

**OFFICIAL COORDINATION REQUEST FOR  
NON-ROUTINE OPERATIONS AND MAINTENANCE**

**COORDINATION TITLE** – 23MCN08 Spillway Hoist Install Bay 16

**COORDINATION DATE** – 28 June 2023

**PROJECT** - McNary Dam

**RESPONSE DATE** – 7 July 2023

**Description of the problem-** The spillway hoist that was in Bay 6 has been repaired and was installed in Bay 16 on June 15. Completing the installation requires; aligning the motor and gearbox, weld shear blocks, connect hoist cable ropes to the gate, set the upper and lower limits, and conduct final testing. This work will take approximately 4 days and will require adjacent spillbays, Bays 15 and 17, to be locked out of operation.

**Type of outage required-** Closure of spillbays 15 and 17 (Bay 16 is already closed) July 10 to 13 from approximately 0630 to 1700 hours each day.

**Impact on facility operation (FPP deviations)-** The spill pattern will be altered by closure of Bays 15 and 17 from 0630 to 1700 hrs for up to 4 days. Bay 16 is already closed.

**Impact on unit priority-** None.

**Impact on forebay/tailwater operation-** None.

**Impact on spill-** The spill pattern will be altered during the times mentioned above. The spill volume will be maintained by spreading required flow evenly through operating bays.

**Dates of impacts/repairs-** July 10 to 13, 2023.

**Length of time for repairs-** Four days during normal working hours.

**Analysis of potential impacts to fish:**

1. 10-year average passage by run during the period of impact for adults and juvenile listed species, as appropriate for the proposed action and time of year;

For the four days, July 10-13, average passage is 4,448 adult summer Chinook salmon, 23,723 adult sockeye salmon, and 885 adult steelhead at McNary Dam.

2. Statement about the current year's run (e.g., higher or lower than 10-year average);

Currently summer Chinook salmon and sockeye salmon are near the 10-year average while steelhead are predicted to be below the 10-year average.

3. Estimated exposure to impact by species and age class (i.e., number or percentage of run exposed to an impact by the action);

Counts at McNary Dam during July 10 to 13 make up 6.6% of the average run for adult summer Chinook salmon, 9.6% for adult sockeye salmon, and 0.8% for adult steelhead. In 2022, during the same dates, 3.6% of the juvenile sub-yearling Chinook salmon were observed in the smolt index.

4. Type of impact by species and age class (increased delay, exposure to predation, exposure to a route of higher injury/mortality rate, exposure to higher TDG, etc.);

Some age-0 (fall Chinook salmon) juveniles may pass through adjacent open spillbays. Juvenile and adult salmon passage through tailrace may be delayed.

**Summary statement - expected impacts:**

**Downstream migrants:** Some age-0 (fall Chinook salmon) juveniles may pass through adjacent open spillbays. Tailrace egress may be delayed.

**Upstream migrants (including Bull Trout):** Tailrace passage may be delayed.

**Lamprey:** Tailrace passage may be delayed.

**Comments from agencies:**

**From:** Ebel, Jonathan <jonathan.ebel@idfg.idaho.gov>

**Sent:** Friday, June 30, 2023 9:45 AM

**To:** Peery, Christopher A CIV USARMY CENWW (USA)  
<Christopher.A.Peery@usace.army.mil>

**Cc:** Cassinelli, John <john.cassinelli@idfg.idaho.gov>

**Subject:** [Non-DoD Source] RE: 23MCN08 MOC Spillway Hoist Install Bay 16

Chris,

It is difficult for me to gauge the risk to adult passage delay resulting from the closure of the bays 15-17 during daytime hours relative to having 15 and 17 open, but 16 closed. This delay is acknowledged in the MOC but with little other information. The chosen period (10-13 July) may encompass a substantial portion of adult Snake River sockeye that pass McNary Dam, much more than depicted by the aggregate sockeye run as stated in the MOC. We know that SR sockeye survival from Lower Granite to Redfish Lake Creek declines precipitously for fish arriving at Lower Granite later in July and into early August. A four day delay at McNary in the middle of July could have very serious impacts on SR sockeye conversion from Lower Granite to the Stanley Basin — a much more extreme outcome than any action that delays spring/summer Chinook salmon. While survival of delayed summer Chinook salmon may decline a small amount under certain conditions, SR sockeye survival can approach zero. Please expound on the mechanisms by which the action in the MOC may impact SR sockeye adult passage so an informed decision can be made. Potential other options include:

- (1) move this work to early August when we reasonably assume that SR sockeye still below McNary have little to no chance of reaching the Stanley Basin.
- (2) move this work to after August 15, when spill is reduced to 20kcf and the modified spill patterns only include using Bays 14-15 & 18-20 (FPP Chapter 5; Table MCN-9). In this case, maybe use bays 13-14 and 18-20 based on best judgment of tailrace dynamics.

\*I acknowledge both alternatives risk impacting fall Chinook and summer steelhead passage at McNary, but keep the status quo for sockeye.

In the end, the spillway issues and untested patterns leave us blind to the potential impacts to adult and juvenile passage. It appears adult sockeye passage at McNary is okay under the

present spill pattern and I prefer that the USACE not implement a pattern with unknown effects at a critical time for adult SR sockeye passage.

-JDE

**From:** Peery, Christopher A CIV USARMY CENWW (USA)  
**Sent:** Friday, June 30, 2023 12:54 PM  
**To:** Ebel,Jonathan <jonathan.ebel@idfg.idaho.gov>  
**Cc:** Cassinelli,John <john.cassinelli@idfg.idaho.gov>  
**Subject:** RE: 23MCN08 MOC Spillway Hoist Install Bay 16

Jonathan,

I asked Laughery about this. Below is his take on the situation;

“Generally, we believe the adults avoid the white water so shutting off this many bays might lead to a few poking around in the slack water. This is all based on active tag data that can’t see fish in white water, so we really have no idea. The general pattern will result in reverse flow re-entering the stilling basin in those bays that are shut off. Most of the fish pass the Oregon shore entrance, so I doubt spillway ops will have much of any influence on overall adult passage.”

I also looked at hourly counts for June. For Chinook we saw a good shift from Oregon fishway to Washington fishway at start of summer spill, 16 June. Sockeye remained relatively evenly split between Oregon and Washington fishways through June. During the removal of TSW’s, bays 15-18 were closed 700 hrs 20 June to 1545 hrs 21 June. There was not a noticeable change in Chinook or sockeye hourly counts during this period, which suggests closing the three bays 13-17 may not have a dramatic affect on adult [passage.

That being said, holding off the change until after July seems a reasonable idea to explore. I will ask the project.

Chris

**Final coordination results:** Consensus reached

**After Action update:**

Please email or call with questions or concerns.

Thank you,  
Chris Peery  
Fish Biologist  
Walla Walla District Ph.  
(509)542-7124