OFFICIAL COORDINATION REQUEST FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE – 22 LWG 02 PNNL Autonomous Receiver Install
COORDINATION DATE – 14 February 2022
PROJECT - Lower Granite Dam
RESPONSE DATE – 28 February 2022

Description of the problem- PNNL study is to address management questions about the potential effects of Federal Columbia River Power System (FCRPS) dam operations and configurations on behavior and survival of juvenile Pacific lamprey is scheduled at LWG during the 2022 migration season.

Detections in the juvenile bypass collection channel requires installation of an autonomous receiver into channel flow at the upstream end of the primary dewaterer. The casing is designed to direct flow around the receiver with a low profile to minimize impacts to fish passage (Figure 1).

Type of outage required- No outages are required.

Impact on facility operation (FPP deviations)- No deviations from FPP.

Impact on unit priority- N/A

Impact on forebay/tailwater operation- N/A

Impact on spill- N/A

Dates of impacts/repairs- March 25-July 30.

Length of time for repairs- N/A

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;

   Adult fish passage facilities will not be impacted. LWG juvenile salmonid passage March 26-July 31 are summarized by species in Figure 2. The 10-year average number of fallbacks at LWG by species is summarized in Figure 3.

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

   No data available on the current year's run.

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 receiver will be installed in the PDW through the peak outmigration period for all juvenile species. Fallbacks through the juvenile bypass system will be passing the receiver as the enter the PDW. The receiver housing will be smooth without rough edges to reduce potential impacts to fish.

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.);

   Fish in the juvenile bypass flow will be channeled around the receiver housing as they come into the PDW.

Summary statement - expected impacts: No impact to operations. Low flow velocities in this section of the channel and housing around receiver should minimize impacts to fish.

Downstream migrants: Minimal

Upstream migrants (including Bull Trout): Minimal

Lamprey: Minimal

Comments from agencies:

Final coordination results:

After Action update:

Please email or call with questions or concerns.

Thank you,
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Lower Granite Project
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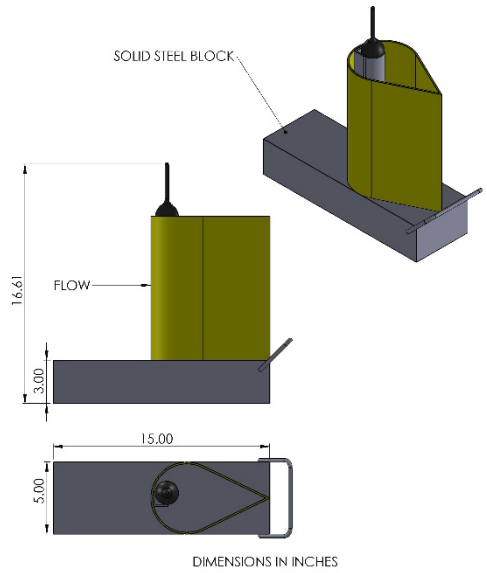

Figure 1. Autonomous receiver design.

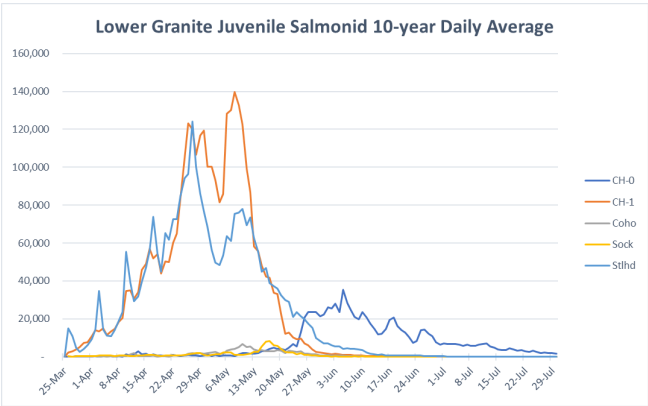

Figure 2. Lower Granite Juvenile Salmonid 10-Year Daily Average Passage by species.

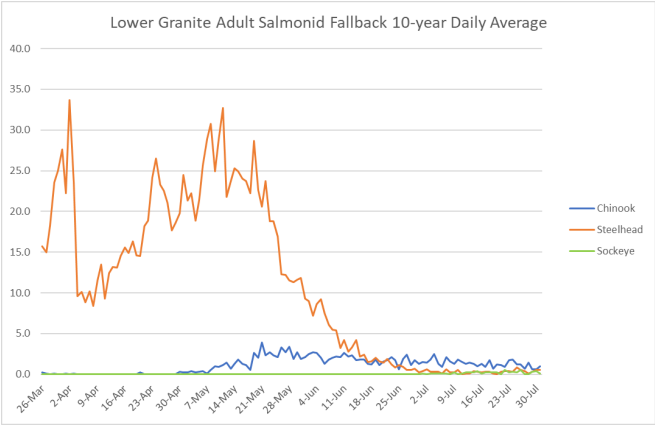

Figure 3. Lower Granite Adult Fallbacks 10-Year Daily Average by species