

# FISHWAY STATUS REPORT

**Date:** 8/12/12  
**Inspection Period:** 8/5 - 8/11/2012

## 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 twice daily. Additional daily monitoring done via automation system in fisheries office.

The Dalles Dam	Inspections Out of Criteria	Criteria Limit	Total Number of Inspections: 21	Temperature: 69.2 F
			Comments	Secchi: 3.6 Ft.
<b>NORTH FISHWAY</b>			PUD auxiliary water off for required ROV inspection Aug 9 ~0800-1000hrs	
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 1.3	Daily differentials & weir depths, see <b>AVGS</b> tab.
Entrance weir N1	0	depth (≥ 8')	Average 10.1	
Entrance weir N2		Closed	Bulkhead installed	
PUD Intake differential	0	≤ 0.5'		
<b>EAST FISHWAY</b>				
Exit differential	0	≤ 0.5'		
Removable weirs 154-157	0	Per forebay	Auto adjusts 1' increments.	
Weir 158-159 differential	0	1.0' ± 0.1'		
Count station differential	0	≤ 0.3'	7/30/12 raked picketed leads, debris has been light this year.	
Weir crest depth	0	1.0' ± 0.1'		
Junction pool weir JP6	1	depth (≥ 7')	Manually adjusted as needed.	
East entrance differential	2	1.0' - 2.0'	Average 1.5	Some differential affect from low AM tailwater
Entrance weir E1	0	No criteria	Average 7.3	Daily differentials & weir depths, see <b>AVGS</b> tab.
Entrance weir E2	0	depth (≥ 8')	Average 10.8	
Entrance weir E3	0	depth (≥ 8')	Average 10.8	
Collection channel velocity	0	1.5 - 4 fps	Average 2.5	See <b>Velocities</b> tab for more complete information.
Transportation channel velocity	0	1.5 - 4 fps	Average 2.5	
North channel velocity	0	1.5 - 4 fps	Average 2.4	
South channel velocity	0	1.5 - 4 fps	Average 3.2	
West entrance differential	4	1.0' - 2.0'	Average 1.2	Some differential affect from low AM tailwater
Entrance weir W1	1	depth (≥ 8')	Average 8.1	
Entrance weir W2	0	depth (≥ 8')	Average 8.1	
Entrance weir W3	0	No criteria	Average Closed	
South entrance differential	0	1.0' - 2.0'	Average 1.4	
Entrance weir S1	0	depth (≥ 8')	Average 8.4	
Entrance weir S2	0	depth (≥ 8')	Average 8.4	
<b>JUVENILE PASSAGE</b>				
Sluiceway operation	0	units 1,8,18	MU 1 was forced out of service from 7/17-8/2. Sluiceways were opened under MU3.	
Turbine trashrack drawdown	0	<1.5', wkly	Range: 0.1' - 0.5'	
Spill volume	2	40%, 24hr	Average 39.7	
Spill Pattern	0	per FPP		
Turbine Unit Priority	0	per FPP	MU1 and 2 were forced out of service on 7/17; returned to service on 8/2/12.	
Turbine 1% Efficiency	0	per FPP		

**OTHER ISSUES:****THE DALLES****Birds:**

Fisheries personnel are collecting bird count data twice daily. USDA gull hazing contract ended 7/30/12. See bird tab for information on species, number and locations. Gull numbers remain very low.

**Operations:**

Main Units 1 & 2 breakers repaired and returned to service 8/2. Sluiceway gates were returned from unit 3 to unit 1 on 8/6; Gatewell drawdown was completed on 8/11/12. All differentials were within criteria. Range 0.1' - 0.5'. Calibration check completed 8/11/12. Some differentials were out >.3'. Maintenance notified. F2 Tripped off 0916 8/7/2012 due to low governor oil pressure. F2 return to service 0945 8/7/2012. Maintenance corrected cause of the trip. West and east entrance differential low during morning low tailwater. Differential increases through day as river flow/tailwater increases.

**Maintenance:**

Remote Operated Vehicle (ROV) inspections of the east fishway grating were completed 8/1. All grating was found intact and in good condition. The north grating inspection had been postponed due to clearance clarification issues. These issues have been temporarily resolved and ROV inspection of the North fishway grating was completed on 8/9. All grating was found intact and in good condition. Small solar light (still working) was found atop grating. Refer to pic. Uncertain of origin.

**Current Outages :**

MU10 out of service 7/23/2012 0600 hrs.to 8/30/2012 1700 hrs., Digital Governor Install.  
MU11 out of service 7/30/2012 0746 hrs. to 9/6/2012 for five year over haul, As Builts, Generator Heaters, Heat Exchangers, and Cavitation.

**Studies:**

Inland Avian Predation Management Work Group meeting held at Westrick 8/6. Primary focus on abatement NWW district tern nesting. Supporting east fishladder backup water supply study as needed. No recent meeting activity. Fishlock and deep intake alternatives moving forward. TDA Adult PIT Tag Study Team Meeting meeting 8/7. Items discussed included biological criteria and considerations, PIT tag detection criteria, electrical design, hydraulic design computational fluid dynamics, and cost estimates. The focus is shifting from the count station station to weirs for antennae placement due to the uncertainty of the future of fish counting program.

**Research/Contractors:**

WDFW Columbia River Northern Pikeminnow Management Program Dam Angling: 37.2 effort hours for 71 pikeminnow  
WDFW fish counters continuing 16 hr./day counting.  
ODFW Bass Dam Angling Project: 6 forebay angler hours for one bass. 12 tailrace angler hours for 12 bass. Total 6 tagged  
The Dalles forebay had the lowest catch during the reporting periods (0.16 during week 32, respectively).  
USFWS continues adult lamprey camera monitoring at counting stations, between picketed leads. North exit dual frequency identification sonar (DIDSON) camera to be installed at a later date.

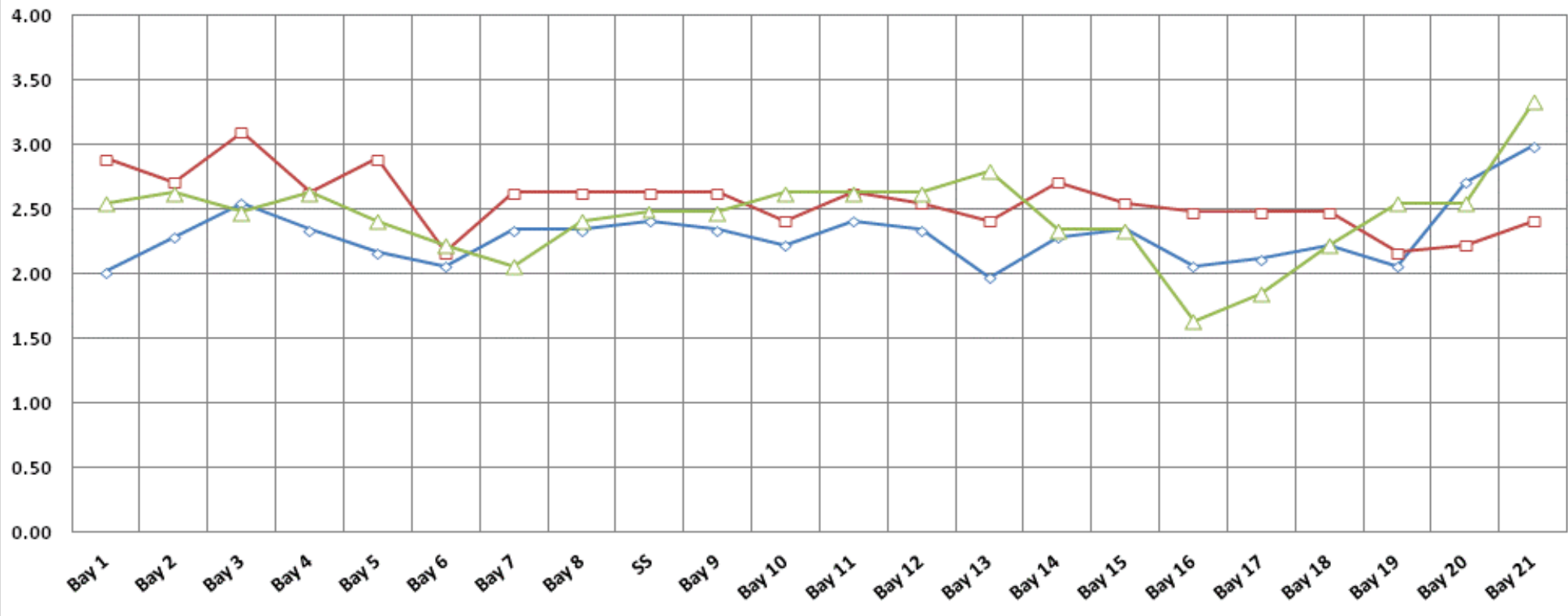
Approved by;  
Ron D. Twiner  
Operation Project Manager  
The Dalles Dam

## The Dalles Dam Fish Counts

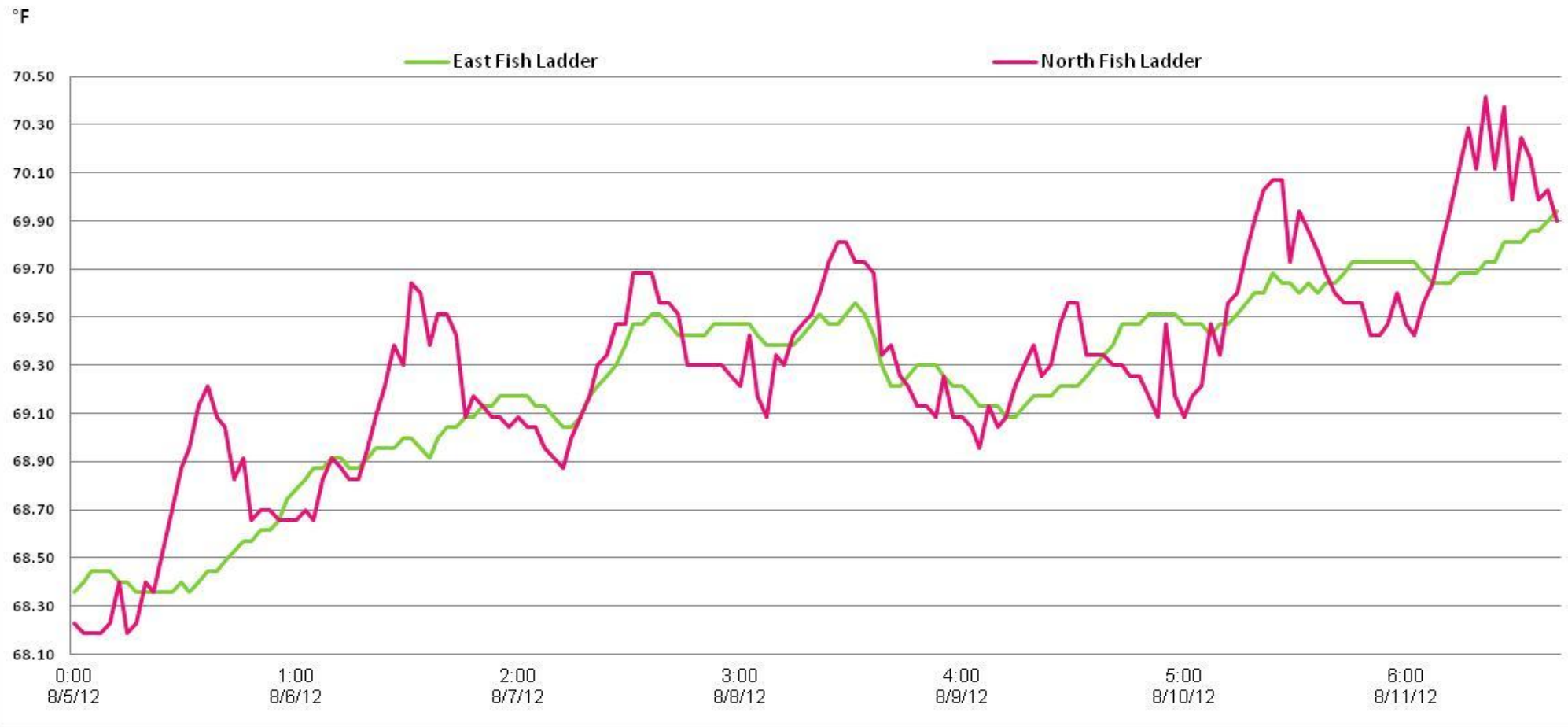
Date	East	North	East	North	Total	Total	East	North					East	North			East	North	KCFS
	Chinook	Chinook	Chinook	Chinook	East	North	Unclipped	Unclipped	East	North	East	North	Coho	Coho	East	North	East	North	Spill
	Adult	Adult	Jack	Jack	Sthd	Sthd	Sthd	Sthd	Sock	Sock	Coho	Coho	Jack	Jack	Lamprey	Lamprey	Pink	Pink	Volume
5-Aug	300	120	136	19	1791	753	701	341	11	1	0	0	0	0	140	22	0	0	82.1
6-Aug	355	110	131	11	2376	699	956	314	17	4	0	0	0	0	97	71	0	0	85.1
7-Aug	341	148	137	19	2142	683	680	318	16	4	2	0	0	0	32	40	0	0	80.8
8-Aug	347	88	107	22	2933	591	1198	253	4	1	1	0	0	0	94	54	0	0	78.5
9-Aug	366	137	142	10	2693	542	1013	272	6	0	0	0	0	0	107	70	0	0	78.1
10-Aug	295	113	82	23	1561	479	557	184	5	4	0	1	0	0	40	112	0	0	73.3
11-Aug	368	166	122	26	1586	420	540	161	4	1	8	0	0	0	60	78	0	0	78.4
Wkly Tot	2372	882	857	130	15082	4167	5645	1843	63	15	11	1	0	0	570	447	0	0	
% Split	72.9%	27.1%	86.8%	13.2%	78.4%	21.6%	75.4%	24.6%	80.8%	19.2%	91.7%	8.3%	0.0%	0.0%	56.0%	44.0%	0.00%	0.00%	79.5

### The Dalles Dam Collection Channel Velocities (fps)

8/4/2012 8/8/2012 8/9/2012



### The Dalles Adult Ladder Water Temperatures



# The Dalles Dam Daily Bird Observations

Washington Shore

SW-T1: No birds

SW-T3: 0-2 cormorant rest, 0-1 flyby. 0-1 gull rest, 0-1 flyby

SW-T4: 0-1 gull forage, 0-1 rest, 0-1 flyby. 0-1 cormorant forage, 0-5 flyby

FB: 0-5 gulls rest. 6-85 cormorant rest, 0-3 active. 0-2 osprey foraging, 0-1 rest, 0-1 flyby

SW-T2: 0-1 gull flyby. 0-1 osprey rest, 0-1 cormorant rest. 0-1 grebe flyby

PH-T1: 0-20 cormorant rest, 0-4 foraging. 0-1 osprey forage, 0-1 rest, 0-1 flyby

PH-T2: 0-2 cormorant forage, 0-1 flyby

PH-T3: 0-1 gull flyby, 0-1 osprey rest, 0-1 cormorant flyby

Oregon Shore

Temp:		Secchi:	
	68.4	SUN	3.0
	68.9	MON	
	69.2	TUES	
	69.4	WED	3.5
	69.2	THUR	3.5
	69.6	FRI	4.0
	69.6	SAT	4.0
AVG:	69.19	AVG:	3.6

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

Date:	North Fish Ladder		East Fish Ladder											% Spill	
	North Entrance		East Entrance					West Entrance				South Entrance			
	Differential	N1 Depth	Differential	E1Depth	E2 Depth	E3 Depth	JP 6	Differential	W1Depth	W2 Depth	W3 Depth	Differential	S1 Depth	S2 Depth	
8/5/12	1.3	10.1	1.4	9.5	9.5	9.1	7.4	1.0	8.1	8.1	Closed	1.3	8.6	8.2	39.7
8/5/12	1.3	10.2	1.5	9.4	9.4	8.9	8.6	1.2	8.0	8.1		1.5	8.4	8.2	38.9
8/5/12			1.3	9.6	9.6	9.0		1.0	8.2	8.2		1.2	8.7	8.7	
8/6/12	1.4	10.0	1.7	9.0	9.1	9.1	7.3	1.0	8.2	8.2		1.5	8.1	8.2	40.5
8/6/12	1.3	10.2	1.7	9.0	9.0	9.0	8	1.2	8.1	8.1		1.5	8.3	8.2	39.1
8/6/12			1.5	9.1	9.1	9.1		0.9	8.2	8.0		1.3	8.4	8.3	
8/7/12	1.3	10.1	1.5	9.9	10.0	9.9	7.1	1.3	8.0	8.0		1.6	8.2	8.1	38.6
8/7/12	1.3	10.1	1.6	9.9	9.9	10.0	9.9	1.6	8.0	8.1		1.7	8.1	8.1	38.9
8/7/12			1.6	10.1	10.1	10.0		1.2	8.2	8.2		1.5	8.2	8.3	
8/8/12	1.1	9.9	1.8	10.1	10.6	10.5	7.5	0.9	7.9	8.0		1.1	8.6	8.6	40.8
8/8/12	1.4	10.1	1.8	4.0	12.4	12.5	12.4	1.3	8.3	8.3		1.6	8.1	8.1	38.8
8/8/12			0.8	9.3	9.6	9.9		0.6	8.6	8.5		1.1	8.7	8.7	
8/9/12	ROV'd OOS		1.5	4.0	12.1	12.0	9.4	0.9	8.3	8.3		1.3	8.5	8.5	39.8
8/9/12	1.4	10.3	1.5	5.1	12.1	12.0	9	1.6	8.0	8.1		1.6	8.5	8.5	39.6
8/9/12			1.8	6.0	13.1	13.0		1.7	8.2	8.2		1.2	8.5	8.5	
8/10/12	1.2	10.1	0.9	8.9	11.9	11.9	5.9	1.2	8.0	8.0		1.4	8.5	8.5	42.5
8/10/12	1.4	10.2	1.7	0.0	12.0	12.1	8.3	1.4	8.1	8.2	1.6	8.5	8.5	39.5	
8/10/12			1.7	5.0	12.0	12.0		1.7	8.1	8.1	1.5	8.6	8.6		
8/11/12	1.3	10.2	1.3	5.1	12.1	12.1	8.4	1.3	8.0	8.1	1.5	8.6	8.6	39.9	
8/11/12	1.4	10.1	1.4	7.6	11.9	12.0	10.1	1.5	8.1	8.2	1.4	8.6	8.6	39.6	
8/11/12			1.4	2.0	12.0	11.9		1.3	8.0	8.0	1.4	8.6	8.5		
<b>AVG:</b>	1.3	10.1	1.5	7.3	10.8	10.8	8.5	1.2	8.1	8.1	Closed	1.4	8.4	8.4	39.7

Third fish way inspection (date in blue) for east fish ladder, east, west, and south entrances completed via automation system in fisheries office.

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Vide



Solar lamp found atop north fishway grating during ROV inspection. Origin unknown. High quality since it was still working.