The Dalles Dam Fishway Status Report

1/31/2015 Inspection Period: 1/25/2014 to 1/31/2015

THE DALLES DAM



The Dalles Project-Fisheries P.O. Box 564 The Dalles, OR 97058-9998

Phone: 541-506-3800

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Fishways are	inspected once	ner dav	/ durina the	winter mainten:	ance neriod
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		•	cted once per day							
The Dalles Dam	Inspections	Criteria	Total Number	r of Inspect	ions: 7	7 T	emperatu		40.4	F
	Out of Criteria	Limit	Comments			Se	ecchi:	5.0	feet	
			NORTH F	FISHWAY						
Exit differential	0	≤ 0.5'								
Count station differential	0	≤ 0.3'								
Weir crest depth	0	1.0' ± 0.1'								
Entrance differential	2	1.0' - 2.0'	Average	1.3	PUD was	in Plun	ge Pool d	ue to wo	rk on the n	orth pump
Entrance weir N1	0	depth (≥ 8')	Average	9.3						
Entrance weir N2	0	Closed								
PUD Intake differential	0	≤ 0.5'								
EAS	ST FISHWAY -	Out of Servi	ce Dec 1, 2014 th	rough end	of Jan 2015 fo	or winte	er mainte	nance.		
Exit differential	NA	≤ 0.5'								
Removable weirs 154-157	NA	Per forebay	Auto adjusts 1' incre	ements.						
Weir 158-159 differential	NA	1.0' ± 0.1'								
Count station differential	NA	≤ 0.3'								
Weir crest depth	NA	1.0' ± 0.1'								
Junction pool weir JP6	NA	depth (≥ 7')	Average	N/A						
East entrance differential	NA	1.0' - 2.0'	Average	N/A						
Entrance weir E1	NA	No criteria	Average	N/A	Manua	ally adju	sted as nee	eded.		
Entrance weir E2	NA	depth (≥ 8')	Average	N/A						
Entrance weir E3	NA	depth (≥ 8')	Average	N/A						
Collection channel velocity	NA	1.5 - 4 fps	Average	N/A						
Transportation channel velocity	NA	1.5 - 4 fps	Average	N/A F	shway velocities	conclud	ded Dec 1 a	and will re	sume Mar 1	, 2015 as per Fish
North channel velocity	NA	1.5 - 4 fps	Average	N/A			Passa	ige Plan.		
South channel velocity	NA	1.5 - 4 fps	Average	N/A						
West entrance differential	NA	1.0' - 2.0'	Average	N/A						
Entrance weir W1	NA	depth (≥ 8')	Average	N/A						
Entrance weir W2	NA	depth (≥ 8')	Average	N/A						
Entrance weir W3	NA	No criteria	Closed							
South entrance differential	NA	1.0' - 2.0'	Average	N/A						
Entrance weir S1	NA	depth (≥ 8')	Average	N/A						
Entrance weir S2	NA	depth (≥ 8')	Average	N/A						
			JUVENILE	PASSAGE						
Sluicegate operation	0	per FPP	Sluicegates 1-1 a	and 18-3 are	open to foreba	ay, endo	gate is clo	sed		
Turbine trashrack drawdown	NA	<1.5', wkly	Resume on March	h 1						
Spill volume	NA	40% ±1%	Average	On seal.						
Spill Pattern	NA	per FPP	Spillbay	On seal.						
Turbine Unit Priority.	NA	per FPP	Fish passage sea							
Turbine 1% Efficiency	NA	per FPP	Fish passage sea	ason resume	es March1					

OTHER ISSUES:

Birds/Sea lions:

Bird observation data collected once daily. Eagle numbers appear decreasing. Refer to Avian Zone Map.

Operations:

Gatewell drawdown and routine weir calibrations to resume March 1, 2015.

Current Outages:

Current Outages:

Treansformer T8 (MU15 & MU16) de-rated to single unit full load ops through 2017

Unit MU13 out of service 1/20/2015 to 2/5/2015 for oil leak repairs. No oil observed in river.

Maintenance:

New exit weir 158 installed and calibrated. Remaining exit weirs being calibrated.

Weir guide repair work completed on W2 and test epoxy repair on E2. Repair on remaining weir guides scheduled for next year.

Three more weirs have new set of high density plastic wheels. All installed and ready for water up.

Three collection channel dewatering pumps needing rehab pulled on deck, repair underway. Two of 6 collection channel pumps remain stuck.

Permanent east fishway exit boom delivered. Contract delay resulted in missing in water work window.

FCQ7 electrical panel for east exit upgrade prep work completed. Parts to be ordered. Installation planned for next outage season.

One of 6 east entrance diffuser valves in need of repair. Valve opened for remainder of passage season. Repair planned for next outage period.

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

Fish related but non-fish funded items; spillway evaluation, spillway crane rehab, spillgate 9 wire rope replacement, HDC update 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.

Studies:

North fishladder rock stabilization development team site visit Feb 17. Alternatives for repair of vulnerable areas to be determined.

Investigating PIT tag 15 mile creek steelhead overshooting The Dalles. Coordination discussion underway for potential sdditional sluiceway operation. . Investigating north fish count station mods for visibility improvement and use of video. Equipment purchase underway. Install Feb for testing in March.

EFL Backup; Plans/Specs 60% review underway. Includes 10'pipe from forebay to AWS. A 1400cfs flow test planned in Feb. coordination underway.

PUD 'freedom' second turbine; Field test proposal summer 2015 proposed through FPOM and SRWG. Rock plunge pool inspection included.

Spill test for more fish passage to north fishladder completed. Results showed benefit. FPOM discussion to continue for when to implement.

Research/Contractors:

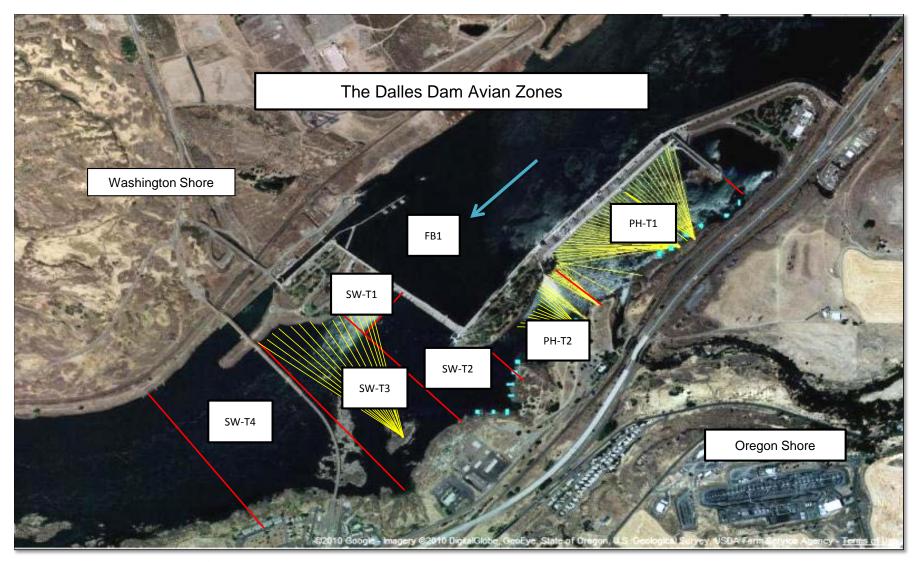
PSMFC PIT tag monitoring continues at north count station. Outage maintenance as needed for east count station antenna.

Normandeau fish counters to resume Apr1.

University of Idaho maintaining antennas. Continuing downloads of winter steelhead.

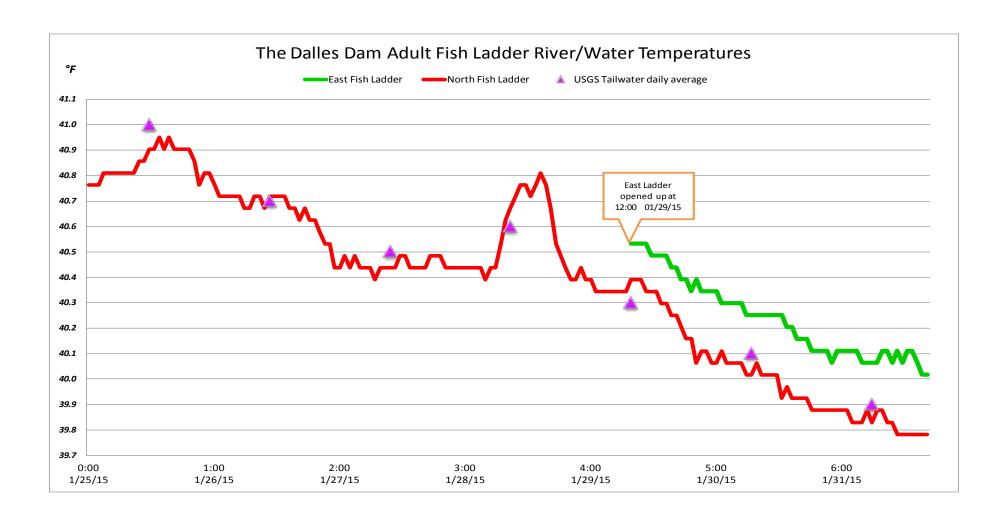
Approved by: Ron Twiner

Operation Project Manager The Dalles Dam



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

2015 Piscivorous Bird Counts F=foraging, NF=non-foraging													
												Date Observer	
				F	NF	F	NF	F	NF	F	NF		
		14:28	FB	0	0	13	5	0	0	0	11	29	BAEA
		13:58	PH1	0	0	0	0	0	0	0	0	0	
		14:02	PH2	0	0	0	0	0	0	0	8	8	BAEA
1/25/15	JWR	14:21	SW1	0	74	0	0	0	0	0	7	81	GBHE
		14:03	SW2	0	0	0	0	0	0	0	0	0	
		14:04	SW3	0	0	0	60	0	0	0	0	60	
		14:07	SW4	0	0	0	0	0	0	0	0	0	5.5.
		14:51	FB	0	0	0	3	0	0	0	3	6	BAEA
		14:09	PH1	0	1	0	0	0	0	0	0	1	4.00505.40.0454
100145	DOL	14:12	PH2	0	0	0	0	0	0	0	11	11	1 GREBE, 10 BAEA
/26/15	PSK	15:15	SW1	0	47	0	0	0	0	0	0	47	
		14:20	SW2	0	6	0	0 47	0	0	0	0	6 47	
		14:22	SW3 SW4	0	0 34	0		0	0	0	0	47	
		15:24	FB	0		10	11 3	0	0	0	0	45 19	BAEA
		10:36	PH1		0	0	0		0		6		BAEA
		9:28 9:34	PH1 PH2	0	0	0	0	0	0	0	0 11	0 11	9 BAEA, 2 GBHE
1/27/15 / W	ла/р	10:09	SW1	0	6	0	0	0	0	0	0	6	9 BAEA, 2 GBHE
	JWK	9:35	SW1	0	0	0	0	0	0	0	0	0	
			SW2	0	0	0	51	0	0	0	3	54	BAEA
		9:36 9:37	SW4	0	10	0	0	0	0	0	0	10	BAEA
		15:24	FB	0	0	0	0	0	0	0	2	2	BAEA
		14:41	PH1	0	0	0	2	0	0	0	0	2	DALA
		14:49	PH2	0	0	0	0	0	0	0	6	6	BAEA
1/28/15	PSK	15:49	SW1	0	33	0	0	0	0	0	0	33	DALA
1/20/13	1 510	14:53	SW2	0	5	0	0	0	0	0	0	5	
		14:55	SW3	0	0	0	44	0	0	0	0	44	
		15:45	SW4	0	26	0	0	0	0	0	0	26	
		9:12	FB	0	0	7	5	0	0	0	12	24	BAEA
		9:33	PH1	0	0	0	0	0	0	0	0	0	D/ (L/ (
		9:24	PH2	0	0	0	0	0	0	0	7	7	BAEA
/29/15	/WR	9:14	SW1	0	3	0	0	0	0	0	0	3	5,12,1
	J	9:17	SW2	0	0	0	0	0	0	0	0	0	
		9:21	SW3	0	0	0	44	0	0	0	1	45	BAEA
		9:22	SW4	0	0	0	0	0	0	0	0	0	5, 12, 1
		14:15	FB	0	1	0	4	0	0	0	1	6	BAEA
		12:30	PH1	0	0	0	0	0	0	0	0	0	
		12:40	PH2	0	0	0	0	0	0	0	19	19	2 GBHE, 17 BAEA
/30/15	PSK	14:21	SW1	0	68	0	0	0	0	0	0	68	- ,
		12:47	SW2	0	0	0	0	0	0	0	27	27	Golden eye
		14:22	SW3	0	0	0	35	0	0	0	0	35	
		14:30	SW4	0	0	0	0	0	0	0	0	0	
		10:46	FB	0	0	0	0	0	0	0	1	1	1 BAEA
		10:12	PH1	0	0	0	0	0	0	0	0	0	
		10:40	PH2	0	0	0	0	0	0	1	9	10	1 GBH & 9 BAEA
1/31/15	EK	10:44	SW1	0	1	0	0	0	0	0	0	1	
		10:21	SW2	0	0	0	0	0	0	0	0	0	
		10:24	SW3	0	0	0	61	0	0	0	0	61	
1		10:43	SW4	0	0	0	0	0	0	0	0	0	



	Temperatures		Secchi:
	41.0		5.0
	40.7		5.0
	40.5		5.0
	40.6		5.0
	40.3		5.0
	40.1		5.0
	39.9		5.0
VG:	40.4	AVG	5.0

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

= out of criteria

	North	Ladder	East Ladder											
	North E	Entrance		East	Entrance			West Ent	trance		Soi			
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 KCFS
	1.4	9.3					·							
25-Jan-15														
			<u> </u>											
	1.4	9.3	<u> </u>											
26-Jan-15			<u> </u>											
		0.0	 											
07 lan 15	1.4	9.3												
27-Jan-15														
	0.9	9.4	l İ											O n
28-Jan-15	0.0	5.4	t		Fast ladde	r OOS f	or winter ma	intenace.	RTS Jan	29. 2015				
			1							,				S
	0.9	9.4	•											e a
29-Jan-15			İ										Ī	
			Ī											
	1.4	9.4												
30-Jan-15														
			<u> </u>											
	1.4	9.2												
31-Jan-15														
11/0	4.0	0.0	N1/A	N 1/A	N/A N/A	L N1/A	N 1/A	N1/A	21/2	L N1/A	N1/A	N1/A	N1/A	
AVG:	1.3	9.3	N/A	N/A	N/A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	



New entrance weir E2 plastic wheel and added rub block to assure alignment.