

COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

June 18, 2014

Facilitator's Summary

Facilitator: Emily Plummer, Notes: Tory Hines, 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

In order to allow for complete review, the group postponed approval of the June 4th Official Meeting Minutes and Facilitator's Summary until the next TMT meeting.

Treaty Fishing - SOR 2014-C4

Kyle Dittmer, CRITFC, shared the operation request for spring fishing support; the request is to keep the BON, TDA, and JDA pools steady with a 1.5ft variation. The Corps implemented SOR 2014-C4 from June 10 to June 12.

Treaty Fishing - SOR 2014-C5

Kyle Dittmer, CRITFC, shared the operation request for summer fishing support. Kyle noted the summer treaty fishing season is soon to be underway and that the tribes are requesting the Corps keep a 1.5ft variation at BON, TDA and JDA pools. Kyle also noted that the summer Chinook run size estimates are around 64,000 and sockeye run size estimates are at 345,000. The Corps will implement SOR 2014-C5 from June 16 to June 19 and June 23 to June 26. Kyle expressed appreciation to the Corps for implementing the SORs.

McNary Operations

Doug Baus, USACE, reported that with regional support, the Corps coordinated numerous special operations from May 28 through June 6 in attempt to decrease descaling at McNary; a calendar of special operations and descaling rates is provided on the TMT website (http://www.nwd-wc.usace.army.mil/tmt/agendas/2014/0618_MCN-mid-point-descaling-calendar.pdf). Coordinated operations included operating to the mid-point, increased trash raking, and a debris spill. From the Corps perspective, these efforts did not reveal the cause of the elevated descaling rates based on the sockeye descaling data. Doug concluded that despite the coordinated efforts, the Corps was unable to determine the cause of the elevated sockeye descaling rates and suggested that fish may have entered McNary already descaled. Tom Lorz, Umatilla/CRITFC, stated that FPAC would like to review descaling data from the Mid-Columbia in order to further assess what contributed to the increased descaling. Tom also noted that in the future, being more proactive to remove debris, as well as increasing sampling in trash racks may be necessary to resolve the elevated descaling rates. Dave Statler, Nez Perce, added that if this is an issue in the future, the Corps should be prepared for heightened debris removal efforts. He also requested that in the future, the Corps consider monitoring Pacific lamprey for impacts of debris entrapment. Charles Morrill, WA, commented that he appreciates the Corps efforts to identify the issue, noting that criterion for "descaling" requires that fish are freshly descaled. Furthermore, Charles noted that some of the descaling was indicative of impact with tumbleweeds; however, there was also a "swipe" pattern that is not indicative of tumbleweed descaling.

Operations Review

Reservoirs: Mary Mellema, BOR, reported on Reclamation projects:

- Grand Coulee midnight elevation was 1,287.4ft. Grand Coulee will temporarily draw down Lake Roosevelt for the July 4th holiday to 1,286ft. Refill will take place following the July 4th weekend with a full pool elevation target of 1,289.8ft. Tony Norris, BPA, noted that the project will aim to hit the elevation target within .5ft.
- Hungry Horse midnight elevation was 3,445.08ft, with 3kcfs outflow. Inflows are increasing due to lots of rain, projected inflows are around 22kcfs. Discharge at Columbia Falls has been decreased to help with flood control.
- Mary also noted that the Snake flow augmentation started last week and BOR still plans to augment 487kcfs. The Upper Snake and Boise waters will be out by mid-July; other waters will be out by August.

Lisa, USACE, reported on Corps projects:

- Libby midnight elevation was 2,430.9ft, with 37.4kcfs inflow and 17kcfs outflow.
- Albeni Falls midnight elevation was 2061.2ft, with 67.3kcfs inflow and 58.3kcfs outflow.
- Dworshak midnight elevation was 1,590.4ft with 13.3kcfs inflow and 1.6kcfs outflow.
- Lower Granite average inflow was 71.6kcfs.
- McNary average inflow was 247.4kcfs.
- Bonneville average inflow was 228.8kcfs.

Lisa noted that the 2014 Summer Fish Operations Plan has been released and is available on the TMT website (http://www.nwd-wc.usace.army.mil/tmt/agendas/2014/2014_Summer_Fish_Operations_Plan_%28061314%29.pdf). Summer spill start dates are noted in the FOP: Lower Columbia June 16th and Lower Snake June 21st.

Steve Hall, USACE Walla Walla District, noted that Dworshak will fill within the next few weeks, will be held full as temperatures allow and then will begin drafting.

Fish: Charles Morrill, WA, reported on fish. He noted that the numbers of yearling Chinook, steelhead, coho and sockeye juveniles are declining rapidly at all sites. Sub-yearling juvenile Chinook dominate collections at all projects with significant numbers at Lower Granite, Little Goose, Lower Monumental, McNary, John Day and Bonneville. Juvenile lamprey were most abundant at JDA and McNary. Charlie also reported on adults. With the exception of Priest Rapids, summer Chinook counts are above average at most dams compared to last year and the ten year average. Counts of summer Chinook at Priest are ahead of the 10 year average but less than half of last year's count totals at present. At Bonneville, sockeye and steelhead counts are increasing and counts are presently above last years and the 10 year average. Spring Chinook counts at Snake projects were nearly twice last years and 10 year averages while jacks fell counts fell below last year but higher than the 10 year average. Lamprey counts were highest at Bonneville.

Water Quality: Scott English, USACE, reported that flows have receded to the point that there is no longer involuntary spill. As a result, TDG levels have decreased. He also reported that all monitoring stations are currently in operation.

Power System: Nothing to report.

The next TMT meeting will be a conference call on June 25th at 9:00am.

Columbia River Regional Forum
TECHNICAL MANAGEMENT TEAM – OFFICIAL MINUTES

June 18, 2014
Minutes: Pat Vivian

1. Introduction

Doug Baus, COE, chaired this TMT meeting facilitated by Emily Plummer, DS Consulting. Representatives of the COE, BPA, Montana, Nez Perce Tribe, Washington, BOR, CRITFC, NOAA, Idaho and others participated. This summary is an official record of the proceedings, not a verbatim transcript.

2. Meeting Minutes – June 4

Review of the June 4 meeting notes and minutes was postponed because people needed more time to comment.

3. Treaty Fishing – SOR 2014-C4 and SOR 2014-C5

Kyle Dittmer, CRITFC, introduced these two treaty fishery SORs. The last of this year's spring treaty fishing occurred from 6 am, June 10, to 6 pm, June 12, per SOR 2014-C4. The first summer treaty fisheries are scheduled from 6 am, June 16, to 6 pm, June 19, and again from 6 am, June 23, to 6 pm, June 26, per SOR 2014-C5.

The two SORs made the typical request to operate the three lower Columbia River pools, BON, TDA and JDA, within a 1.5' elevation range to accommodate tribal fishing. The COE implemented SOR 2014-C4 and is in the process of implementing SOR 2014-C5 now, Baus said.

The current summer upper Columbia chinook run estimate is for 64,000 adult returns, Dittmer reported. Charles Morrill, Washington, asked when a summary of spring treaty fishing will be available; Dittmer said later today.

4. McNary Dam Operations

Baus provided a brief overview of action agency efforts to reduce descaling of sockeye and subyearlings at McNary Dam (MCN) and said the COE would like to better understand what effects recently coordinated special operations had on reducing descaling should this type of event occur in the future. Attachment 4a to today's agenda is a calendar of all special operations at MCN, including sockeye descaling rates as documented by project staff.

Baus emphasized that the COE has not been able to find any correlation between the special operations and resulting descaling rates of juvenile sockeye. In the absence of any other explanation, the COE speculates that the fish may have arrived at MCN already descaled. Based on the special operations just implemented and

concurrent descaling data Baus asked the salmon managers what types of special operations they might request in the future if there was a desire to reduce descaling at MCN.

In the absence of FPAC chair Paul Wagner today, Tom Lorz, CRITFC, responded on behalf of the salmon managers. FPAC wants to reserve judgment on what happened at MCN this year until all descaling information from the mid-Columbia is available, specifically Grant PUD's sampling results at Priest Rapids Dam. This information will give a clear indication of whether fish might have been descaled at Wanapum Dam while a failed spillway pier was being repaired. FPAC members also agreed an important step in addressing descaling is dealing with massive debris accumulation in the MCN forebay. Tumbleweeds will continue to be a problem. Lorz added there have been discussions at FPOM regarding more extensive sampling at the trash racks to help determine whether descaling is occurring there. The salmon managers don't believe the fish were descaled in the Snake River.

Dave Statler, Nez Perce Tribe, made two requests. First, he asked the COE to assume that pileup of debris is a major problem and to be prepared for removal in the future. Then he asked that project staff collect more sampling data on descaling of Pacific lamprey concurrent with juvenile salmonids. Not much information was collected this year on lamprey descaling rates.

Morrill expressed appreciation to the COE for the tremendous efforts made to address descaling at MCN despite a lack of conclusive results. While we may never know exactly what caused such high rates of sockeye descaling this year, we can be assured the data reflect only freshly descaled fish because the sampling protocol called for counting freshly descaled fish only. Morrill also pointed out that observed sockeye descaling was a "swipe on the side" that was consistent with contact with tumbleweeds or other debris. Recent descaling reports for subyearling Chinook are more normative.

Scott Richardson, Snohomish PUD, asked about the prognosis of descaled fish. Descaled fish are exposed to secondary injury, Morrill said, and removal of more than 50% of a fish's scales definitely increases mortality. Removal of more than 20% of scales is considered to significantly impact the ability of anadromous fish to transition to a salt water environment. Morrill clarified that the percentages of descaling shown on the MCN calendar are percentages of fish sampled that were missing more than 20% of their scales.

5. Upper Snake Flow Augmentation

This year the upper Snake will provide 487 kaf of summer flow augmentation, Mary Mellema, BOR, reported. Volume contributions are expected to be:

- Upper Snake River above Milner Dam – 188 kaf
- Payette River basin – 175 kaf
- Boise River basin – 46 kaf

- Natural flows – 77 kaf

Flow augmentation is expected to continue through mid-July from the upper Snake above Milner and from the Boise basin. The Payette basin and other sources are expected to continue providing flow augmentation into August. Mellema estimated that 60-65% of the 487 kaf will be released by the end of July.

6. Operations Review

a. Reservoirs. Hungry Horse is at elevation 3445.08' or 15' feet from full. Releases are only 3 kcfs but inflows are rising quickly. Discharges will be decreased to help control flooding at Columbia Falls, targeting 13' elevation as flood stage, Mellema reported. The RFC inflow forecast of up to 22 kcfs will fill the project quickly. Jim Litchfield said Montana is concerned at this point about filling and spilling. Managing runoff and discharges at HGH to hit refill exactly will be tricky this year, Mellema acknowledged. Brian Marotz, Montana, said the BOR has a good history of managing flows from the south fork of the Flathead River, but flows coming from the unregulated fork are beyond human control.

Grand Coulee is at elevation 1287.4'. The BOR plan for recreation at Lake Roosevelt over the 4th of July weekend is to allow the reservoir to fill by half a foot per day as follows: 1286.5' elevation on July 4; 1287' elevation on July 5; and 1287.5' elevation on July 6. Refill will occur the following weekend. Because of the incremental storage release program this year at Lake Roosevelt, the project will be considered full at 1289.8'. Tony Norris, BPA, added that attainment of an elevation within half a foot of 1289.8' is generally considered a successful refill.

Libby is at elevation 2430.9' with inflows of 37.4 kcfs and releases of 17 kcfs. Albeni Falls is at elevation 2061.2' with inflows of 67.3 kcfs and releases of 58.3 kcfs. Dworshak is at elevation 1590' with inflows of 13.3 kcfs and releases of 1.6 kcfs. The project anticipates refilling within the next couple of weeks, Steve Hall, COE, reported. On July 7 the DWR summer draft will begin.

Lower Granite daily average inflows are 71.6 kcfs. McNary daily average inflows are 247.4 kcfs. Bonneville daily average inflows are 228.8 kcfs.

Lisa Wright, COE, said the 2014 summer FOP has been finalized and posted to the TMT page. The lower Columbia projects transitioned to summer operations on June 16, and the lower Snake projects will transition to summer operations on June 21.

e. Fish. Charles Morrill, Washington, reported. Juvenile passage is winding down. Yearling chinook passage is tapering off quickly, while subyearling passage at LGS, LGR, LMN, MCN, JDA and BON is still substantial. Juvenile sockeye have already passed through the system. Lamprey numbers are moderate at MCN and JDA and low on the Snake.

Adults: The summer chinook run looks good at this point, with most of the projects passing above average numbers compared to prior years. As reported earlier by Kyle Dittmer, sockeye returns are forecast to be high at 345,000 this year. Lamprey numbers aren't great, but they're on the rise at BON.

c. Water Quality. Inflows have receded to the point of no involuntary spill on the system, Scott English reported. TDG saturation levels are relatively low, and all monitoring stations are up and running. English explained that the lower Columbia projects are subject to both Oregon and Washington state water quality standards so only the most restrictive standard applies. Any numbers crossed out on the water quality monitoring web page represent the least restrictive standard in effect at the time.

Charles Morrill reported that stronger signs of an El Niño trend in ocean conditions are being observed, such as whales migrating farther north than usual. This trend augurs hotter, drier weather conditions in the summer, as well as changes in upwelling patterns off the Pacific coast that are not good for salmon. The impact of the El Niño trend is not expected to become fully apparent until fall.

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

7. Next TMT Meeting

The next TMT meeting will be a conference call on Jun 25.

<i>Name</i>	<i>Affiliation</i>
Tony Norris	BPA
Jim Litchfield	Montana
Dave Statler	Nez Perce
Lisa Wright	COE
Charles Morrill	Washington
Doug Baus	COE
Julie Doumbia	BPA
Tori Hines	DSC
Bill Proctor	COE
Scott English	COE

<i>Phone:</i>	
Mary Mellema	BOR
Brian Marotz	Montana
Kyle Dittmer	CRITFC
Tom Lorz	CRITFC
Trevor Conder	NOAA
Heather Dohan	Puget
Russ Kiefer	Idaho
Steve Hall	COE