OFFICIAL COORDINATION REQUEST FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 23 IHR 11 MOC Concrete Removal to Support Upstream Navigation Lock Tainter Gate Replacement

COORDINATION DATE- 1 December 2023

PROJECT- Ice Harbor Lock and Dam

RESPONSE DATE- 15 December 2023

Description of the problem - USACE proposes to replace the upstream navigation tainter gate structure, along with its associated mechanical equipment, and trunnion anchorages, at Ice Harbor Dam. The concrete supporting the trunnion bearing would also be replaced and new trunnion hubs and anchors would be installed. The proposed action involves designing, fabricating, and installing a new gate and fixed bearings. The proposed action is needed because the gate has surpassed its service life and has become unreliable. The gate support components have worn and cracked due to fatigue of the structure due to its extended use.

The work described here will include concrete cutting and grouting along the walls of the navigation lock. The concrete work would involve jackhammering concrete which causes loud noise levels and vibrations. The work along the south wall of the navigation lock will be within 50 feet of the North Shore adult fishway.

Type of outage required- None

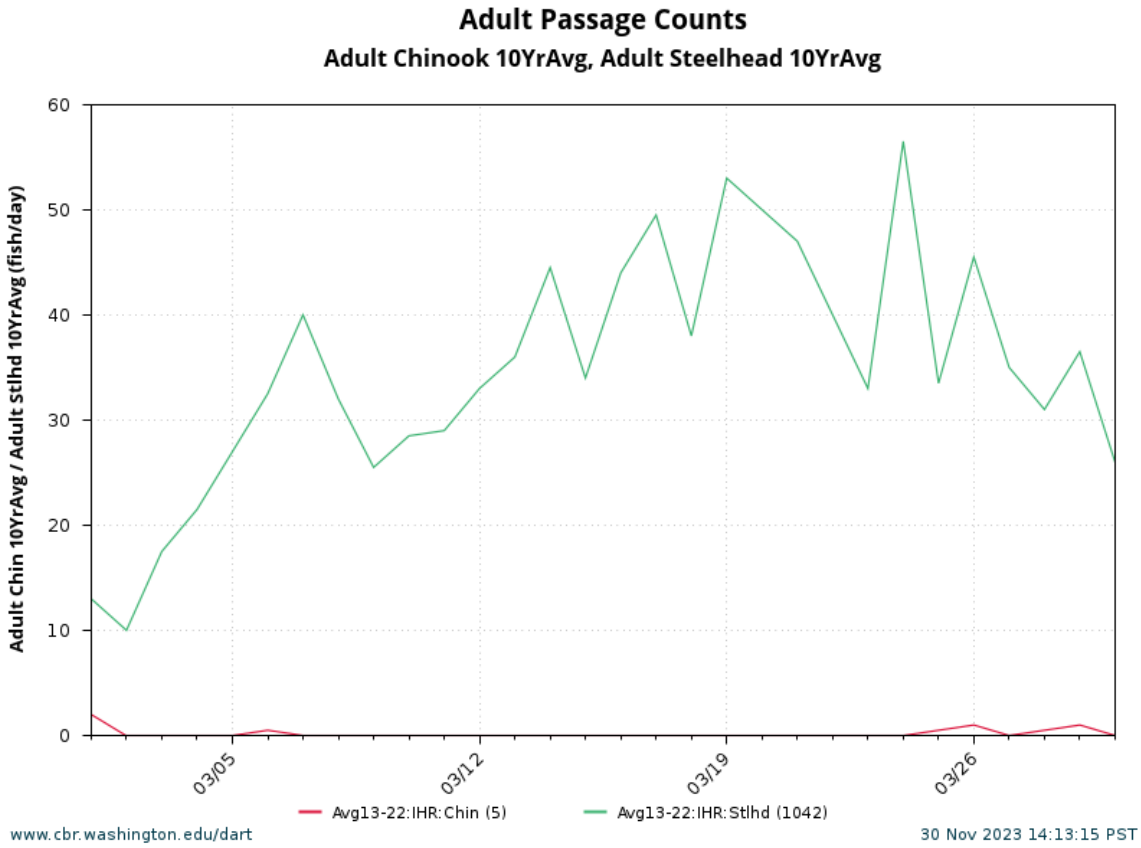
Impact on facility operation– None.

Dates of impacts/repairs- Two five-week Navigation Lock outages are planned for 2025 and 2026 between February 22nd and March 30th of each year. The lock would remain in service and fully functional outside of the planned extended outages in 2025 and 2026. We anticipate most of the work can be completed in 2025, but some may carry over to 2026.

Length of time for repairs- Work would occur for a total of 3 months over the course of two years, however, only two of the three months of work would occur during Adult Fish Passage Season.

Analysis of potential impacts to fish

1. The figure below displays 10-year average passage for adult steelhead and Chinook salmon during the proposed period of impact. The proposed work would have no impact on juvenile fish passage as noise and vibration would only occur in the navigation lock and the top portion of the north fish ladder.



2. This work is scheduled to occur at the beginning of the fish passage season in 2025 and 2026. There would be no current year data prior to the work occurring.
3. The proposed period of work would affect 1.2% of the ten-year average annual steelhead run and 0.1% of the 10-year average annual Chinook run.
4. A small portion of the early adult steelhead run may be exposed to areas of loud noise and vibration for a short period of time near the North Shore fishway exit. There would be a negligible amount of adult Chinook salmon present in the ladder when the work would occur.

Summary statement - expected impacts on:

The proposed work is expected to have no effect on juvenile fish passage or adult Chinook salmon passage. There could be a minimal effect on a small percentage of the early adult steelhead run. The vibration and noise associated with the proposed work could cause short passage delays for adult steelhead.

Comments from agencies

Final coordination results

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

Chuck Barnes
Senior Fish Biologist
U.S. Army Corps of Engineers
Walla Walla District
201 North 3rd Avenue
Walla Walla, WA 99362
Desk: (509) 527-7524
Cell: (509) 240-5750