

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

COORDINATION TITLE- 22 LMN 01 MOC North Fish Ladder Debris Barrier

COORDINATION DATE- January 25, 2022

PROJECT- Lower Monumental Dam

RESPONSE DATE- February 3, 2022

Description of the problem

The installation of the debris barrier was scheduled during the winter maintenance outage period. The MOC titled “21 LMN 06 MOC North Fish Ladder Debris Barrier Anchor Block” was the installation of the concrete anchor block. The concrete anchor block was poured and completed on December 13, 2021. The anchor plate was installed onto the side of the dam on February 14, 2022. The remaining supplies arrived the following week and began to be assembled on land. Currently, the barrier is sitting on the land in small sections.

Due to the sheer weight of the entire barrier, it was not able to be installed during the winter maintenance outage. The final steps are to assemble the individual sections in the water at the boat launch and use the boat to attach each section together once the pieces are in the water. The project believes the sounds should be negligible from this point forward and should only involve sounds created by the boat.

The project would like to finalize the debris barrier in early April, or late August.

Type of outage required - None

Impact on facility operation - None

Impact on unit priority - None

Impact on forebay/tailwater operation - None

Impact on spill - None

Dates of impacts/repairs – Early April (Apr_1-20) or late August after Doble testing (Aug 15-31)

Length of time for repairs – 1 to 3 days

Analysis of potential impacts to fish

The 10-year (2012-2021) daily average adult count during the period of April 1-20 for both ladders includes approximately 10 Chinook salmon and 58 steelhead while the

August 15-30 period includes approximately 218 Chinook salmon, 162 steelhead and 1 sockeye salmon (Figure 1).

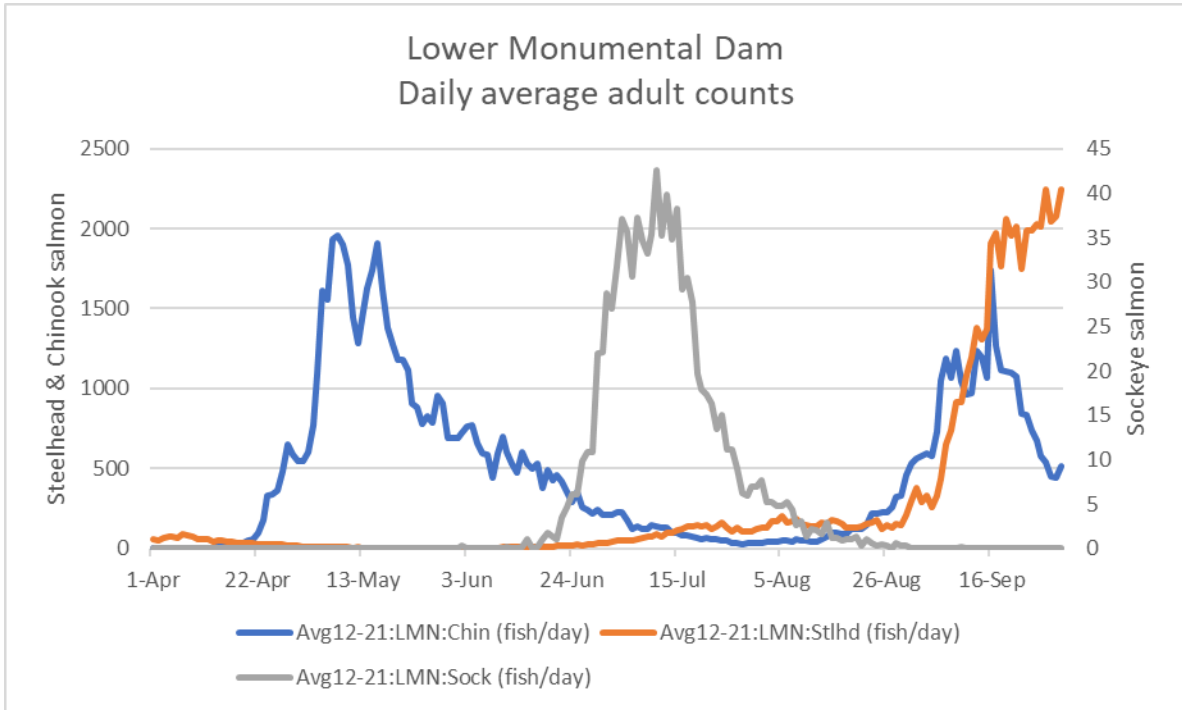


Figure 1. Combined ladder adult fish counts at Lower Monumental Dam, 2012-2021.

The impact to adult passage is expected to be limited to a possible delay due to the noise within 100' of the north ladder exit by the boat motor. No injury or mortality would be expected for this work.

Summary statement - expected impacts on:

Impact to bull trout and lamprey is unknown but expected to be negligible. The 10-year (2012-2021) average daily lamprey counts for both ladders combined at Lower Monumental Dam includes <1 lamprey during the April 1-20 period and approximately 3 lamprey during the period of August 15-31.



Image 1. One section of the fish ladder exit debris barrier assembled on shore.



Image 2. Multiple sections of the fish ladder exit debris barriers assembled on shore.

Comments from agencies

Sent: Tuesday, January 25, 2022 8:14 AM

To: St John, Scott J CIV USARMY CENWW (USA) <Scott.J.StJohn@usace.army.mil>

Cc: Trevor Conder -NOAA Federal <trevor.conder@noaa.gov>

Subject: [Non-DoD Source] Re: MOC 22 LMN 01 North Fish Ladder Debris Barrier

Thanks for the update, I would suggest do this earlier in the am if possible since not many adults will have made it through the whole ladder by then so there would be few if any to be impacted by any vibration or issues with the boat. Can this work be done sooner, ie the start of April if the parts show up? Their are few spring chinook present then but could get the benefit of the debris boom before the freshet? At the next FPOM maybe we can get an update on delivery time if one is available.

thanks

Tom Lorz

CRITFC

From: St John, Scott J CIV USARMY CENWW (USA)

To: Tom Lorz

Cc: Trevor Conder -NOAA Federal

Subject: RE: MOC 22 LMN 01 North Fish Ladder Debris Barrier

Date: Tuesday, January 25, 2022 9:39:00 AM

Tom,

Great questions and we appreciate the input. I will work with the Project and get back to you as soon as possible.

Scott St. John

From: Bettin,Scott W (BPA) - EWP-4 <swbettin@bpa.gov>

Sent: Tuesday, January 25, 2022 8:16 AM

To: St John, Scott J CIV USARMY CENWW (USA) <Scott.J.StJohn@usace.army.mil>

Cc: Peery, Christopher A CIV USARMY CENWW (USA)

<Christopher.A.Peery@usace.army.mil>

Subject: [Non-DoD Source] RE: MOC 22 LMN 01 North Fish Ladder Debris Barrier

Will this require any units to be out of service while the boat is in the forebay to do the drilling? -s

From: St John, Scott J CIV USARMY CENWW (USA)

To: Scott Bettin

Cc: Peery, Christopher A CIV USARMY CENWW (USA)

Subject: FW: MOC 22 LMN 01 North Fish Ladder Debris Barrier

Date: Tuesday, January 25, 2022 8:49:00 AM

Scott,

The Project confirmed that there will NOT be a need to have any Units OOS for the work outlined in the MOC.

Scott St. John

From: VANDYKE Erick S * ODFW <Erick.S.VANDYKE@odfw.oregon.gov>
Sent: Tuesday, January 25, 2022 8:55 AM
To: St John, Scott J CIV USARMY CENWW (USA) <Scott.J.StJohn@usace.army.mil>
Cc: Peery, Christopher A CIV USARMY CENWW (USA) <Christopher.A.Peery@usace.army.mil>; Griffith, Denise S CIV (USA) <Denise.S.Griffith@usace.army.mil>
Subject: [Non-DoD Source] RE: MOC 22 LMN 01 North Fish Ladder Debris Barrier
Hi Scott,

Thanks for sharing this information. This change in schedule will impact fish passage more than it would have if the schedule did not slip. The North ladder has generally supported more fish passage than the south fish ladder. The in-season discussion of fish passage operations in late May-early June have been strained as it is and this addition will only add to the already contentious adaptive management discussions. Is there more information on what supplies have yet to arrive? What has been done to enquire about reason(s) for delay in delivery or alternative supply options? Is the new schedule solely to accommodate expected arrival of the needed supplies? More information would be appreciated.

Erick Van Dyke

From: St John, Scott J CIV USARMY CENWW (USA)
To: VANDYKE Erick S * ODFW
Cc: Peery, Christopher A CIV USARMY CENWW (USA); Griffith, Denise S CIV (USA)
Subject: RE: MOC 22 LMN 01 North Fish Ladder Debris Barrier
Date: Tuesday, January 25, 2022 9:07:00 AM

Erick,

I have reached out to the Project and will get back to you as soon as I can. Thank you.
Scott St. John

From: Morrill, Charles (DFW) <Charles.Morrill@dfw.wa.gov>
Sent: Tuesday, January 25, 2022 9:32 AM
To: St John, Scott J CIV USARMY CENWW (USA) Scott.J.StJohn@usace.army.mil
Subject: [Non-DoD Source] RE: MOC 22 LMN 01 North Fish Ladder Debris Barrier
Good morning Scott,

Thank you for the providing the MOC.

My initial reaction as I reviewed this and the information provided is that the scheduled completion date is, in my opinion, after the any high spring flows in the Snake and that debris would not likely be a problem for the remainder of the season. With that thought in mind, why risk any impact to juvenile or adult passage and reschedule this work in late fall when very few adults or juveniles are present, or during next season's winter work period? You've asked for responses by Feb 3rd. Could we not discuss this at the Feb FPOM? I certainly would appreciate hearing from other FPOM reps on this MOC.

Cheers

Charlie

From: St John, Scott J CIV USARMY CENWW (USA)

To: Morrill, Charles (DFW)

Subject: RE: MOC 22 LMN 01 North Fish Ladder Debris Barrier

Date: Tuesday, January 25, 2022 9:54:00 AM

Charlie,

Appreciate your feedback and concern. Similar questions from other folks have been brought up and I'm working with the Project to come up with answers. As for moving the response date, I will ask and get back to you soon.

More to come.

Scott St. John

From: Trevor Conder - NOAA Federal <trevor.conder@noaa.gov>

Sent: Wednesday, January 26, 2022 11:21 AM

To: Morrill, Charles (DFW) <Charles.Morrill@dfw.wa.gov>; St John, Scott J CIV USARMY CENWW

(USA) <Scott.J.StJohn@usace.army.mil>; Lorz, Tom <lor@critfc.org>

Subject: [Non-DoD Source] Re: MOC 22 LMN 01 North Fish Ladder Debris Barrier
I agree with Charlie, if we are going to wait that long, we might as well wait until the winter maintenance period. We also often have sockeye passage problems during that time, so not the best. If there is a chance to get it in prior, such as in March or April I think that would be best.

From: St John, Scott J CIV USARMY CENWW (USA)

To: Trevor Conder - NOAA Federal; Morrill, Charles (DFW); Lorz, Tom

Subject: RE: [Non-DoD Source] Re: MOC 22 LMN 01 North Fish Ladder Debris Barrier

Date: Wednesday, January 26, 2022 11:28:00 AM

All,

I am working with the Project as we speak to try and provide additional details. I plan to send out an e-mail to FPOM and also plan to push the response date back in order to discuss the MOC on the February FPOM meeting.

Scott St. John

From: St John, Scott J CIV USARMY CENWW (USA)

To: Peery, Christopher A CIV USARMY CENWW (USA); Griffith, Denise S CIV (USA); Alan Brower; Alford, Christopher H CIV USARMY CENWW (USA); Anderson, Karl R CIV USARMY CENWW (USA); Barnes, Charles A CIV USARMY CENWW (USA); Baus, Douglas M CIV USARMY CENWD (USA); Beau Glead; Benjamin Sandford - NOAA Federal; Calvin Douglas; Charlie Morrill (temporary email); Childers, Richard T LTC USARMY CENWW (USA); Chris Albrecht; Claire McGrath; Studebaker, Cynthia Ann CIV (USA); darren.ogden@noaa.gov; Dave Benner; David Swank; Dunning, Joyce M CIV USARMY CENWW (USA); Dykstra, Timothy A CIV USARMY CENWD (USA); FCRPS NWW; Feil, Daniel H CIV USARMY CENWD (USA); Fone, Kenneth R CIV USARMY CENWW (USA); Fone, Kenneth R CIV USARMY CENWW (USA); Gibbons, Karrie M CIV USARMY CENWP (USA); Heffling, Jack W CIV USARMY CENWW (USA); Holdren, Elizabeth A CIV USARMY CENWW (USA); Holecek, Dean E CIV USARMY CENWW (USA); Hook,

John D CIV USARMY CENWW (USA); Horal, Robert E CIV USARMY CENWW (USA); Howard, Jamie N CIV USARMY CENWW (USA); Jason Sweet; Jay Hesse; John Ferguson; Johnson, Bobby R CIV USARMY CENWW (USA); Johnson, Bobby R CIV USARMY CENWW (USA); Jonathan Ebel; Josie Thompson - NOAA Federal; Juhnke, Steven D CIV USARMY CENWW (USA); Klatte, Bernard A CIV USARMY CENWP (USA); Kovalchuk, Erin H CIV USARMY CENWP (USA); kgeris@anchorqea.com; lssullivan@bpa.gov; Langeslay, Michael J CIV USARMY CENWD (USA); Laughery, Ryan O CIV USARMY CENWW (USA); Mackey, Tammy M CIV USARMY CENWP (USA); Madson, Patricia L CIV USARMY CENWP (USA); McClain, Nathan A CIV USARMY CENWP (USA); Michelle Havey; Morrill, Charles (DFW); Ocker, Paul A CIV USARMY CENWW (USA); Paige Stinebaugh; Parker, Gregory A CIV USARMY CENWW (USA); Paul Burke; Paul.Wagner@easbio.com; Rhynard, Chad A CIV USARMY CENWW (USA); Eskildsen, Robert CIV USARMY CENWW (USA); Roberts, Timothy J CIV USARMY CENWW (USA); Salgado, J David CIV USARMY CENWP (USA); Saxon, Joseph B CIV USARMY CENWW (USA); Scott Bettin; Shawn Rapp; "Shutters, Marvin K - DELETED"; Steve Smith; Susannah Iltis; Scott Bettin; Thomas Van Nice; Thoren, Scott D CIV USARMY CENWD (USA); Tiffani Marsh; Tom Lorz; Trachtenberg, David A CIV USARMY CENWP (USA); Trevor Conder - NOAA Federal; Trumbo, Bradley A CIV USARMY CENWW (USA); Walker, Ricardo W CIV USARMY CENWW (USA); Wilson, Jeannette M CIV USARMY CENWW (USA); Wright, Lisa S CIV USARMY CENWD (USA); Addis, Raymond A CIV USARMY CENWW (USA); blane.bellerud@noaa.gov; VANDYKE Erick S * ODFW; Rerecich, Jonathan G CIV USARMY CENWP (USA)

Subject: RE: MOC 22 LMN 01 North Fish Ladder Debris Barrier

Date: Thursday, January 27, 2022 4:12:00 PM

FPOM,

A number of individuals provided input regarding the installation of the North Fish Ladder Debris Barrier (MOC 22LMN01). As a quick refresher, this work does NOT impact unit priority or spill. This work would take place the week of June 13-17 from the hours of 06:30-17:00. The installation of 4 undercut concrete anchors approximately 100' for the North Fish Ladder Exit would take approximately 2 hours, with intermittent drilling lasting a total of approximately 1 hour. These particular anchors require specialized tooling for drilling and installation as well as hands-on training. Lower Monumental staff do not own the required tools for this specific anchor system and do not possess the required knowledge for proper installation. DeWalt is scheduled to provide training and is also allowing Lower Monumental staff to utilize their specialized tooling.

Rather than writing everyone individually, I will do my best to provide answers to the group.

Is the schedule outlined in the MOC solely to accommodate the arrival of supplies? The dates requested allow time for materials to arrive for both the installation and training, but were also chosen to accommodate the schedules of both Lower Monumental and DeWalt while trying to avoid peak sockeye salmon passage. Additionally, debris issues are not only an issue during spring runoff, but also an issue later in the year, particularly

at the end of MOP. Completing this work during the proposed dates may reduce the debris load entering the North Fish Ladder.

What supplies/materials have yet to arrive? Lower Monumental is awaiting the specialized 15” undercut concrete anchors which will be utilized to attach the anchor plate to the side of the dam.

Are there other sources for the materials? The anchors cannot be supplied by another source due to their specialized nature and the training required for installation.

Can this work be accomplished earlier, prior to spring runoff? Work cannot be accomplished earlier as the arrival of the specialized undercut anchors is unknown.

Could this work be done later? The dates have been scheduled with the contractor to provide training. Due to constraints with scheduling and availability of staff, Lower Monumental would prefer to complete the work during the dates proposed.

Scott St. John

Final coordination results: Approved. No objections during March 10 FPOM meeting.

After Action update

Please email or call with questions or concerns.

Thank you,

Denise Griffith

Fish Biologist

Lower Monumental Dam

(509) 282-7211

Denise.s.griffith@usace.army.mil