

COLUMBIA RIVER REGIONAL FORUM

TECHNICAL MANAGEMENT TEAM

MEETING NOTES

July 10, 2002

CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES – CUSTOM HOUSE
PORTLAND, OREGON

TMT Internet Homepage: <http://www.nwd-wc.usace.army.mil/TMT/index.html>

FACILITATOR'S SUMMARY NOTES ON FUTURE ACTIONS

Facilitator: Donna Silverberg

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.

Libby:

Brian Marotz reported that Montana fish made it through the involuntary spill event pretty well. Overall mortalities related to gas bubble trauma were very low, although there was trauma to some fish. Of greatest concern were those few fish with eye bubbles. The day after spill ended, trauma to the fish was reduced. Brian said he believes the majority of the fish will recover. He summarized that while the fish were indeed impacted, the level of harm to fish appears to have been low. Another survey will be out next week.

REQUEST: Brian requested that if anyone is aware of good literature sources regarding fish sounding to avoid gas please pass this on. His email address is: bmarotz@state.mt.us.

Libby Spill Test: COE reported on the preliminary numbers resulting from the Libby spill test. It was noted that not all data has been collected as the instruments are still in the river. The following information are the initial assessments:

- 1) It appears that the TDG plateaued at 125%;
- 2) Gas levels below Kootenai Falls prior to spill was 116-118; once spill began, it remained at 116-118;
- 3) There was 120% TDG around the Dave Thompson bridge.

When asked whether there was any recommendation of a safe spill amount if more was needed, staff responded that a little over 2 kcfs spill could be added (if needed) and still keeps within 110% TDG level.

Weather Update:

Temperatures have been very high around the region. Very little precipitation is forecasted for the next 5-7 days.

Lower Columbia Adult Migration Study:

The adult migration is still preliminary but coming along. Of interest is that the total time to pass the dam this year is between 53 and 59 hours, whereas 1996 and 2001 tests showed that it only took around 24 hours. More work will be done to determine what may be causing the migration to slow down.

Fallback: The study also showed a correlation between higher fallback and higher spill. It was noted that the overall numbers of fallback are very low, but more fish passed with lower spill. The spill test will continue through the end of August. More information will be shared with TMT as it is compiled.

McNary Juvenile Fish Transport:

NMFS requested that juvenile collection begin today due to the change from spring to summer conditions. The COE said they would be able to begin full transport today.

Next Steps for Emergency Action List:

BPA will go to FPAC next Tuesday 7/16 to discuss and resolve issues related to the priority list. A report will be made at the July 24th TMT meeting.

Snake River Flow Augmentation Plan for July/August:

Tony Norris, BOR, presented the plan for Snake River flow augmentation. It is as follows:

- 160 kaf out of the Payette system
- 60 out of the Boise system
- 18 kaf out of OR (natural flows)
- 40 kaf from “pumpers”
- 0 kaf out of Upper Snake
(278 kaf less 40 kaf) Total of 238 kaf from BOR in July and August

Regarding the “less 40 kaf”, NMFS requested two feet be left in Cascade in August to reduce fish mortalities and improve water quality in the reservoir and rivers. The agency requested that the two feet (or 40 kaf) be released early next spring.

As requested, Tony will provide additional information on how the 40 kaf will be accounted for so it is not lost during flood control periods in spring '03, a BOR release schedule (if available), and a written response from the BOR regarding no use of Milner power head for fish operations.

Idaho Power's Response to SOR 2002-5:

TMT appreciated the written response from Idaho Power and requested closer cooperation between IPC and TMT in the future. IPC said they are happy to cooperate if the Federal agencies will mitigate their losses.

Dworshak Modeling Scenarios:

COE and CRITFC both ran scenarios for Dworshak operations. The runs show if held at 13 kcf through the end of August, 100 to 200 kaf will be available to meet the interest expressed by the Nez Perce Tribe and Idaho. The Salmon Managers requested that the slow growth rates of fall Chinook be monitored from week-to-week and, if river and air temperatures stay cool, the group

will revisit the issue of whether to reduce flows from 13 down to 10 to encourage growth of the smolts.

Action: Dave Statler will fax the information to the Salmon Managers for discussion of temperature and growth information at their next FPAC meeting.

Action: The COE will begin to release 47-degree water from Dworshak at about 13.3 kcfs 7/10/02. TMT will check-in on the status of fish and elevations next Wednesday.

Current System Status:

Libby inflows are holding steady at 35 kcfs. COE may need to spill again as early as today. Kathy Hlebechuk, COE, will keep the group informed on this matter via email.

Hungry Horse and Grand Coulee are within 10ths of being full and most likely will be full on Friday. The BOR can hold HH through Monday if the group wants to use the water later in the summer since Columbia River flows are high. The BOR would need Biological Opinion flexibility at the end of August if the date got pushed back.

Action: Tony Norris will review the options at HH regarding operations after HH is full and email a proposed operation to TMT members as soon as possible. If there are concerns, a call will be requested on Monday.

Water Quality: Tom Lorz had questions from the last meeting on Lower Granite forebay water quality issues: specifically, is it possible to get more regular information from the tri-level thermograph? No information was available at this time, but Kathy Hlebechuk will email information to Tom as soon as it is available.

Fish Migration Status: Fish are at more than 50% passage. Clearwater juveniles are experiencing slow growth while wild Snake River Chinook juveniles are moving rapidly.

BPA “Financial Choices” Public Process:

Suzanne Cooper provided information on a new public process that BPA has begun on “financial choices”. There was a 5-6% shortfall in revenue from last year. BPA has choices to make about how to manage the shortfall and are looking for input on five choices. For more information, see BPA’s website. To give input, email financialchoices@bpa.gov. The deadline for input is September 30, 2002. Regarding potential risks to fish and wildlife programs, Suzanne said “everything is on the table”.

Next Meeting, July 24:

Agenda items:

- New BON Fallback Study Information
- Portland District Spill Test Study
- Emergency Action List Update
- BOR – 40 kaf Accounting Plan
- Dworshak Operations
- Lower Granite Forebay Tri-level Thermograph Update

Reminder: on July 17th there will be a work session for TMT members regarding the 2003 Water Management Plan. The session is scheduled from 9 a.m. – 12 noon.

Meeting Minutes

1. Greeting and Introductions

The July 10 Technical Management Team meeting was chaired by Cathy Hlebechuk of the Corps and facilitated by Donna Silverberg. 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 Hlebechuk at 503/808-3942.

2. Weather Update.

Marty Lee of the River Forecast Center said there is currently a strong ridge of high pressure over the entire West Coast; it looks as though the thermal trough west of the Cascades is going to hop the mountains and bring prolonged high temperatures to the interior part of the basin over the next week or so – temperatures at Missoula are expected to exceed 100 degrees over the next two days, then fall to the mid-90s by the weekend. There is some possibility that we may see some precipitation by late Friday, likely on the west side of the Cascades, said Lee; no precipitation is expected on the east side.

David Westnedge reported that, on the hydrologic front, most systems are currently experiencing slowly-receding inflows. There is still some minor snowmelt going on, particularly in the northern Cascades. Flows in the Upper Kootenai are expected to recede following the recent rainfall event; over the next couple of weeks, the snowpack should disappear from the Upper Kootenai. At Libby, inflows are already starting to recede; inflows are expected to peak today, then begin to fall off by about 2 Kcfs per day. So you're not anticipating a dramatic recession in the Kootenai? Hlebechuk asked. How long do you think it will take for Libby inflows to fall to the 25 Kcfs range? That will likely take 5-6 days, Westnedge replied.

3. Libby Spill/TDG and Fish Update.

Hlebechuk drew the group's attention to a preliminary report from Montana Fish, Wildlife and Parks on the topic of spill, TDG and fish at Libby Dam. Brian Marotz went through some of the information generated by the planned Libby spill test monitoring, which was continued during last week's uncontrolled spill at the project. The monitoring effort included net-pen rainbow trout held in the top 3 to 4 feet of the water column. Marotz said 100% of those fish showed signs of GBT; we did see some mortality toward the end of the test, he said. Marotz emphasized that these fish probably are not representative of fish in the river, which had the option of seeking deeper refuge during what eventually became a full-blown spill emergency. He added that at least some of the net-pen mortalities could have been due to fungus and other causes, rather than gas bubble trauma. We saw no mortality in the at-large fish in the river, Marotz said, although some low levels of mortality could have gone undetected. Overall, he said,

it appears that mortality due to GBT was low during the spill emergency, although we did see numerous signs of GBT, including bubbles in eyes.

The day after the spill ceased, signs of GBT reduced, and the fish began to recover, Marotz said. We saw some level of signs of GBT in about 80% of the mountain whitefish sampled, he said; in wild bull trout, we saw up to 81% of fish with signs during spill, which went down to 71% a day later. In the rainbow and cutthroat trout sampled, 80% showed GBT signs during the spill event, a percentage that went down significantly a day after spill ceased. 100% of the kokanee sampled showed signs of GBT during the spill event, although that species is less abundant in the reach of concern.

All in all, said Marotz, it looks as though we came through the Libby spill event pretty well, from a biological standpoint; while we did see numerous signs of GBT in all of the species sampled, it doesn't appear that the fish suffered much in the way of permanent harm. Marotz added that a more detailed report covering incidence and severity of signs and species affected will be available later this summer. Marotz asked the TMT to recommend any literature citations they are aware of regarding a fish's ability to avoid gas by sounding, and to email those citations to him at bmarotz@state.mt.us.

Carolyn Fitzgerald of the Corps' Seattle District then provided some preliminary results from the spill test and spill emergency; she noted that TDG appears to plateau at about 125% below Libby, regardless of spill volume. Below Kootenai Falls, Falls about 30 river-miles downstream of the project, TDG stayed at 116%-118% during the spill test, the same level it was at before the test. There was a definite change in TDG levels from the left bank to the right bank, Fitzgerald said, with TDG levels of about 125% observed near the David Thompson Bridge on the left bank at a volume of 6 Kcfs-7 Kcfs spill. A final report on the Libby spill test will be available by the end of the calendar year, she said; again, the results I've presented today are preliminary. Carolyn provided this synopsis of preliminary results from the spill test.

Readings taken at David Thompson Bridge

Libby Spill	Preliminary tdg
2 kcfs	109%
3 kcfs	114%
4 kcfs	119%
5 kcfs	122%
6-7 kcfs	124-125%

Hlebechuk noted that, given current project elevation (2457 feet) and continuing inflows of 35 Kcfs to Libby, it may be necessary to spill again at that project over the next few days. In response to a question from Hlebechuk, Fitzgerald said it appears that it should be possible to spill about 2 Kcfs at Libby without violating the 110% Montana state TDG standard. If at all possible, we will attempt to avoid spill, Hlebechuk said; we'll be watching project inflows closely in an effort to avoid filling and spilling at Libby. It does appear that inflows will start to recede soon, she said; the question is, how quickly? Libby filled about half a foot yesterday, Hlebechuk noted.

4. Lower Columbia Adult Migration Study.

David Clugston of the Corps distributed a report titled “Spill and Fallback Test Summary;” he emphasized that the information it contains is preliminary. Basically what this shows is that, from where the fish are released, travel time to the Bonneville tailrace is essentially the same under both spill treatments, Clugston said. From the tailrace to the dam itself, there is a significant difference in travel time, with fish taking less time to reach the dam under the low spill condition – a median of 14.61 hours -- compared to a median of 23.55 hours under the high-spill treatment. There is some difference in total travel time from the release point to the dam under the low spill and high spill conditions, Clugston said – 53.86 hours during the low spill treatment vs. 59.37 hours during the high spill treatment. He noted that travel times under both treatments are significantly longer this year than they were in the last study in 1996. There are a number of reasons why this may be occurring, he said – we now have flow deflectors at the project, and the spill pattern is different, in addition to the effects of the ongoing spill test.

With respect to fallback, said Clugston, 593 radio-tagged fish were released for the spring test, 34 of which eventually fell back. What’s interesting, he said, is that 24 of those fish took more than 24 hours to fall back – in other words, they were on their way upstream, then turned around. What the data also show is that more fallback occurred during the high-spill treatment periods, he said (18 fallbacks during high spill, 14 during low spill). The take-home message is that fallback was very low this spring, but delay may be higher – we’ll be looking more closely at that over the next few weeks, he said. In response to a question from Boyce, Clugston said the Bonneville spill test is scheduled to continue through August 31. In response to another question, Clugston said 410 of the 593 radio-tagged fish passed Bonneville during the low-spill condition; the other 183 passed during the high-spill treatment.

5. Chum Numbers and Locations in 2002.

Boyce said there is nothing to report on this agenda item at today’s meeting; it will be up to the Fish and Wildlife Service to provide this information.

6. McNary Juvenile Fish Transport.

Wagner said that, with McNary flows on the wane (about 210 Kcfs and falling) and water temperatures on the rise (about 63 degrees F, currently) , NMFS recommends that juvenile transport begin today at McNary. He added that, given the fact that about half of the run has already passed McNary in 2002, the total percentage of the run that will be transported this year is expected to be 25% or less, which should give us some good information about the relative benefit of transport vs. in-river migration this year, Wagner said. Turner replied that it should be possible for transportation to begin at McNary today.

7. Emergency Action List – Next Steps.

Rick Pendergrass said the May 29 draft of the emergency priorities list is still in use by project schedulers. There is a more recent draft, dated June 19, but you’re not using it? asked Chris Ross. No, Pendergrass replied, because some of the items called for in the June 19 version

of the emergency actions priority list -- the two-foot draft of Grand Coulee, for example -- cannot be implemented instantly, but will take hours or even days to coordinate. It was agreed that Scott Bettin will attend next Tuesday's FPAC meeting to explain the complications associated with some of the measures recommended in the June 19 list. We'll look forward to a further conversation on this topic at the next TMT meeting, Silverberg said.

8. Snake River Flow Augmentation Plan.

Tony Norris said that, this year, 160 KAF of flow augmentation water will be delivered from the Payette system; NMFS has requested that 40 KAF of that water be retained in Cascade Reservoir. A further 60 KAF will be delivered from the Boise system, 18 KAF from purchased natural flows from Skyline Farms in Oregon, and another 40 KAF from the pumps -- a total of 278 KAF in all, minus the 40 KAF that will stay in Cascade Reservoir. Norris said Reclamation has been releasing water from both the Payette and Boise systems; all of the Boise water will be out by the end of July, and the remainder of the water will be delivered by August 31.

With respect to the 40 KAF to be retained in Cascade Reservoir, Norris said there are concerns about water quality at that project when the elevation gets too low. He noted that 40 KAF translates into two feet in elevation at that project; NMFS has requested that the 40 KAF be left in that project through August.

Wagner explained that, since there is no BPA/IPC shaping agreement this year, the decision has been to retain the 40 KAF in Cascade through next year, in order to avoid creating a water quality problem in that reservoir; that 40 KAF will be released next summer, and will not count against the 427 KAF in 2003 Upper Snake flow augmentation water.

In response to a question from Boyce, Norris said the State of Idaho accounts very closely for this water. In response to a request, Norris said he will check on how this water will be accounted for during next year's flood control release period, and will report back to the TMT. In response to another request, Norris said he will see what Reclamation is willing to provide, in terms of the release dates for the various Upper Snake water deliveries this year. In response to another question from Boyce, Norris said Reclamation will provide a written response to SOR 2002-5, particularly on the question of why power head is off the table this year. Norris reiterated that the power head question is under discussion between the Bureau and the State of Idaho, and is not something the TMT can resolve.

Silverberg drew the group's attention to the July 9 letter from Idaho Power to the TMT, the Company's written response to SOR 2002-5; essentially, it spells out the Company's view that Idaho Power is not liable to incur expense in order to mitigate for the impact of federal facilities on ESA listed species, and, absent an agreement with Bonneville, Idaho Power is unwilling to shape the Upper Snake flow augmentation water in 2002.

Wagner noted that one topic that is not addressed in Idaho Power's letter is the thermal impact of the Hells Canyon complex on outmigration timing and on the life-cycle of the fish. There are ongoing discussions between Idaho power and NMFS on the temperature issue, Jon Bowling (from Idaho Power) replied, but I'm not prepared to address that issue today.

We appreciate this response, said Boyce; however, without Idaho Power's cooperation, it makes it very difficult for the TMT to manage the Upper Snake flow augmentation operation. I would encourage IPC to be as cooperative as possible, and to work with this group to make Snake River operations as beneficial as possible all the way around, Boyce said. Second, he continued, the best data set we have about the biological benefits of flow augmentation is the data we have on the Snake River – I want to emphasize that there is no dispute, among the salmon managers, at least, about the biological benefits of flow augmentation. Bowling replied that Idaho Power is endeavoring to be cooperative, but some cooperation from the federal agencies is needed as well. If we can reach an agreement that will make us whole financially, Bowling said, we would be willing to shape the Upper Snake water.

Is it still your plan to keep Brownlee full through the month of July? Boyce asked. Yes – that hasn't changed, Bowling replied. However, Idaho Power's operation will be market-driven, Wagner observed – if energy prices stay high, you may begin to draft Brownlee sooner. That's correct, Bowling replied.

9. Dworshak Modeling Scenarios.

Hlebechuk drew the group's attention to the summary of Dworshak modeling scenarios requested at this week's TMT conference call, showing what might happen if a portion of the Dworshak storage is reserved for use in September. Hlebechuk said the Corps modeled the following scenarios:

- Hold 13 Kcfs (110% tdg) as long as possible, ramp to 10 Kcfs (full load) to achieve Dworshak elevation 1537 feet on August 31
- Hold 13 Kcfs (110% tdg) as long as possible, ramp to 10 Kcfs (full load) to achieve elevation 1527.5 on August 31
- Hold 13 Kcfs (110% tdg) from July 10 through August 31
- Hold 10 Kcfs (full load) from July 9 to August 31

Hlebechuk noted that it was not necessary to model Scenario 2 because of the volume of water in the current forecast. The results of the model runs were as follows:

- Scenario 1: ramp down to 10 Kcfs on August 25, end August 31 with 228 KAF available for use in September
- Scenario 3: 189 KAF available for use in September
- Scenario 4: 501 KAF available for use in September

Kyle Martin said CRITFC had also modeled these scenarios, and their numbers correspond fairly closely with the Corps' modeling results. Silverberg noted that Scenario 3 appears to meet the preferred operation identified at Monday's TMT conference call. What that would allow us to do is to ramp Dworshak outflow down to 10 Kcfs during the last week in August, hold 10 Kcfs through the first week in September, go to 7 Kcfs outflow during the second week in September and to 3 Kcfs during the third week in September, to achieve elevation 1520 at Dworshak by the end of September, Martin said. In response to a question from

Hlebechuk, Martin said he had used the RFC inflows in the current TMT spreadsheet in developing his analysis.

Are you comfortable with the SSARR inflow forecast? Hlebechuk asked. Yes, Martin replied – it looks reasonable to me, at this point in the season. So where do we go from here? Jim Litchfield asked. We'll monitor the SSARR data on a weekly basis, and keep CRITFC's and Idaho's recommendations in mind during our week-to-week decision-making process, Wagner replied. My understanding is that we'll be managing the system for flow and temperature control through the summer, with the goal of leaving 100 KAF in storage on August 31 if possible, Shane Scott said. My understanding is that 100 KAF-200 KAF is the goal, Silverberg replied.

Dave Statler reported that the mean fork length of the Clearwater fall chinook is 62 mm this year, which compares to a mean fork length of 70 mm on July 1 last year. Essentially, the fish are a couple of weeks behind in their development this year, Statler said, and need as many thermal units as we can give them over the next few weeks, as long as water temperatures at Lower Granite are within the 20 degree-C threshold. Our recommendation is that 10 Kcfs outflow from Dworshak would be preferable to 13 Kcfs over the next two weeks, from the standpoint of Clearwater fall chinook growth, Statler said.

What evidence do you have that reducing Dworshak outflow to 10 Kcfs would be beneficial to those fish? Boyce asked. It's based on chinook growth experiments, which indicate that optimal growth occurs at water temperatures of 60 degrees F and above, Statler replied.

Wagner noted that air temperatures at Lewiston are expected to exceed 100 degrees F over the next three days; water temperatures in the Lower Snake are already 64.5 degrees F and rising, even before we've seen that scorching weather, he said. The tribe had agreed that we need to get ahead of the water temperature curve and keep Dworshak outflow at 13 Kcfs through this week, Statler said; however, we would like to see Dworshak outflow reduced to 10 Kcfs, if possible, beginning next week. Boyce and Statler devoted a few minutes of discussion to the question of what the literature indicates with respect to optimal water temperatures for fall chinook growth. Ultimately, Statler and Boyce agreed to discuss this issue in more detail outside of today's meeting. Statler said he will fax the relevant literature to Boyce.

What I'm hearing is that 13 Kcfs outflow at Dworshak is OK for this week, and we can revisit this issue at next week's TMT meeting, Wagner said. Actually, we're currently releasing 12.5 Kcfs at Dworshak, but our plan is to increase outflow to 13.3 Kcfs later today, said Laura Hamilton. She said the Corps has been able to increase outflow and still maintain tdg below 110%. Boyce said he will provide a copy of Billy Connor's growth projections for distribution to the TMT membership prior to next week's meeting.

10. Current System Conditions.

Hlebechuk said that, for the week ending July 7, flows averaged 51 Kcfs at Lower Granite, right at the summer flow objective; at McNary, 290 Kcfs, well above the 200 Kcfs summer flow objective. Albeni Falls is operating in the top half-foot and releasing 40 Kcfs. Libby is at elevation 2457 feet, with inflows of 35 Kcfs and outflows of 25 Kcfs. It does look like we're going to have to resume spill at Libby, she said, given the forecast continuing high

inflows at that project. We will try to keep in mind the 2 Kcfs spill cap to stay within the 110% TDG waiver limit, she added. Hlebechuk noted that a lightning strike caused an emergency line outage and a three-hour reduction in Libby outflow from 25 Kcfs to 18 Kcfs on July 8. This caused us to exceed our Biological Opinion ramp rates, she said.

Should we hold 2 Kcfs spill at Libby until the project fills, then pass inflow, or should we spill at a higher volume and fill the project more gradually over the next few days? Hlebechuk asked. Ultimately, there was no consensus reached on this issue. In response to a question, Turner said it is not possible to fill Libby above 2459 feet without a major treaty negotiation with Canada. In response to a request, Hlebechuk said the Corps will send out an email once the spill operation at Libby is defined.

Norris reported that both Hungry Horse and Grand Coulee are very close to full; Hungry Horse is releasing 4 Kcfs, currently, and it looks as though outflow will need to be increased to 8 Kcfs once the project touches full, probably by Monday. The TMT could also decide to waive the August 31 draft requirement of 3540 feet at Hungry Horse, keep outflow at 4 Kcfs for the time being, and either retain or release any volume above elevation 3540 during the month of September, Norris said.

Given current flows in the Columbia, Norris said, we could probably hold off on increasing Hungry Horse outflow now. Oregon would prefer to go to 8 Kcfs on Monday, Boyce said. Montana would prefer to delay that increase to 8 Kcfs while flows in the Lower Columbia are well in excess of the summer flow objective, Litchfield said – if we don't need the full 20-foot draft from Hungry Horse this summer to meet the seasonal flow objective, we shouldn't take it. Drafting Hungry Horse at this point in the season, given current flows in the system, is simply punitive, Litchfield said – it serves no biological purpose at this time.

In response to a question from Boyce, Norris said he will find out when the fourth unit at Hungry Horse will be back on line. Once that unit is back in service, he explained, it would be possible to release more water without spilling, Reclamation's goal being to avoid spill at that project. That would give us some added flexibility in Hungry Horse operations this summer, Boyce noted.

Litchfield observed that there have been years, such as 2000, when it wasn't necessary to draft Hungry Horse the full 20 feet in order to meet the lower river flow targets; such an option is welcome, from Montana's standpoint, because it minimizes some of the biological damage to the reservoir the 20-foot draft causes every year. The BiOp is also clear that the flow targets are a minimum, not a maximum, Boyce said. Is Monday soon enough to make a decision on the Hungry Horse operation? Silverberg asked. Yes, was the reply. My goal is to balance upriver and downriver interests in a way that doesn't necessarily follow the letter of the BiOp, as we did in 1999, Litchfield said. Again, said Norris, I'll try to find out when the fourth unit at Hungry Horse will come back on line; if that won't occur until mid-August, that's going to constrain our operational alternatives somewhat.

Norris summarized this issue by saying that what is at stake here is the August 31 ending elevation at Hungry Horse – whether it should be 3540 feet, or some elevation above that. The

only real wild card, operationally, is the availability of the fourth unit, Norris said – if it is not going to be available, and if we want to take the full 20 feet this year, then Reclamation will need to start releasing 8 Kcfs from Hungry Horse this Monday.

Ultimately, it was agreed that Reclamation will make a decision about whether or not to increase Hungry Horse outflow to 8 Kcfs on Monday, and will send an email explaining that decision to the TMT membership. It was agreed there will be a conference call on Monday if there is major TMT disagreement with that decision.

BPA's Rick Pendergrass said there are no problems, currently, with the power system. Hamilton distributed information on the current TDG situation in the system; she noted that while the system has been averaging four TDG standard exceedences per day, flows are now receding, so TDG will become less of a concern. Water temperature is now becoming the parameter of concern, Hamilton said; Lower Monumental is the current hot spot, with temperatures approaching 72 degrees F for a few hours yesterday.

In response to a request from Wagner, Hlebechuk said she will check to see whether the tri-level thermograph information from Lower Granite forebay can be made available on a weekly, rather than a monthly, basis.

With respect to the status of the fish migration, Wagner said the 50% passage point has now been reached for subyearling chinook outmigrants at both Lower Granite and McNary. The adult summer chinook run is going gangbusters, with record numbers arriving at Bonneville – 102,000 to date, Wagner said. Statler noted for the record that the juvenile fall chinook in the Lower Clearwater are still below the size necessary for outmigration, and need to grow. Chris Ross added that outmigrant travel times for wild fall chinook in the Lower Snake River are much faster than they were last year, a fact for which we have higher flows to thank, he said.

11. New System Operational Requests.

No new SORs were presented at today's meeting.

12. Recommended Operations, July 15-28.

Recommended operations were summarized during previous agenda items.

13. Other.

A. BPA Financial Choices Public Process. Suzanne Cooper said she wanted to share some information about a public process BPA started last week regarding financial choices. She noted that, last year, BPA set its power rates for the current rate period, which runs through September 2006; since then, our financial condition has deteriorated significantly, Cooper said. Although our rates have several cost recovery adjustment mechanisms built in, even with those adjustments, BPA's power revenues are expected to fall 5%-6% short of projections over the rate period, she said. Cooper distributed two handouts summarizing BPA's financial condition and the public process under which it is to be addressed; she went through some of the reasons for

the current financial situation.

BPA would like to create a comprehensive financial plan to guide operations over the next few years, Cooper said; we're providing information about the current situation and outlining five possible alternative ways to address the situation. Cooper went briefly through those options, then noted that what BPA needs is public input on those options and the policy questions laid out in the handouts. There will be a series of public meetings this summer, she said; the public comment period will be open through September, after which we will develop a plan, based on the input received, by December.

With respect to BPA-funded fish and wildlife programs, Cooper said BPA's focus is to meet the performance objectives in the Biological Opinion at the lowest possible cost; if it is possible to meet those objectives while reducing our fish and wildlife spending, she said, we're open to doing that.

Cooper emphasized that BPA has made no decision to date about which approach to pursue; she asked the TMT membership to review this information and to provide any feedback they may have to the following website: financialchoices@bpa.gov.

14. Next TMT Meeting Date.

The next face-to-face meeting of the Technical Management Team was set for Wednesday, July 24. Meeting summary prepared by Jeff Kuechle, BPA contractor.

TMT PARTICIPANT LIST JULY 10, 2002

Name	Affiliation
Kyle Martin	CRITFC
Shane Scott	WDFW
Rudd Turner	COE
Ron Boyce	ODFW
Nancy Yun	COE
Scott Boyd	COE
Tim Heizenrater	UBS
Maria Van Houten	UBS
Cathy Hlebechuk	COE
Paul Wagner	NMFS
Tony Norris	Reclamation

Mike O'Bryant	Columbia Basin Bulletin
Rick Pendergrass	BPA
Ruth Burris	PGE
Colin Beam	PPM
Laura Hamilton	COA
David Clugston	COE
David Brenner	FPC
Russ George	WMCI
Tina Lundell	COE
Eugene Rosolie	PNGC
Suzanne Cooper	BPA
Chris Ross	NMFS
John Bowling	IPC
Brian Marotz	Montana FWP
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