OFFICIAL COORDINATION REQUEST FOR NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 19TDA07 Lamprey pot trap hoist installation in the East Fish Ladder COORDINATION DATE- 25 April 2019 PROJECT- The Dalles Dam RESPONSE DATE- 10 May 2018

Description of the problem

In support of the Tribal Translocation program adult lamprey trapping occurs at BON, TDA, and JDA. This is generally accomplished by setting pot traps behind picket leads (salmon and steelhead free water) and lamprey traps (ramp and collection box).

At TDA, in coordination with tribal partners and project staff, we have agreed to install a counter weighted hoist system to facilitate pot trap recovery in the East Fish Ladder (Figure 1). This work will require installation of I-beams, counter weight guides, and rope (Figure 2). The work will only require hand tools and no work will occur in the water. The crews will pay special attention to keeping associated debris out of the ladder.



Figure 1. The Dalles Dam East Fish Ladder (USACE FPP, 2019). Installation location of the pot trap hoist is marked by the red star. The location is upstream of the picket lead near the count window.



Figure 2. Proposed lamprey trap hoist. The I-beams, counter weight guides, and rope to be installed are framed in the red box and located on the south fishway wall.

Type of outage required - None

Impact on facility operation (FPP deviations) – This work occurs directly above the east fish ladder behind the picketed leads at the count station.

Impact on unit priority- None

Impact on forebay/tailwater operation - None

Impact on spill - None

Dates of impacts/repairs - 13-16 May 2019

Length of time for repairs – One to two days

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;



Figure 3. 10 year average (2009 to 2018) and current year counts for The Dalles Dam from Columbia River DART accessed on 18 APRIL 2019. The top panel are steelhead counts and the bottom panel are Chinook salmon counts. The blue lines show the proposed installation date range.

- 2. Statement about the current year's run (e.g., higher or lower than 10-year average). Fish runs are expected to be lower than average this year.
- 3. Estimated exposure to impact by species and age class (i.e., number or percentage of run exposed to an impact by the action). A majority of spring chinook use the east ladder. Since the work will only take a couple of days, only a small percentage of fish would be exposed to additional noise from the work.
- 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.).

There is potential to delay and or induce a startle response in adult Chinook salmon during this time as it is near the peak of spring Chinook salmon passage (Figure 2). There are also a few steelhead that may be impacted. However, this work is not occurring directly over the fishway where salmon and steelhead pass since they are working upstream of the picket lead. In addition, noise and vibration from the installation should be minimal as this work will only be completed with hand tools further reducing risk of impacts to fish.

Summary statement - expected impacts on:

Upstream migrants (including Bull Trout)

The overall impact on Spring Chinook and steelhead should be minimal since the work will be over the area portioned off by the picket leads and only hand tools will be used.

The impact on bull trout would be the same as the adult salmonids; however, very few bull trout have been observed at The Dalles Dam over the last twenty years.

Downstream migrants

There are no expected impacts to steelhead kelts, juvenile salmonids, or juvenile lamprey as a result of this work.

Lamprey

Although there may be adult lamprey in the ladder, this work is scheduled to occur before the start of the main lamprey passage and therefore, should have minimal impact on lamprey.

Comments from agencies

-----Original Message-----From: Blane Bellerud - NOAA Federal [mailto:blane.bellerud@noaa.gov] Sent: Monday, April 29, 2019 11:08 AM To: Kovalchuk, Erin H CIV USARMY CENWP (US) <Erin.H.Kovalchuk@usace.army.mil>

Subject: [Non-DoD Source] Re: FPOM: Official Coordination 19TDA07 MOC lamprey hoist EFL and 19TDA08 MOC Lamprey reduced nighttime flows

There is no time specified for the work to be conducted. Could it be done during nighttime hours when ladder use is lower? Could it even be delayed until after the passage season?

Blane

Response:

-----Original Message-----From: Cordie, Robert P CIV (USA) Sent: Tuesday, April 30, 2019 7:28 AM To: Walker, Ricardo W CIV USARMY USACE (USA) <Ricardo.W.Walker@usace.army.mil>; Blane Bellerud - NOAA Federal <blane.bellerud@noaa.gov> Cc: Kovalchuk, Erin H CIV USARMY CENWP (US) <Erin.H.Kovalchuk@usace.army.mil>; Randall, Jeffrey W CIV (USA)
<Jeffrey.W.Randall@usace.army.mil>
Subject: RE: [Non-DoD Source] Re: FPOM: Official Coordination 19TDA07
MOC lamprey hoist EFL and 19TDA08 MOC Lamprey reduced nighttime flows
(UNCLASSIFIED)

Drilling will be the noisiest part. Looks to be 8 concrete anchors. Drilling is about a minute per hole. We could do it mid day to avoid the morning rush hour of fish. We can monitor the install to keep other noise to the minimum. And we can put down a mat to catch concrete dust. Anecdotal info; We have done noisy work here similar to this in the past. Fish in the downstream pool didn't seem to obviously react to it. Not to say it may have slowed them down.

-----Original Message-----From: Walker, Ricardo W CIV USARMY USACE (USA) Sent: Tuesday, April 30, 2019 7:09 AM To: Blane Bellerud - NOAA Federal <blane.bellerud@noaa.gov> Cc: Kovalchuk, Erin H CIV USARMY CENWP (US) <Erin.H.Kovalchuk@usace.army.mil>; Cordie, Robert P CIV (USA) <Robert.P.Cordie@usace.army.mil> Subject: RE: [Non-DoD Source] Re: FPOM: Official Coordination 19TDA07 MOC lamprey hoist EFL and 19TDA08 MOC Lamprey reduced nighttime flows (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Good morning Blane,

We can probably delay the installation but the hope was to get it installed for this year's lamprey trapping season. Installation at night is probably not possible due to increased cost and limited lamprey dollars.

To be clear this work is only going to occur above the water line and upstream of the picket leads with hand tools. So it won't be directly above areas where fish are passing. This is the location where the tribes deploy pot traps starting in late May to mid-June. The actual construction of the hoist frame will only be 1 day of work. The second day is just to run rope and place pulleys.

Let me know if you still feel strongly that this work should be delayed and I will start coordinating with the tribes and project.

Best, Ricardo

Final coordination results:

From the May FPOM minutes: **19TDA07 MOC Lamprey hoist EFL installation** – Lorz suggested doing the work later in the day. There are about 10 bolts to drill into the wall which will take about 30 mins. **FPOM recommended doing the work later in the day and concurred with this action.**

After Action update

Just prior to install the project engineer came up with a modification that would address both hoisting traps onto walkway and hoisting lamprey holding tank up to transport truck. This modification required no added materials or cost. Six holes were drilled at the original locations, 8 more holes were drilled further down the deck about 30' from the fishway exit. Overall the plan was simplified and solved the entire lamprey trap hoist issue. It also improved the transport conditions for lamprey by keeping them in water during more of the process.



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

Ricardo Walker Fish Biologist NWP Environmental Resources Branch Ricardo.Walker@usace.army.mil Office: 503.808.4709

Erin Kovalchuk NWP Operations Division Fishery Section Columbia River Coordination Biologist <u>Erin.H.Kovalchuk@usace.army.mil</u>