

# The Dalles Dam Fishway Status Report

2/25/2017

Inspection Period: 02/19/2017 - 02/25/2017

THE DALLES DAM



US Army Corps  
of Engineers  
Portland District

*Fishways are inspected once daily during winter*

The Dalles Dam	Inspections Out of Criteria	Criteria Limit	Total Number of Inspections: 7	Temperature: 37.3 °F
			Comments: Snow conditions subsided	Secchi: 3.3 feet
<b>NORTH FISHWAY</b>				
Exit differential	0	≤ 0.5'	1.3	
Count station differential	0	≤ 0.3'		
Weir crest depth	0	1.0' ± 0.1'		
Entrance differential	0	1.0' - 2.0'		
Entrance weir N1	0	depth (≥ 8')	9.1	
Entrance weir N2	0	Closed		
PUD Intake differential	0	≤ 0.5'		
<b>EAST FISHWAY</b>				
Exit differential		≤ 0.5'		
Removable weirs 154-157		Per forebay		
Weir 158-159 differential		1.0' ± 0.1'		
Count station differential		≤ 0.3'		
Weir crest depth		1.0' ± 0.1'		
Junction pool weir JP6		depth (≥ 7')		
East entrance differential		1.0' - 2.0'		
Entrance weir E1		No criteria		
Entrance weir E2		depth (≥ 8')		
Entrance weir E3		depth (≥ 8')		
Collection channel velocity		1.5 - 4 fps		
Transportation channel velocity		1.5 - 4 fps		
North channel velocity		1.5 - 4 fps		
South channel velocity		1.5 - 4 fps		
West entrance differential		1.0' - 2.0'		
Entrance weir W1		depth (≥ 8')		
Entrance weir W2		depth (≥ 8')		
Entrance weir W3		No criteria		
South entrance differential		1.0' - 2.0'		
Entrance weir S1		depth (≥ 8')		
Entrance weir S2		depth (≥ 8')		
<b>JUVENILE PASSAGE</b>				
Sluiceway operation	<b>2</b>	Units 1, 18	Reopens Mar1 for fish passage. Opened during intermittent forced spill operation. MU 18 OOS, chaingates not adjusted	
Turbine trashrack drawdown	NA			
spill	NA		Intermittent spill for high river flows	
Turbine 1% Efficiency	NA	per FPP	Out of fish passage season	
Turbine Unit Priority	NA	per FPP	Out of fish passage season	

***Out for winter maintenance and  
AWS backup construction. Return  
2/28***

**Birds/Sea lions:**

No sea lions observed. All bird numbers low.

Bird observation data collected once daily. Refer to Avian Zone map and bird count.

Spillway avian lines repair plan in progress. Awaiting USDA signatures for work plan. USDA prework site tour Mar1.

**Operations:**

North Fishway watered up Jan24. Additional temperature monitoring probe deployed at north entrance. Refer to graph.

Additional temperature monitoring probe being deployed at east junction pool and south entrance prior to water up

Sluiceway intermittent operation in conjunction with involuntary spill per Fish Passage Plan.

**Current Outages;**

T8 (MU15 & MU16) out due to transformer failure. Transformer replacement scheduled for spring 2018.

MU21 out for exciter failure, return Feb23

MU3 out for governor oil level failure, return Feb24

Awaiting tailrace crane completion to resume turbine maintenance schedule. ETR end of March.

**Maintenance:**

Installing rubber seal to bottom of east count station crowder to keep lamprey out from entering crowder. FPOM approved.

New east exit weir electrical panel FCQ7 installation on hold awaiting funding. Approx 50% completed.

East ladder return to service Feb28 delayed due to AWS backup construction. North ladder in service.

Maintenance status; East exit weirs 154 and 159 coupler/seal replacement complete, ladder expansion joint repair complete

N1 weir rehab and spare swap complete, W1 weir repair/wheel replace complete/install after fishway returns.

*Other repair maintenance plans*; 154 -157 rehab/weir wheel replace, diffuser valve overhaul (rehab or decommission).

*Fish related /non-fish funded items*; Spillway crane and spillgate 9, both awaiting funding.

All spillway items on Critical Infrastructure list and Unfunded Requirement list.

**Research/Construction/Contractors:**

Normandeau supervisors received badges and keys 2/23 in preparation for fish counting 2017

North fishladder rehab/rock wall stabilizing - Awaiting funding. Possible 2018/19.

East fishladder AWS emergency backup - Forebay diving saw cutting continues. Junction pool 7' pipes span complete. Demob junction pool scaffold.

Jackhammering hole complete season 1. Excavation 10' valve room to occur in March per FPOM approval. Up to 10 day EFL outage extension FPOM approved

Railroad track removal - Underway west powerhouse tailrace deck. Work over sluiceway in March FPOM approved. Crane rail replace 2021.

Tailrace crane rehab - Work resumed. Completion March?

Fish unit breaker replace.- Work start fall 2017. Switch over Jan 2018.

Fish unit rehab - Weekly coordination meetings. Phase 1A report Jan 2018. Award 2020. Completion 2022. Investigating possible increase flow capacity.

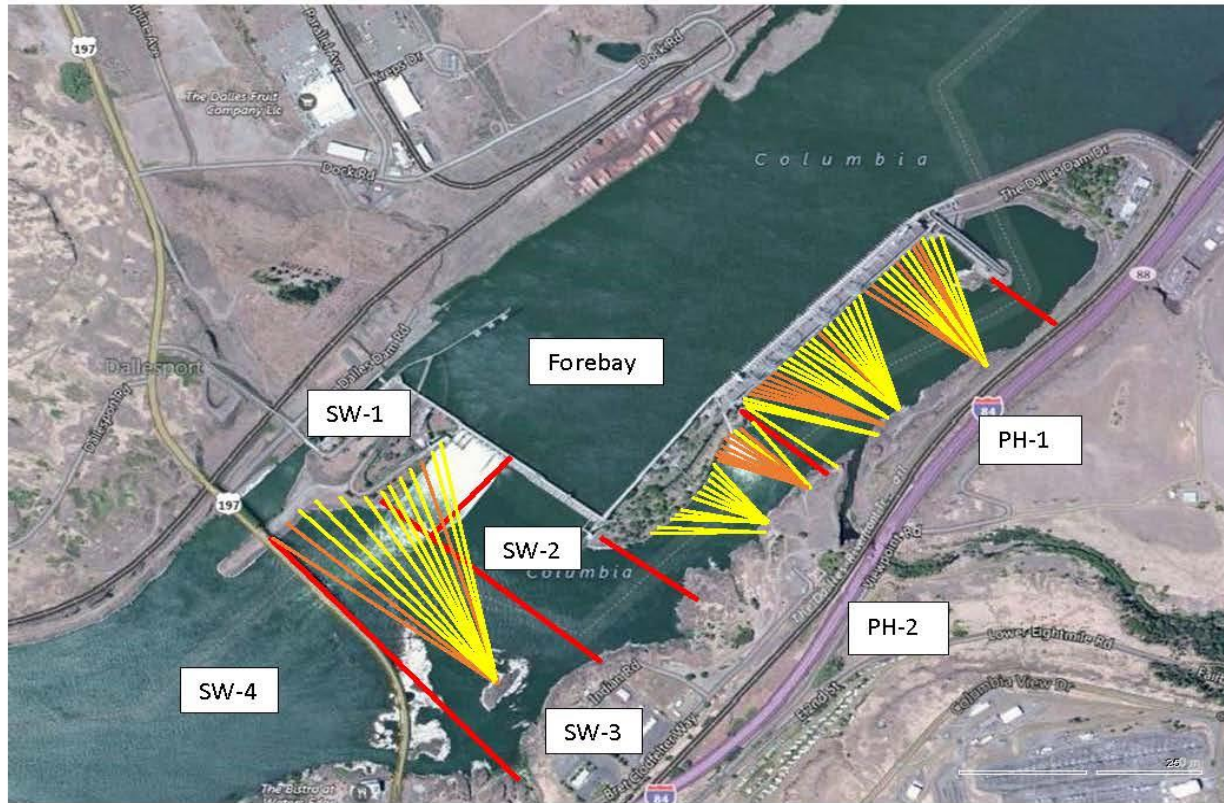
Transformer replacement - Install start May 2018. Coordinated through FPOM.

N Wasco Co PUD Memo of Agreement - Complete.

Lamprey minor mods - Tribal trap hoist improvements and rounded entrance weir caps designs underway. Fab in-house '17. Install next in water work period.

Approved by: Ron Twiner

Operation Project Manager The Dalles Dam



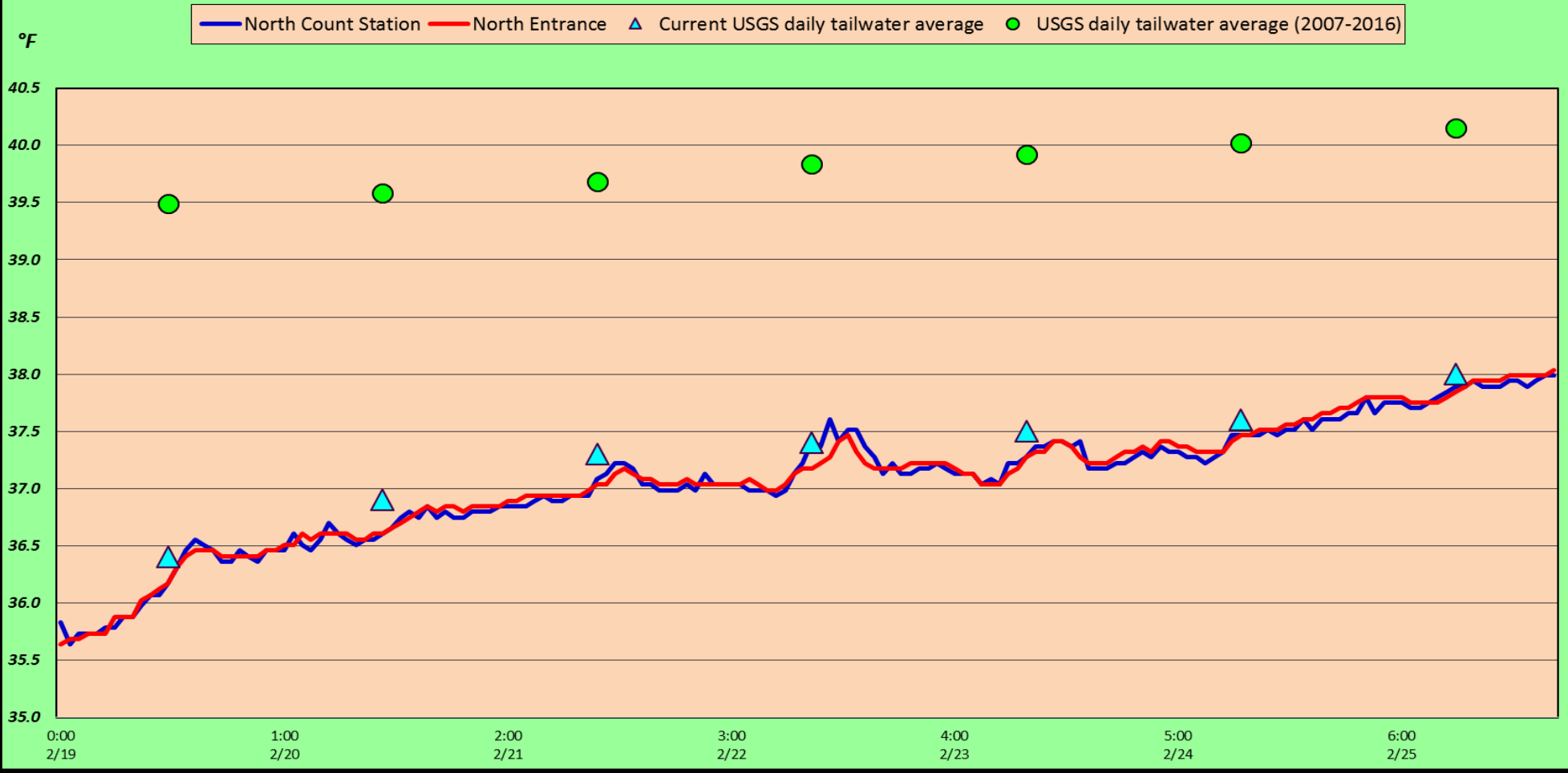
Red lines = avian zones

Yellow lines = current wires

Orange lines = down or missing wires



# The Dalles Dam Adult Fish Ladder-River/Water Temperatures









Excavation completed for 7' valve room and thrust block construction



Rubber seal installed to prevent lamprey entry under east count station crowder.