

## COLUMBIA RIVER TECHNICAL MANAGEMENT TEAM

November 22, 2017

Facilitator's Summary

Notes: Charles Wiggins, DS Consulting

*The following 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/2017/>*

### Dworshak Operations

Paul Wagner, NOAA, introduced System Operational Request #2017-01 (SOR) from FPAC relating to Dworshak operations for November and December 2017. It provides: "Target end of December elevation of 1520'. Limit outflows up to powerhouse maximum with no spill." The complete SOR is available on the TMT web site. Currently, Dworshak is discharging 1800 cfs with a reservoir elevation of 1520'.

Paul explained that the purpose of the SOR is to prevent last year's spring push and support upcoming flood risk-management operations by reducing the risk of high spill and undesirable TDG levels. The SOR meets the Idaho criteria of: 1) meet refill; 2) below 110% TDG; and 3) spring flow management. Jay Hesse, Nez Perce, pointed out that the SOR buys time until there is a better view of the weather year, and avoids the risk of having to ramp up flows aggressively, which could dewater fall Chinook redds. He also noted that operating the two available units at full load with no spill would result in about a 5 kcfs flow, which follows the natural hydrograph. The fall Chinook run is expected to end about December 10<sup>th</sup>. Charles Morrill, WDFW, thanked Jay for his help in preparing the SOR.

➤ **ACTION** – Steve Hall, COE, described SOR implementation:

Beginning Saturday, November 25, Dworshak will ramp up to full discharge on one unit (2.4 kcfs). It will ramp the second unit up or down to target a reservoir elevation of 1520' on December 31.

Steve clarified for the group that if a Pineapple Express atmospheric river occurs during this period, then the Corps will meet the spirit of the SOR, but will not ramp up discharge too far in order to avoid high TDG levels.

### Chum Operations and Information

The weather has been warm and wet recently, resulting in the need to move water at night. Scott Bettin, BPA, noted that chum are starting to arrive. Charles reported there will be a new database on line soon, with quicker response times. Julie reported that 400 chum were observed at I-205, with 120 in the spawning channel on Monday. Also, Steller sea lions are still in place preying on chum.

**The next TMT meeting will be a conference call on December 6, at 9:00.**

**Columbia River Regional Forum**  
**TECHNICAL MANAGEMENT TEAM OFFICIAL MINUTES**

**November 22, 2017**

Minutes: Pat Vivian

**1. Introduction**

Representatives of the COE, BPA, Washington, NOAA, Umatilla, Yakama, and Nez Perce tribes, Idaho, BOR, and others participated in an unscheduled TMT call to discuss SOR #2017-1, submitted yesterday to the Action Agencies by Paul Wagner, NOAA. Signatories to the SOR included NOAA, USFWS, Idaho, Oregon, Washington, the Nez Perce Tribe, and the Columbia River Inter-Tribal Fish Commission.

Doug Baus, COE, chaired today's discussion of the SOR, with Charles Wiggins, DSC, facilitating. The purpose of the call was to officially poll the Salmon Managers and other TMT members who did not participate in the FPAC call yesterday, as well as to clarify how the SOR would be implemented.

Tony Norris, BPA, added an update on the chum operation at Bonneville Dam to today's agenda.

**2. Dworshak Operations**

**2a. SOR 2017-1.** Paul Wagner led a discussion of this SOR, which requests an elevation target of 1520 feet in Dworshak reservoir by the end of December as a precautionary measure against having to draft aggressively and exceed 110% TDG later in the season. According to Wagner the SOR conforms to operational objectives identified by Idaho and endorsed by TMT in 2016 and again in 2017. The objectives are in prioritized order:

1. Operate the reservoir to a 95% probability of refill
2. Avoid exceeding 110% TDG downstream
3. Provide spring flow augmentation

Wagner said these objectives capture the Salmon Managers' priorities in terms of avoiding TDG water quality exceedances in spring 2018, given last year's experience with high flows. In addition to the ongoing outage of unit 3 that reduces powerhouse outflow by 5 kcfs there will be an outage of unit 2 that will reduce powerhouse outflow by an additional 2.4 kcfs during the month of January.

The goal of the SOR is to position Dworshak reservoir to allow more flexibility in flood risk management decisions next spring, Wagner said. The SOR was discussed and supported by the Salmon Managers present on yesterday's FPAC call (Russ Kiefer, Idaho, and Steve Hall, COE, participated).

Jay Hesse, Nez Perce, made two comments today:

1. The SOR will buy time until more is known about the 2017-18 water year.
2. There is a collective desire to avoid ramping up flows due to potential impacts on fall Chinook redds and the potential for subsequent dewatering. This strategy minimizes the risk.

Baus asked whether the Nez Perce would support operating Dworshak at maximum powerhouse outflows of approximately 5 kcfs via two units with no spill. That would be in concurrence with high natural flows and short term fluctuations that fall chinook naturally experience, Hesse replied. The goal of the SOR is to avoid ramping up artificial flows outside the natural hydrograph.

Scott Bettin, BPA, asked when fall Chinook spawning ends. Usually around December 10-15, Hesse said.

Steve Hall described how the SOR will be implemented if TMT approves. Last night the COE increased discharges to 1800 cfs in order to reduce TDG values downstream of Dworshak. The reservoir elevation is already at the 1520 feet elevation target for the end of December as requested in the SOR. Given forecasted inflows and the operational goals of the SOR, the plan is to ramp Dworshak up to full discharge on one unit, which will release 2.4 kcfs starting November 25. After that, the second unit will be ramped up or down as needed to target 1520 feet elevation by December 31.

While it's rare, a "pineapple express" can bring inflows of 40-50 kcfs to Dworshak this time of year. If the weather in December becomes an atmospheric river, the COE will do its best to meet the spirit of the SOR without ramping up discharges above the powerhouse capacity to maintain 1520 ft. If inflows do increase, the plan is to ramp up the two small units and discuss next steps at TMT.

At this point, with NOAA, Oregon, Washington, USFWS, Idaho and the Nez Perce Tribe as signatories to the SOR, Baus polled the remaining TMT members, noting that Montana and the Kootenai, Colville, and Warm Springs tribes were not present today.

- Umatilla Tribe – Supports the SOR
- BOR – Supports the SOR
- BPA – Supports the SOR
- COE – Supports the SOR

With unanimous support from those present, the COE will implement the SOR as Hall described.

### **3. Chum Operations Update**

Tony Norris gave an update on chum operations at Bonneville Dam as previously coordinated at TMT. Because the weather has been warm and wet the Action Agencies are already moving water at night, with a peak tailwater elevation of 16.3 feet yesterday.

Chum spawning activity started picking up on November 20, Scott Bettin reported. Steller sea lions have been injuring and killing more fish than in recent years, both Chinook and chum.

Charles Morrill, Washington, said WDFW is developing a new database that users will be able to query, making chum spawning survey information more readily available than in the past.

### **4. Next TMT Meeting**

TMT will meet next in a conference call December 6 to revisit Dworshak operations.

<b>Name</b>	<b>Affiliation</b>
Doug Baus	COE
Tony Norris	BPA
Charles Morrill	Washington
Lynn Palensky	NPCC
Wayne Jousma	COE
Steve Hall	COE
Aaron Marshall	COE
Michael Bryant	CBB
Tom Lorz	Umatilla
Paul Wagner	NOAA
Scott Bettin	BPA
Tom Iverson	Yakama
Lisa Wright	COE
Ann Setter	COE
Jay Hesse	Nez Perce

Russ Kiefer  
John Roache

Idaho  
BOR