

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

COORDINATION TITLE- 17TDA01 Railroad Rail Removal

COORDINATION DATE- January 5, 2017

PROJECT- The Dalles Dam

RESPONSE DATE- January FPOM meeting (January 12)

Description of the problem - Derelict railroad rail is being removed on the Intake and Tailrace Powerhouse decks. Removal is done by saw cutting and jackhammers. Currently all locations within 50' of fish channels and 100' of fishladder exits and entrances will occur during the 2016/17 in water work period (IWWP) and do not require coordination. However the powerhouse intake deck rails will be completed between Mar 1 and June 1, 2017. This includes areas within 20' horizontally from unit 1, 8 and 18 intakes as well as directly over the channel of the Ice Trash Sluiceway (ITS). Work will be done within daylight hours.

Type of outage required – Open sluiceways will be moved to units greater than 100' from the rail removal work location.

Impact on facility operation – Sluiceway pattern will maintain the criteria in the FPP.

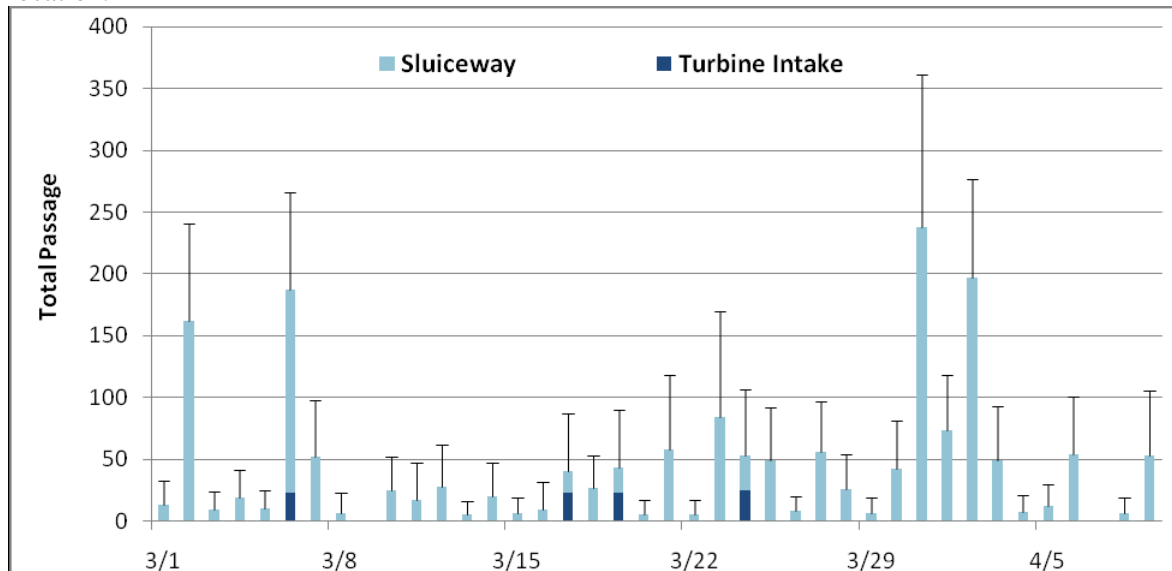
Dates of impacts/repairs – Mar 1 – June 1, 2017

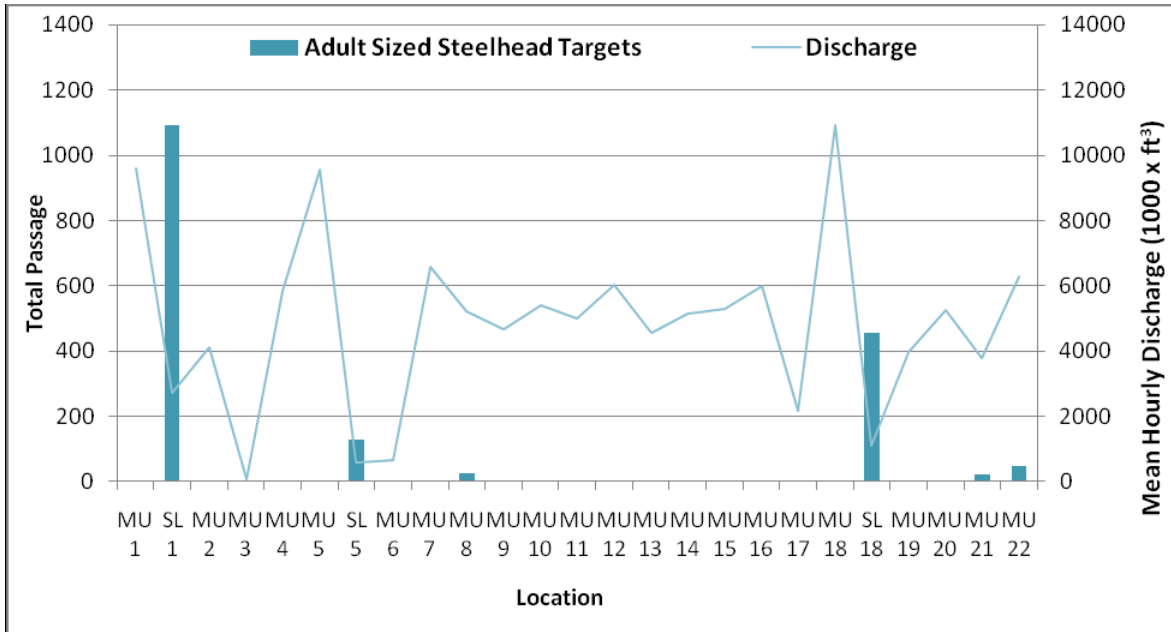
Length of time for repairs – 3 months

Expected impacts on fish passage –

Upstream migrants (including Bull Trout). This work will not impact fish migrating upstream. Fishways and fishway exits will not be impacted.

Sluiceways are open for fish passage on unit 1 and 18 during March and Units 1, 8 and 18 during April and May. Research from PNNL, Mar 2009 sluiceway study showed 1766 fish passed in 40 day test in March and April. Most pass unit 1 (primarily 1-3). There was no diel distribution and flows were slightly less than 10yr average during this research. The following was passage timing and location:

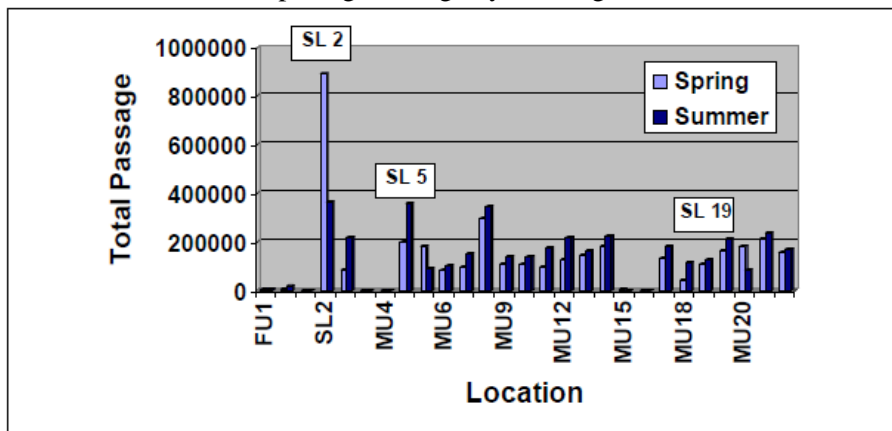




In addition, the Adult Steelhead Passage Behaviors and Survival in the Federal Columbia River Power System Technical Report by University of Idaho also shows approximately 43 fish per day passage April through May.

There is a potential of passage impacts to adult steelhead using the ITS for downstream passage. Operational adjustments to mitigate for this will include opening alternative units gates when work is within 100' of these entrances. Example, when work is being done near unit 1, the sluiceways will be open under unit 3. Research has shown fish will use alternative gates if open and turbine is in operation. All sluiceways will remain open as specified in Fish Passage Plan.

Downstream migrants. Fish migrating downstream may be impacted by the work at the entrance into the ITS at Units 1, 8 and 18 during April and May. The same operational adjustments for adults would also apply to juvenile passage. Approximately 10% of total spring juvenile passage uses the ITS. Diel distribution shows more passage during day than night.



Lamprey – Lamprey passage rates through the ITS is unknown. No research information could be found.

Comments from agencies

FPOM January meeting minutes: The recommendation from FPOM is to maintain an east end sluiceway open to retain channel velocity so there are not any dead spots. Cordie will update MOC with the details of the actual work and time of day.

-----Original Message-----

From: Gary Fredricks - NOAA Federal [mailto:gary.fredricks@noaa.gov]
Sent: Wednesday, February 01, 2017 9:59 AM
To: Kovalchuk, Erin H CIV USARMY CENWP (US)
<Erin.H.Kovalchuk@usace.army.mil>
Cc: Cordie, Robert P CIV CENWP CENWD (US)
<Robert.P.Cordie@usace.army.mil>; Lorz, Tom <lort@critfc.org>
Subject: [EXTERNAL] Re: FPOM: Official Coordination 17TDA01 MOC Railroad Rail Removal Updated

Erin, I've reviewed the second draft. As long as they stick to the daylight hours (giving the night for fish to pass), I'm good with this one. Since this point is an important one, it would be good to clarify the hours if possible (i.e., is this just the day shift of 8-10 hours or all hours of daylight available?). Thanks, Gary

-----Original Message-----

From: Gary Fredricks - NOAA Federal [mailto:gary.fredricks@noaa.gov]
Sent: Thursday, January 19, 2017 3:04 PM
To: Cordie, Robert P CIV CENWP CENWD (US)
<Robert.P.Cordie@usace.army.mil>
Subject: [EXTERNAL] Re: ITS rail removal

No. Juvenile passage has always been higher through sluiceways during the day. We saw this at both The Dalles and Bonneville PH1. The kelt/pre-spawn steelhead passage was more variable. I wouldn't worry about it. You are moving open gates to get away from the work area, so fish entrance shouldn't be affected too much. I think passage down the channel will occur day or night regardless of when they entered. So, there may be some delay during the day in the channel near the work area but as long as things are quiet at night, any delaying fish should move out. Wouldn't it be nice to have a side scan sonar in there to see what really happens.

On Thu, Jan 19, 2017 at 1:29 PM, Cordie, Robert P CIV CENWP CENWD (US) <Robert.P.Cordie@usace.army.mil <mailto:Robert.P.Cordie@usace.army.mil> > wrote:

Gary,

Trying to finalize the rail removal MOC, but I found a blurb on diel distribution from the USGS '01-'05 synthesis;
'Spillway and sluiceway passage tended to be higher during day than night hours, although diel passage patterns were variable among and within study years.'

So I can't put that day work is better in the MOC.

Do you have any info to the contrary?

-----Original Message-----

From: Bettin, Scott W (BPA) - EWP-4 [mailto:swbettin@bpa.gov]
Sent: Thursday, January 05, 2017 12:52 PM
To: Kovalchuk, Erin H CIV USARMY CENWP (US)
<Erin.H.Kovalchuk@usace.army.mil>
Cc: Cordie, Robert P CIV CENWP CENWD (US)
<Robert.P.Cordie@usace.army.mil>

Subject: [EXTERNAL] RE: FPOM: Official Coordination 17TDA01 MOC Railroad Rail Removal and December meeting minutes

I was wondering if you could include some pictures of the train rail in the MOC. I think it would go a long way in showing just how far this work is from any of the fishways. I also noticed that you specifically mentioned fishways and exits would not be impacted. Should the word entrances be included in that sentence as well. That was creative to move around which gates are entering the sluiceway to stay within criteria. I was wondering how the 100 feet is measured? In my mind the rail is more than 100 feet away but I never broke out a tape to check. I was also wondering if we could apply some of the knowledge we picked up at LWG on impacts of sound. I have a feeling this work won't impact fish passage even if there are within the 100 threshold. -s



Derelict rail at unit 18 forebay deck. Unit 18 sluiceway gearboxes in background.

UPDATE 2/27/17: A new plan was developed to saw cut the entire powerhouse rail in 2 night shifts. MFR will be provided with this detail.

Please email or call with questions or concerns. Thank you,
Bob Cordie
TDA Project Fisheries
541-506-7800

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