The Dalles Dam Fishway Status Report

2/25/2017

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

THE DALLES DAM



		Fishwa	ys are inspecte	ed once daily during win										
The Dalles Dam	Inspections	Criteria	Total Numb	er of Inspections:	7	Temperatui	re:	37.3	°F					
The Dalles Dain	Out of Criteria	Limit		Snow conditions subsided	9	Secchi:	3.3	feet						
			NORTH	I FISHWAY										
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′												
			EAST	FISHWAY										
Exit differential		≤ 0.5']											
Removable weirs 154-157		Per forebay												
Weir 158-159 differential		1.0' ± 0.1'												
Count station differential		≤ 0.3'	1											
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	O	(f =		- ! (-								
Entrance weir E2		depth (≥ 8')	1 Ou	t for winte	r ma	ainte	nai	nce a	na					
Entrance weir E3		depth (≥ 8')						_						
Collection channel velocity		1.5 - 4 fps	I AWS	S backup c	cons	struc	tior	ı. Rei	turn					
Transportation channel velocity		1.5 - 4 fps												
North channel velocity		1.5 - 4 fps			2/2	R								
South channel velocity		1.5 - 4 fps				U								
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')	1											
			JUVENIL	E PASSAGE										
Sluicegate operation	2	Units 1, 18	Reopens Mar1 for fish	n passage. Opened during intermitter	nt forced spill	operation. MU 1	8 OOS, cha	ingates not adjuste	ed					
Turbine trashrack drawdown	NA													
spill	NA		Intermittent spil	l for high river flows										
Turbine 1% Efficiency	NA	per FPP	Out of fish pass	sage season										
Turbine Unit Priority	NA	per FPP	Out of fish pass	sage season										

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 couting 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.

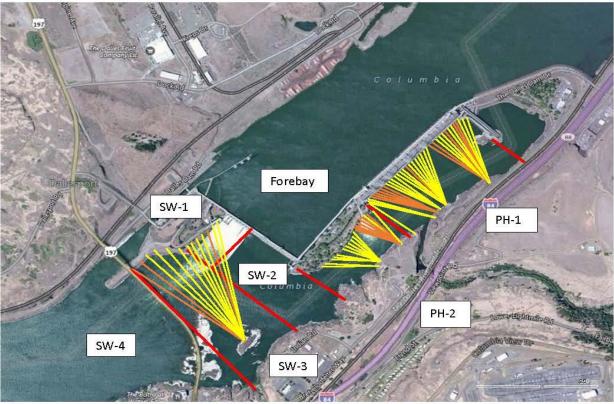
Transformer replacement - Install start May 2018. Coordinated through FPOM.

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

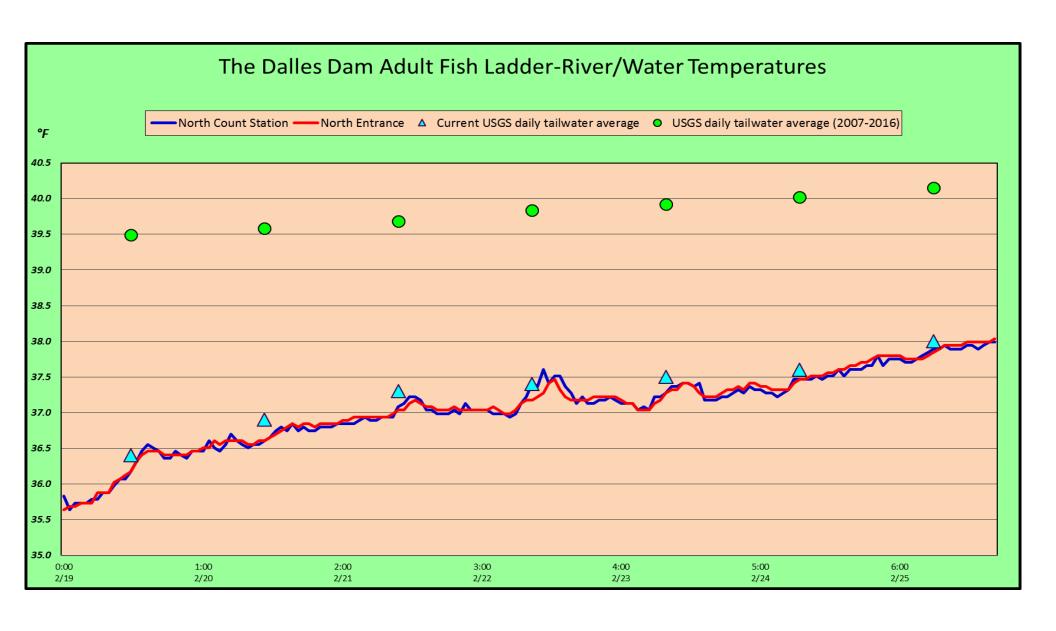
Yellow lines = current wires

Orange lines = down or missing wires

2017 Piscivorous Bird Counts

F=foraging, NF=non-foraging

				G	ull	Cormorant Caspian tern				Gre	ebe	Pel	ican	Ot	her	Total birds	Notes
Date	Observer	AM/PM	Zone	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	in zone	
			FB	0	0	0	0	0	0	0	0	0	0	0	0	0	
			PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	
			PH2	0	0	0	0	0	0	0	0	0	0	0	5	5	2 BAEA, 3 GBHE
2/19	JWR	AM	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
			SW3	0	0	0	7	0	0	0	0	0	0	0	0	7	
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	
			FB	0	0	1 0	0	0	0	0	0		0	0	0	1	
			PH1 PH2	0	0	0	0	0	0	0	0	0	0	0	2	0 2	4 DAEA 4 ODLIE
2/20	JWR	PM	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	1 BAEA. 1 GBHE
,/20	SVVIC	1 101	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
			SW3	0	0	0	21	0	0	0	0	0	0	0	0	21	
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	
			FB	0	0	0	0	0	0	0	0	0	0	0	0	0	
			PH1	0	1	0	0	0	0	0	0	0	0	0	0	1	
			PH2	0	0	0	0	0	0	0	0	0	0	0	2	2	1 BAEA, 1 GBHE
/21	JWR	АМ	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	. 5, 12, 1, 1, 05, 12
2,21	•		SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
			SW3	0	0	1	7	0	0	0	0	0	0	0	0	8	
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	
		FB	0	0	0	0	0	0	0	0	0	0	0	0	0		
		PH1	0	0	0	0	0	0	0	0	0	0	0	0	0		
		PM	PH2	0	0	0	0	0	0	0	0	0	0	0	3	3	GBHE
/22	JWR		SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
			SW3	0	0	0	0	0	0	0	0	0	0	0	3	3	2 BAEA, 1 GBHE
			SW4	0	0	0	0	0	0	0	0	0	0	0	1	1	BAEA
			FB	0	1	1	0	0	0	0	0	0	0	0	0	2	
		GJF AM	PH1	0	0	0	1	0	0	0	0	0	0	0	0	1	
			PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
/23	GJF		SW1	0	0	0	0	0	0	0	0	0	0	0	1	1	GBHE
			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
			SW3	0	0	0	7	0	0	0	0	0	0	0	0	7	
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	
		GJF PM	FB	0	0	0	0	0	0	0	0	0	0	0	0	0	
			PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	
			PH2	0	0	0	0	0	0	0	0	0	0	0	3	3	GBHE
/24	′24 GJF		SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
			SW3	0	0	0	2	0	0	0	0	0	0	0	0	2	
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	
			FB	0	0	0	0	0	0	0	0	0	0	0	0	0	
			PH1	0	0	0	2	0	0	0	0	0	0	0	0	2	
	GJF	0.04	PH2 SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
/25		JF AM			0	0	0	0	0	0	0	()	0	0	0	0	
2/25	GJF	AIVI															
2/25	GJF	AIVI	SW2 SW3	0	0	2	0 27	0	0	0	0	0	0	0	0	2 27	



			USGS:
	Secchi:		Temperatures
2/19	3.0	Sun	36.4
2/20	3.0	Mon	36.9
2/21	3.0	Tue	37.3
2/22	3.0	Wed	37.4
2/23	3.0	Thurs	37.5
2/24	4.0	Fri	37.6
2/25	4.0	Sat	38.0
	3.3	AVG	37.3

http://www.nwd-wc.usace.army.mil/tmt/documents/ops/temp/201701.lcol.html

The Dalles Dam Daily Readings and Averages for

Temperatures, Secchi, Entrances, and Spill

= Out of criteria

	North	Ladder	East Ladder												
	North E	ntrance			East Entrance)			West E	ntrance		8	South Entrance	9	
Date:	Differential	N1 Depth	Differential	E1 Depth	E2 Depth	E3 Depth	JP 6	Differential	W1 Depth	W2 Depth	W3 Depth	Differential	S1 Depth	S2 Depth	
2/19	1.4	9.7													
2/20	1.4	9.4													
2/21	1.4	9.1													
2/22	1.4	9.3				Eas	t Ladd	er OOS	for Ma	aintena	ance				
2/23	1.5	9.5													
2/24	1.5	9.5													
2/25	1.4	9.6													
	1.4	9.4													



Excavation completed for 7' valve room and thrust block construction



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