

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

COORDINATION TITLE: 20 LMN 08 MOC-Floating Guide Wall Cable Emergency
Repair

COORDINATION DATE: 8/11/20

PROJECT: Lower Monumental Dam

RESPONSE DATE: 8/13/20

- 1. Description of the problem** – Tow Boat Operators noted a slight shift of the floating guide wall towards the spillway at the end of June. At that time, all navigators were instructed to avoid any contact with the floating guide wall. Inspection of the guide wall revealed concerns over a cable replaced in early 2017. Guide wall cables were inspected by ROV in early July but did not reveal a clear picture of what had occurred. A contract to temporarily repair the guide wall was awarded on 28 July, divers discovered that the primary cable between the anchor block and an intermediate connection had failed. The decision was made by the team to replace the broken cable as soon as possible to minimize potential additional damage and impacts to navigation. In order to attach the new cable to the anchor block the sediment around the anchor block needs to be removed.

This work would include clamshell or hydraulic dredging of approximately 1,600 cubic yards of accumulated silt from around the anchor block in the forebay, in approximately 80 to 100-foot depth of water. Dredge material would be placed in an upland disposal site. Turbidity will be monitored within the dredging limits.

- 2. Type of outage required** – No specific outage required.

- 3. Impact on facility operation** – none

- 4. Impact on unit priority** – none

- 5. Impact on spill** – none

- 6. Dates of impacts/repairs** – Work is expected to be completed by the end of September. In-water work would be approximately 1 to 2 weeks.

- 7. Analysis of potential impacts to fish**

This repair is not expected to impact fish operations or cause any deviations from the criteria found in the Fish Passage Plan (FPP). Spill and unit priority are expected to remain in compliance with the FPP.

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

The 10-year average of adults passing Lower Monumental during this time frame (August 11-September 30) is 31,713 Chinook salmon, 63,463 steelhead and 2,131 coho salmon.

Very few juvenile fish are historically out-migrating during this period. In 2019, the smolt index indicates 2,150 subyearling Chinook salmon smolts and 9 steelhead smolts total from August 11-September 30.

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

Current steelhead and Chinook salmon runs are well below the 10-year average. Juvenile runs for 2020 are also much lower than 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).

The proposed activities would not affect salmon passage through Lower Monumental Dam because no changes in FPP operations would be needed. Dredging would occur 80 to 100 feet below the water surface where fish are not expected to be migrating. Figure 1, located at the end of this form, shows the approximated location the dredging will take place. The dredging area is approximately 750 feet from the south fish ladder exit.

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.).

Salmon within the dredging area may be slightly disoriented by turbidity caused by the dredging activities. The contractor would adhere to a water quality monitoring plan to minimize turbidity and effects to ESA-listed fish. The on-site fish biologist would be contacted for fish salvage if a fish becomes distressed.

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 and the relatively small area being dredged. No survey has been conducted to locate the presence or absence of ammocetes in the Lower Monumental Dam forebay.

8. Comments from agencies

This MOC was discussed at the August 13, 2020 FPOM meeting. Discussions included:

- NOAA advised that the dive and dredge activities consider the RSW would be intermittently operated from October 1 through November 15 should the work extend past the end of September. The likely RSW spill operation would be three times per week on non-consecutive days for 4 hours per day between the hours of 0500 and 1100. This operation is on page 1400 of the new BiOp which would be effective when the EIS ROD is signed.
- RCC provided the following:
 - We currently have a LMN FBE constraint due to LGS downstream nav lock entrance. I am assuming this would still be in place during Sept. See TMT notification below. Let me know if I should look for the cbt or should

investigate further if this would be a concern if the contractor needs a cbt for a LMN FBE operation for this work.

- TMT Members and Alternates, Beginning today, July 14, the Corps raised the Lower Monumental Dam Minimum Operating Pool (MOP) range by one foot for the purpose of navigation safety. The 1-foot raised MOP (538.0-539.5 feet) adjustment at Lower Monumental Dam was made to maintain the minimum depth at the downstream entrance to the navigation lock at Little Goose Dam. This operation is discussed in greater detail in the 2020 Fish Operations Plan in section 4.6 Navigation Safety. Lower Monumental will be operated within the 1-foot raised MOP range for navigation safety until further notice.
- NOAA BiOp spill. Per the comment from Trevor today sounds like we are expected to spill in Oct. Assuming this will not be an issue as it will be occurring after the work is complete. If they overlap would assume it would be reasonable for contractor safety to shut off the spill. If we are requested to modify the spill operation for contractor safety in the LMN FBE then I assume we would need additional coordination on this operation.
- Return to Aug 31 FBE elevation at LMN approximately Sept 23. MOP ends Aug 31. BPA then exercises LSR FBE ranges as adjusted for nav safety starting Sept 1. Assuming as in years past at TMT BPA would draft LSR projects back to August 31 FBE if water was ponded. If the 200 KAF water gets ponded in years past BPA has committed to drafting LSR projects back to the Aug 31 elevation once DWR drafts to 1520. This generally occurs on approximately Sept 23 but can change. This could likely require us drafting back down to 538.0-539.5 feet once we hit 1520 feet at DWR. This could be a challenge if the contractor needed us in the top of the pool and not draft.
- Project Staff will coordinate operational needs for the repair work with RCC and BPA.

9. Final coordination results

This MOC was approved at the August 13, 2020 FPOM meeting.

10. After Action update

All dredging was completed on the September 20, 2020 and the cable installation was completed September 25, 2020. With the floating guidewall cable repairs completed the navigation lock was open for regular navigation traffic September 25, 2020.

Chuck Barnes
Project Fisheries Biologist
Lower Monumental Dam

Figure 1: Approximate Location of Dredging and south fish ladder exit location.

