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. 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 100' of unit 1 and unit 18 intakes as well as directly over the channel of the Ice Trash Sluiceway (ITS).

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

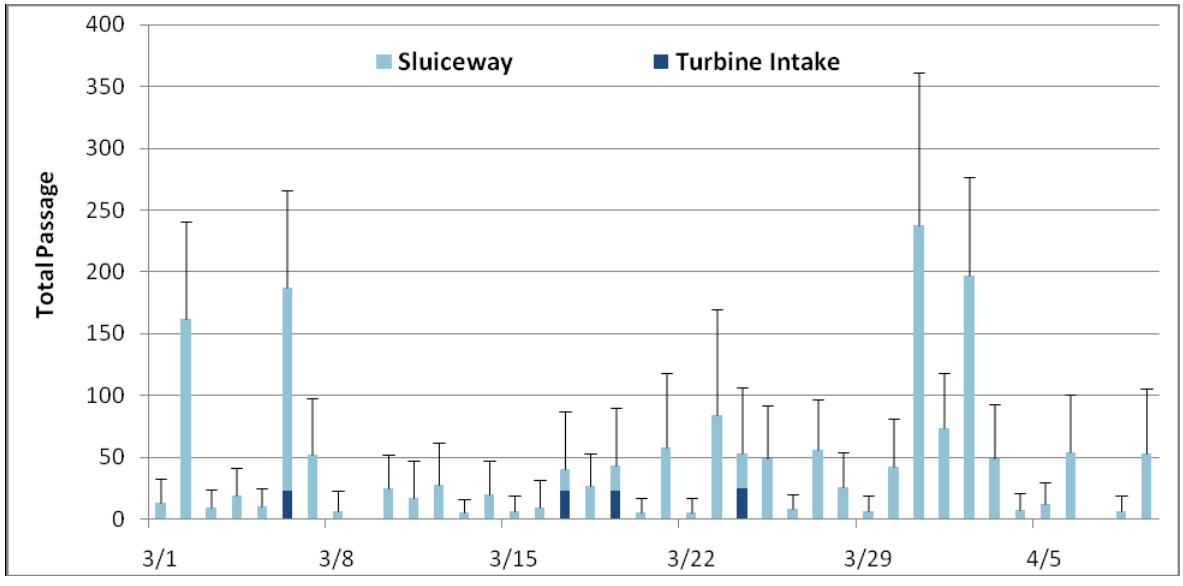
Impact on facility operation – Sluicegate pattern will not be in the criteria set forth in the FPP but the correct number of sluicegates will be open.

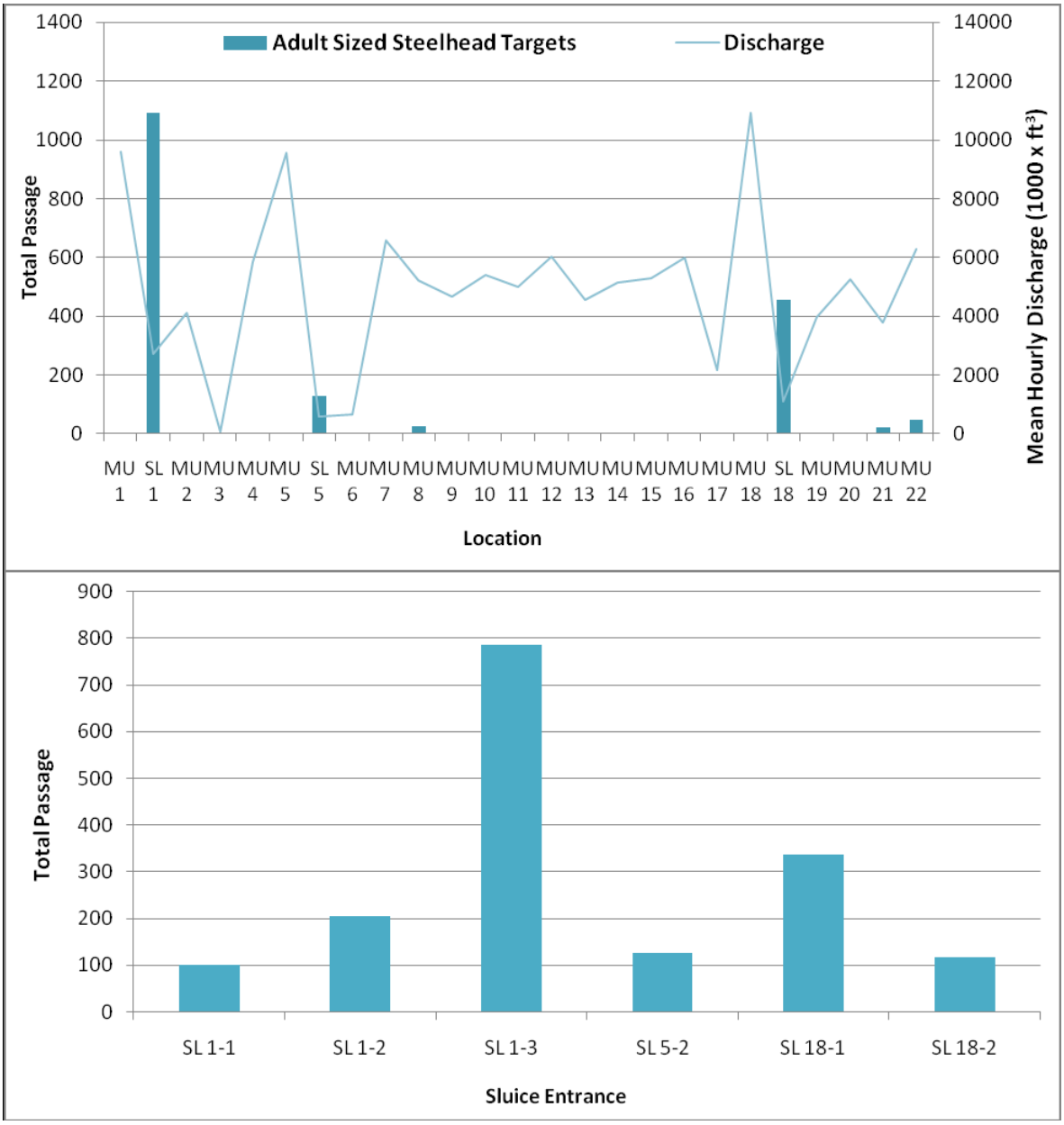
Dates of impacts/repairs – Mar 1 – June 1, 2017

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.

Sluicegates 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:



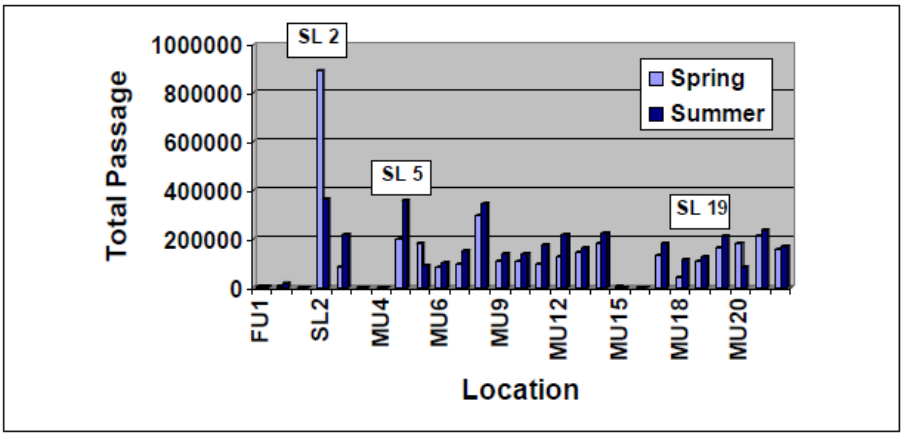


In addition, the Adult Steelhead Passage Behaviors and Survival in the Federal Columbia River Power System Technical Report by University of Idaho also shows approximately 43 fish per day passage April through May.

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. When work is being done near unit 1, the sluicegates will be open under unit 3. Research has shown fish will use alternative gates if open and turbine is in operation. The noise/vibration from the work is not expected to delay fish on the western half of the sluiceway because of the high velocities in the channel.
There is also potential of adult steelhead within the channel in the slower east half to be impacted as well. Opening gates on only units 1 and 8 (3 gates each) instead of 18 can prevent this while work is occurring on the east half of powerhouse. This was actually recommended as operational status by PNNL. Flow velocity in the west end of the channel is much faster and fish cannot move on own volition.

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. As with adults, velocities in the east half of

the ITS channel are low and fish movement could be impacted. Velocities in the west end of the channel are high and no fish passage impact is expected. Same operational adjustments for adults would also apply to juvenile passage. While rail removal on units 10-22, open at unit 1 and 8 only (3 each) per PNNL hydroacoustic evaluation 2005 recommendations. This would eliminate potential of fish passing through unit 18 gate and stalling in channel. Approximately 10% of total spring juvenile passage uses the ITS.



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

Comments from agencies

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