OFFICIAL COORDINATION REQUEST FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 23 LGS 06 Stilling Basin Sediment Removal

COORDINATION DATE- 20 April 2023

PROJECT- Little Goose Lock and Dam

RESPONSE DATE- 11 May 2023

Description of the problem - USACE proposes to remove accumulated sediment from the stilling basins of Lower Monumental, Little Goose, and Lower Granite Dams so that the basins can be inspected for damage as the condition of the concrete stilling basins are unknown. USACE has conducted a preliminary survey with an unmanned underwater vehicle to determine the debris and sediment composition. The bulk of the sediment volume is at Little Goose and Lower Granite dams and the material is predominately cobble.

Sediment removal for Little Goose Dam will occur 15 December 2025 to 28 February 2026, but work at the three dams will be similar: The project will begin by temporarily removing the avian deterrent wires, then documenting the existing conditions with a pre-dredge condition (bathymetric) survey to determine the quantity and location of debris and sediments that need to be removed. Following the acceptance of the pre-dredge survey, accumulated sediments will be removed from the spillway aprons and stilling basins with a clamshell dredge utilizing in-water disposal downstream of the work site. A hydraulic suction dredge would be used to remove sediment that cannot be removed with the clamshell. Sediments that cannot be removed by the clamshell or hydraulic dredge (i.e. between the baffle blocks; in damaged areas of the concrete; in corners, etc.) will likely be removed with dive labor utilizing hand operated suction dredge or other like equipment. Aprons and stilling basins will be post-surveyed with multibeam technology and supplemented with divers.

All dredged material will be disposed of in the river near Joso HMU, below Little Goose Dam, at RM 57.

The proposed work would include the following steps:

1. Prepare worksite by temporarily removing the avian wires from over the stilling basin to allow clearance for the dredge plant
2. Complete a detailed bathymetric survey of each stilling basin
3. Mobilize dredge barge and scow and set up at the first stilling basin
4. Utilize a clamshell dredge to remove the large debris and cobble
5. Place the dredged material in a dump scow
6. Once full (or upon completion at Lower Monumental), push the scow to the Swift Bar HMU disposal area
7. Empty the scow while in motion to minimize material mounding
8. Return the scow to the stilling basin as necessary
9. Repeat these steps until a majority of the sediment is removed
10. Remove the remaining sediment with a hydraulic dredge and divers
11. Place the sediment into a dump scow and repeat the disposal process
12. Divers will be used to remove any leftover sediment

13. Once all sediment is removed, conduct a bathymetric survey of each stilling basin
14. Reinstall any avian wires that were removed

Type of outage required- None

Impact on facility operation– Spillways will be tagged out of operation while work occurs in the stilling basin.

Dates of impacts/repairs- The work at Little Goose Dam is planned to begin on or about December 15, 2025 and be completed by 28 February 2026.

Length of time for repairs- Work will take about 2 months

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;

   Counts at Little Goose Dam during winter are not available so data for Lower Monumental Dam is provided here. 10-year average counts of adult steelhead at Lower Monumental Dam during 15-31 December, January, and February are 631, 250, and 817, respectively.

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

   Unknown

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

   Numbers of steelhead observed during 15-31 December, January , and February represent 0.7%, 0.3%, and 0.9% of the 10-year average count at Lower Monumental Dam.

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.);

   Adult steelhead in the tailraces of Lower Monumental and Lower Granite Dam at the times fishways are operating may be delayed passing these projects.

Summary statement - expected impacts on:

Adult fish, including bull trout and lamprey: minimal disruption of fish in tailrace of the dams. Passage may be delayed while fishways are operational.

Juvenile fish: Minimal.

Comments from agencies

Final coordination results

Please email or call with questions or concerns.
Thank you,