The Dalles Dam Fishway Status Report

5/4/2015

Inspection Period: 4/26/2015 to 5/2/2015

THE DALLES DAM



The Dalles Project-Fisheries P.O. Box 564 The Dalles, OR 97058-9998 Phone: 541-506-3800

Criteria	Total Number of Inspections:	21	Te
Fishways are	e inspected twice daily plus one SCADA	\ inspectio	n

The Dellee Dem	Inspections	Criteria	Total Number of Inspections: 21	Tempera	iture:	53.4	F
The Dalles Dam	Out of Criteria	Limit	Comments	Secchi:	4.4	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'	Average 1.4				
Entrance weir N1	0	depth (≥ 8')	Average 9.5				
Entrance weir N2	0	Closed	Bulkhead installed.				
PUD Intake differential	0	≤ 0.5'					
			EAST FISHWAY				
Exit differential	0	≤ 0.5'					
Removable weirs 154-157	0		Auto adjusts 1' increments.				
Weir 158-159 differential	0	1.0' ± 0.1'					
Count station differential	0	≤ 0.3'	Picket leads raked as needed.				
Weir crest depth	0	1.0' ± 0.1'					
Junction pool weir JP6	0	depth (≥ 7')	Average 10.2				
East entrance differential	0	1.0' - 2.0'	Average 1.5				
Entrance weir E1	0	No criteria	Average No criteria; manually adjusted a	as needed.			
Entrance weir E2	0	depth (≥ 8')	Average 12.6				
Entrance weir E3	0	depth (≥ 8')	Average 10.1				
Collection channel velocity	0	1.5 - 4 fps	Average 2.8				
Transportation channel velocity	0	1.5 - 4 fps	Average 2.8				
North channel velocity	0	1.5 - 4 fps	Average 2.6				
South channel velocity	0	1.5 - 4 fps	Average 3.5				
West entrance differential	0	1.0' - 2.0'	Average 1.6				
Entrance weir W1	0	depth (≥ 8')	Average 10.5				
Entrance weir W2	0	depth (≥ 8')					
Entrance weir W3	0	No criteria		as needed.			
South entrance differential	0	1.0' - 2.0'					
Entrance weir S1	0	depth (≥ 8')					
Entrance weir S2	0	depth (≥ 8')					
			JUVENILE PASSAGE				
Sluicegate operation	0		Sluicegates 1-1,2,3, 8-1,2, and 18-2 open				
Turbine trashrack drawdown	0		Range: 0.1' - 0.5'.				
Spill volume	0	40%+-1%	Average 40.1				
Spill Pattern	0						
Turbine Unit Priority.	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

OTHER ISSUES:

Birds/Sea lions:

Bird observation data collected once daily. Refer to Avian Zone Map. Sea lion observed near west entrance 4/27, 4/28 (C014), and 5/2 (caught fish), USDA hazing.

Operations:

All fishways in operation per Fish Passage Plan requirements.

Spill for juvenile passage started Apr 10.

Calibration done 4/30 East entrance tailwater off. TDE notified.

Gatewell differential check done 4/26 all reading within criteria.

Current Outages:

T8 (MU15 & MU16) de-rated to 85MW ops through 9/14/2017.

MU6 out 3/30/2015 to 5/7/2015 for overhaul.

Maintenance:

Entrance weir wheel and guide work to resume next winter outage.

Three collection channel dewatering pumps on deck for rehab, repair delayed due to lack of funding. Two of 6 collection channel pumps remain stuck.

FCQ7 electrical panel for east exit upgrade funding in place. Planning and parts purchase underway for installation next outage season.

Future repair plans; Upgrade east exit weirs 154-157, removal/permanent closure of collection channel diffusers, repair north failed diffusers,

Fish related but non-fish funded items; spillway evaluation, spillway crane rehab, spillgate 9 trunnion pin replacement, HDC updated fish unit reliability assessment, planning upgrade fish unit breakers and fish unit transformer replacement.

All spillway items on Critical Infrastructure list and Unfunded Requirement list. Spill gate 9 pine repair meeting planned for May5.

Studies:

North fishladder rehab of rock walls product development team to start within next week. Construction dates to be determined.

March fish count video at north count station completed. Night video to start May 15 pending lighting installation. To be used with new software application. BCOES review site visit for east fishladder backup system Apr30. Construction start this winter.

Crane rail replacement on tailrace and intake decks winter of 2016-2017. Schedule planning underway. Expected FPOM coordination needed.

Research/Contractors:

USDA gull hazer's on site 12 hours/day, primarily hazing from the navlock peninsula. Occasional pigeon removal near east ladder and sea lion deterrence near west entrance.

Fish counters at east and north count stations 16 hr/day. Spring Chinook passage increasing with high numbers using the north ladder. North count station video counting to resume 5/15 (night only) when new inferred light installation completed. Last week negative steelhead passage was counter error.

PSMFC PUD weekly sampling 4/29; 9 Chinook yearling, 13 subyearling, and 1 clipped steelhead.

WDFW to conduct hook and line removals of predatory northern pikeminnow from the BRZ adjacent to the project. Start date mid May.

University of Idaho maintaining antennas and monitoring movements of adult steelhead outfitted with radio-tags and Pacific lamprey outfitted with half-duplex (HDX) PIT tags.

Coordination underway for ODFW forbay Northern Pikeminnow Management Program.

Coordination underway for tribal lamprey trapping at east count station.

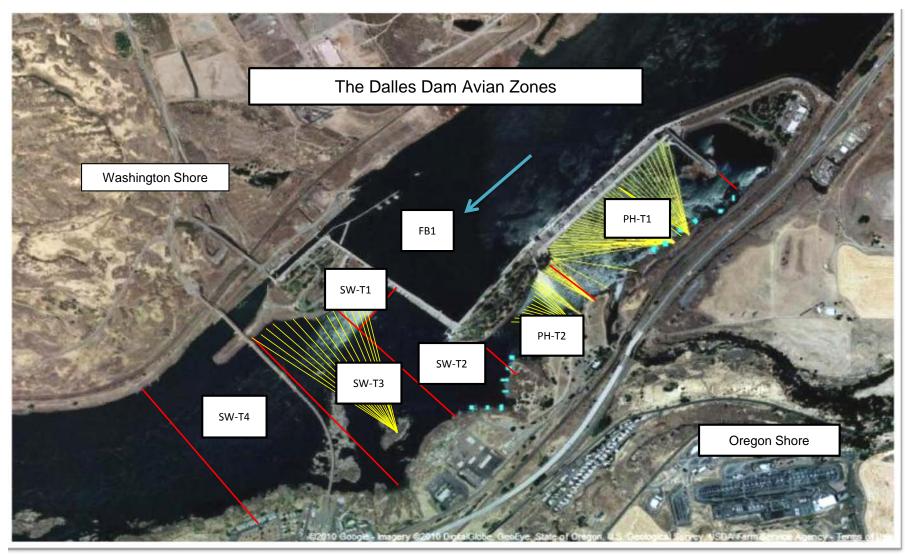
PSMFC monitoring and maintaining thin walled PIT tag antennas and computer equipment. USGS total dissolved gas monitoring.

USGS total dissolved gas monitoring.

Approved by: Ron Twiner

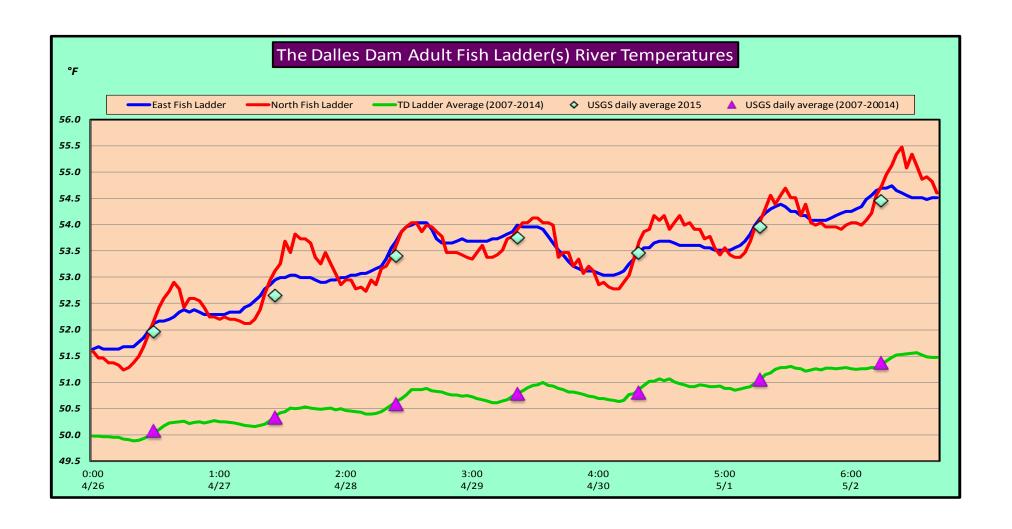
Operation Project Manager The Dalles Dam

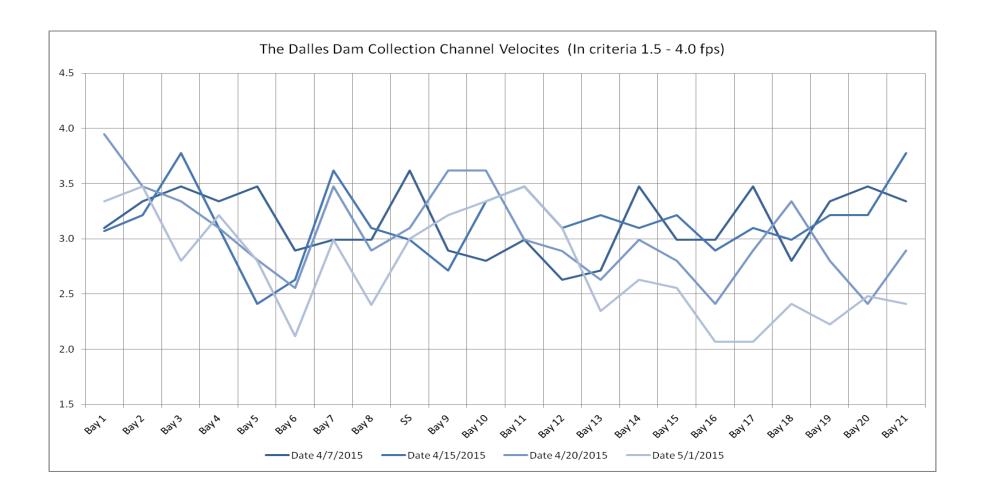
	The Dalles East												
Date	All Chinook	Adult Chinook	Jack Chinook	All Steelhead	Clipped Steelhead	Unclipped Steelhead	All Coho	Adult Coho	Jack Coho	Sockeye	Chum	Pink	
4/26	2473	2450	23	2	1	1	0	0	0	0	0	0	
4/27	1975	1949	26	6	5	1	0	0	0	0	0	0	
4/28	4053	3971	82	7	7	0	0	0	0	0	0	0	
4/29	4434	4373	61	3	1	2	0	0	0	0	0	0	
4/30	8958	8740	218	4	2	2	0	0	0	0	0	0	
total	21893	21483	410	22	16	6	0	0	0	0	0	0	
					The	Dalles No	orth						
Date	All Chinook	Adult Chinook	Jack Chinook	All Steelhead	Clipped Steelhead	Unclipped Steelhead	All Coho	Adult Coho	Jack Coho	Sockeye	Chum	Pink	
4/26	1673	1661	12	2	1	1	0	0	0	0	0	0	
4/27	2565	2557	8	2	1	1	0	0	0	0	0	0	
4/28	3898	3863	35	5	4	1	0	0	0	0	0	0	
4/29	5753	5710	43	10	6	4	0	0	0	0	0	0	
4/30	7304	7207	97	6	4	2	0	0	0	0	0	0	
total	21193	20998	195	25	16	9	0	0	0	0	0	0	



Avian lines in yellow, zones in red, river flow in blue.

							F=f0	oraging, NF	=non-fora	ging								
Date	Observer	Observer	Time	Zone	G	ull	Corm	orant	Caspia	an tern	Gre	ebe	Pel	ican	Ot	her	Total	Notes
Date	Observer	(24 hr)		F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	birds in		
		9:23	FB	0	0	0	10	0	0	0	6	0	0	0	0	16	1	
		8:30	PH1	0	0	0	1	0	0	0	0	0	0	0	0	1	1	
4/00/45		8:45	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
4/26/15	EHK	9:35	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	ł	
		8:48	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	ł	
		9:26 9:25	SW3 SW4	2 52	30	0	0	0	0	0	0	0	0	0	0	2 82	I	
	+	9.25	FB	0	0	0	7	0	0	0	4	0	0	0	0	11		
		13:11	PH1	0	0	0	1	0	0	0	0	0	0	0	0	1	I	
		13:23	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	I	
4/27/15	EHK	14:19	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	I	
1/2//10		13:26	SW2	1	0	0	0	0	0	0	0	0	0	0	0	1	I	
		15:02	SW3	10	0	0	0	0	0	0	0	0	0	0	0	10	I	
		15:05	SW4	37	0	0	0	0	0	0	0	0	0	0	0	37	l	
		8:54	FB	0	0	0	10	0	0	0	0	0	0	0	4	14	ospre	
	JWR =	9:17	PH1	0	0	0	1	0	0	0	0	0	0	0	0	1		
		9:28	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	l	
4/28/15		8:43	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	l	
		9:35	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	l	
		8:56	SW3	15	0	0	0	0	0	0	0	0	0	0	0	15	J	
		8:59	SW4	36	73	0	0	0	0	0	0	0	0	0	0	109		
	PSK _	15:30	FB	0	0	0	9	0	0	0	4	0	0	0	0	13	1	
		14:45	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
		14:59	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
4/29/15		15:41	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
		15:04	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
		15:48	SW3	9	0	0	0	0	0	0	0	0	0	0	0	9	ł	
		15:51	SW4	25	0	0	0	0	0	0	0	0	0	0	0	25		
		9:24	FB PH1	0	0	0	16	0	0	-	2	0	0	0	1 0	20	ospre	
		8:52 8:58	PH1 PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	l	
4/30/15	/WR	9:22	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	I	
4/30/13) ///C	9:09	SW2	0	0	0	1	0	0	0	0	0	0	0	0	1	I	
		9:12	SW3	21	38	0	0	0	0	0	0	0	0	0	0	59	l	
		9:14	SW4	40	34	0	0	0	0	0	0	0	0	0	0	74	I	
		15:46	FB	0	0	0	15	0	0	0	3	0	0	0	0	18		
		13:31	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	l	
		14:30	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	I	
5/1/15	PSK	15:55	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	I	
		14:35	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	I	
		14:37	SW3	3	0	0	0	0	0	0	0	0	0	0	0	3	I	
		14:39	SW4	36	0	0	0	0	0	0	0	0	0	0	0	36	I	
		11:08	FB	0	13	0	0	0	0	0	3	0	0	0	1	17	1 ospr	
		8:44	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0]	
		9:32	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
5/2/15	PSK	11:20	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
		9:35	SW2	0	2	0	0	0	0	0	0	0	0	0	0	2	1	
		9:37	SW3	5	54	1	0	0	0	0	0	0	0	0	0	60	1	
		9:40	SW4	61	0	0	0	0	0	0	0	0	0	0	0	61	1	





usace.army.mil/tmt/documents/ops/temp/201504.lcol.html	www.nwd-wc	http://v	USGS:	
	Secchi:		Temperatures	
	5.0	Sun	52.0	
The Dalles Dam Daily Read	4.0	Mon	52.7	
The Dailes Daili Daily Neat	4.0	Tue	53.4	
Temperatures, Secchi,	5.0	Wed	53.8	
Temperatures, Seconi,	4.5	Thurs	53.5	
·	4.0	Fri	54.0	
	4.5	Sat	54.5	
= Out of c	4.4	AVG	53.4	AVG:

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

= Out of criteria

	North	Ladder	East Ladder													
	North I	Entrance		East Entrance					West Entrance				South Entrance			
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	% Spill	
			1.5	5.5	12.9	9.9		1.6	10.7	10.6		1.5	8.6	8.4		
4/26/15	1.3	9.6	1.5	5.4	13.0	9.8	9.7	1.5	10.7	10.7		1.5	8.5	8.4	40.0	
	1.4	9.6	1.3	5.6	13.1	10.4	10.4	1.5	10.7	10.8		1.5	8.5	8.5	40.0	
			1.3	5.5	12.9	11.3		1.7	10.7	10.6		1.5	8.5	8.5		
4/27/15	1.3	9.6	1.4	5.6	12.6	11.6	11.3	1.6	10.9	11.0		1.5	8.6	8.6	40.2	
	1.4	9.5	1.4	5.4	12.4	11.3	11.3	1.7	10.9	10,9		1.5	8.4	8.4		
			1.5	5.7	12.6	9.0		1.4	10.9	10.9		1.4	8.6	8.6		
4/28/15	1.4	9.5	1.6	5.4	12.5	9.5	9.5	1.7	10.0	10.0		1.5	8.5	8.5	39.7	
	1.4	9.7	1.4	5.7	12.6	10.8	10.8	1.7	10.5	10.5		1.5	8.6	8.6	33.1	
			1.5	6.0	12.5	10.2		1.6	10.3	10.4		1.4	8.6	8.6		
4/29/15	1.4	9.5	1.6	5.5	11.5	9.8	9.8	1.6	10.5	10.5		1.5	8.5	8.6	40.0	
	1.5	9.5	1.4	6.4	12.5	10.3	10.3	1.6	10.5	10.5		1.5	8.6	8.6		
			1.5	6.7	12.6	8.7		1.4	10.5	10.5		1.4	8.6	8.6		
4/30/15	1.4	9.3	1.5	6.5	12.5	8.8	8.8	1.5	10.1	10.1		1.4	8.5	8.5	40.2	
	1.4	9.4	1.6	6.0	12.5	8.6	8.6	1.5	9.8	9.8		1.5	8.5	8.5	40.2	
			1.6	6.0	12.5	9.0		1.8	9.8	9.7		1.5	8.5	8.5		
5/1/15	1.5	9.2	1.7	6.0	12.5	11.2	11.2	1.7	10.3	10.4		1.4	8.6	8.6	39.9	
	1.4	9.4	1.5	6.1	12.6	10.5	10.5	1.8	11.2	11.1		1.6	8.5	8.5	55.5	
			1.5	6.0	12.4	9.9		1.6	10.3	10.3		1.5	8.5	8.5		
5/2/15	1.5	9.3	1.6	6.0	12.5	10.1	10.1	1.6	10.3	10.4		1.5	8.4	8.4	40.6	
	1.5	9.3	1.5	6.0	12.6	10.7	10.7	1.7	10.3	10.3		1.5	8.5	8.5	40.0	
AVG:	1.4	9.5	1.5	No criteria	12.6	10.1	10.2	1.6	10.5	10.5	closed	1.5	8.5	8.5	40.1	