

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

COORDINATION TITLE- 19MCN13 Steelhead Overshoot Research Equipment Installation

COORDINATION DATE- 23 July 2019

PROJECT- McNary Dam

RESPONSE DATE- 06 August 2019

Description of the problem

Main turbine units 1, 2, 13, and 14 need to be placed out of service to facilitate dive work to install hydro acoustic equipment on the trash racks. This work is necessary for the Steelhead Overshoot TSW Evaluation coordinated through the Science Review Work Group as ADS-S-16-1. The purpose is to evaluate the effectiveness of surface spill operation at McNary Dam to provide a non-turbine downstream return route for adult steelhead that overshoot their natal tributaries and/or downriver origin adult steelhead that overwinter in the McNary forebay. This study will assess a fall and spring surface spill operation, at the Top Spillway Weir (TSW) spillbay, for returning John Day and Umatilla rivers origin steelhead spawners that overshoot McNary Dam. Monitoring will evaluate the diel timing and duration of surface spill periods to determine when spill is most effective at passing steelhead downstream.

Type of outage required – Remove Units 1 and 2 concurrently for 2 days, and units 13 and 14 concurrently for 2 days, from service.

Impact on facility operation – None.

Impact on unit priority- Turbine priority is 1, then 14-2 in descending order. When units 1 and 2 are OOS for up to 2 days it will shift operation to unit 3 then 14 – 4 in descending order. When units 13 and 14 are OOS for up to 2 days, operation will be unit 1 then 12 – 2 in descending order.

Impact on forebay/tailwater operation - None

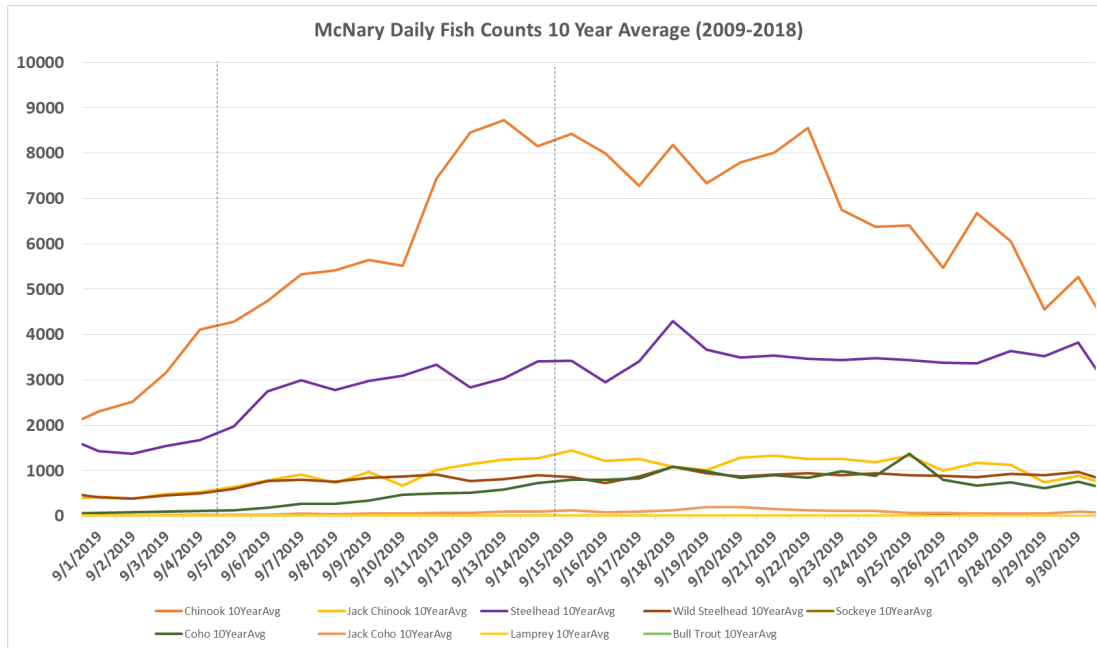
Impact on spill - None

Dates of impacts/repairs – September 9 – 15, 2019 (4 days during this time period)

Length of time for outage – 4 days

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;



2. Statement about the current year's run (e.g., higher or lower than 10-year average).
Fish runs are trending lower than average in 2019.
3. Estimated exposure to impact by species and age class (i.e., number or percentage of run exposed to an impact by the action).
In September the following species are present (% of run) and passing based on the 10-year average during the proposed outage schedule:
 - Fall Chinook salmon ~15%
 - Steelhead ~15%
 - Pacific lamprey ~7%
 - Coho ~14%
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.).
Shifting unit priorities may cause some adult passage delay.

Summary statement - expected impacts on:

Upstream migrants (including Bull Trout)

The overall impact on Chinook salmon and steelhead is expected to be minimal.

The impact on bull trout would be the same as the adult salmonids; however, very few bull trout have been observed at McNary Dam over the last twenty years.

Pacific lamprey passage will not be impacted by the shift in unit priorities.

Downstream migrants

Impacts to steelhead kelts, juvenile salmonids, or juvenile lamprey as a result of this work are expected to be minimal. Juvenile passage is mostly complete by September and relatively few will pass during the proposed unit outages.

Comments from agencies

Final coordination results

After Action update

Please email or call with questions or concerns.

Thank you,

Ricardo Walker
Fish Biologist
NWW Environmental Analysis
Ricardo.Walker@usace.army.mil
Office: 509.808.4709