

The Dalles Dam Fishway Status Report

2/13/2016

Inspection Period: 02/14/2016-02/20/2016

THE DALLES DAM



US Army Corps
of Engineers
Portland District

The Dalles Project-Fisheries
P.O. Box 564
The Dalles, OR 97058-9998
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Fishways are inspected once daily plus one SCADA inspection starting December 1

The Dalles Dam	Inspections Out of Criteria	Criteria Limit	Total Number of Inspections: 7		Temperature: 41.7 °F	
			Comments		Secchi: 4.5 feet	
NORTH FISHWAY						
Exit differential	0	≤ 0.5'				
Count station differential	0	≤ 0.3'				
Weir crest depth	0	1.0' ± 0.1'				
Entrance differential	0	1.0' - 2.0'	1.4			
Entrance weir N1	0	depth (≥ 8')	9.3			
Entrance weir N2	0	Closed				
PUD Intake differential	0	≤ 0.5'		PUD in bypass on 2/16/16. Entrance was still in criteria.		
EAST FISHWAY						
<p>East Ladder down for winter maintenance RTS 2/28/16</p>						
JUVENILE PASSAGE						
Sluiceway operation	0	Units 1, 8, 18				
Turbine trashrack drawdown		<1.5', wkly				
Spill volume	Spill RTS ~April 2016					
Spill Pattern						
Turbine Unit Priority	NA	per FPP	Out of fish passage season			
Turbine 1% Efficiency	NA	per FPP	Out of fish passage season			

OTHER ISSUES:**Birds/Sea lions:**

Bird observation data collected once daily. Refer to Avian Zone map. Up to 10 Bald eagles observed on project.

Sea lion observed multiple times near east fishway.

Operations:

East fish ladder dewatered through Feb 28 for annual maintenance.

North fishway in service.

Turbine trashrack drawdown and velocities to resume Mar 1.

Current Outages:

T8 (MU15 & MU16) FOOS through 3/10/2016 due to high levels of methane production

MU3 FOOS through 4/1/2016 due to loss of governor sump oil level

MU11 FOOS through 2/22/2016 due to a thrust bearing cooler leak

F2 OOS 0600 12/1/2015 to 1700 2/29/2016 for O/H

EFL OOS 0600 1/3/2016 to 1700 2/29/2016 for annual maintenance

F1 OOS 0600 1/3/2016 to 1700 2/29/2016 for Annual

Spillway gates 1-6 OOS Daily from 0600 2/17/2016 to 1700 2/25/2016 to perform gate climbing inspections.

Maintenance:

Assembling 1 of 6 collection channel dewatering pumps for installation. To be installed after in water work period.

East exit weir electrical panel FCQ7 panel to arrive in March for initial installation. Final electrical connection awaiting funding.

New dewatering pump motor for north fishway entrance delivery this spring. Install before dewater season 2016/2017.

East fishladder expansion joint leakage repair in progress.

Fish unit maintenance complete. Fish unit 2 restacked, functional testing to follow. On schedule for Mar 1 start up.

Tailrace crane repair near west entrance delayed beyond end of in water work period (~mid April). MOC form updated for FPOM review.

Upcoming winter maintenance period workload; adjust 158 weir completed, east entrance weirs wheel replace and lift modifications in progress.

Long Term repair plans; 154 -157 weir mods, removal/permanent closure collection channel diffusers, repair failed diffusers - all on hold due to funding

Fish related /non-fish funded items; spillway evaluation, spillway crane rehab, spillgate 9 trunnion pin replace, sluiceway chaingate rehab (approx 50% complete), fish unit breaker replace (in planning), and transformer replace (in planning).

All spillway items on Critical Infrastructure list and Unfunded Requirement list. Spill gate 9 repair on hold awaiting funding.

Studies:

North fishladder rehab study for rock wall ongoing. Construction 2017/18. FPOM review as needed.

East fishladder emergency backup construction delayed. Awaiting planning meetings.

Crane rail replacement on tailrace and intake 2016-17. To be completed within in water work period.

Transformer replacement planning underway. Plans to eliminate fish unit TA transformers. Work to start 2017. Periodic planning meetings continue.

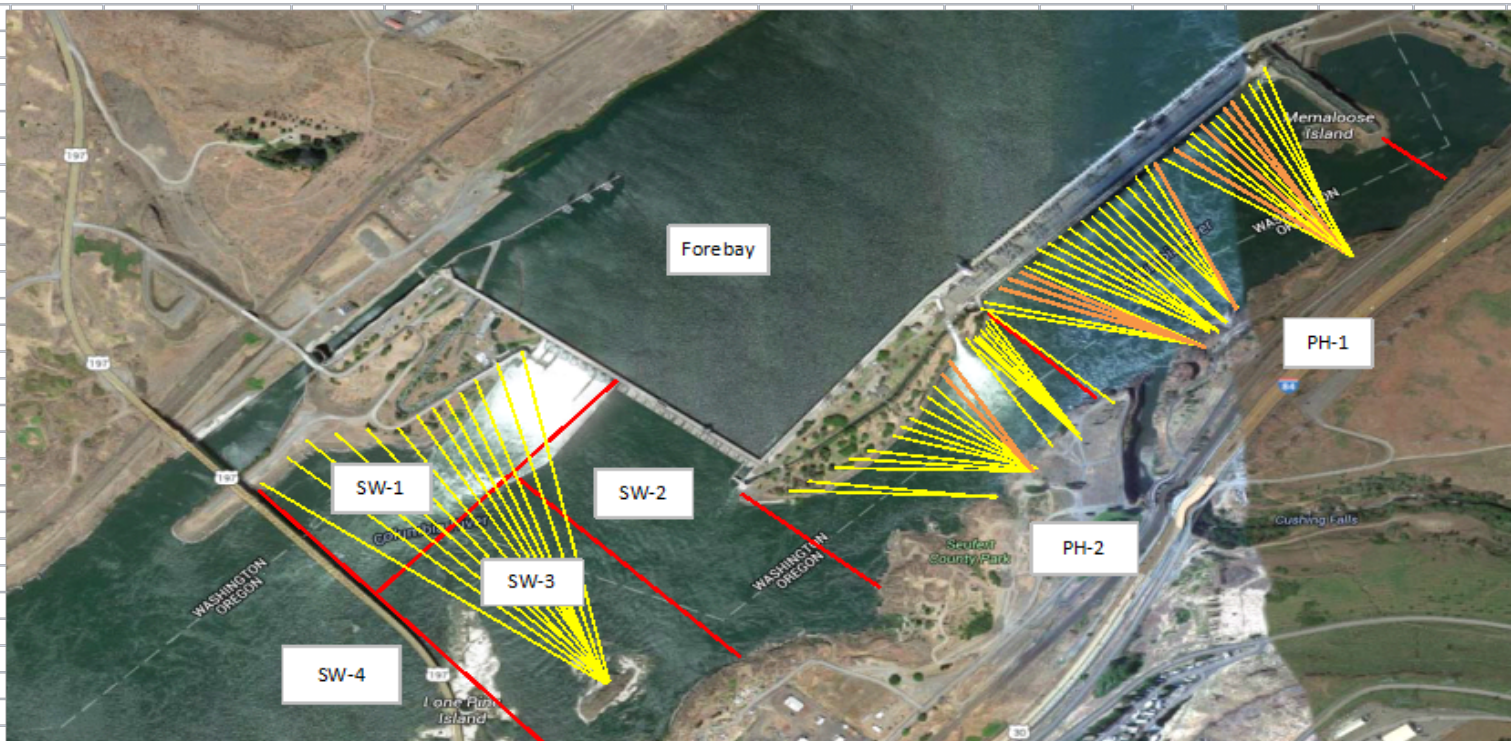
Lamprey minor modification planning site visit Jan26. Potential improvements for trapping at east count station.

Research/Contractors:

Normandeau fish counters season done 10/31. Resumes Apr1.

Approved by: Ron Twiner

Operation Project Manager The Dalles Dam



Yellow lines= present avian lines

red lines= Barriers between observation zones

Orange lines= Missing or down avian lines

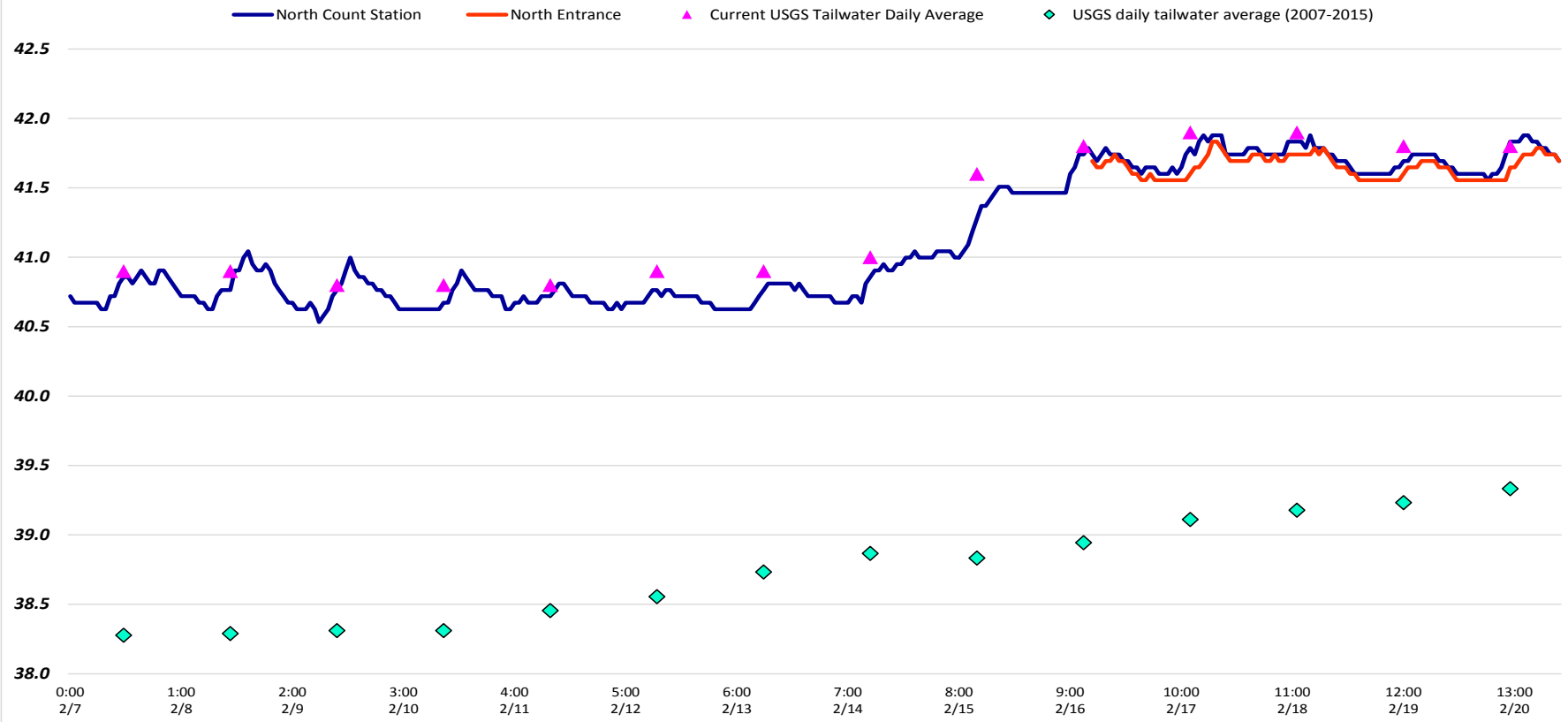
2016 Piscivorous Bird Counts

F=foraging, NF=non-foraging

Date	observer	Time (24 hr)	Zone	Gull		Cormorant		Caspian tern		Grebe		Pelican		Other		Total birds in zone	Notes
				F	NF	F	NF	F	NF	F	NF	F	NF	F	NF		
2/14/16	GJF	15:00	FB	0	0	2	0	0	0	0	0	0	0	0	2	4	BAEA BAEA 1 BAEA, 2 GBH
		14:50	PH1	0	0	0	0	0	0	0	0	0	0	1	0	1	
		15:05	PH2	0	0	0	0	0	0	0	0	0	0	0	3	3	
		15:20	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
		14:10	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
		14:11	SW3	0	0	0	23	0	0	0	0	0	0	0	0	23	
		14:12	SW4	0	5	0	0	0	0	0	0	0	0	0	0	5	
2/15/16	GJF	15:00	FB	0	0	1	0	0	0	0	0	0	0	0	0	1	BAEA GBH
		14:50	PH1	0	0	0	0	0	0	0	0	0	0	1	0	1	
		15:05	PH2	0	0	0	0	0	0	0	0	0	0	0	2	2	
		15:20	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
		14:10	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
		14:11	SW3	0	0	0	31	0	0	0	0	0	0	0	0	31	
		14:12	SW4	0	24	0	15	0	0	0	0	0	0	0	0	39	
2/16/16	JWR	13:46	FB	0	0	0	0	0	0	0	0	0	0	0	0	0	GBH GBH
		13:19	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	
		13:22	PH2	0	0	0	0	0	0	0	0	0	0	0	2	2	
		13:41	SW1	0	0	0	0	0	0	0	0	0	0	0	1	1	
		13:25	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
		13:26	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	
		13:46	SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	
2/17/16	EHK	13:25	FB	0	0	0	0	0	0	0	0	0	0	0	0	0	1 GBH
		13:11	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	
		13:20	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
		13:35	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
		13:22	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
		13:23	SW3	0	0	0	20	0	0	0	0	0	0	0	1	21	
		13:24	SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	
2/18/16	GJF	10:00	FB	0	0	1	0	0	0	0	0	0	0	2	5	2 OSPREY NF, 2 COME F	
		10:45	PH1	0	0	0	0	0	0	0	0	0	0	0	0	OSPREY, GBH	
		10:15	PH2	0	0	0	0	0	0	0	0	0	0	2	2		
		9:45	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	COME
		10:16	SW2	0	0	0	0	0	0	0	0	0	0	4	4		
		10:17	SW3	0	0	0	16	0	0	0	0	0	0	0	16		
		10:18	SW4	0	0	0	0	0	0	0	0	0	0	0	0		
2/19/16	JWR	9:58	FB	0	2	1	0	0	0	0	0	0	1	0	4	GBH	
		9:36	PH1	0	0	0	0	0	0	0	0	0	0	0	0		
		9:41	PH2	0	0	0	0	0	0	0	0	0	0	3	3		
		9:56	SW1	0	0	0	0	0	0	0	0	0	0	0	0		
		9:44	SW2	0	0	0	0	0	0	0	0	0	0	0	0		
		9:45	SW3	0	0	0	19	0	0	0	0	0	0	0	19		
		9:46	SW4	0	2	0	0	0	0	0	0	0	0	0	2		
2/20/16	EHK	10:22	FB	0	0	0	0	0	0	0	0	0	0	0	0		
		10:05	PH1	0	0	0	2	0	0	0	0	0	0	0	2		
		10:21	PH2	0	0	0	0	0	0	0	0	0	0	0	0		
		10:38	SW1	0	0	0	3	0	0	0	0	0	0	0	3		
		10:23	SW2	0	0	0	0	0	0	0	0	0	0	0	0		
		10:24	SW3	0	0	0	0	0	0	0	0	0	0	0	0		
		10:25	SW4	0	0	0	18	0	0	0	0	0	0	0	18		

Key: BAEA = Bald Eagle; GBH = Great Blue Heron; COME = Common Merganser

The Dalles Dam Adult Fish Ladder River/Water Temperatures



USGS:

<http://www.nwd-wc.usace.army.mil/tmt/documents/ops/temp/201602.lcol.html>

Secchi:		Temperatures
5.0	Sun	41.0
5.0	Mon	41.6
5.0	Tue	41.8
3.0	Wed	41.9
5.0	Thurs	41.9
4.5	Fri	41.8
4.0	Sat	41.8
4.5	AVG	41.7

The Dalles Dam Daily Readings and Averages for
Temperatures, Secchi, Entrances, and Spill

= Out of criteria

Date:	North Ladder			East Ladder											
	North Entrance			East Entrance				West Entrance			South Entrance				
	Differential	N1 Depth		Differential	E1 Depth	E2 Depth	E3 Depth	JP 6	Differential	W1 Depth	W2 Depth	W3 Depth	Differential	S1 Depth	S2 Depth
2/14	1.4	9.2		East Ladder down for winter maintenance RTS 2/28/16											
2/15	1.4	9.3													
2/16	1.3	9.3													
2/17	1.5	9.1													
2/18	1.4	9.4													
2/19	1.3	9.3													
2/20	1.5	9.2													
AVG:	1.4	9.3													

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Fishways are inspected twice daily plus one SCADA inspection.



Installation of east entrance modified weirs and weir extensions.