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

COORDINATION TITLE- 21 LGS 13 Floating Guidewall Cable Replacement
COORDINATION DATE- September 14, 2021
PROJECT- Little Goose Lock and Dam
RESPONSE DATE- September 28, 2021

1. **Description of problem.** The floating navigation lock guidewall support cables have frayed and need replacing. Divers would attach the new cables to the anchors. These cables are attached to two anchor blocks in the forebay of the dam. One of the anchor blocks is buried under accumulated rock and sediment. The Corps proposes to remove approximately 1,500 cubic yards of rock by hydraulically or clamshell dredging the material and transporting it by barge to an upland disposal area. The Corps plans to replace these cables during the winter maintenance period, December 15 through February 28, 2022, but dredging work is expected to occur during the fishway outage in January. Actual dates will be determined closer to the work window. While dredging would be conducted during the annual fishway outage, the movement of sediments within the forebay could potentially affect fish present near the dam.

2. **Type of outage required** (relate to deviation from FPP). None.

3. **Dates of impacts/repairs.** Dredging: One event, likely between January 1-30. Attachment of cables: February 1-28. This would be a one-time event during the fish work window between December and February, 2022.

4. **Length of time for repairs.** Dredging will take approximately three weeks in January. Attachment of cables would take a week in February.

5. **Impact on fish facility operation** *(fishway, JFF, etc.)***.** None.

6. **Impact on project operations** (*unit priority, forebay/tailwater operation and/or spill*). No impact to project operations. A barge would be staged in the forebay during proposed activities. Turbidity could enter the fishway if open. Turbidity monitoring would be conducted both upstream and downstream of the dredged area to minimize the turbidity plume.

7. **Analysis of potential impacts to fish. Include:**

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

      No fish counts are available for January or February at Little Goose Dam. March steelhead counts collected in 2016 averaged 2,077 for the month, representing 2% of the migration for steelhead that passed Little Goose Dam.

      Smolt index: Over the past 10 years, an average of 34 steelhead smolts annually passed through Little Goose Dam between March 1 and March 30.

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

   The 2021 steelhead run is well below the 10-year average.

c. Estimated exposure to impact of adults and/or juveniles, as appropriate, by species (number or percentage of 10-year average that occurs during dates of impact).

   Both bull trout and steelhead utilize Little Goose Dam fish passages and can rest/migrate through the forebay, located on the upstream side of the dam. The fishway will be closed during the dredging work therefore few migrants should be exposed to disturbed sediments.

d. 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.).

   Fish in the forebay will likely be displaced by the dredging activities because of the increased turbidity and noise.

   Steelhead migration would be through the fishway if open.

e. Final judgment on scale of expected impacts (negligible, minor, significant) on:

   i. Downstream migrants. Negligible.

   ii. Upstream migrants (including Bull Trout). Minor.

   iii. Lamprey. Negligible impact to adults. Ammocetes may be located within the forebay sediment and if there, would be moved with the sediment. However, the numbers are expected to be low because of the anoxic environment within the forebay. No survey has been conducted to locate the presence or absence of ammocetes at Little Goose Dam. The closest known ammocetes are located within the deltas of the major tributaries such as the Palouse River and Tucannon River, approximately 11 miles and 8 miles downstream, respectively.

8. Comments from agencies.

9. Final coordination results. Concurrence reached

10. After Action update. The floating guidewell anchor cable replacement project was completed during the coordinated timeframe outlined in the MOC. Dredging was completed on January 9 with the cable connections completed on January 17.

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

Chuck Barnes

Little Goose Lock and Dam

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