

# COLUMBIA RIVER REGIONAL FORUM

## TECHNICAL MANAGEMENT TEAM

May 19<sup>th</sup>, 2004

### 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.

#### **Status of Hanford Reach:**

Chris Carlson, Grant County PUD, reported on the weekly average flows at Hanford Reach for May 10-16<sup>th</sup>. The average daily discharge for the week was 139.3 kcfs. End of emergence occurred on May 10<sup>th</sup>, so the PUD started operating toward 400 temperature units on May 11<sup>th</sup>. They were at 65 tu's as of May 16<sup>th</sup>. Chris will provide another update on the status on Hanford Reach at next week's TMT meeting.

#### **Mid-Columbia Flows:**

The COE continues to operate to meet 135 kcfs flow objectives at Priest Rapids and will provide TMT with ESP runs at the next TMT meeting to aid in discussions on this issue next week.

#### **CRITFC SOR C-3:**

Kyle Martin presented a request for a spring treaty fishery from 6 am today, May 19<sup>th</sup>, until 6 pm Friday, May 21<sup>st</sup>. CRITFC requested that Bonneville, The Dalles and John Day pools be operated at 1' from full, and stable. Kyle noted that this should be the last fishery for the season. Cindy Henriksen, COE, said that a teletype has been issued to operate Bonneville at 75-76.5' as a hard constraint and 75.5-76.5' as a soft constraint; The Dalles at a 3' pool (but noted that the pool generally remains stable); and John Day at the BiOp 1.5' range, from 262.5-264'. Kyle will present a review of the spring treaty fishery at next week's TMT meeting.

#### **System Status Review:**

*Reservoirs:* Libby is at elevation 2423', releasing 4 kcfs out, and has a water supply forecast of 4.9 MAF (just above a tier one flow volume for sturgeon). Libby is filling about .5'/day. Hungry Horse is at elevation 3544.3', releasing a weekly average of 3.9 kcfs and operating to fill by June 30. Grand Coulee is at elevation 1272.3'. Dworshak is at elevation 1581' (19' from full). The COE is doing some load shaping at this time, and provided bar graphs of volumes projections for Dworshak and Hungry Horse to show refill possibilities at the projects. The COE plans to maintain current outflows at Dworshak and go to minimum flow in early June.

Flows for May 10-16<sup>th</sup> averaged 139 kcfs at Priest Rapids; 65 kcfs at Lower Granite; and 230 kcfs at Bonneville.

*Fish status:* Lower Granite and Lower Monumental are seeing a downward trend in yearling chinook numbers. McNary, John Day and Bonneville are showing high yearling chinook numbers (~100,000 at McNary on 5/15). Steelhead numbers likely peaked at Lower Granite earlier in the week, and not many numbers have been seen yet at McNary and John Day. Subyearling chinook numbers are similar to previous years, with the migration not yet occurring at this time. The trend for yearling and steelhead is lower than previous years, possibly due to full transport. Adult numbers this year are expected to reach 189,000, with a daily count last week of 1,500-2,500.

*Water quality:* Jim Adams, COE, reported that, due to low flows in the system, there has been spill to the gas caps only at McNary and Bonneville, and no exceedances. The COE is using the SYSTDG model this year, and has found recently that it tends to be an “over-predictive” model. Thus the COE, over the last two days, has raised the target to attempt to get closer to the gas cap. It was noted that many criteria are used to make these predictions, and that SYSTDG is one of many tools in the tool box. It is an on-going, interactive process that is updated daily.

**Sturgeon SOR:**

Bob Hollock, USFWS, described a forthcoming SOR from the USFWS for a sturgeon pulse operation. The trigger to start this operation would be the first spawning event at Hemlock. When this trigger occurs, increase flows out of Libby to 13 kcfs, 14 kcfs, 15 kcfs, and 16 kcfs (ramp up one kcfs per week) for a total four week operation. A second trigger would be if spawning occurs at Bonner’s Ferry, and the requested operation would be the same as above. Alternatively, if no spawning occurs, the request for a sturgeon pulse operation will no longer be put forth and the USFWS recommendation will be for a ramp down to Bull Trout BiOp operations.

A question was raised whether the SOR has a contingency for not refilling Libby, to which Bob responded no, not as written. TMT discussed some alternative operations for the potential of refilling Libby at a lower flat flow after the end of the sturgeon operation. This may need further discussion. NOAA requested that the SOR fully acknowledge both salmon and bull trout needs. Montana noted that there seems to be an opportunity for a win-win operation for sturgeon and bull trout. TMT agreed that they need to look at the SOR before agreeing to fully implement it, and agreed to allow the start of operations if the spawning trigger occurs.

**ACTION:** Bob Hollock will send the SOR to TMT as soon as possible. He will be the contact point for biologists on the river, and will contact Cindy Henriksen if/as soon as the spawning trigger occurs. Cindy will then send an email notification to TMT members. TMT will have further discussions on sturgeon operations at next week’s TMT meeting.

**SOR 2004-10:**

The salmon managers presented a request to implement full BiOp spill at John Day and The Dalles, as well as provide mitigation for not spilling to 40% at The Dalles and 60% at John Day earlier this year. Paul Wagner noted that NOAA signed on to the SOR in an attempt to open a discussion of why the COE was not able to implement to the

percentage of spill at the two projects. The Dalles has physical limitations with the positioning of the gates, so have operated up to 40% spill, recognizing that the objective is to reach BiOp spill levels as often as possible. Relative to John Day, again the COE has been operating up to 60% spill, and offered that there may be room to adjust the stops in order to get closer to the 60%. The salmon managers recognized that they may need to revisit and re-write the FPP in order to more clearly characterize the objective of meeting the spill percentages as much as possible, rather than spilling up to the percentages.

Relative to the compensation piece of the request, the COE was not prepared to grant mitigation spill operations for the salmon managers' estimated differences between planned and actual spill. BPA was not available to respond to the SOR.

**ACTION:** The COE will send out a teletype that reinforces the objective of meeting the respective 40% and 60% spill objectives at The Dalles and John Day. They will work with project operators and BPA schedulers to find adjustments to operate closer to 60% at John Day. The salmon managers will request a response from BPA on the compensation piece of the SOR at the next TMT meeting.

**SOR 2004-11:**

The salmon managers presented SOR 2004-11, to operate McNary within 1% and stop the McNary modification test immediately in order to meet that objective. The justification for this was the concern for higher mortality and de-scaling that has occurred at the project. NOAA, while not signing on to the SOR, noted that they share the concern and also are interested in continuing the test, so would like to further investigate the situation before ending the test.

FFDRWG planned to discuss this issue during a meeting today in Walla Walla. While all TMT members shared an interest in hearing the outcome of that discussion, there was disagreement about whether the test should be stopped until a final decision could be made by TMT on this matter, or whether FDRWG should decide whether to continue the test given this new knowledge. (The test was scheduled to continue today, then stop and re-start on Sunday, May 23<sup>rd</sup>.)

**ACTION:** Mark Smith, Walla Walla COE, will send a summary of the FFDRWG discussion to TMT members for their next discussion on this issue. The project biologists will be alert to the salmon managers' concerns and will stop the test if they see an increase in mortalities or descaling. If deemed necessary, Dave Wills will call an emergency TMT meeting (by first calling Cindy Henriksen who will forward the notice on to all TMT members) on Friday, May 21<sup>st</sup>. Otherwise, TMT will revisit this issue at their next regularly scheduled meeting on Wednesday, May 26<sup>th</sup>.

**Next Meeting, Wednesday May 26<sup>th</sup>, 9-noon:**

Agenda Items:

- Status of Hanford Reach
- Mid-Columbia Flows/ESP analysis
- Review Spring Treaty Fishery
- Sturgeon SOR

- Response from BPA re: 2004-10 SOR
- McNary 1% Update
- System Status Review

### ***1. Greeting and Introductions***

The May 19 Technical Management Team meeting was chaired by Cindy Henriksen of the Corps and facilitated by Robin Harkless. The following is a distillation, not a verbatim transcript, of items discussed at the meeting and actions taken. Anyone with questions or comments about these minutes should call Henriksen at 503/808-3945.

### ***2. Status of Hanford Reach.***

Chris Carlson reported that, for the week ending May 16, the average Priest Rapids flow was 139.3 Kcfs. The flow band ranged between 40 and 60 Kcfs, and was significantly exceeded only on Monday, May 10, when the flow band was 40 Kcfs and the actual change in flows was 84.1 Kcfs. He added that a total of 65 temperature units have been recorded since the end of emergence on May 10; the fish are accumulating approximately 11 TUs per day.

### ***3. Mid-Columbia Flow Objectives.***

Henriksen noted that last week's Mid-Columbia flow objective was 135 Kcfs; the actual weekly flow observed at Priest Rapids Dam was 139.3 Kcfs. Paul Wagner said the salmon managers would like to maintain 135 Kcfs as the Priest Rapids target through the end of next week – the end of May, essentially. Henriksen said the Corps will be re-running its ESP model using the most recent flow and volume forecast data, and will provide this information to the salmon managers prior to next week's TMT meeting.

### ***4. Sturgeon SOR.***

Bob Hallock said the 2004 sturgeon SOR has been prepared, but has not yet been signed by Fish and Wildlife Service management and sent to the action agencies. The SOR recognizes that there is not a great deal of water available in 2004; we're attempting to move the sturgeon to the best available spawning area, he said. The SOR will request that, as soon as spawning behavior is observed (either eggs recovered or female sturgeon observed heading downstream), Libby outflow be increased to 13 Kcfs for one week, then 14 Kcfs for a week, then 15 Kcfs for a week, and finally to 16 Kcfs for a week. The operation could start as soon as this weekend, but again, will be triggered by biological indicators.

Hallock noted that there have been some instances of spawning on the mats and gravel near Bonners Ferry, and if eggs are seen there, that would also trigger the start of the operation. If no sturgeon spawning behaviors are observed, we will not continue with this SOR, Hallock said. If the sturgeon pulse is provided this year, once it is complete, we

would expect the action agencies to ramp Libby outflow down to the bull trout minimum flow, Hallock said.

Jim Litchfield said there has been some discussion in Montana of the possibility of providing something above the bull trout minimum flow from Libby, in order to avoid a double peak in Libby outflow this summer. And you expect Libby to refill this year? Cathy Hlebechuk asked. Henriksen replied that, according to the most recent Corps model runs, given a sturgeon operation similar to the one Hallock just described, followed by a flat 15 Kcfs outflow, the closest Libby will come to refill in 2004 is 9 feet from full. Hallock observed that a flat Libby outflow of 9 Kcfs, rather than 15 Kcfs, would get Libby closer to refill in 2004. That's something we do need to look at more carefully, Litchfield observed – I can see a real win-win opportunity here, in terms of providing a stable flow from Libby through the entire summer period. Litchfield added that the State of Montana will be advocating a full 20-foot draft from Libby this summer, extending into September. Wagner replied that NOAA Fisheries may have a different opinion on that operation, because any water released from Libby in September will not reach the lower river in time to help migrants there. Wagner said it would be nice if the sturgeon SOR referenced the 2000 BiOp salmon augmentation operation. It is acknowledged in the SOR, Hallock replied.

When we modeled this, said Henriksen, we were thinking the operation might start as soon as May 24 – any idea how much lead time we may have? We would like flows to come up as soon as possible once the biological triggers are observed, Hallock replied – we have people following these fish every day. Henriksen said the Corps would prefer to have two days of warning prior to the onset of the sturgeon operation; Litchfield noted that there will be a couple of days of ramp-up, given the fact that Libby is currently releasing minimum outflow. The sooner you can notify the Corps, the sooner we can provide the water, Henriksen said. It was agreed that Hallock will contact Henriksen directly as soon as the biological trigger is seen by the field crews. In the meantime, Hallock said he will provide the signed sturgeon SOR to the TMT by the end of this week.

So is it likely that the sturgeon operation will start next week? Ron Boyce asked. Yes, Hallock replied – water temperatures are already in the correct range. The operation could start as soon as today, given the ripe condition of the females, Scott Bettin noted. Henriksen observed that, procedurally, it is somewhat awkward for the TMT to approve an SOR it has not yet seen. I understand, said Hallock, and will get that to you as soon as possible. Boyce asked that the TMT have some more detailed discussion of operations after the sturgeon SOR is complete; it was agreed to place this topic on the next TMT agenda. Henriksen said the Corps will model a range of operational scenarios for Libby, showing a range of potential operations once the sturgeon operation is complete. Is the TMT comfortable with starting this operation even if we don't have a signed SOR? Harkless asked. I'm not comfortable doing that, Litchfield replied – I think we need to at least run the SOR through an email loop before the TMT signs off on this operation. I'll get it signed as soon as possible and will email it to Cindy, said Hallock. It was agreed that Henriksen will distribute the SOR to the TMT members via email and that any comments or concerns should be provided to her as soon as possible.

## ***5. Status of Operations.***

Henriksen said Libby continues to release 4 Kcfs; Libby's current water supply forecast is 4.9 MAF, just above the Tier 1 flow volume for sturgeon – 800 kaf. Libby's current elevation is 2423 – 36 feet from full – and filling about 0.5 feet per day, with inflows in the 14 Kcfs range, down from a high of 25 Kcfs last week. Mary Mellama from Reclamation said Hungry Horse was at 3544.3 feet as of midnight last night, with 3.9 Kcfs out and 5-6 Kcfs in. The project is filling slowly and is expected to refill by June 30. At Grand Coulee, the current elevation is 1272.3 feet, with inflows of 110 Kcfs. The elevation hasn't changed much over the past week, she said.

Dworshak is at 1581 feet, 19 feet from full, releasing 4.2 Kcfs during the week and 2.2 Kcfs on the weekend, Henriksen said. She drew the group's attention to the most recent "Volumes at Dworshak" graph, showing the volume the Corps expects to be able to release from that project above minimum outflow between now and June 30. At a 50% confidence of refill, that volume is now 295 kaf, Henriksen said, noting that this graph has been updated to reflect the May final water supply forecast. It was agreed to maintain the current outflow regime from Dworshak through at least the end of Memorial Day weekend, after which the project will go to minimum outflow (1.3 Kcfs). Henriksen said last week's average flow at Lower Granite was as high as 73 kcfs and as low as 55 Kcfs, with an average of 64 Kcfs. At Bonneville, for the week ending May 16, flows ranged between 257 and 108 Kcfs, with a weekly average flow of about 230 Kcfs.

With respect to current fish status, Wagner said yearling chinook passage at Lower Granite has fallen from more than 700,000 on May 6 to a current index of about 17,000. Numbers continue to be stronger at Little Goose and McNary Dams. With respect to steelhead, Wagner said that, at Lower Granite, the peak of more than 480,000 fish occurred on May 8; index numbers have since receded. Wagner also touched briefly on current subyearling chinook passage data. He then moved on to cumulative passage index graphs for various Snake and Columbia River projects, noting that steelhead passage indices, in particular, are lagging behind historic passage timing.

Scott Bettin said there are no current power system problems to report. Jim Adams said low system flows have kept spill volumes low, with most projects unable to hit their TDG cap limits due to minimum generation requirements. He noted that the Corps' SYSTDG model appears to be running slightly on the conservative side, predicting somewhat higher TDG levels than what is being seen in the actual data. That's something we need to take a look at, Adams said, adding that the Corps will be developing a comprehensive post-season review of SYSTDG's performance. And the current nighttime spill volume at Bonneville is? Wagner asked. Tonight it will be 140 Kcfs, Adams replied, adding that the 120% TDG limit at McNary will be 185 Kcfs of spill tonight.

## ***6. CRITFC SOR 2004 C-3.***

On May 17, CRITFC submitted SOR 2004 C-3. This SOR requests that, for the period 6 a.m. May 19 through 6 p.m. May 21, the action agencies maintain the following pool elevations in support of the tribal treaty fishery:

- Bonneville: 1.0 feet from full pool (msl elevation 76.5-75.5)
- Celilo (The Dalles): operate pool within 1 foot of full pool (msl elevation 159.5-158.5)
- John Day: operate the pool within 1 foot (msl elevation 264.5-263.5)

Kyle Martin went briefly through the contents of this SOR, the full text of which is available via hot-link from the TMT homepage. Martin said this is likely the last treaty fishery of the 2004 spring season.

Henriksen said the Corps has already sent a teletype to Bonneville Dam, specifying elevation 75-76.5 as a hard constraint and 76.5-75.5 as a soft constraint. The Dalles will operate within a 3-foot range but the actual operating range will likely be much narrower; John Day pool will be operated in a 1.5-foot range per the BiOp – in essence, the same operating ranges we have provided during the previous two treaty fisheries, Henriksen said. Do you think you'll be able to keep the pools relatively steady during the fishery? Martin asked. We have seen no additional special requests that would cause pool elevations to fluctuate, Henriksen replied.

#### **7. SOR 2004-10.**

On May 18, the action agencies received SOR 2004-10. This SOR, supported by USFWS, IDFG, ODFW, WDFW, NOAA Fisheries, the Shoshone-Bannock Tribes and CRITFC, requests the following specific operations:

- Assure spill at John Day and The Dalles Dams is provided to the full BiOp levels (40% of total flow at The Dalles and 60% of total flow for 12 hours at John Day)
- Compensate for spill below the BiOp levels between April 12, 2004 and May 17, 2004 at John Day (295 kaf) and The Dalles Dam (106 kaf). In order to “true up” the difference in planned and actual spill volumes provided, extend the spill interval at John Day to a 12-hour spill program (6 p.m. to 6 a.m.) until the planned and actual spill volumes are equal.

Wills and Wagner provided an overview of this SOR, the full text of which is available via hot-link from today's agenda on the TMT homepage. Wills noted that, after May 15, spill at John Day is cut back to 11 hours per night, rather than 12 hours, hence the suggestion that 12 hours of spill be provided at that project as a potential mitigation measure. The group devoted a lengthy discussion to this SOR, its analytical basis, and the logistical difficulties, in terms of spill gate settings, in providing precise spill volumes. In response to a question, Wagner said the analysis underlying this SOR does not factor in the days when spill was curtailed at John Day because the project was at the gas cap. It's been at the gas cap 38% of the time this year, Scott Boyd noted.

Wagner said NOAA Fisheries does not necessarily agree with ODFW's contention that 40% spill at The Dalles is a guideline, not a ceiling. Still, there is nothing to prevent the Corps from being right at 40% spill at The Dalles, said Boyce. Yes there is, Adams replied – the physical limitations on our ability to finely control the percent of river flow spilled.

The group also discussed spill operations at John Day Dam. Ultimately, Henriksen said it may be possible to increase some of the spill gate stops at John Day to provide some additional spill; she said the RCC will send out a teletype reminding the John Day project operators that 60 percent of total river flow is the goal during nighttime hours. Rudd Turner noted, however, that, overall, the percentage of spill provided at The Dalles and John Day is quite high in 2004, in comparison to some previous years. Again, we will reiterate the 60% objective at John Day, Henriksen said. With respect to spill operations at The Dalles, said Henriksen, we have heard that, in their opinion, the 40% spill number is a ceiling, not to be exceeded, so we will continue to do our best to provide as close to 40% of total river flow as possible, 24 hours a day.

What about the proposal the some additional spill be provided to make up for loss of spill and the impacts of that lost spill on fish passage and survival? Boyce asked. Typically we have not provided this type of compensation, and TMT has had this discussion in the past and decided as a group that it would be counterproductive to count every single lost Kcfs or megawatt, Henriksen said. After a few minutes of additional discussion, Henriksen said that, without all of the TMT representatives at the table (Scott Bettin having had to sign off), the Corps is unable to agree to provide the type of compensation or mitigation the SOR requests.

Wagner noted that reminding the action agencies of their obligation to hit the BiOp spill targets at The Dalles and John Day is the most important component of this SOR. Will you bring this SOR back to TMT next week? Henriksen asked. We haven't yet heard a response from Bonneville, Wagner replied; the response we heard from the Corps today is that they will try to do better at John Day, and that operations will likely be unchanged at The Dalles. In response to a question, Wagner said he would still like to get a response from Bonneville on this SOR, in particular, on the question of whether or not the spill operations provided in 2004 will help the action agencies achieve their BiOp performance standard obligations. I would also like to hear BPA's response to the compensation issue, said Boyce.

#### **8. SOR 2004-11.**

On May 18, the action agencies received SOR 2004-11. This SOR, supported by USFWS, IDFG, ODFW, WDFW, the Shoshone-Bannock Tribes and CRITFC, requests the following specific operations:

- Operate all McNary turbine units within the 1% peak efficiency range during spring and summer 2004 as described in RPA Measure 58 in the 2000 Biological Opinion
- Immediately terminate Vertical Barrier Screen tests, which require turbine units outside the 1% peak efficiency range.

Again, Wills provided an overview of this SOR, the full text of which is available via hot-link from today's agenda on the TMT homepage. Please refer to this document for full details and justification. Wills noted that this SOR was submitted in response to the increased rates of mortality and descaling observed this year when McNary turbine

units have been operated outside 1%. We feel that the VBS test is detrimental to fish passage at McNary, said Wills, and agree that the test should be terminated immediately. Wagner noted that, while NOAA Fisheries shares those concerns, they also support the McNary modernization program, and would like the VBS testing to continue for a little longer in order to obtain additional information as to why the descaling and mortality problems are occurring. NOAA Fisheries did not sign SOR 2004-11, Wagner said.

Boyce noted that while ODFW also supports the McNary modernization program, tests such as the 2004 McNary VBS test must be conducted wisely – it’s a balance between obtaining the information we need and taking care of the juvenile migrants, said Boyce. Research is secondary to the primary goal of ensuring good fish passage conditions, Boyce said.

After a brief discussion, it was noted that the Walla Wall District FFDRWG group is discussing the McNary modernization test today; there was general agreement that it would be best to wait until FFDRWG weighs in before making a final TMT recommendation on this SOR. It was agreed to revisit this topic at next Wednesday’s TMT meeting, once the outcome of today’s FFDRWG discussion is known. It was further agreed to ask Mark Smith to summarize that discussion for TMT next week. Wills asked that the Corps postpone the next test period outside 1%, which is due to begin on Sunday, until after TMT can discuss this issue again next week – in other words, he said, let’s err on the side of fish. Litchfield said that, to him, it makes more sense to continue the study as designed in order to maximize data collection. Henriksen added that project personnel are already empowered to shut down operation outside 1% if increased descaling and mortality are seen.

The group discussed how best to proceed with this issue. Ultimately, it was agreed that the TMT will have an opportunity to provide any comments they may have on FFDRWG’s conclusions; in the meantime, said Wills, I would be comfortable leaving the current test operation in place until next week’s TMT meeting, with the stipulation that an emergency TMT conference call may be needed on Friday if additional concerns arise following today’s FFDRWG meeting.

***9. Next TMT Meeting Date.***

The next meeting of the Technical Management Team was set for Wednesday, May 26. Meeting summary prepared by Jeff Kuechle.

**TMT PARTICIPANT LIST**

**May 19, 2004**

<b>Name</b>	<b>Affiliation</b>
Robin Harkless	Facilitator
Cindy Henriksen	COE

Jim Litchfield	Montana
Kyle Martin	CRITFC
David Benner	FPC
Tim Heizenrater	PPM
Jim Adams	COE
Rudd Turner	COE
Scott Boyd	COE
Tom Haymaker	PNGC
Tina Lundell	COE
Cathy Hlebechuk	COE
Kevin Nordt	PGE
Ken Corum	PNUCC
Laura Hamilton	COE
Mike O'Bryant	CBB
Paul Wagner	NOAAF
Ron Boyce	ODFW
Ruth Burris	PPL
David Wills	USFWS
Mary Mellama	USBR
Russ Kiefer	IDFG
Cindy LeFleur	WDFW
Chris Carlson	GCPUD
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