The Dalles Dam Fishway Status Report

2/11/2017

Inspection Period: 02/05/2017 - 02/11/2017





		Fishwa	ys are inspect	ed once daily during w	vinter				
	Inspections	Criteria	Total Num	per of Inspections:	7	Temperatu	ire:	35.8	°F
The Dalles Dam	Out of Criteria	Limit	Comments:		·	Secchi:	5.0	feet	
			NORTI	H FISHWAY		<u> </u>			
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'							
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')				• 4			
Entrance weir E3		depth (≥ 8')	l Ou	t for winte	er m	ainte	enai	nce a	and
Collection channel velocity		1.5 - 4 fps	0 02		_			_	
Transportation channel velocity		1.5 - 4 fps		AWS bac	kun	cons	trii	ctior	7
North channel velocity		1.5 - 4 fps	4	ATTO DUO	Nup	00110	, ci a		
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')							
			JUVENII	_E PASSAGE					
Sluicegate operation	NA	Units 1, 18	Closed. Reope	ns Mar1 for fish passage	е				
Turbine trashrack drawdown	NA								
spill	NA								
Turbine 1% Efficiency	NA	per FPP	Out of fish pas	sage season					
Turbine Unit Priority	NA	per FPP	Out of fish pas	sage season					

Birds/Sea lions:

No sea lions observed. All bird numbers low as shown in bird counts

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

Spillway avian lines repair plan in progress. Work plan and hazing plan routed for approvals. USDA prework site tour Mar1.

Operations:

North Fishway watered up Jan24. Additional temperature monitoring probe deployed at north entrance, data shown in temperature graph

Current Outages:

T8 (MU15 & MU16) forced 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.

Maintenance:

North fishway entrance diffuser grating will be inspected by ROV 2/15.

Navlock intake trashrack, PUD intake trashrack and North entrance exit will be inspected via ROV on 2/15

Plans underway to install material to east count station crowder to keep lamprey out from behind crowder. FPOM informed.

New east exit weir electrical panel FCQ7 installation on hold awaiting funding.

East ladder dewatered Dec1 through Feb28 for AWS backup construction and ladder maintenance. North ladder in service.

Winter work in progress; East exit weirs 154 and 159 coupler/seal replacement (90%), ladder expansion joint repair (0%), N1 weir rehab and spare swap (50%),

Brush strip to be install bottom of east count station crowder to prevent lamprey entering behind crowder. FPOM approved.

Broke diffuser stems on 5 junction pool diffusers. Will not impede flow. These valves will be removed in future. No repair planned.

Long Term repair maintenance plans; 154 -157 rehab/weir wheel replace, collection channel diffusers decommission, repair failed diffusers.

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:

Unit 1 EAL environmental acceptable grease - Coordinated and approved through FPOM.

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

East fishladder AWS emergency backup - Forebay diving sawcutting continues. Junction pool concrete removal continues. Excavation 7' valve room.

Jackhammering of hole approximately 30'. Forebay slot cutting via dive for peirs continues.

Railroad track removal - Mobilizing for work start this winter. Work over sluiceway next spring FPOM approved. Crane rail replacement 2021.

Tailrace crane rehab - Work resumed. Completion Feb.

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

Fish unit rehab - Kickoff meeting Jan 19, 2017. Phase 1A report Jan 2018. Award 2020. Completion 2022. Investigating possible more flow for redundancy.

Transformer replacement - Developing sequence. Install start May 2018. MOC to be provided to FPOM.

N Wasco Co PUD Memo of Agreement - Reviewing final comments.

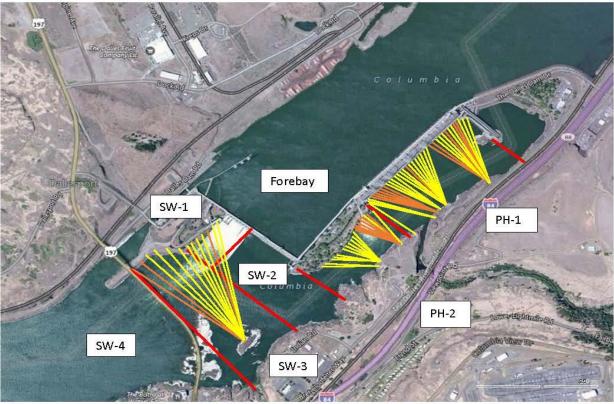
Lamprey minor mods - Tribal trap hoist improvements and rounded entrance weir caps designs underway, fab '17, install '17/'18.

Research/Contractors:

Kiewit on site for east fishladder AWS backup. Monitoring work progress. Refer to Pic tabs.

Approved by: Ron Twiner

Operation Project Manager The Dalles Dam



Red lines = avian zones

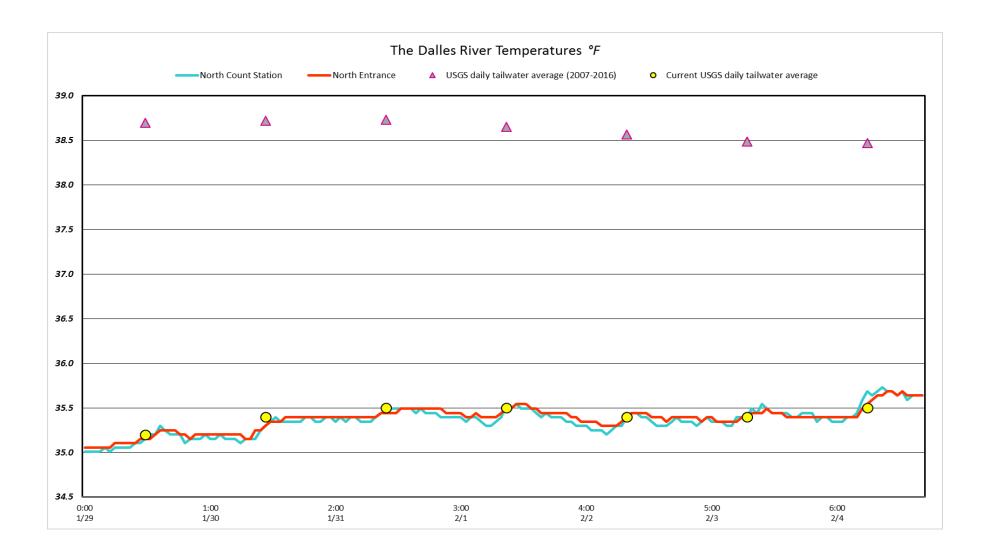
Yellow lines = current wires

Orange lines = down or missing wires

2017 Piscivorous Bird Counts

F=foraging, NF=non-foraging

	Gull Cormorant Caspian tern Grebe Pelican Other Notes																						
Date	Observer	AM/PM	Zone						1				1			Total birds in zone	Notes						
				F	NF	F	NF	F	NF	F	NF	F	NF	F	NF								
			FB	0	0	0	0	0	0	0	0	0	0	0	1	1	BAEA						
			PH1	0	0	0	0	0	0	0	0	0	0	0	0	0							
2/5	JWR	AM	PH2	0	0	0	0	0	0	0	0	0	0	0	6	6	4 BAEA, 2 GBHE						
2/5	JWK	Aivi	SW1	0	0	0	0	0	0	0	0	0	0	0		0	BAEA						
			SW2 SW3	0	0	0	7	0	0	0	0	0	0	0	0	8	GBHE						
			SW4	0	0	0	0	0	0	0	0	0	0	0	2	2	BAEA						
			FB	0	0	0	0	0	0	0	0	0	0	0	0	0	BAEA						
			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	8	8	2 BAEA, 6 GBHE						
2/6	JWR	РМ	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	2 BALA, O OBITE						
2,0	• • • • • • • • • • • • • • • • • • • •		SW2	0	0	0	0	0	0	0	0	0	0	0	0	0							
			SW3	0	0	1	3	0	0	0	0	0	0	0	0	4							
			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							
			PH2	0	0	0	0	0	0	0	0	0	0	0	12	12	BAEA						
2/7	JWR	NR 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	3	0	0	0	0	0	0	0	1	4	GBHE						
			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							
		R PM	PH1	0	0	0	0	0	0	0	0	0	0	0	3	3	BAEA						
- 4-			PH2	0	0	0	0	0	0	0	0	0	0	0	0	0							
2/8	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	2	1	0	0	0	0	0	0	0	0	0	3	COME						
			PH1 PH2	0	0	0	0	0	0	0	0	0	0	0	3 12	3 12	COME						
2/9	GJF	AM	SW1	0	0	0	0	0	0	0	0	0	0	1	0	12	10 BAEA, 2 GBHE COME						
2/9	GJF	Alvi	SW1	0	2	0	0	0	0	0	0	0	0	0	0	2	COME						
			SW3	0	0	1	0	0	0	0	0	0	0	0	0	1							
			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	0	0	0	0	0	0	0	0	0	0	0	0	0							
		GJF PM	PH2	0	0	0	0	0	0	0	0	0	0	0	3	3	1 BAEA, 2 GBHE						
2/10	GJF		PM	PM	PM	PM	PM	PM	PM	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	3	0	0	0	0	0	0	0	0	3							
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0							
			FB	0	1	0	0	0	0	0	0	0	0	0	0	1							
			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	6	6	5 BAEA, 1 GBHE						
2/11	GJF	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	15	15	COME						
			SW3	0	0	0	1	0	0	0	0	0	0	0	0	1							
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0							
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_			USGS: 2
	Secchi:		Temperatures
2/5	5.0	Sun	35.8
2/6	5.0	Mon	35.9
2/7	5.0	Tue	36.0
2/8	5.0	Wed	35.7
2/9	5.0	Thurs	35.7
2/10	5.0	Fri	35.8
2/11	5.0	Sat	35.8
	5.0	AVG	35.8

The Dalles Dam Daily Readings and Averages for

Temperatures, Secchi, Entrances, and Spill

= Out of criteria

/www.nwd-wc.usace.army.mil/tmt/documents/ops/temp/201701.lcol.h

	North	Ladder						East l	_adder						
	North E	intrance			East Entrance)			West E	ntrance			South Entrance	е	
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	
2/5	1.5	9.1													
2/6	1.5	9.2													
2/7	1.4	9.1													
2/8	1.4	9.2				Eas	t Ladd	er OOS	for Ma	aintena	ance				
2/9	1.4	9.2													
2/10	1.4	9.2													
2/11	1.4	9.2													
	1.4	9.2													



AWS 7' pipes half way across junction pool span.



Failed support bracket for diffuser valve (slanted one). 4 others found with same failure.