COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM
May 28, 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

The group agreed to postpone the approval of the May 21, 2014 Official Meeting Minutes and Facilitator's Summary until TMT members have been able to review the documents.

Treaty Fishing - SOR 2014-C2

Kyle Dittmer, CRITFC, shared an operation request for spring fishing support. The request is to hold the BON, TDA and JDA pools steady with 1.5ft variation from the morning of May 28th through the evening of May 31st. Kyle noted that the spring Chinook run size estimations have been upgraded from 207,000 to 214,000, which is above average. There were 305 nets out and catch efficiency was high, with 3,500 fish caught by tribal members last week; however, he expects that catch will decrease in future weeks as the fish are move toward the end of the run. Doug Baus, USACE, reported that Corps has received the SOR, coordinated with the project and is implementing the request as best as possible.

McNary Operations

Doug Baus, USACE, reported that the elevated descaling of juvenile Sockeye has continued at McNary, with descaling as high as 37%. Other species have also realized higher than average descaling. Paul Wagner, NOAA, commented that the rate of descaling at McNary has been high this season, regularly in excess of 15%, however, the cause of descaling is unknown. Paul noted that changes at the project, including a lowered headgate position (new operation to comply with new dam safety requirements, note: see 2014 FPP change form 14MCN010 for further information) and an increase in the amount of debris present, may be factors in the increased descaling. Per FPAC recommendations, the Corps will implement two operations: operate 7 units no higher than the 1% midpoint (10.1-10.3kcfs) in order to evaluate the effects of the headgate position in relation to descaling; and use the 'Log Bronc' to remove debris. Ann Setter, USACE Walla Walla District, stated that project staff is uncertain of the amount of manipulation needed in the spillway and thus debris removal may take up to two days. Salmon Managers expressed that if these two operations do not reduce the descaling, additional operations will need to be identified. Russ Kiefer, ID, expressed appreciation to the Corps for agreeing to the mid-point operation.

- **Action:** Beginning at 0600 hours today, May 28th, through 0700 hours on May 29th, the Corps will operate Units 2, 3, 5, 6, 8, 9, and 10 to midpoint, maintaining 10.1 to 10.3 kcfs. Additionally, the Corps will initiate a debris removal operation today, May 28th, with the 'Log Bronc'. Pending updated SMP data that will be available on May 29th, additional operations may need to be considered to address descaling. FPAC will meet to review the SMP data on the 29th and contact Doug Baus if additional TMT coordination is necessary.

Lower Snake River Spring to Summer Transition:

Doug Baus, USACE, framed the discussion by sharing that the Corps is interested in hearing TMT input regarding NOAA's proposed options for the spring to summer transition operation and will take input

received today back to the Corps for further consideration. Doug noted that the Corps will aim to provide a decision on the operation at the next TMT meeting on June 4th. With that, Paul Wagner, NOAA, walked the group through a presentation detailing the differences between the 2008 BiOp, Supplemental 2014 BiOp, and a revised proposal for how to determine spring to summer transition spill dates. The presentation outlined two different methodologies for criterion to determine the start dates, as well as predicted and actual migration timing characteristics for wild -yearling Chinook, Sockeye and Steelhead; the presentation is available on the TMT website (http://www.nwd-wc.usace.army.mil/tmt/agendas/2014/0528_Agenda_FTF.html). Paul explained that in the 2014 Supplemental BiOp the transition date is determined when 95% of the juvenile spring migrants have passed Lower Granite (based off of past 5 year running average of actual passage dates) and then staggers start dates at downstream projects depending on estimated water particle travel time to Lower Monumental. This is a change from the 2008 BiOp which established transition dates, after June 1 and when sub-yearling collection exceeded 50% for 3 days at all Lower Snake projects. Paul noted that the 2014 draft summer FOP utilizes criteria and methodologies from the 2014 Supplemental BiOp and establishes transition dates as follows: Lower Granite, June 6, Little Goose, June 11, Lower Monumental June 14th. As a result of comments received and NOAA's review of actual migration data, Paul shared a revised methodology which considers that the transition dates be derived from the last date observed in the past five years, rather than a five year running average. If this methodology were used it would result in the proposed transition dates being revised as follows: Lower Granite, June 13, Little Goose, June 18 and Lower Monumental, June 21.

The following questions and comments were provided by TMT members:

- Dave Wills, USFWS, clarified that the methodologies use wild, yearling, Chinook passage; Paul confirmed yes, wild, yearling Chinook that were PIT tagged and detected at Lower Granite. Chinook are the most dispersed throughout the watershed, the latest and most spread out migrators.
- Erick Van Dyke, OR, noted that Oregon appreciates NOAA's efforts to incorporate Oregon's comments into the new methodology. However, Erick, speaking for Oregon, views the methodology changes in the BiOp and revised proposal as incremental changes that decrease protections for the fish relative to what had occurred under the recent court ordered operation. He also noted concern that the new methodologies shift the baseline that has been used for the previous spring to summer transition operations and questioned the biological benefit for reducing spill for migrating species.
- Jim Litchfield, MT, clarified the implications of the date changes, noting that the Lower Granite spill will be the largest change, with a 2kcfs decrease from (20 kcfs down to 18 kcfs) in spill for 8 days.
- Dan Feil, USACE, noted that the dates are similar to previous years, with LoMo the same and LGW 8 days earlier.
- Dave Wills expressed interest in ensuring protection for late migrating stocks by maintaining a June 21st date for Lower Granite.

➢ **Action:** TMT members will provide Doug Baus with additional comments or input by Friday, May 30th. TMT comments will be considered by USACE and a decision regarding the spring to summer spill operations will be made and provided back to TMT by the June 4th TMT meeting.

Operations Review

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

- Hungry Horse elevation was 3,518.0ft with 6.7kcfs outflow and 25kcfs inflow.
- Grand Coulee elevation was 1,257.6ft. Grand Coulee is continuing to target elevations below flood control for the end of May.

Doug Baus, USACE, reported on Corps projects:

- Libby was at elevation 2,407ft, with 57.4kcfs inflow and 18kcfs outflow. The second sturgeon pulse operation may be implemented earlier than planned due to potential flood control needs.
- Albeni Falls was at elevation 2,060ft, with 103.8kcfs inflow and 82kcfs outflow.
- Dworshak was at elevation 1,555.93ft with 22.3kcfs inflow and 2.3kcfs outflow.
- Lower Granite average outflow was 142kcfs.
- McNary average outflow was 375.5kcfs and is operating 7 units at the midpoint. TDG levels are currently being exceeded in the tail water, as well as the JDA forebay.
- Bonneville average outflow was 372kcfs.

As identified in the FOP the Corps switched from the bulk to uniform spill pattern at Lower Monumental Dam on May 23 as coordinated with the TMT. At this time the AA's anticipate spilling in the uniform spill pattern until inflows decrease to 130 kcfs or less. Once flows are below approximately 130 kcfs the Corps will resume spilling in the bulk pattern.

Fish: Paul Wagner, NOAA, reported on fish. He noted that juvenile yearling Chinook counts are decreasing and are now in the low 20k range; 21,000 have passed Lower Granite, 20, 000 passed Little Goose, 10,000 have passed McNary, and 35,000 passed John Day. Sub-yearling passage counts are also starting to increase at LWG. Steelhead are still going strong, however, are declining in the Lower Columbia River. Sockeye are passing Lower Granite, and peak passage at McNary occurred 10 days ago with 250,000 and 10,000 on May 27th. Descaling rates of juvenile sockeye at McNary have reached 37%, John Day is at 6% and Bonneville is at 5%. Other species are experiencing increase descaling rates as well. Adult spring chinook are reaching the end of their run, with approximately 2,000/day; and passage is still well above the average at all projects. Paul noted that there has been good conversion between the Snake River projects, with little delay between Lower Monumental and Little Goose.

Water Quality: Scott English, USACE, reported that there is involuntary spill at all projects and as a result, TDG levels are elevated in the upper basin. The group looked at the combined Oregon and Washington combined TDG percentages, which are available on the TMT website (http://www.nwd-wc.usace.army.mil/ftppub/water_quality/12hr/). Additionally, he noted that all of the fixed monitoring stations are currently operating.

Power System: Nothing to report.

The next TMT meeting will be face to face on June 4th at 9:00am at the USACE Division building.

Agenda items include:

- Spring to Summer Transition Operation
- McNary Descaling Update
- John Day Spill Operation

<u>Columbia River Regional Forum</u>
TECHNICAL MANAGEMENT TEAM – OFFICIAL MINUTES

May 28, 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, BOR, USFWS, Oregon, CRITFC, Idaho and others participated. This summary is an official record of the proceedings, not a verbatim transcript.

2. Meeting Minutes – May 21

Review of the minutes and facilitator's notes was postponed until next week to allow more time for rewiew.

3. Treaty Fishing – SOR 2014-C2

Kyle Dittmer, CRITFC, presented this SOR for a second 2 ½-day treaty fishery in the 2014 spring season. The SOR requests 1.5-foot forebay operating ranges from 6 am, May 28, to 6 pm, May 31, to minimize fluctuations for tribal fishers in the Bonneville, The Dalles and John Day pools. Baus said the COE is implementing the SOR as requested.

Last week's CRITFC-sponsored net flight found 376 nets in the three lower Columbia River pools, the vast majority of them at BON and JDA. Catch efficiency has been good, with 3500 fish harvested last week. This week's fishing might not be as good because the run is nearing its end.

4. McNary Operations

Descaling rates of juvenile sockeye are still elevated at McNary Dam as discussed at TMT last week, Baus said. In order to address this issue the COE is implementing the following actions. First, based on FPAC's feedback yesterday the COE has implemented the mid-point operation, beginning at 6 am today through 7 am tomorrow. Seven units (units 2, 3, 5, 6, 8, 9 and 10) are being operated to their mid-point, which is currently 10.1-10.3 kcfs.

The second operation to address descaling is debris removal. A boat will arrive at MCN from LGR today to assist with debris removal operation. It is hoped that the debris removal, which is expected to take 1-2 days, will significantly reduce descaling. Baus also gave an update on smolt monitoring, which is occurring on odd days throughout May. The May 27 sample found a sockeye descaling rate of 36% which is high. It is hoped that the mid-point operation will result in lower descaling rates from the May 29 sample. More information on descaling rates will be available then.

Paul Wagner, NOAA, reported that sockeye descaling rates have been high all season, exceeding 15-20% over the past week. The cause is unclear. Only two things have changed at the project since last year, the head gate operation (the gates were lowered to comply with new closure requirements) and a floating raft of debris whose depth is uncertain. These are the two main options to investigate. Russ Kiefer, Idaho, thanked the COE for implementing the mid-point operation. The head gates were lowered so the project would meet a 10-minute closure rule, Tom Lorz, CRITFC, added. TMT will revisit this operation at its next meeting June 4, with an unscheduled meeting before then if needed.

5. Lower Snake River Spring to Summer Spill Operations

Wagner gave a presentation, linked to this item on today's agenda, on an alternative to the criteria for transitioning from spring to summer spill as stated in the 2014 draft FOP. This proposal for transitioning to summer spill on the lower Snake is currently out for review. Baus said the COE is seeking comments from TMT with the goal of announcing a decision on the date selected to transition from spring to summer spill operations at next week's meeting.

Wagner recalled the 2008 BiOp introduced summer spill to the FOP, with the criteria for the switch being 50% or more subyearling chinook collected over a 3-day period for each Snake River project after June 1. The 2014 supplemental BiOp changed the criteria to 95% wild PIT tagged yearling chinook collected at Lower Granite, incremented for water particle travel times to Little Goose and Lower Monumental.

Wagner showed TMT data queries from the DART page for historic 50%, 90% and 95% passage dates for yearling chinook, wild spring chinook, wild steelhead and sockeye at Lower Granite Dam. Dates are actual for all years past and predicted for the current year. The 95% passage date for LGR in 2013 was initially thought to be in June and turned out to be May 22. The DART data include estimated travel times from project to project.

The draft 2014 FOP initially proposed to use the past 5 years' running median to establish the 95% passage dates, with the earliest date May 22 and the latest June 13. The initial transition dates to summer spill were June 6 for LGR, June 11 for LGS, and June 14 for LMN using this methodology, but there were some comments received suggesting that the dates were too early.

An alternative proposal to base the transition to summer spill on the latest 95% passage date observed in the past 5 years reset the dates to June 13 at LGR, June 18 at LGS, and June 21 at LMN. These dates depend heavily on juvenile spring chinook passage because they're typically the last to migrate. Given that spring and summer spill rates are both 30% at LGS, the change there is moot. LGR transitions from 20 kcfs spring spill to 18 kcfs for summer spill, a slight difference. The change is most

significant at LMN – from the gas cap (approximately 27 kcfs with a bulk pattern) in the spring to spill to 17 kcfs summer spill.

Wagner asked TMT for feedback on the alternative proposal. Erick Van Dyke said the change from how the projects operated under court order will be small, but it's definitely in the wrong direction. Van Dyke expressed appreciation for NOAA's responsiveness to Oregon's comments in its proposal, but many of Oregon's concerns have not been addressed. **Oregon** sees no biological benefit in reducing fish protection at this time, nor does Oregon see biological benefit in summer transport. Van Dyke questioned the historic data sets used in the models and said the changes represent a questionable shift in methodology from that used under court-ordered spill.

Wagner replied that **NOAA** chose 5 years as an appropriate time span because data from the past 5 years incorporates current project configurations beginning in 2010 when the RSW started operating at LMN. Summer spill volumes were based on collecting 50% of the migrating juveniles for transport; the summer transport evaluation is still under way.

Jim Litchfield, **Montana**, asked whether travel time estimates for spring chinook are included in the alternative proposal, and Wagner said he will double-check on that. Litchfield asked about the volume implications of the proposed date changes, particularly June 21 at LMN. Dan Feil, COE, said the date is the same for LMN as under court-ordered spill, and for LGR the date change amounts to a loss of 2 kcfs spill for 8 days.

David Wills said **USFWS** doesn't support a transition to summer spill any earlier than June 20 at LGR for the sake of late-migrating stocks. Russ Kiefer said **Idaho** will review the proposal and comment.

Baus asked TMT members to give him their comments by the end of this week on the alternative proposal. On June 4 he will inform TMT of the COE's decision on the shift from spring to summer spill operations.

6. Operations Review

a. Reservoirs. Hungry Horse is at elevation 3518.74', with inflows of 25 kcfs and releases of 6.7 kcfs, gradually refilling. Grand Coulee is at elevation 1257.6', filling toward its end of May flood control elevation.

Libby is at elevation 2407' with average inflows of 57.4 kcfs and releases of 18 kcfs. Dworshak is at elevation 1555.93' with inflows of 22.4 kcfs and releases of 2.3 kcfs.

Lower Granite daily average inflows are 142 kcfs. McNary daily average inflows are 375.5 kcfs. Bonneville daily average outflows are 372 kcfs.

Lower Monumental will switch from uniform spill to bulk spill when inflows remain around 130 kcfs for an appropriate length of time. The COE is reluctant to change the spill pattern when inflows are fluctuating.

e. Fish. Paul Wagner, NOAA, reported.

Juveniles: Yearling passage is declining. Passage at LGR and LGS is in the low 20,000 per day, while it was in the 100,000 in past weeks. LMN index counts are down from 15,000 to 8,000 fish per day. On the lower Columbia projects 10,000 passed MCN, 35,000 passed JDA and 24,000 passed BON daily. Subyearling passage is picking up at LGR in particular, which the passage index is 65,000. There's a similar uptick at LGS and LMN.

Index counts on the lower river are, 11,938 at MCN, 7,542 at JDA and 8,958 at BON. Sockeye passage as usual happened quickly and is trailing off. Tony Norris, BPA, asked whether sockeye descaling might resolve with the end of sockeye season. Wagner said descaling rates for all species are higher at MCN not just sockeye. Descaling rates at MCN have been as high as 36%, with descaling rates at the other projects being much lower, so there's clearly a problem at MCN.

Adults: Passage season is also winding down, at least for spring chinook. They're passing BON at the rate of 2,000 per day, and counts are running well above average at the other projects upriver. Sometimes there are delays between LMN and LGS, but this year's adult passage counts are tracking quite closely between projects.

c. Water Quality. Scott English reported that involuntary spill is happening everywhere on the system. Bill Proctor said the COE will keep increasing spill caps at CHJ as long as the project is degassing.

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

7. Next TMT Meeting

The next TMT meeting will be in person June 4, with a possible unscheduled conference call earlier if needed. Agenda topics on June 4 will include a MCN descaling update and a decision from the COE on the transition from spring to summer spill.

Name	***Affiliation***
Tony Norris	BPA
Doug Baus	COE
Paul Wagner	NOAA
Bill Proctor	COE
Karl Kanbergs	COE
Dan Feil	COE
Tori Hines	DSC
Rose Francis	BPA

Julie Doumbia	BPA
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Jim Litchfield	Montana
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Mary Mellema	BOR
David Wills	USFWS
Eric Van Dyke	Oregon
Kyle Dittmer	CRITFC
Shane Scott	PPC
Heather Dohan	Puget
Don Tinker	SCL
Ann Setter	COE
Margaret Filardo	FPC
Peter Graf	Grant PUD
Barry Espensen	CBB
Tom Lorz	CRITFC
Russ Kiefer	Idaho