

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

May 14, 2014

Facilitator's Summary

Facilitator & Notes: Emily Plummer, 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.

Review of Meeting Minutes

The group approved the May 7th official Meeting Minutes and Facilitator's Summary pending the following changes/additions on the minutes and summary:

- The official April – July water supply forecast for Hungry Horse was incorrect in the Facilitator's Summary: the forecast is 2,234KAF, not 2,232KAF.
- Grand Coulee elevation was 1,232.9 with 8.2kcfs spill, the Facilitator's summary had stated that outflow at Grand Coulee was 8.2kcfs.
- In the Official Minutes, OR and WA need to be added as signatories to SOR 2014-01 (request to change spill pattern at Lower Monumental).
- In the first paragraph of pg. 8 of the Official Minutes, change the word 'fisheries' to 'fish' to better reflect the intention of the SOR.

Water Supply Forecast

Doug Baus, USACE, shared the current NW River Forecast Center (NWRFC) water supply forecasts. Forecasts are posted on today's agenda (<http://www.nwd-wc.usace.army.mil/tmt/>). Current NWRFC forecasts are as follows:

- The Dalles April – August: 96 MAF (110% of average)

Doug noted that water supply continues to be above average.

Libby SOR #MT 2014-1

Doug Baus, USACE, reported that the Action Agencies have followed up with and finalized coordination and will implement SOR #MT 2014-1 as discussed at the May 7th TMT meeting. Updates on the operation will be provided in season at TMT.

Libby SOR FWS#1

Doug Baus, USACE, reported that the Action Agencies have followed up with and finalized coordination and will implement SOR FWS#1 as discussed at the May 7th TMT meeting. An update on the operation will be provided at the 5/21 TMT meeting.

Vernita Bar Update

Russell Langshaw, Grant County PUD, provided an update on the Vernita Bar operation. He shared that due to warmer water temperatures, the expected end of emergence date has been moved to May 20th (previous estimates suggested end of emergence by the end of the 3rd week of May), which will conclude emergence protection operations. The rearing period is expected to end by June 20th, which will conclude rearing protection operations. Russell reported that there have been no exceedences to date. A link to a monthly summary of the operation is provided on the TMT website. A Vernita Bar update will be provided at the 5/28 TMT meeting.

Wanapum Dam Update

Russell Langshaw, Grant County PUD, provided an update on the Wanapum Dam fracture. He reported that the root cause investigation is complete and concluded that mathematical error led to an insufficient amount of concrete used during construction. Grant County PUD is expecting that repairs to monoliths 3, 4, and 5 will be complete by the 4th quarter of the year (in or after September 2014) and at that point the project will be able to bring the pool to the normal minimum operating elevation. All fish ladders will be operating normally at that point. The other monoliths will likely need repair as well, however, these repairs are not expected to be complete until 2015, at which point the pool will be brought up to normal operating elevations. Russell reported that monitoring confirms that tagged fish are successfully passing the project. A link to a Grant County PUD news release and King 5 News update are on the TMT website.

John Day Spill Operations

Scott Bettin, BPA, reported that he is waiting for a PNNL report on the 2013 John Day spill operations; once he has more data he will share it with TMT and discussions will continue on the 2014 spill operations.

Spring Creek Hatchery Release Update

Doug Baus, USACE, reported that the Spring Creek hatchery release operation is complete and was successful. The operation had a hard constraint from May 7th to 11th. Doug also reported that the Bonneville task group met and finalized the Bonneville change form (14BON001). The 2014 Fish Passage Plan has been updated with the operation change and is available on the TMT website.

Operations Review

Dworshak Operation

Steve Hall, USACE, Walla Walla, reported that BPA submitted a request for two days (through Thursday) of increased discharge at Dworshak. Steve noted that due to residual runoff volume, the project currently has increased flexibility to implement the request to shift from 2.4kcfs to 4.7kcfs discharge. Erick Van Dyke, OR, inquired as to the reasoning behind the request, to which Steve responded that for planning purposes BPA would like to utilize some of the water in the system now instead of releasing it in June; Tony Norris, BPA, concurred. Steve noted that the operation could be held for an extra day if TMT felt that it would be beneficial to fish. Salmon Managers present (NOAA, Umatilla/CRITFC, ID, OR, and WA) expressed that holding the increased flow for another day would be okay with them. Erick Van Dyke noted that as stated during previous conversations, Oregon favors holding a steady discharge between 4-5kcfs for fish benefit. Russ Kiefer, ID, noted that during the April 30th TMT meeting, Salmon Managers had requested that discharge be held between 5-7kcfs to benefit fish and that the request was met with some resistance from BPA and the Corps. Steve clarified that previous forecasting suggested that holding 5kcfs would risk refill. Today's flexibility to ramp up discharge is a result of increased precipitation and snow melt in the Clearwater reach, which has seen delayed runoff and thus increased the amount of runoff expected in the future. There was concern expressed by Idaho and Oregon regarding the way in which the April 30th request from Salmon Managers was characterized by the Action Agencies as being a risk to refill. Scott Bettin, BPA, noted that BPA considered Salmon Managers' interest in increased discharge when they made the request to Corps and the operation seemed to meet multiple interests.

Action: The request to increase discharge from 2.4 to 4.7kcfs will be implemented today and held through Friday, at which point discharge will return to 2.4kcfs as planned for the refill period.

Reservoirs: Lisa Wright, USACE, reported on Corps projects:

- Dworshak was at elevation 1,517.6 feet with 14.4kcfs inflow and 2.4kcfs outflow.
- Libby was at elevation 2,387 feet, with 17kcfs inflow and 16kcfs outflow.
- Lower Granite average outflow was 72.5kcfs.
- McNary average outflow was 278.5kcfs.
- Bonneville average outflow was 300.8kcfs.

Joel Fenolio, USACE Seattle District, noted that the first of the two sturgeon pulses will be on Friday, May 16th, at which point Libby will be brought up to full powerhouse.

Mary Mellema, BOR, reported on Reclamation projects:

- Hungry Horse elevation was 3,498.24 with 8.8kcfs outflow, with 3kcfs of that spill. The outflow will be reduced to 7kcfs on Friday afternoon (5/16).
- Grand Coulee elevation was 1,237.3 with no spill. Mary noted that Grand Coulee is on a slow refill.

Fish: Paul Wagner, NOAA, reported on fish, however, due to a lack of internet connection, did not have numbers to report. He noted that juvenile spring chinook and steelhead passage is strong past Bonneville and that descaling was low for sub-yearling chinook at Bonneville. Adult spring chinook at Bonneville has reached 150% of the 10-year average, with 151,000 fish past Bonneville. Paul noted that the May 7th meeting minutes and summary noted different spring chinook forecasts, 200,000 and 240,000 respectively, however, those forecasts will be a challenge to hit at the current pace. Kathryn Kostow, OR, shared that the TAC estimates for spring chinook have been revised and estimate 224,000 at the Columbia River mouth. Paul noted that both Ice Harbor (185%) and Rock Island (138%) are above the 10-year average and doing well. Jacks passage at Bonneville continues to be good, at 130% of the 10-year average. Charlie Morrill, WA, said that the numbers and timing of passage are looking good and that he would provide the Fish Passage Center's Fish Passage Indices for Lower Granite for posting on today's Agenda on the TMT website.

Water Quality: Lisa Wright, USACE, reported that all of the fixed monitoring stations are currently in operation and that there are no additional updates.

Power System: Nothing to report.

The next TMT meeting will be face to face on May 21st at 9:00am at the USACE Division building.

Agenda items include:

- Water Supply Forecast Update
- Libby Operations – SOR FWS#1
- John Day Spill Operation

Columbia River Regional Forum
TECHNICAL MANAGEMENT TEAM – OFFICIAL MINUTES

May 14, 2014
Minutes: Pat Vivian

1. Introduction

Doug Baus, COE, chaired this TMT meeting facilitated by Emily Plummer, DS Consulting. Representatives of the COE, BPA, NOAA, Montana, CRITFC, Oregon, BOR, Yakama, USFWS, Idaho, Washington and others participated. This summary is an official record of the proceedings, not a verbatim transcript. Lack of internet access in the meeting room today constrained the ability of meeting participants to access current data for discussion.

2. Meeting Minutes – May 7

Mary Mellema, BOR, requested a couple of changes in the meeting minutes re: the water supply forecast and operations review. Grand Coulee had 8.2 kcfs spill, not 4.2 kcfs outflows. Erick Van Dyke noted that Oregon and Washington were signatories on the Lower Monumental Spill Pattern SOR 2014-01, and “Fisheries” in the first paragraph should be changed to “fish.” With these changes, the meeting minutes and facilitator’s notes will be considered final.

3. Update on Water Supply Forecasts

Baus reported that the water supply forecast in general continues to be above average. The current forecast for The Dalles (April-August) is 96 maf, 110% of average. Forecasts for other basins were not available due to lack of internet access.

4. Libby SOR #MT 2014-1

The action agencies will implement the SOR as coordinated at the May 7 TMT meeting, Baus reported. The COE coordinated with TMT members who missed last week’s discussion before implementing the SOR.

5. Libby SOR FWS#1

In light of follow-up coordination with TMT members who were not present for last week’s discussion of this SOR for the sturgeon pulse, the action agencies will implement it along with the Montana SOR.

6. Vernita Bar and Wanapum Dam Repairs Update

Vernita Bar: Grant PUD has moved up the end of emergence protections to May 20, based on the predicted effects of warmer temperatures, Russell Langshaw reported.

The end of rearing protections is expected to be declared on June 20. Daily delta constraints will remain in effect until then.

The mean daily discharge in the first 30 days of the Hanford Reach protection program was 143 kcfs, with a daily delta of 32.5 kcfs and a daily delta constraint of 45.3 kcfs. Discharges have increased, and the mean daily delta for the past week was 183.4 kcfs, with a daily delta of 47.1 kcfs and a daily delta constraint of 60 kcfs.

Minimum weekend discharge constraints of around 162 kcfs are in effect, with two of the four weekends already completed. Langshaw said the 2014 Hanford Reach protection program is going well. There have been no exceedances since he last reported to TMT.

Wanapum: The investigation of the causes behind the crack in the monolith at spillway pier #4 at Wanapum Dam is now complete. The report concluded that, due to mathematical error, not enough concrete reinforcement was installed to hold the river back. Grant PUD will extend the steel anchors of pier #4 into bedrock and expects to fortify the other monoliths in the same way. These repairs will probably extend into 2015.

Tony Norris, BPA, asked whether the board of consultants advising Grant PUD on the Wanapum repairs will authorize an intermediate pool raise after monolith #4 is repaired. The plan is for an intermediate pool raise up to 562' elevation in or after September 2014, Langshaw replied. He will give TMT another update in two weeks.

7. John Day Spill Operation

Following up on last week's TMT conversation, Scott Bettin, BPA, reported that he's waiting for completion of a PNNL report to provide additional data on the effects of 30% vs 40% daytime spill and 30% vs 40% nighttime spill at John Day Dam.

8. Spring Creek Hatchery Release

The Spring Creek operation that was in effect as a hard constraint until May 7 was completed on May 11, Baus reported. Concurrent with that operation, FPOM finalized the change form for Bonneville operations. Baus encouraged TMT members to review the 2014 Fish Passage Plan, which has been updated to include this operational change. The FPP is linked to today's agenda.

9. Operations Review

a. Reservoirs. Dworshak: Steve Hall, COE, gave an update on Dworshak operations as follow-up to last week's TMT discussion. The project is at elevation 1517.6' with inflows of 14.4 kcfs and, until this morning, releases of 4.7 kcfs.

In response to a request from BPA for increased flows from Dworshak over the next few days, the COE increased releases this morning from 2.4 kcfs using one unit to 4.7 kcfs using two units. The plan is to continue this operation until May 16 at midnight. Current STP traces indicate that additional water will need to be released in June, and BPA is requesting some of that water now. Hall explained that based on recent changes in the residual runoff volume – the forecasted volume minus observed runoff in April-May – the COE has the flexibility to meet BPA's request at this time.

TMT members supported the increase and there were no objections. Discussion focused on whether the 4.7 kcfs releases should continue for 2 (May 15 at midnight) or 3 (May 16 at midnight) days. Hall said the COE committed to 2 days but could extend the releases for a third day if TMT wishes. **NOAA** endorsed either 2 or 3 days, given that flows are low now and expected to pick up as the season progresses. **CRITFC, Washington** and **Idaho** agreed that 3 days of increased flows is a good idea at this time. **Oregon**, did not object to this operation.

Concern was expressed that, two weeks ago when the salmon managers asked the action agencies for increased flows for fish, they were warned it could jeopardize refill. **Oregon** and **Idaho** shared this view. Conditions at Dworshak have changed significantly since then, Hall replied, with more snowpack available than was known at the time. The highest elevation snow stations have not even begun to melt off. Hall noted that while the action agencies did express concern about the request of two weeks ago, they provided extra flows for fish as requested.

In response to TMT's discussion today, the COE will continue releases of 4.7 kcfs using two units at Dworshak through midnight May 16, or for 3 days. The initial plan was to continue 4.7 kcfs releases through midnight May 15, or for 2 days.

Libby is at elevation 2387' with inflows of 17 kcfs and releases of 16 kcfs. It will ramp up to full powerhouse for the first peak of the sturgeon pulse beginning on May 16 continuing for the next 7 days. Hungry Horse is at elevation 3498.24' with outflows of 8.8 kcfs, 3 kcfs of which is spill. The BOR plans to reduce HGH outflows to 7 kcfs on May 16. Grand Coulee is at elevation 1237.3' with no spill, refilling slowly.

Lower Granite daily average outflows are 72.5 kcfs. McNary daily average outflows are 278.5 kcfs. Bonneville daily average inflows are 300.8 kcfs.

b. Fish. Paul Wagner, NOAA, reported.

Juveniles: Passage of spring chinook yearlings and juvenile steelhead is still going strong at all lower Columbia projects from LGR to BON. The Spring Creek Hatchery release of spring chinook subyearlings went well. Descaling rates were low, conditions were good, and the BON operation for high flows seems to have done its job.

Adults: Passage of spring chinook adults is still strong at BON with 151,000 fish to date, which is 150% of average. Counts at BON are turning out to be lower than NOAA's earlier forecast of 200,000 fish.

Charles Morrill, Washington, said the TAC adult forecast for 2014 has been revised. Kathryn Kostow, Oregon, reported that on May 12, TAC updated the forecast of spring chinook returns at the river mouth from a pre-season forecast of 227,000 down to 224,000.

Morrill has provided a fish passage summary of yearling chinook and steelhead run sizes, timing, and relative abundance at LGR this year compared to prior years. This information will be posted to the TMT page. He reported that yearling chinook returns are at a 95% confidence level in terms of what is expected historically, and steelhead returns are at a 50% confidence level. The 2014 season looks good so far for adult returns – 2012 is the only year in which yearling chinook passage exceeded the current level of abundance.

c. Water Quality. There was nothing to report today.

d. Power System. There was nothing to report today.

8. Next TMT Meeting

The next TMT meeting will be in person May 21.

<i>Name</i>	<i>Affiliation</i>
Tony Norris	BPA
Julie Doumbia	BPA
Agnes Lut	BPA
Lisa Wright	COE
Paul Wagner	NOAA
Doug Baus	COE
 <u>Phone:</u>	
Jim Litchfield	Montana
Tom Lorz	CRITFC
Scott Bettin	BPA
Erick Van Dyke	Oregon
Mary Mellema	BOR
Joel Fenolio	COE
Steve Hall	COE Walla Walla
Kathryn Kostow	Oregon
Tom Iverson	Yakama
Jason Flory	USFWS
Heather Dohan	Puget
Don Tinker	SCL

Russ Kiefer	Idaho
Jeremy Giovando	COE Walla Walla
Russell Langshaw	Grant PUD
Charles Morrill	Washington
Mike Shafley	Snohomish PUD
Peter XX	Grant PUD
David Benner	FPC
Robin Gumpert	DSC
Barry Espenson	CBB
Bill Rudolph	NW Fish Letter