**Summary of TMT Coordinated Operations Associated with System Operational Request (SOR) 2021-3, 2021-4, and 2021-5**

SOR 2021-3

July 2, 2021

TMT Meeting

TMT Coordinated Operation to Implement SOR 2021-3, “Requested operations to mitigate for and reduce high water temperatures in the lower Snake River reservoirs,” dated, July 1, 2021.

1. Lower Granite Dam (LWG) Spill Change.

EFFECTIVE DAILY FROM JULY 3 THROUGH JULY 31, SPILL AS

DEFINED BELOW:

 0900-2300 HOURS: RSW SPILL ONLY (APPROX 7 KCFS)

 2300-0900 HOURS: 18 KCFS

2. Little Goose Dam (LGS) Spill Change.

EFFECTIVE DAILY FROM JULY 3 THROUGH JULY 31, SPILL AS

DEFINED BELOW:

 0900-2300 HOURS: ASW SPILL ONLY (APPROX 7 KCFS)

 2300-0900 HOURS: 30% OF OUTFLOW \*EXCEPT AS DESCIBED IN THE 2021 FOP

 DURING LOW FLOWS (SEE PAGE FOP-20).

3. Juvenile Transportation Change.

Collection for transport at LWG began at 11:00 on 2 July with the first truck departing on 4 July.  Collection for transport at LGS began at 07:00 on 4 July with the first truck on 6 July.

July 16, 2021

Email from FPAC Chair to TMT Chair RE SOR 2021-3

SOR 2021-3 related email from FPAC Chair to TMT Chair that recommended adjusting the hours of Removable Spillway Weir (RSW) spill as coordinated in SOR 2021-3 at Lower Granite Dam (LWG) from 0900 to 2300 hours to 0500 to 1900 hours from July 19 to July 22. The Action Agencies implemented the request to adjust LWG RSW spill from 0500-1900 hours from July 19 to July 22.

July 21, 2021

TMT Meeting

ID, NPT, and NOAA, request to clarify operations associated with operations identified in SOR 2021-3, at Lower Granite Dam.

1. Effective July 19 to July 22

* Minimum generation and RSW spill (note closure criteria in the FPP) during day 0500 to 1900 hours
* Minimum generation and spill the remainder of project outflow from 1900 to 0500 hours
* This should be implementable when LWG outflows less than 30 kcfs.

2. Effective July 23 to July 31

* Minimum generation and RSW spill (note closure criteria in the FPP) during the day 0900 to 2300 hours
* Minimum generation and spill the remainder of project outflow from 2300 to 0900 hours
* This should be implementable when LWG outflows less than 30 kcfs.

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SOR 2021-4

July 14, 2021

TMT Meeting

TMT Coordinated Operation to Implement SOR 2021-4, “Requested short-term operation modifications to address unseasonably high-water temperatures in the region during 2021,” dated July 8, 2021.

The following numbered list is taken from the specifications identified in SOR 2021-4. The bullets below document the BPA and the Corps ability to implement the request as well as any additional information on how the request may be implemented.

1. *Restoring minimum operation pool elevations (inclusive of a 1-ft operation range) at Lower Granite (MOP range 733‒734), Little Goose (MOP 633‒634), Lower Monumental (MOP 537‒538) and Ice Harbor (MOP 437‒438) through August 31, 2021.*
* At this time, the Corps is unable to implement the specific Minimum Operating Pool (MOP) elevation request due to navigation safety concerns. The Lower Snake reservoirs are held as low as possible while maintaining navigation safety.
* Corps NWW will continue monitoring temperature impacts associated with the upcoming MOP changes identified in the 2021 FOP (see page FOP-15, Table 2) that are scheduled to occur on August 15. If Corps NWW modeling indicates there could be any measurable temperature impacts associated with the planned change in MOP operations scheduled to occur on August 15, then this information and any associated conversations on adjustments to MOP operations would be coordinated via the TMT.
* The Corps will continue operating in accordance with MOP operations as described in the 2021 Fish Operations Plan (see page FOP – 14) on the following website (http://pweb.crohms.org/tmt/documents/fpp/2021/final/FPP21\_AppE\_03-31-21.pdf).
1. *Short-term prioritization of traditional spillway that return to 2021 FOP summer spill volumes and close spillway weirs at Little Goose, Lower Monumental and Ice Harbor dams,*
* This request was implemented as coordinated during the July 9, TMT meeting. The Corps made these operational changes following the July 9, TMT meeting, because adjustments to spillway weir operations can be made in-season as described in the 2021 Fish Passage Plan.
1. *Short-term emergency transport operation can continue during lethal heat stressed conditions, but should return to 2021 FOP summer reduced powerhouse flow volumes while continuing truck transport if Lower Granite tailwater conditions are maintaining the 68°F criteria,*
* Referenced spill operation changes were requested in SOR-2021-3 and implemented at Lower Granite and Little Goose Dams as coordinated during the July 2, TMT Meeting.
* Juvenile transportation resumed at Lower Granite and Little Goose Dams. Collection for transport at Lower Granite Dam began at 11:00 on 2 July with the first truck departing on 4 July. Collection for transport at Little Goose Dam began at 07:00 on 4 July with the first truck on 6 July.
* Additionally, during the July 2, TMT Meeting, spill at Lower Granite and Little Goose Dams was reduced to improve temperature (http://pweb.crohms.org/tmt/agendas/2021/0707\_Agenda.html) additional coordination occurred during the July 9 TMT Meeting.
* If the Corps is able to operate the Lower Granite tailwater at the TMT coordinated temperature criteria while keeping Dworshak Dam above 1,535 feet by August 31 then OR would need to coordinate further details of this request (transport operation and resumption of 2021 FOP summer spill) at TMT. The Corps would need 7 calendar days advanced notification prior to requesting operational changes for planning purposes.
1. *Temporarily change to Dworshak summer flow augmentation:*
	1. *Modify the end of August draft limit at Dworshak from 1535 to 1525, and*
	2. *Start 200 kaf Settlement releases September 1―operating to ~1510 rather than 1520 by end of September*
* The Corps is committed to the investigation of the requested operation and can provide weekly updates to TMT on progress.
* The Corps is unable to commit to any additional specifications at this time because there are numerous other parties that need to be coordinated with therefore the specific outcome is not certain.

August 4, 2021

TMT Meeting

Given the current forecast additional draft at Dworshak Dam may not be necessary but the Corps will maintain the flexibility to draft to 1534 feet end of August and 1518 end of September if absolutely necessary.

As described in the 2005 Agreement between the U.S. and the Nez Perce Tribe for Water Use in the Dworshak Reservoir, the Corps and the Nez Perce Tribe mutually agree (Article 1-Water Use, d., page 3) to drafting no lower than an elevation of 1,534 feet by the end of August and to an elevation no lower than 1,518 feet by the end of September. This mutual agreement reiterates the Nez Perce Tribe’s right to annually use 200 KAF of water in the Project (Article 1- Water Use, b., page 3). This mutual agreement between the Corps and the Nez Perce Tribe is consistent with the following Dworshak Dam operations as described in the 2020 CRS BA (Page 2-29), “Draft no lower than an elevation of 1,535 feet by the end of August and to an elevation of 1,520 feet (80 feet from full) by the end of September, unless modified per the agreement between the United States and the Nez Perce Tribe for water use in the Dworshak Reservoir.

1. *Coordinate potential alternative to stretch-out cool water augmentation measures that do not require modifications to federal or state water quality standards.*
* The Corps is committed to working with TMT on Dworshak temperature operation specifics once they are identified.
1. *Seek efficiencies for Lower Granite Doble test scheduling where practicable to minimize risk of unintentional loss of Dworshak water conserved by actions taken in SOR 2021-3 and those proposed above.*
* This request has been resolved in association with the July 8, FPOM meeting. Subsequent to the meeting the Corps provided the FPOM with supplemental information that addressed concerns associated with Lower Granite Dam Doble Testing operations.

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SOR-2021-5

July 14, 2021

TMT Meeting

TMT Coordinated Operation to Implement SOR 2021-5, “Requested temporary change to water temperature criteria to conserve water in Dworshak Reservoir,” dated July 13, 2021

ID, presented SOR 2021-5. The SOR requests a temporary change to water temperature criteria to conserve water in the Dworshak reservoir during a period of lower fish passage in the Snake River, in order to extend temperature mitigation water later into August. Specifically, the SOR would increase water temperature criterion for the Lower Granite tailrace from 68 degrees F to 69.5 degrees F beginning no earlier than July 23 and no later than July 29, and ending on August 17. Start and end dates would be determined by FPAC and coordinated through TMT.

July 19, 2021

Email from FPAC Chair to TMT Chair RE SOR 2021-5

Per SOR 2021-5 FPAC Chair send an email to the TMT Chair that made the request to increase the Lower Granite Dam tailrace temperature criterion by 0.5°F per day beginning on July 23. The criterion should be increased to 68.5°F on July 23, 69°F on July 24, and 69.5°F on July 25. The Action Agencies implemented the request to adjust LWG tailwater temperature criteria.