

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

COORDINATION TITLE- Installation of swallow nests deterrent at south fish ladder

COORDINATION DATE- August 26, 2021

PROJECT- Ice Harbor Dam

RESPONSE DATE- September 10, 2021

Description of the problem – This year there was an abundance of cliff swallows that nested on the outside of the walls of the south fish ladders. They were so plentiful that the bird droppings were a problem on the Visitor Center sidewalk, parking lot, vehicles, and on people walking through the area. The droppings created a health hazard for people exposed to it. Also, the area became an eyesore for workers and visitors and the droppings were difficult to clean.

Now that the swallows are done nesting, project maintenance staff plan to knock down the mud nests, then install a nesting deterrent along both sides of the outside of the top section of the south fish ladder, from the dam to the first 180-degree turn. The deterrent will consist of PVC pipe that is cut lengthwise in half, then attached onto the wall just under the eave of the fish ladder where the swallows nest. The pipe will be installed with brackets and ¼” x 1-1/2” Hilti bolts. The work will be done from an aerial lift. The installation is estimated to take 6 weeks, beginning in September. Accomplishing the work in September and October, rather than in the winter, is preferred because of manpower availability and weather conditions.

Type of outage required

Impact on facility operation (FPP deviations)

The work will take place during the adult fish passage season, when any proposed non-routine maintenance and construction activities adjacent to the fish ladder must be coordinated first with FPOM. The work will involve drilling ¼” holes for the anchor bolts which will produce a minor level of noise and vibration, followed by tapping the Hilti-bolt in the hole with a hammer. The bracket will be secured with nuts using power and hand tools. Concrete debris from the drilling will be captured so it does not fall in the fish ladder.

Impact on unit priority

None.

Impact on forebay/tailwater operation

None.

Impact on spill

None.

Dates of impacts/repairs

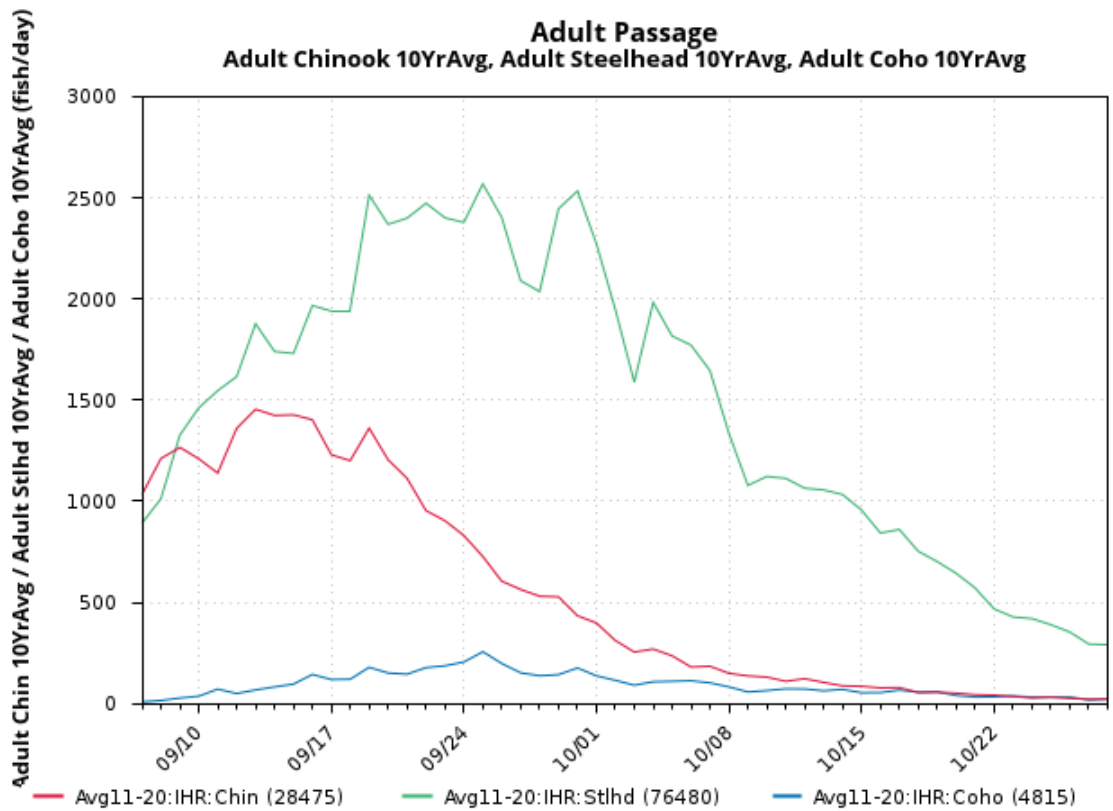
The work will start in September as soon as the materials for the installation are received.

Length of time for repairs

Approximately 6 weeks.

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;

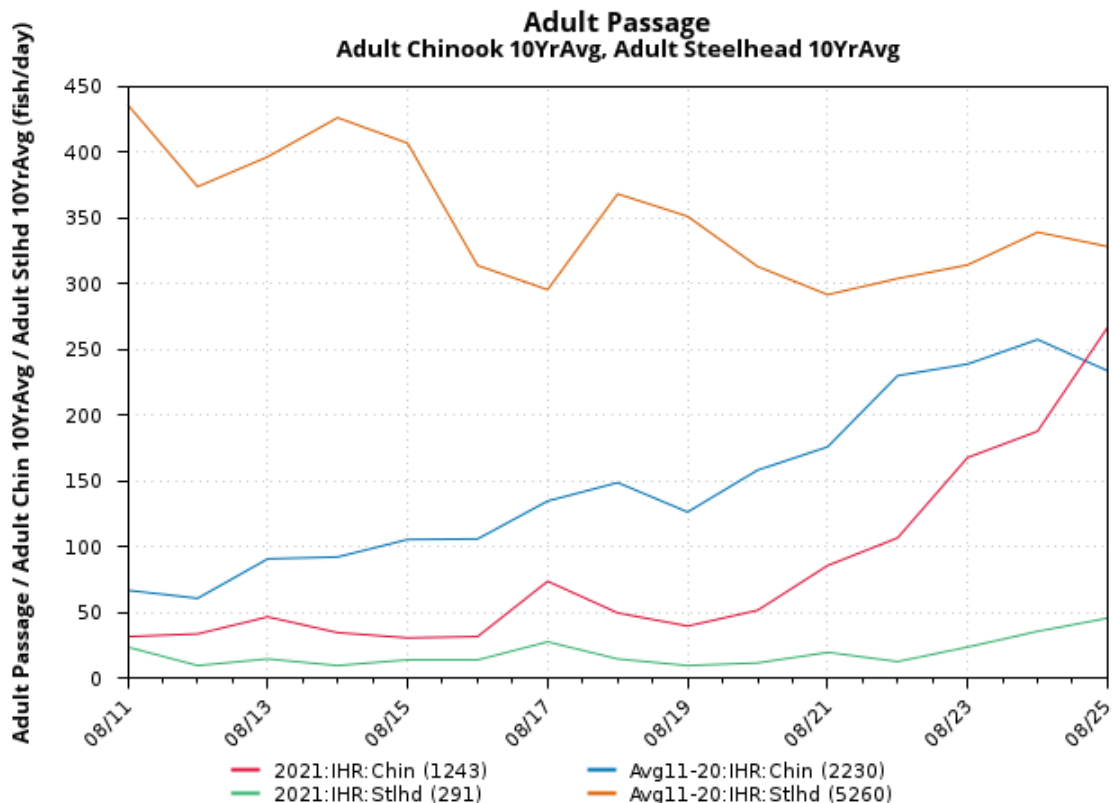


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The graph above shows that adult steelhead, fall chinook, and coho passage is typically peaking in September and early October at Ice Harbor. Average adult lamprey passage ranges from 1 to 4 lamprey passing per day for most of September.

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



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The graph above shows that the daily adult fall chinook passage for the past two weeks has been below the 10-year average at Ice Harbor until August 25. Adult steelhead passage has been well below average. Total adult lamprey counted so far this season has been below the 10-year average. The adult coho run has just started. WDFW forecasts that the coho run will be above 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);

The continuous 24-day period of September 13 to October 6 is arbitrarily chosen for these calculations. (Having the days continuous allows for easier data retrieval and calculation. However, the actual work week is four 10-hour days. Six weeks of working 4 days per week is equal to 24 days of work.) The 10-year average number of fish of each run counted passing through both fish ladder during this period is adjusted for the percent of fish using the south ladder in 2020 (2018 for lamprey, when more were counted) for that period. This is divided by the average total number of fish passing both ladders for the whole season. The estimated results are that 42.7% of adult steelhead, 43.4% of adult fall chinook, 63.3% of adult coho, and 5.9% of adult lamprey will potentially be exposed to the action.

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.);

Drilling ¼” holes into the concrete wall will produce a minor level of noise and vibration that will likely be masked by fishway flow. The proposed work should have minimal to no impact on fish passage.

Summary statement - expected impacts on:

Downstream migrants - None

Upstream migrants (including Bull Trout) - Minimal impact to upstream migrants.

Lamprey – Minimal to no impact as most lamprey move at night.

Comments from agencies

Final coordination results

After Action update (After action statement stating what the effect of the action was on listed species. This statement could simply state that the MOC analysis was correct and the action went as expected, or it could explain how the actual action changed the expected effect (e.g., you didn't need to close that AWS valve after all, so there was no impact of the action). List any actual mortality noted as a result of the action)

Please email or call with questions or concerns.

Thank you,

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