

**TECHNICAL MANAGEMENT TEAM
MEETING NOTES
August 20, 2003
CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES – CUSTOM HOUSE
PORTLAND, OREGON**

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.

Fish Passage Status/95% Criteria/End of Spill:

TMT discussed criteria for end of spill at the Snake River projects. Paul Wagner, NOAA, reported that FPAC discussed three methodologies that were presented on 95% passage criteria. FPAC did not reach a consensus on which methodology to use, but after internal discussions, Paul presented a method to TMT. Essentially, Paul used two tools, DART and a passage index for the run at large, to determine when the 95% passage criteria had been met. This methodology is similar to that used for the Mid-Columbia, although slightly more conservative. Based on the criteria used in Paul’s methodology (meeting 95% criteria for three days in a row satisfied the criteria that 95% of the run had passed.), NOAA recommended that the spill continue as of today.

Steve Haeseker, USFWS, presented two alternative methodologies, also presented at FPAC earlier this week. A handout was provided. The first method includes the influence of hatchery fish in determining run times for the run at large. The second method used cumulative passage numbers starting with August 15. Again, no agreement was reached on whether to utilize either of these methodologies to determine an end of spill date.

The key issue of concern for TMT today is the lack of regional agreement as to what the criteria meant, and a need for clarification from NOAA about the interpretation of the BiOp relative to the Aug. 31 planning date. After further discussion and a caucus, TMT was asked to respond to the following question, which was then elevated to the IT by BPA:

Has enough of the ESA run at large passed to end spill at the four Snake River projects and still meet the intent of the BiOp?

Oregon: Unable to answer the BiOp question, but believes there are still enough fish in the river that warrant protection through continued spill.

USFWS: Agreed with Oregon’s perspective.

Idaho: Need clarification on BiOp in order to answer the question. Not enough confidence from the region that 95% of the fish have passed to end spill – need agreement on the methodology for the 95% criteria.

Montana: End spill – new information still does not show a benefit to fish or that the operation is cost-effective.

Washington: No room in the BiOp to have this discussion – IT should clarify objectives and IF the objective is 95%, direct TMT to develop criteria for determining that number.

CRITFC: Continue spill – consistent with the tribes’ river operating plan and supports late migration of Clearwater stocks.

BOR: Will follow NOAA’s recommendation.

COE: What is the intent of the BiOp? Interest in developing spill objectives; defer to the IT and NOAA to do that.

NOAA: Need to clarify the policy.

BPA: NOAA needs to clarify the policy at IT.

UPDATE: *IT met to discuss the issue on August 21st and was also unable to reach consensus. BPA requested that the issue be elevated to the Executive level as soon as possible. The issue was put forward for possible resolution by the federal executives.*

Ice Harbor Spill:

No new information was available since last week’s TMT meeting. NOAA recommended that the 12-hour nighttime bulk spill pattern continue through the spill season. Oregon raised concerns with the operation and requested a written explanation on this issue from NOAA.

Dworshak Operations Update:

Cindy Henriksen, COE, reported that to meet the target elevation 1535’ at Dworshak, outflows were reduced to 6.5 kcfs on Tuesday evening 8/19 and are scheduled to remain there through the end of August, with some shaping. Outflows will then be increased on 9/8 to 8.4 kcfs in order to meet a target 1520’ by mid-September. After some discussion it was agreed that a steady flow would be sought so the average daily discharge would be similar between the end of August and the first two weeks of September. Paul Wagner reported that tailwater temperatures are around 66.5 degrees. Jim Adams, COE, said to keep in mind that temperatures will decrease at the headwaters, to about 43.5 degrees. The USFWS voiced concern with going much below 45 degrees. Idaho Fish and Game raised some concern that if flows are not flat, stranding may occur. Russ Kieffer will report to Paul Wagner if stranding is observed in the area, and Paul will notify the TMT.

MOP Operations:

As requested by BPA, FPAC discussed the possibility of ending MOP restrictions at Little Goose, Lower Monumental, and Ice Harbor. The Salmon Managers feel that the criteria for passing adults have not yet been met. TMT will check in again on this issue at the next TMT meeting on August 27.

2004 Water Management Plan:

Scott Boyd, COE, reported that the 2004 WMP is now on the TMT website in PDF and is also available as a Word document for anyone interested. Scott requested that comments be sent by September 10. There will be some discussion of the WMP at next week's TMT meeting. One suggestion was made to include the methodology and end of spill criteria in the WMP, when it is decided.

ACTION: Scott will send the word document to all TMT members via email.

Current Conditions:

Tony Norris, BOR, reported that forest fires near the transmission lines at Hungry Horse may require the lines to shut down and the project to be operated at spill/zero powerhouse, or speed/no load, the latter of which would affect Columbia Falls. The project has already begun ramping down at 500 cfs per day. Brian Marotz is coordinating with BOR on Hungry Horse operations.

Next Meeting, August 27, 9am-noon:

An agenda will be developed and posted on the web prior to the next TMT meeting.

1. Greeting and Introductions

The August 20 Technical Management Team meeting was chaired by Cindy Henriksen 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 Henriksen at 503/808-3945.

2. Ice Harbor Spill.

Paul Wagner said he has not been provided any new information on results from the 2003 Ice Harbor spill test. Ron Boyce said that, if (as discussed in the next agenda item) the IT agrees that the 2003 summer spill program should continue, the TMT needs to make a recommendation as to whether Ice Harbor spill should continue only from 8 p.m. to 8 a.m., or should be expanded to 24 hours. NOAA Fisheries' position is that we should stay the course and provide spill during nighttime hours only, said Wagner. Boyce asked that NOAA Fisheries provide a written justification for this policy; Wagner said he will do so.

3. Fish Passage Status Update.

Wagner reminded the group that, at several recent meetings, the TMT has discussed whether the BiOp spill program can be terminated in season. The basic question is, does the BiOp say we need to arrive at the 95% passage point in order for spill to end? The BiOp is not very clear on that issue, Wagner said; August 31 is specified as the planning date for the end of spill, but the BiOp provides no criteria by which the TMT might recommend a different ending date.

Isn't the purpose of this agenda item to talk about the post-test spill operation? Boyce

asked. Yes, but we're being overrun by the end of spill season issue, Scott Bettin replied. That's correct, said Wagner – the world I've been living in for the past week is the proposal that spill should end in season, and the criteria by which we'll make that decision. The focus has changed from 12-hour spill vs. 24-hour spill to whether or not spill should end before August 31, he said. I thought the focus was to resolve the apparent spillway injury issue at Ice Harbor, Boyce said. Bettin replied that, at the last TMT meeting, it was agreed that FPAC would discuss that issue at its meeting yesterday. However, if the decision is to continue spill, we need to discuss the 12 vs. 24 hours issue, Boyce replied.

Again, the BiOp isn't clear about the mechanism by which to decide when to end spill, said Wagner. The 95% passage point is one generally-accepted criteria, he said, but this is really the first time we've seriously considered ending spill prior to August 31. We have talked about it and made that request in years past, but the salmon managers have been unwilling to agree to that request, said Bettin.

We discussed this issue yesterday at FPAC, said Wagner; at that meeting, I put forward some possible criteria for deciding when to end summer spill. Those criteria were not accepted without criticism, he said; we discussed various alternative methodologies as well, but came to no consensus. This question has been hashed over for years at the Mid-Columbia projects, he said; in general, I think we'll need more time to come to consensus on this question. We don't have that time this year, he said, but I've been asked to share NOAA's conclusions on this issue.

Following yesterday's FPAC meeting, said Wagner, we had some additional conversations at NOAA about how we might answer that question. There are two tools that would be applied to answer it, the first being the DART passage prediction tool, which is based on the passage of marked wild fish. This tool does not represent all wild fish, including the Clearwater fish, but it is a tool that is available to us, he said. Wagner took the group through the current DART smolt passage prediction graph; the numbers (in terms of the percentage of the PIT-tagged wild Snake River subyearling chinook run passed to date) broke down as follows: Lower Granite, 98%; Little Goose, 96%, Lower Monumental, 95%, Ice Harbor, 94% and McNary, 93%. One of the boxes NOAA Fisheries feels needs to be checked is that the 95% passage point has been reached, Wagner said. There is some mortality that occurs between projects, observed Jim Litchfield – is that taken into account in these estimates? No, Chris Ross replied.

Using this tool, then, we're very close to the 95% passage point at Ice Harbor but not quite there, Wagner said. The other tool available to us is the Fish Passage Center's passage indices, which is more representative of the run at large – it takes the Lyons Ferry hatchery fish into account, for example. Wagner put up an Excel spreadsheet showing passage index data by project for the years 1992-2002. We determined the 95% passage date for each year, Wagner said; for McNary, it ranged from July 19 to August 19. The spreadsheet also included the daily passage index on the day the 95% point of passage was reached; at McNary, it ranged from 18,840 to 80,872. At John Day, the date of 95% passage ranged between August 4 and August 29; at Lower Granite, July 25 to October 10; at Little Goose, July 30 to September 27.

Haven't we been making changes to our index methodology in the past 10 years? Litchfield asked. Yes, Wagner replied, although the methodology for calculating the indices have not changed, to my knowledge. He noted that, interestingly, the date the 95% passage point was reached is significantly earlier at Little Goose and Lower Monumental than it is at Lower Granite.

To apply this, said Wagner, since the numbers bounce around, you need a series of dates

at which the 95% passage point is reached. What I came up with was the concept that if the index falls below the lowest historic passage index numbers on the date the 95% passage point is reached for three consecutive days, then you're there. He said he had applied this criteria to the historic index data at John Day, McNary, Lower Monumental, Little Goose and Lower Granite with somewhat mixed results – this tool was more accurate for some projects than it was at others.

So in order to build another layer of certainty into this, in NOAA Fisheries' view, you need to be satisfied that the 95% point of passage has been reached at all projects, using both the DART predictor and this tool, Wagner said. If you reach the 95% passage point at all projects using both tools, you can be reasonably certain you're there, he said. Again, I presented this methodology at yesterday's FPAC meeting, and there was not universal agreement about its validity.

Rod Woodin noted that this methodology is limited by the sampling period at individual projects -- if you sample through December at McNary, you have a larger database from which to make your prediction, he said. Boyce said that, at yesterday's FPAC meeting, Bettin brought up the point of what we're managing to – what percentage of the run? ESU fish only? The run at large? The second point was whether this should be used to shorten spill or, conceivably, lengthen the spill period, Boyce said. These are all points on which we need TMT agreement, he said. Would we also need to discuss shortening or lengthening the flow augmentation period? Tony Norris asked. Absolutely, Boyce replied.

As we spill for single-digit passage indices at the cost of millions of dollars, we need to decide whether or not that's worthwhile, Bettin noted – that's not something we can answer here at TMT, it's a policy call. In response to a question, Woodin noted that the Mid-Columbia spill program is intended to provide protection to 95% of the run at large. Spill ended at Rocky Reach and Rock Island on August 13 and 15, respectively; they're still spilling at Wells dam. Grant County ended spill on August 13 and 14. Spill at Wells will end on August 26, he said, the historic date by which the 95% passage point has been reached in 18 of the last 20 years. He noted, however, that the criteria for deciding when to end spill at the Mid-Columbia projects are agreed to before the season begins – they don't try to decide on those criteria at the end of the season. Woodin added that, at Rocky Reach and Rock Island, spill ends after there have been either three consecutive days or three days out of five when the daily index declines to 0.3% of the cumulative passage to date at those projects, a similar method to that which Wagner has proposed.

So does NOAA Fisheries have a proposal for the TMT to consider? Silverberg asked. The question I was asked was, based on our analysis, do we believe we have achieved the 95% point of passage at Ice Harbor? Wagner replied. Applying the criteria NOAA has proposed, he said, for this year, the answer to that question is yes – the daily index we're looking for at Lower Granite is 1,940 or less for three consecutive days; we've been there since August 11. At Little Goose, the index number is 663; we were there from August 11 to August 17, but in the past two days, the index has bumped back up to 1,000+. At Lower Monumental, daily indices have also fallen below the target index number, Wagner said. In response to a question from Woodin, Wagner noted that the methodology he is proposing is actually more conservative (erring on the side of the fish) than the methodology used to determine the 95% passage point at the Mid-Columbia projects.

The discussion continued in this vein for some minutes. Ultimately, Russ Kiefer said that, in IDFG's view, the BiOp is not ambiguous – it says spill will be provided until August 31. We

are willing to be adaptive, he said, but we believe spill must protect 95% of the wild run, not the run at large; we believe any agreement must include the flexibility to extend spill beyond August 31 in years when the run is late. Finally, he said, IDFG will not agree to change the BiOp spill operation without full technical agreement by all relevant parties that such a change is warranted. We do not believe such an agreement has been reached in 2003, Kiefer said.

We need further discussion on this issue, said Boyce, noting that there were other approaches discussed at yesterday's FPAC meeting. Steve Haeseker outlined the two methods proposed by the Fish and Wildlife Service at yesterday's meeting. The first is designed to negate the influence of hatchery fish on the 95% passage point calculation; according to this method, the 95% passage point will not be reached for the wild run at Lower Granite until September 6. Bettin noted that the Snake River ESU includes both hatchery and wild fish. After a few minutes of discussion, Silverberg noted that there is obviously no clear technical agreement on which methodology should be used.

Haeseker said the second method he has developed uses the historical percent of run passed by August 15 to predict the 95% point of passage date in a given year. The group offered a few clarifying questions and comments on this method as well, which predicted that, in 2003, the 95% passage point will not be reached at Lower Granite until September 12..

So what does all this mean, in terms of our discussion here at TMT? Silverberg asked. Bettin observed that, according to Council estimates, the current summer spill program is costing the region millions of dollars to save about five fish. Our interpretation of the BiOp is that August 31 is a planning date for the end of spill, he said; obviously, you're correct when you say we don't have technical agreement on when the 95% passage point is reached. We can't develop a criteria everyone can agree upon, said Bettin; my suggestion is that we raise this issue to the IT – are we there?

We've all had dealings with IT, said Henriksen; my guess is that the IT will tell us, as the Regional Forum's technical body, to figure out whether or not we're at the 95% passage point, or whatever "there" is. It's impossible for us to decide if we're "there" yet if we don't know what "there" is, Woodin observed. To me, the question is, have we protected enough of the ESA run at large to end spill? Bettin replied. Isn't the question more, what is the August 31 planning date intended to encompass? Wagner asked – is it 95% of the run, or was August 31 simply a negotiated date? To me, said Litchfield, given the cost of the spill program, the real policy question is, when should we stop spill and shift those resources to more productive recovery methods?

After a brief caucus break, Bettin said the question, to him, is whether or not there is consensus that enough of the ESA run has passed to stop spill at all four projects and still meet the intent of the BiOp. Silverberg asked the TMT members to state their positions on this question. Boyce said he cannot answer the intent of the BiOp; NOAA Fisheries needs to answer that. However, there are still enough juvenile fish passing through the system, particularly Clearwater fish, to warrant continued spill at this point. Haeseker said the Fish and Wildlife Service agrees with Oregon's position. Kiefer said IDFG's position is that clarification is needed on what the BiOp says; it will be difficult for the TMT to meaningfully engage on the spill issue until that question is answered. He added that IDFG needs an SOR for its policy personnel to review before they can decide on an agency position; further, he said, how is this different from the Montana SOR? The last point is that I do not believe that we, as a region, have enough confidence that 95% of the run has passed, Kiefer said – until we have agreement on a methodology to determine that, we can't make a decision on this issue.

Litchfield said Montana feels that the 2003 summer spill program should be terminated as soon as possible. Woodin said Washington's position is that it is procedurally inappropriate for the TMT to be asking this question. We feel it would be appropriate to ask the IT to consider the question of what criteria should guide when the spill program should end; until they clarify the objectives of the summer spill program, we can't really, at TMT, develop a methodology to determine whether those criteria have been met, he said.

Kyle Martin said CRITFC's position is that the summer spill program should continue. Norris said Reclamation will follow NOAA Fisheries' recommendation on this issue. Henriksen said the Corps agrees with this, and seeks regional concurrence. Wagner said that, clearly, there is no consensus on this issue; this is, then, an IT issue, and the IT needs to clarify the intent of the BiOp. Bettin said BPA, along with the other action agencies, would like NOAA Fisheries to clarify the intent of the BiOp through the IT.

Is the wording of the question the same as stated above? Silverberg asked -- is there consensus that enough of the ESA run has passed to stop spill at all four projects and still meet the intent of the BiOp? Kiefer said that, in his opinion, the IT needs to first answer the question of whether the BiOp allows the TMT to make a decision to truncate a recovery measure in-season, before the IT considers whether spill should be truncated this year. Wagner replied that both TMT and IT are given a fair amount of flexibility to implement the BiOp as written. So if there is consensus, the planning dates in the BiOp can be changed? Silverberg asked. Actually, the BiOp doesn't mention consensus, Litchfield said -- it says that the achievement of performance standards will drive any changes that are made. That is certainly one interpretation of the BiOp, Wagner replied; it also says that the IT will provide dispute resolution when the TMT is unable to reach consensus. Silverberg said she will forward this issue to IT with the expectation that the IT will convene tomorrow afternoon at 2 p.m.

4. Dworshak Operation Update.

Litchfield noted that, in the context of the preceding discussion, it is interesting that the TMT has decided to leave 15 feet of storage in Dworshak on August 31, despite direction to the contrary in the BiOp. Henriksen said that, per last week's TMT discussion, the Corps continues to target an elevation near 1535 at Dworshak on August 31. Dworshak outflow was reduced at midnight last night; average daily outflow from the project will be 6.5 Kcfs-7 Kcfs through the end of the month, with some load shaping (higher flows during daytime hours, lower flows at night).

Didn't we agree to hold a constant Dworshak outflow until elevation 1520 is met in September, rather than having lower flows now and higher flows later? Wagner asked. We agreed, I thought, that this would be a better operation, even if we miss elevation 1535 by a foot or two on August 31, Wagner said. That would be acceptable, if that is what the TMT would prefer, said Henriksen -- I'll check to see where we're at, operationally, at Dworshak. That would mean a steady outflow of about 7 Kcfs, then, Wagner noted. BPA needs the flexibility to continue load shaping at Dworshak, releasing 8 Kcfs during the day and 5.8 Kcfs at night, said Bettin. It sounds, then, as though every day's operation will be the same between now and September 15, Henriksen said.

Kiefer said IDFG is not happy with the load-shaping operation, but can live with it. He asked, however, who should be responsible for looking for stranded fish. That would be IDFG's

responsibility, Bettin replied – they’re your fish. I don’t think this operation will strand fish, said Kiefer, but I do believe we should be looking to see whether it is. I assume that the ramp rates at Dworshak are designed to address this issue, said Wagner. If IDFG finds listed fish, please let NOAA Fisheries know, said Silverberg. Kiefer agreed to do so. Martin said the CRITFC tribes would prefer flat flows from Dworshak, but will not object to this operation.

The group briefly discussed Dworshak outflow temperature; Jim Adams said that, by tomorrow, both units at Dworshak will need to go to undershot mode, which will mean colder outflow temperatures – about 43 degrees, rather than 45 degrees. Haeseker noted that this is likely to cause some problems at Dworshak National Fish Hatchery; Adams replied that, because of turbine head pressure requirements and the falling reservoir elevation, the Corps has no choice but to operate both units in undershot mode.

5. End of MOP Operation at Ice Harbor, Lower Monumental and Little Goose.

The request at last week’s TMT meeting was to lift the MOP requirement to allow the action agencies to use the full extent of the pools’ flexibility, said Bettin. The consensus at FPAC was that we’re approaching the criteria laid out in the BiOp for lifting the MOP requirement, but we’re not there yet, Wagner replied – we would prefer to revisit this question next week. The group discussed the historic end-of-MOP timing, as well as the logistics involved in ending MOP operation. Ultimately, it was agreed to revisit this issue at the August 27 TMT meeting.

6. 2004 Water Management Plan.

Scott Boyd said the draft 2004 WMP is now available via the TMT’s Internet homepage; he noted that all changes from last year’s document are highlighted in legislative format. He asked that any comments on the plan be submitted to him by September 10. People need to look at this document, he said; I am underwhelmed, to date, by the volume of comments received. Boyd went briefly through some of the changes he has made to the 2004 plan.

7. Current System Conditions.

Norris said there are forest fires going on near the Hungry Horse transmission lines which could force Reclamation to shut the Hungry Horse powerhouse down; he said USBR is coordinating with the State of Montana about what to do if that occurs. One option is to spill, which would sharply increase TDG levels in the river below the project; we could also waive the Columbia Falls minimum and go to speed-no-load operation, Norris said. Hungry Horse outflow has begun ramping down to the Columbia Falls minimum at a rate of 500 cfs per day. Norris said the speed-no-load option is the more attractive alternative to both Reclamation and Montana.

8. New System Operational Requests.

No new SORs were submitted prior to today’s meeting.

9. Recommended Operations for August 25-31.

Recommended operations were covered during a previous agenda item.

10. Next TMT Meeting Date.

The next meeting of the Technical Management Team was set for Wednesday, August 27. Meeting summary prepared by Jeff Kuechle.

**TMT PARTICIPANT LIST
August 20, 2003**

Name	Affiliation
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Kevin Nordt	PGE
Russ George	WMCI
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Jim Adams	COE
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