USACE Portland District (NWP) FFDRWG Update Form April 30, 2019

PROJECT INFORMATION

Project Title	Lamprey Passage Structure (LPS) Development and Improvements: John Day North Fish Ladder LPS (Phase 3)
SCT Reference Number	
Project Manager (PM)	Eric Blumh (NWP, 503-808-4759)
Technical Lead (TL)	James Schroeder (NWP 503-808-4930)
Biologist/Coordination	Ricardo Walker (NWP, 503-808-4709)

PROJECT DESCRIPTION

The John Day North Fish Ladder LPS is currently configured as a ramp and trap box with two pumps that provide the water supply (Figure 1). Recently electrical, mechanical, and structural modifications were made to the existing system to ensure long term operation while minimizing O&M.

Unfortunately, the pump wet wells failed shortly after the fish ladder was watered up.

Excess current caused the PVC wet wells to rub against the wall until it abraded and failed. Both PVC Wet Wells broke off above the second bracket (~ EL 144; Figure 2) and pumps were lost.

Any permanent fix (likely more robust material for the wet wells) involving replacement of the pipes would require access to this channel and the fish ladder which can't happen until the next winter maintenance period and pending funding availability.

Damaged wet wells (Figure 2) are not a concern for ESA listed species as the wet wells are located in fish free water within the diffuser wells. To ensure operation of the LPS during the 2019 lamprey passage season the old pumps will be deployed and used to provide adequate water to the LPS.



Figure 1. JDA North Fish Ladder lamprey passage structure.

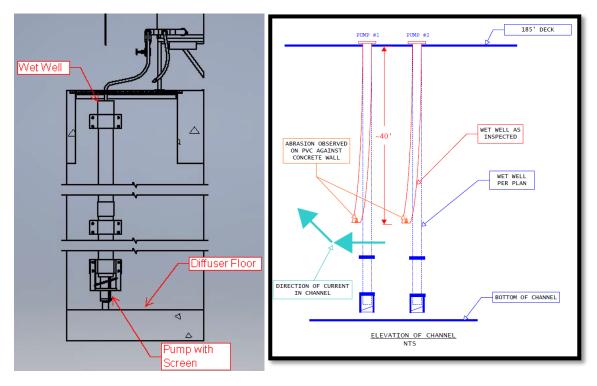


Figure 2. LPS wet wells and pump design. The right panel shows the design configuration and the left panel shows the location of the wet well failure.

CURRENT SCHEDULE

The old pumps will be deployed and LPS placed in service by the end of May. The permanent fix will have to occur in the FY19/20 winter maintenance period pending availability of funds.

FFDRWG REVIEW NEEDED AT MEETING? (If YES, list discussion topics below)

No, any future design updates will be coordinated through this group.