

# FISHWAY STATUS REPORT

Date: 1/6/2013  
 Inspection Period: 12/30/2012 - 1/5/2013

## THE DALLES DAM



**US Army Corps  
 of Engineers**  
 Portland District

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

Fish ways are inspected twice daily. Additional daily monitoring done via automation system in fisheries office.

The Dalles Dam	Inspections	Criteria	Total Number of Inspections:	7	Temperature:	41.8	F
	Out of Criteria	Limit	Comments		Secchi:	5.0	Ft.
<b>NORTH FISHWAY</b>							
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	9.1			
Entrance weir N2		Closed	Bulkhead installed				
PUD Intake differential	0	≤ 0.5'					
<b>East Fishway</b>							
Exit differential			East Adult Fish Ladder Dewatered 12-03-12  For Annual inspection and maintenance  East Adult Fish Ladder scheduled RTS 01-17-13				
Removable weirs 154-157							
Weir 158-159 differential							
Count station differential							
Weir crest depth							
Junction pool weir JP6							
East entrance differential							
Entrance weir E1							
Entrance weir E2							
Entrance weir E3							
Collection channel velocity							
Transportation channel velocity							
North channel velocity							
South channel velocity							
West entrance differential							
Entrance weir W1							
Entrance weir W2							
Entrance weir W3							
South entrance differential							
Entrance weir S1							
Entrance weir S2							
<b>JUVENILE PASSAGE</b>				<b>Season Resumes 03-01-2013</b>			
Sluiceway operation		units 1,8,18	End Gate Closed				
Turbine trashrack drawdown		<1.5', wkly					
Spill volume		40%, 24hr	No Spill - All Spill gates on seal.				
Spill Pattern		per FPP					
Turbine Unit Priority		per FPP	On seal.				
Turbine 1% Efficiency		per FPP					

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

Fisheries personnel conducting bird observations once per day.

Normal numbers of increased fall bird activity around project for juvenile shad outmigration. Refer to "Avian Distribution" tab for species, location, and numbers. Eagle observations started Dec 15 as second of 2 year study to determine eagle interactions with avian lines. This is a collaborative effort between project fisheries and Fish Field Unit. Final results will help determine future management of avian lines. Numerous eagles observed to date.

**Operations:**

The Dalles North Ladder in service and conforming to fish passage criteria. The Dalles East ladder out of service for annual maintenance; return service 1/22/2013. The Ice/Trash Sluiceway out of service, end gate closed, and sluice gates 1-1, 18-3 open.

**Maintenance:**

East fishway maintenance continues: PM count station, repair expansion joint on road deck, install heron lines over ladder, FSQ electrical upgrade. Fish units out of service; F1 out through Jan 31 overhaul and digital governor install, F2 out though Jan 17 for annual. Possible extension needed to repair nitrogen lines. More to come.

East entrance weir E2 damaged wheels repaired and weir installed. Similar problem found with W1 weir, which is now removed for repair.

Same repair will be planned for the remaining 4 powerhouse weirs next winter.

Several brittle attachment studs found in west diffuser grating install. Questionable attachments will be welded directly to support beam. Long term plan underway for better repair next winter.

Several seized weir lifting beam wheels and weir wheels found. Engineering investigating repair.

New outage date for north fish ladder. Moved from Jan 28 to Feb 4.

**Current Outages:**

Main Unit 15, 16, and Transformer 8 forced out of service due to high levels of combustible gas in the transformer oil. Return to service ~6/6/2013.

Fish Unit 2 out of service 12/3/2012 to 1/21/2013.

Fish Unit 1 out of service 12/3/2012 1/31/2013 for overhaul and digital governor installation. East Fish Ladder out of service 12/3/2012 to 1/17/2013.

**Studies:**

PSMFC, Biomark, ACE-IT scheduled site visit 1/8/2013 and 1/9/2013 for best site and cable connect for thin walled PIT Tag antennae coming this winter. Planning with project staff underway for some equipment install. Old fishlock operation stand considered for east PIT equipment.

**Research/Contractors:**

Army Dive scheduled 1/11/2013 to 1/15/2015 for removal of derelict USGS antennas and cables from sluiceway; hydroacoustic transducers at all 22 Main Units; a PNNL hydrophone on pier of Main Unit 1 or Main Unit 2, and ; 45' I-beams at Main Unit 1, 5, and 19. The transducers are located a depth of ~ 85' (~73' elevation). Divers will access by boat.

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

	Temp:		Secchi:
	42.7	SUN	5.0
	42.4	MON	5.0
	42.2	TUES	5.0
	42.0	WED	5.0
	41.5	THUR	5.0
	41.2	FRI	5.0
	40.9	SAT	5.0
AVG:	41.8	AVG:	5.0

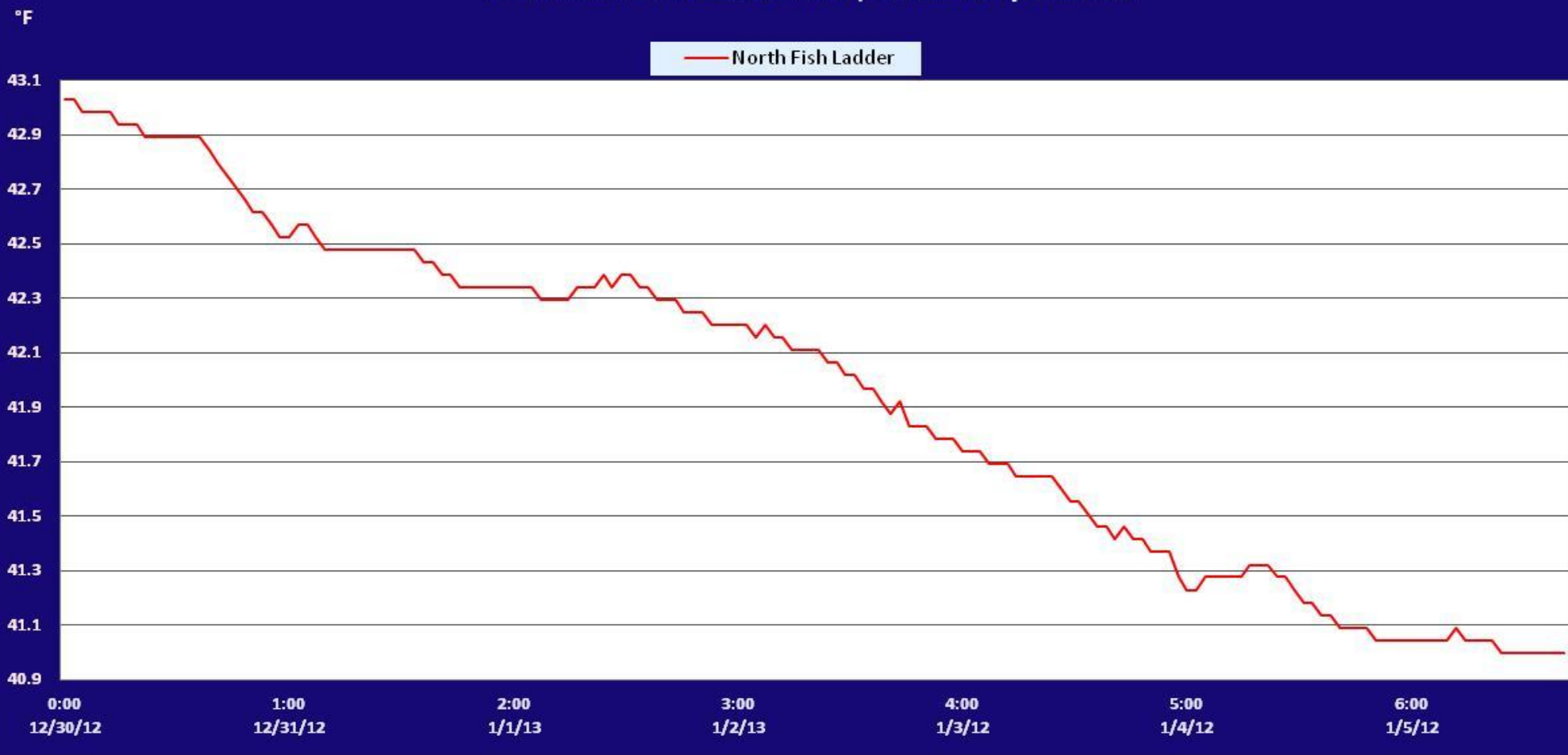
The Dalles Dam Daily Readings and Averages for  
Temperatures, Secchi, Entrances, and Spill

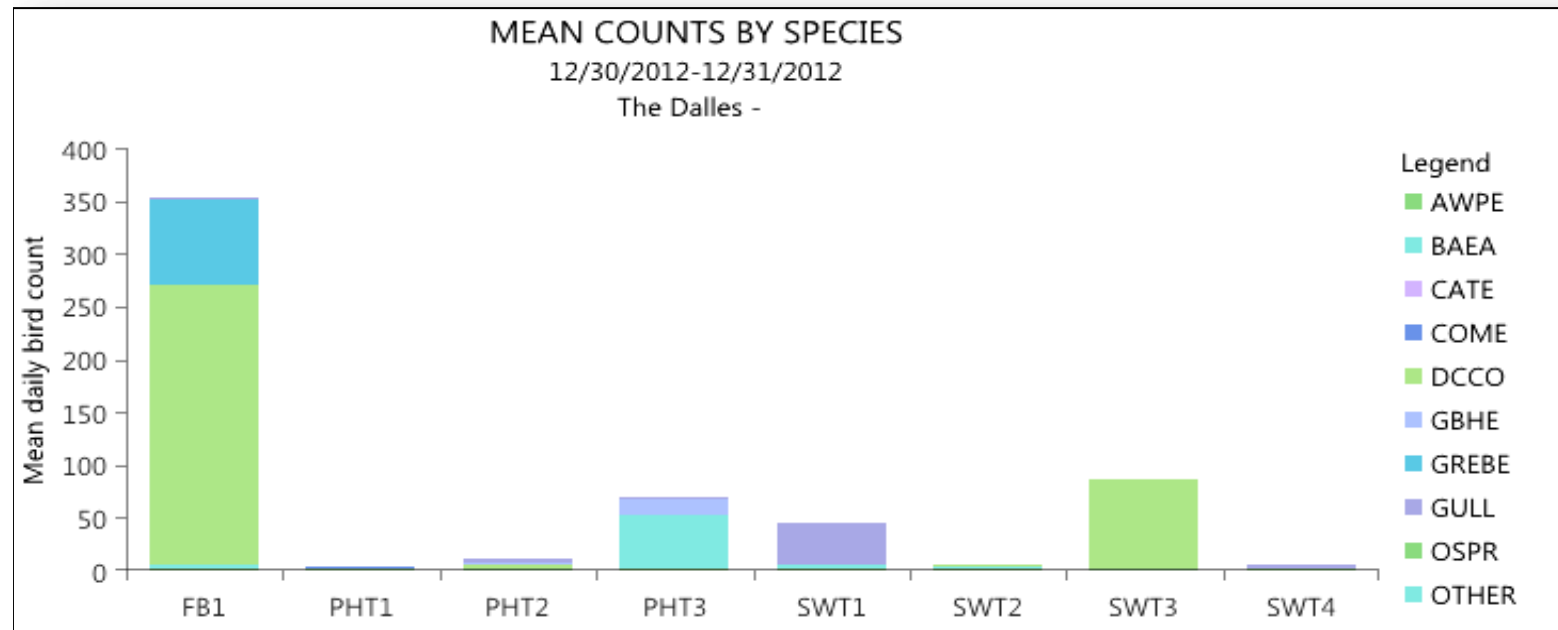
North Fish Ladder			East Fish Ladder												
<b>North Entrance</b>			<b>East Entrance</b>					<b>West Entrance</b>				<b>South Entrance</b>			% Spill
Date:	Differential	N1 Depth	Differential	E1Depth	E2 Depth	E3 Depth	JP 6	Differential	W1Depth	W2 Depth	W3 Depth	Differential	S1 Depth	S2 Depth	
12/30/12	1.4	9.0													
12/31/12	1.3	9.1													
1/1/13	1.3	9.1													
1/2/13	1.4	9.0													
1/3/13	1.4	9.3													
1/4/13	1.4	9.1													
1/5/13	1.1	9.2													
<b>AVG:</b>	1.3	9.1													

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



### North Adult Fish Ladder River/Water Temperatures

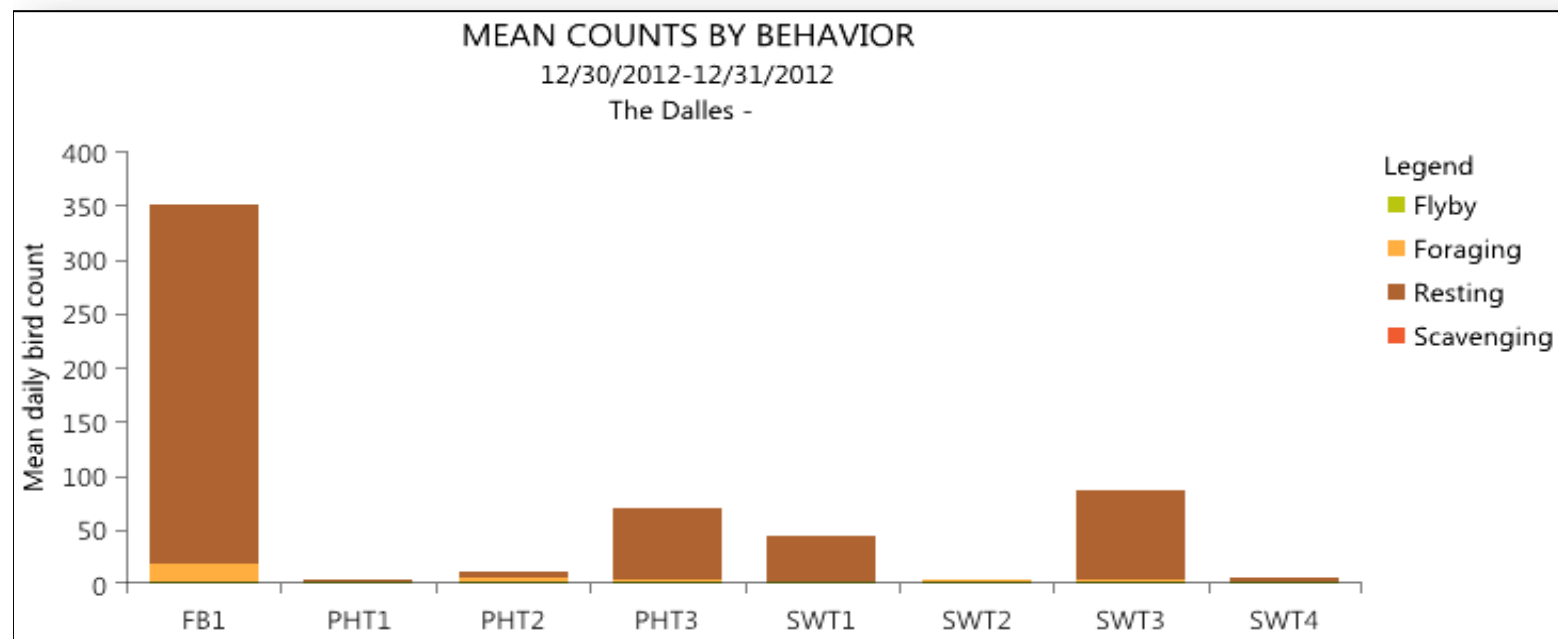




American White Pelican - (AWPE); Bald Eagle - (BAEA); Caspian Tern - (CATE); Common Merganser - (COME)

Double Crested Cormorant - (DCCO); Great Blue Heron - (GBHE); Grebe - (GREBE);

Gull - all species (GULL); Osprey (Ospr)



# The Dalles Dam Maximum Daily Bird Observations

Washington Shore

FB1

PH-T1

PH-T2

SW-T1

PH-T3

SW-T2

SW-T3

SW-T4

Oregon Shore





New diffuser grating installed in the west entrance.