

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

FRIDAY, July 20, 2018

Facilitator's Summary

Facilitator: Emily Stranz; Notes: Nancy Pionk, DS Consulting

The following Facilitator's Summary is intended to capture basic discussion, decisions and actions, as well as 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. Official minutes can be found on the TMT website: <http://www.nwd-wc.usace.army.mil/tmt/agendas/2018/>

Adult Sockeye Passage

Paul Wagner, NOAA and Russ Kiefer, ID, reported on adult sockeye passage. They noted that on July 19, only 3 sockeye were counted passing Lower Monumental, and as of 3 PM on July 20, 5 sockeye had passed. At Ice Harbor Dam, 10 sockeye were counted: 7 were unclipped and 3 were clipped (note: the majority of Snake River fish are clipped and mid-Columbia fish are not clipped). At the Lower Granite trap, 35 sockeye were counted and of those, six were unclipped. The proportion of clipped versus unclipped tracks well with what would be expected based off of estimates, which is another indicator that there are mid-Columbia sockeye at Ice Harbor.

Fish managers agreed that, given the small number of sockeye actually passing, there was no need to continue the interim two-day modified spill operation that was agreed to at the July 18, 2018 TMT meeting and was at the time of the meeting complete. Fish managers noted that there is still uncertainty as to why the counts were so high at Ice Harbor and hypotheses ranged from the possibility that these were mid-Columbia fish that had been misdirected to the possibility of a temperature differential in the fish ladders.

→ **ACTION:** The Corp will continue operating Lower Monumental with the spill pattern designated in the Fish Passage Plan (RSW open, in a bulk spill pattern) until further notice.

Dworshak Dam Operations

Alfredo Rodriguez and John Heitstuman, Corps, reported on Dworshak Dam Operations. Several supporting materials are posted to the agenda for today's meeting on the TMT website. Current reservoir elevation is 1,584.7 ft. and discharge is 10.6 kcfs. The TDG level in the tailrace is currently 102.9%. The river temperature is holding at 66.7 degrees F in the Lower Granite forebay (however, it has been higher during the period of 9 AM – 12 PM). The forebay temperature at the 10-meter level was 67-68 degrees F, and the forebay temperature at the 15-meter level was 66 degrees F.

Alfredo reported that the Unit 3 outage took longer than anticipated and Unit 3 did not get back in operation until 1800 hours, (it was expected to be a 6 hour outage and instead was an 8 hour outage). Additionally, the weather forecast for Lewiston was warmer than expected: it is expected to be 99 degrees F by Tuesday (7/24), 100 degrees F by Wednesday (7/25) and 97 degrees F by Thursday (7/26). Temperatures are expected to cool by Sunday (7/29) to 90 degrees F.

Alfredo reviewed graphs showing model runs of water temperature comparisons. He noted that the model indicated that increased releases of 1,000 cfs to 11.5 kcfs and 12.5 kcfs would have no significant effect on the Lower Granite Dam tailwater temperature. Consequently, their current planned operation is to keep discharge at 10.5 kcfs and conserve water, while maintaining a Lower Granite Dam tailwater temperature of 68 degrees F.

TMT members agreed that, in the event that the July 23, 2018 forecast predicts the current operation exceeding 68 degrees, the Corps has the discretion to increase the discharge up to 12.9 kcfs or to the gas

cap to reduce the forebay temperatures. The Corps will run the model on Sunday, July 22 and will update TMT members if a change is made.

- **ACTION:** The Corps will continue current operations to discharge 10.5 kcfs at Dworshak Dam to maintain the Lower Granite Dam tailwater temperature of 68 degrees F. If the July 23, 2018 forecast shows the current operation exceeding 68 degrees, the Corps has the discretion to increase the discharge up to 12.9 kcfs or to the gas cap to maintain the Lower Granite Dam tailwater temperatures at 68 degrees F.
- **ACTION:** The Corps will run the model on Sunday, July 22 and will update TMT members, if a change is made.
- **ACTION:** If TMT members wish to discuss an operation that is different than the change that has been reported, they will notify the Corps of their desire to hold an unscheduled meeting on Monday, July 23, 2018.

The next regular TMT meeting will be a conference call on July 25, at 9:00 AM.

This summary was prepared by the impartial facilitation team of DS Consulting. Please send questions, comments or revisions to nancy@dsconsult.co

Columbia River Regional Forum
TECHNICAL MANAGEMENT TEAM OFFICIAL MINUTES
FRIDAY, July 20, 2018
Minutes: Melissa Haskin, FLUX Resources

1. Introduction

Representatives of NOAA, USFWS, ID, WA, Nez Perce, BPA, Corps, and others participated in today's unscheduled TMT meeting chaired by Doug Baus, Corps, and facilitated by Emily Stranz, DS Consulting.

2. Adult Sockeye Passage - Paul Wagner, NOAA, and Russ Kiefer, ID

Chris Peery, Corps NWW, reported that 3 sockeye were counted at Lower Monumental yesterday (7/19) – 1 at noon and 2 in the afternoon. Today 5 have been counted so far, all between 1 p.m. and 3 p.m.

Wagner noted, “Based on that information, I see no need to continue the operation.” He added that if there were sockeye that had been delayed below Lower Monumental, they don't appear to be now.

He wondered why upper Columbia River sockeye may be straying into the Snake River and passing Ice Harbor. He observed that the rate of straying is unusual and that salmon managers may not get answers.

Russ Kiefer, ID, reported that counters at Ice Harbor are monitoring the number of clipped and unclipped sockeye passing the project and, 7 of the 10 sockeye counted yesterday and so far were unclipped. At the Lower Granite trap, he reported 6 of the 35 fish trapped were unclipped. He said that is a much higher proportion than they would have expected; however, he noted that the sample size was particularly limited.

Dave Swank, USFWS, added, “I don't think anyone thinks we need to continue the operation with having so few pass in the last few counts.” He did note that there is a lot of uncertainty whether the fish at Ice Harbor are mid-Columbia or Snake River sockeye. His opinion is that there is probably some level of delay and it's most likely related to water temperatures at Lower Monumental. This could especially be due to the high ladder differentials, especially at the North Ladder. There's little PIT tag data to work with, he noted.

Doug Baus, Corps, summarized the operation and what would happen next. He reported that the Corps implemented the operation coordinated at TMT to close the Lower Monumental RSW and switch to a uniform spill pattern from 4am to 2pm for two days, yesterday and today. The project has resumed spilling with the RSW in a bulk pattern per the Fish Passage Plan.

3. Dworshak Dam Operations - Alfredo Rodriguez, Corps

Alfredo Rodriguez, Corps NWW, updated TMT on Dworshak Dam operations and an outage of Unit 3. Several supporting materials are posted to today's TMT meeting agenda. The pool is at 1,684.7 feet and outflows are 10.6 kcfs. TDG levels in the tailrace are 102.9%. The temperature in the Lower Granite tailwater is holding at about 66.7 °F. There was an 8-hour outage of Unit 3 today that impacted the ability to cool downstream temperatures.

The weather forecast for Lewiston is warmer than expected – 98°F on Tuesday, 100°F on Wednesday, 97°F on Thursday, and 90°F on Sunday.

Rodriguez reported that the current planned operation is to keep outflows at 10.5 kcfs and discuss any need for changes on Wednesday. He shared models with TMT showing the difference between running outflows at 10.5 kcfs versus 12.9 kcfs. The graphs showed little difference in effect on Lower Granite temperatures so he advocated that in the interest of saving water, 10.5 kcfs made most sense. He noted that no matter what, it would be impossible to negate the effects of the outage on the water temperatures in the Lower Granite tailrace Sunday and Monday, which are expected to rise to 68°F.

Paul Wagner wondered if choosing the higher outflow option would allow the Corps to lower expected temperatures 3-4 days out, by July 26 or so. Rodriguez replied that yes, typically the results of a change in outflows are observed 3-4 days later. So, for instance, the Corps could return to the before-outage model results 5-7 days out, as well.

Increasing outflow now to the 110% gas cap reduces the amount of water available later; however, there are still adult sockeye passing through the system and there may not be later.

Dave Swank, USFWS, commented, “We save cold water for a reason and sockeye need it now.”

Russ Kiefer, ID, supported going up to the gas cap and moderating temperatures now, while adult sockeye are in the system. Jay Hesse, Nez Perce, concurred. Charles Morrill, WA, said he was comfortable with the recommendation and that there was little difference between July 20 and 24 in the models, but that he could see the importance further out on July 28.

There was some talk about waiting until Monday to decide to go up to 12.9 kcfs if temperatures in the Lower Granite tailrace rise above 68°F.

The consensus was to have the Corps make the decision on Monday, based on their discretion and the current temperatures.

Tony Norris, BPA, wondered why the Action Agencies would not advocate to just increase Dworshak outflows now since the travel time is 3 days and would arrive at the peak of

the heat on Sunday and Monday. John Heitstuman, Corps, replied that at this point, the increase in temperatures caused by the Unit 3 outage cannot be reduced, and that the weather forecast for the time period when the higher outflows would affect the water temperature is cooler so there may not an increase may not be necessary.

Doug Baus, Corps, will post model runs to the July 25 agenda when they are available. There will be an email update from the Corps on Sunday or Monday.

7. Next TMT

The next TMT meeting is a conference call scheduled for July 25, 2018.

Today's Attendees:

TMT Members:

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| Corps | Doug Baus (Chair) |
| BPA | Tony Norris, Scott Bettin |
| Reclamation | N/A |
| NOAA Fisheries | Paul Wagner |
| US Fish & Wildlife | Dave Swank |
| Washington | Charles Morrill |
| Oregon | N/A |
| Idaho | Russ Kiefer |
| Montana | N/A |
| Nez Perce Tribe | Jay Hesse |
| Umatilla Tribe | N/A |
| Colville Tribe | N/A |
| Warm Springs Tribe | N/A |
| Kootenai Tribe | N/A |
| Spokane Tribe | N/A |

Other Attendees:

Corps – Chris Peery, Alfredo Rodriguez, John Heitstuman, Jonathan Roberts

Reclamation – Chris Runyon

DS Consulting – Emily Stranz (Facilitator), Nancy Pionk

FLUX Resources – Melissa Haskin (Notetaker)