

**OFFICIAL MEMO of COORDINATION (MOC) FOR NON-ROUTINE  
OPERATIONS & MAINTENANCE**

**COORDINATION TITLE-** 24 LGS 02 Potential Noise - Juvenile Collection Channel

**COORDINATION DATE-** April 1, 2024

**PROJECT-**Little Goose Dam

**RESPONSE DATE-**April 15, 2024

**Description of the Problem:** The trash rake crane requires replacement for operational reliability. Work is scheduled to be completed on May 19, 2024, with tentative installation scheduled to begin April 8, 2024. Initial phases involve the erection of the new crane directly above and adjacent to the juvenile collection channel gate wells of units 5 and 6 and are not anticipated to cause additional noise nor vibration beyond the current ambient levels (85dB) within the juvenile collection channel and orifice gallery.

Installation of new electrical feeder lines and breaker is scheduled under the Mechanical & Electrical phase with a tentative start date of April 22, 2024, through April 29, 2024. Within the 100' proximity immediately above and adjacent to units 1 and 2 gate well, orifice, and juvenile channel areas concrete channeling and core drilling will be necessary. Approximately 25' of concrete saw work is required to cut a trench 6" wide by 8" deep to embed the electrical conduit. At the end of the trench 8' of concrete jackhammer core drilling is necessary to achieve a 3" diameter hole to reach the orifice gallery below. Concrete saws are rated around 120dB, jackhammers at approximately 130dB. The cutting and hammering will take place on the intake deck; however, it is anticipated concrete transmission of impact noise could reach levels of 100dB within the orifice galley. Technical personnel estimate the concrete demolition to take a minimum of 4 to 6 hours and may potentially take a full 10-hour shift to complete.

Remaining phases include internal testing to begin April 29, 2024, SAT and lifting beam testing on May 5, 2024, trash rake testing May 12, and old crane removal May 19, 2024.

**Type of outage required:** No outage required

**Dates of impacts/repairs:** April 22 – May 19, 2024

**Length of time for repairs:** Daily from 0630 – 1700 hours

**Impact on fish facility operation:** Operations anticipated to impact the juvenile collection channel only as the adult ladder forebay exit is located 200'+ from the concrete demolition areas.

**Impact on project operations:** None.

## **Analysis of potential impacts to fish:**

1. 10-year average passage of adults and juveniles of each affected listed species during dates of impact:

Adult counts: Per DART, an average of 25,582 adult Chinook salmon, 1,684 jack Chinook salmon, 2,360 adult steelhead, 2 Bull Trout, and less than 1 Pacific lamprey pass through Little Goose Dam through the period of April 8 through May 19. For the period of April 22 through April 29 numbers average 2,143 adult Chinook salmon, 35 jack Chinook salmon, 152 steelhead, 1 Bull Trout, and no lamprey.

2. Smolt index:

Per DART, for the period of April 22 through April 29 10-year numbers average 35,657 yearling Chinook salmon, and 443,111 steelhead.

3. Estimated exposure to impact of adults and/or juveniles, as appropriate, by species:

For the period of April 22 through April 29 the 10-year numbers average 18% yearling Chinook salmon and 25% steelhead.

4. Type of impact to adults and/or juveniles, as appropriate, by species (e.g., increased delay, exposure to predation, exposure to a route of higher injury/mortality rate, exposure to higher TDG, etc.):

There will be negligible impacts on upstream migrants to include Bull Trout and Pacific lamprey. Down stream yearling Chinook and juvenile steelhead attempting to enter the juvenile collection may be either delayed or encouraged to exit through ASW and other spill options.

## **Comments from Agencies:**

## **Final Coordination Results:**

## **After Action update:**

Please e-mail or call with questions or concerns.

Thank you,

Deborah L. Snyder  
Little Goose Lock and Dam  
Supervisory Fish Biologist  
Deborah.l.snyder@usace.army.mil