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

COORDINATION TITLE- 19 IHR 21 Floating Guidewall Cable Replacement
COORDINATION DATE- December 9, 2019
PROJECT- Ice Harbor Lock and Dam
RESPONSE DATE- December 23, 2019

Description of problem. The floating navigation lock guidewall needs repairs because of four frayed anchor cables. The Corps plans to replace these cables during the scheduled Navigation lock outage (March 1 through March 31st). Divers would attach the new cables to the anchors.

These cables are attached to two anchor blocks that are in the forebay of the dam. One of the anchor blocks is buried under approximately 20 feet of accumulated sediment. The Corps proposes to remove the accumulated sediment by hydraulically dredging the material using a 6-inch intake suction valve and disposing the material in an in-water contained area located in the north side of the forebay. Approximately 2,000 cubic yards of sediment would be moved. While no additional interruption of operations will be needed and the north shore fishway will be out of operation for winter maintenance during the dredging in February, the movement of sediments within the forebay could potentially affect fish present in the area near the dam.

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

2. Dates of impacts/repairs. Dredging: February 1 to February 29, 2020. Attachment of cables: March 1st through March 31, 2020.

3. Length of time for repairs. Dredging will take approximately three weeks in February. Dredging could occur both day and night. Cable replacement will take approximately one week in March.

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

5. Impact on project operations (*unit priority, forebay/tailwater operation and/or spill*). None.

6. 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 February at Ice Harbor Dam. Steelhead counted January of 2014 totaled 222 adults. March steelhead counts collected 2013 and 2018 averaged 1,098 for the month, representing 0.73% of the migration for steelhead that passed Ice Harbor Dam.

Smolt index: There is no smolt data for Ice Harbor Dam. The closest data station is Lower Monumental Dam. Over the past 10 years, an average of 23 steelhead smolts annually passed through Lower Monumental Dam between March 15 and June 15.

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

As of September 2019, a total of 60,328 steelhead have passed Bonneville Dam. The TAC downgraded the total expected steelhead return to 69,200 fish. The update includes and expectation of 66,700 A-Index fish (fish that migrate to Columbia and Snake Rivers) 33,000 unclipped and 2,500 B-Index fish (fish that migrate to the Snake River in Idaho) 1,300 unclipped. This is approximately 21% lower than then 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 bulltrout and steelhead utilize Ice Harbor Dam fish passages and can rest/migrate through the forebay, located on the upstream side of the dam. The north shore 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.

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

   i. Downstream migrants. Negligible.

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

   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 Ice Harbor Dam. Sediment sampling was conducted for this effort and no ammocetes were observed in the sample. The closest known ammocetes are located within the deltas of the major tributaries such as the Palouse River and Tucannon River, approximately 50 miles and 52 miles upstream respectively.

7. Comments from agencies.

8. Final coordination results.

9. After Action update.

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

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