OFFICIAL COORDINATION REQUEST FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 18TDA15 Conduit Installation at The Dalles Fishway in Support of Adult Lamprey Radio Telemetry Evaluation
COORDINATION DATE- 11 DEC 2018
PROJECT- The Dalles Dam
RESPONSE DATE- 13 DEC 2018 (FPOM meeting)

Description of the problem
Several modifications have been made at FCRPS dams to improve adult Pacific Lamprey passage. As part of these improvements an evaluation of lamprey passage has been funded for 2 years using radio telemetry and PIT tags. In an effort to improve radio transmitter (RT) detections at TDA new RT antennas are being installed as well as a stilling well for a depth logger to support the reduced nighttime flow study.

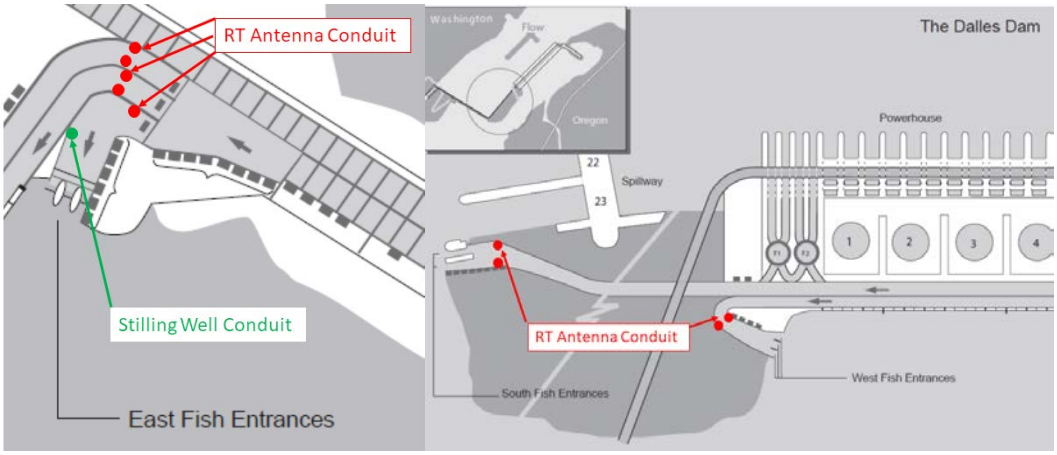

Figure 1. Location of proposed conduit installation at TDA.

Radio Telemetry Antenna Conduit
The new antennas will replace current drop-in and aerial antennas and will be identical to other conduit encased antennas already installed in the fishway. The new antennas will be constructed with approximately 40’ of 3/4” PVC conduit running from a few feet above the high water line to approximately 3’ above the fishway floor and secured to the fishway wall using wedge anchors and stainless steel clamps. The locations we will install the antennas are shown in Figure 1 and an example site shown in Figure 2.

Figure 2. View of proposed location (red lines) of additional antennas in TDA South entrance pool.

Stilling Well Conduit

We intend to use the proposed stilling well for the deployment of an Onset HOBO Water Depth Level Logger. This data logger will monitor fishway water elevation changes during reduced nighttime velocity experiments. These experiments are part of ongoing studies evaluating adult Pacific lamprey passage at Columbia River dams.

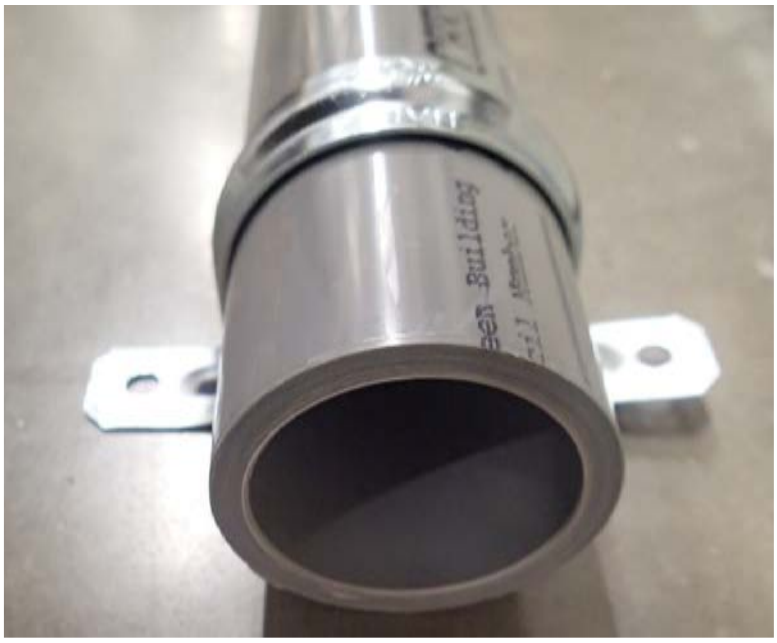

Figure 3. PVC pipe and pipe clamps similar to what we propose installing in The Dalles Dam fishway.

The stilling well will be constructed with 50' of 2-3" PVC conduit running from the roadway deck down to approximately 3' above the fishway floor and secured to the fishway wall using wedge anchors and stainless steel clamps (Figure 3). A potential location is shown in Figures 1. The final location will be determined by man basket access and coordination with TDA Project Biologists. Similar stilling wells have been used inside fishway entrances at BON and at TDA South Spillway entrance.

Type of outage required – No outage required, entrance weirs will be lowered.

Impact on facility operation – No impact to facility operations.

Impact on unit priority – No impact

Impact on forebay/tailwater operation – No impact

Impact on spill – No impact

Dates of impacts: NA

<u>Analysis of potential impacts to fish</u>

Summary statement - expected impacts on:

Downstream migrants - There are no expected impacts to steelhead kelts, juvenile salmonids, or juvenile lamprey as a result of this action.

Upstream migrants (including Bull Trout) - Minimal impact to adult migrating fish. The proposed conduit installation is tight on the wall using the smallest possible size PVC and smooth rounded anchors. These installations are minimal compared to existing valve controls attached to fishway walls as seen in Figure 2.

Lamprey - No impact to lamprey is expected. Lamprey are likely free swimming in locations where conduit installation is being proposed.

Comments from agencies – No comments were received.

Final coordination results – FPOM concurred with this action at the December FPOM meeting.

After Action update – This action was completed as coordinated.

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

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