended operating to a specific discharge for management purposes.

USFWS – Signed the SOR and supports implementation as written. Believes that providing flows now for spring migration is worth the risk of a water shortage later this summer for flow augmentation.

COE – After adjourning for internal consultation, proposed a compromise operation to balance the risk of not refilling Dworshak reservoir with efforts to meet the seasonal flow objective of 100 kcfs at Lower Granite. The compromise operation consists of 7.9 kcfs outflows (a large and small unit at optimal efficiency) beginning at 10 pm tonight through May 16, when flows drop to 5.6 (one big unit at optimal efficiency). On May 17, flows drop again to 4.6 kcfs (2 small units), and will return to minimum flows on May 19. The Corps' proposal to not implement the SOR as written was partly out of concern that the Salmon Managers might request additional water next week. However, might provide supplemental releases next week if flows continue to be low.

NOAA – Gave high priority to maintaining 10 kcfs outflows from Dworshak over the coming weekend. In terms of peaks in the historical hydrograph, runoff is consistently high on the Snake River over the next week, which should reduce the demand on Dworshak pool. This historical tendency, plus the added 100 kaf in the flow forecast makes refill highly likely if the SOR were implemented as written. Offered not to sign an SOR next week requesting additional water if flows are provided now as requested in this SOR.

Idaho – Supports the SOR in light of the increased flow forecast. Suggested the COE set a weekend flow rate based on Friday's streamflow predictions in a best-faith effort to implement the SOR as written. Seconded NOAA's offer not to sign another SOR next week if flows are provided now as requested, and agrees with NOAA's position that runoff in the Snake basin will be adequate next week without much supplemental flow from Dworshak.

Oregon – Signed the SOR and believes that providing flows now for the spring migration is worth the risk to flow augmentation this summer. Seconded the offer not to sign another SOR next week if flows are provided now as requested.

Washington – Signed the SOR and asked the COE questions about the probability of refill according to the most recent ESP traces. The 50% confidence level says that Dworshak pool will refill

The COE will implement its compromise operation, which begins tonight with ramping up to 7.9 kcfs, then down to 5.4 kcfs and again to 4.6 kcfs and returning to minimum flows on May 19, a day before TMT's next meeting.

3. Next Meeting

The next regular TMT meeting will be on May 20 at the COE Portland office. Dworshak operations, a Hanford reach update, the sturgeon operation, upper Snake flow augmentation, and review of meeting minutes for April 22, 29

and May 6 will be on the agenda. This summary prepared by consultant and writer Pat Vivian.

Name	Affiliation
Jim Adams	COE
Paul Wagner	NOAA
Tony Norris	BPA
Russ Kiefer	Idaho
John Roache	BOR
Cindy LeFleur	Washington
Steve Hall	COE Walla Walla
Ruth Burris	PGE
Barry Espenson	CBB
Richelle Beck	DRA
Kyle Dittmer	CRITFC
Margaret Filardo	FPC
Dave Benner	FPC
Glen Trager	Shell Energy
Dave Statler	Nez Perce Tribe
Dave Wills	USFWS
Rick Kruger	Oregon
Denny Rohr	DRA
Cathy Hlebechuk	COE
Dan Feil	COE
Rudd Turner	COE
Richelle Beck	DRA
Denny Rohr	DRA