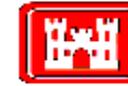


# The Dalles Dam Fishway Status Report

Date: 01/19/2014  
 Inspection Period: 01/12/2014-01/18/2014

## 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

Fishways are inspected once daily during the winter.

The Dalles Dam	Inspections Out of Criteria	Criteria Limit	Total Number of Inspections: 7	Temperature: 40.0 F
			Comments	Secchi: 5.5 feet
<b>NORTH FISHWAY</b>			North fishway dewatering scheduled for Feb4.	
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 9.1	
Entrance weir N2		Closed	Bulkhead installed.	
PUD Intake differential	0	≤ 0.5'		
<b>EAST FISHWAY</b>			East Fishway dewatered for annual maintenance. Possible return next week.	
Exit differential		≤ 0.5'		
Removable weirs 154-157		Per forebay		
Weir 158-159 differential		1.0' ± 0.1'		
Count station differential		≤ 0.3'		
Weir crest depth		1.0' ± 0.1'		
Junction pool weir JP6		depth (≥ 7')		
East entrance differential		1.0' - 2.0'		
Entrance weir E1		No criteria		
Entrance weir E2		depth (≥ 8')		
Entrance weir E3		depth (≥ 8')		
Collection channel velocity		1.5 - 4 fps		
Transportation channel velocity		1.5 - 4 fps		
North channel velocity		1.5 - 4 fps		
South channel velocity		1.5 - 4 fps		
West entrance differential		1.0' - 2.0'		
Entrance weir W1		depth (≥ 8')		
Entrance weir W2		depth (≥ 8')		
Entrance weir W3		No criteria		
South entrance differential		1.0' - 2.0'		
Entrance weir S1		depth (≥ 8')		
Entrance weir S2		depth (≥ 8')		
<b>JUVENILE PASSAGE</b>				
Sluiceway operation	0	units 1 & 18	End gate closed; 2 sluiceways open to forebay.	
Turbine trashrack drawdown		<1.5', wkly	No unit priority for winter	
Spill volume		40%, 24hr		
Spill Pattern		per FPP		
Turbine Unit Priority		per FPP		
Turbine 1% Efficiency		per FPP		

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

Bird observation data collected once daily. Up to 39 eagles foraging/roosting at Westick park. Many shad carcasses below roosting trees. See avian zones map and distribution details.

**Operations:**

East fishway dewatered for maintenance. North fishway in full operation. Sluiceway closed through Feb28. No unit priority.

**Current Outages:**

East fish ladder out of service for annual maintenance. Possible return late next week.

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

Fish unit F1 out of service to for annual maintenance. Possible return late next week.

Fish unit F2 out of service to Feb3 for overhaul and digital governor installation

**Maintenance:**

Maintenance on lower fishway completed. Entrance bulkheads removed and equalized to tailwater.

Winter maintenance work; west entrance diffiser grating attachment complete, east exit weir 159 rehab installed with final touches remaining, east exit deck drains cleaned and leak repair in progress, north entrance sill dive Jan 8 to remove gravel complete.

Plans underway to build new weir to replace 158 or 159 next year. Elevating priority of east fishway dewatering pump upgrades due to recent discovered electrical conduit failures.

North fishway scheduled dewatering Feb4.

**Studies:**

**PIT** - Temporary Thin Wall PIT tag antenna in operation. North antenna possible to be repositioned early Feb. PSMFC investigating feasibility of PIT antenna installation in ice trash sluiceway channel. PSMFC sent proposal to BPA Dec13.

**EFL** - Plan includes 10' dia. pipe through dam to AWS conduit under east fishladder and 5' intake peir noses with trashracks. Construction start winter '14/'15. ROV inspection of planned caisson location in forebay completed Jan14.

**PUD** - Modification of original FERC license underway for additional north turbine. No new developments.

**Lamprey** - Plating mods in lower east weirs completed early. Final inspection completed Jan8. Refer to Pic tab.

**Research/Contractors:**

University of Idaho in overwintering steelhead portion of their study. Planning underway to improve 2 antenna power sources for OHSA compliance.

Removal last set of 3 derelict Vertical Barrier Screens (VBS) from MU 12 gatewell slot scheduled week of Aug11. CRFM funding support expected.

Planning for dive removal of remaining pier nose USGS antennas week of Feb19-21 with Feb25-26 as backup. JSAT pipes removal next year.

USFWS camera equipment for lamprey monitoring at east count station removed. North count station equipment removal in Feb.

Portland District FFDRWG meeting scheduled for Feb 6th from 0900 - 1400 hrs.

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



# The Dalles Dam Avian Zones

Washington Shore

FB1

PH-T1

PH-T2

SW-T1

PH-T3

SW-T3

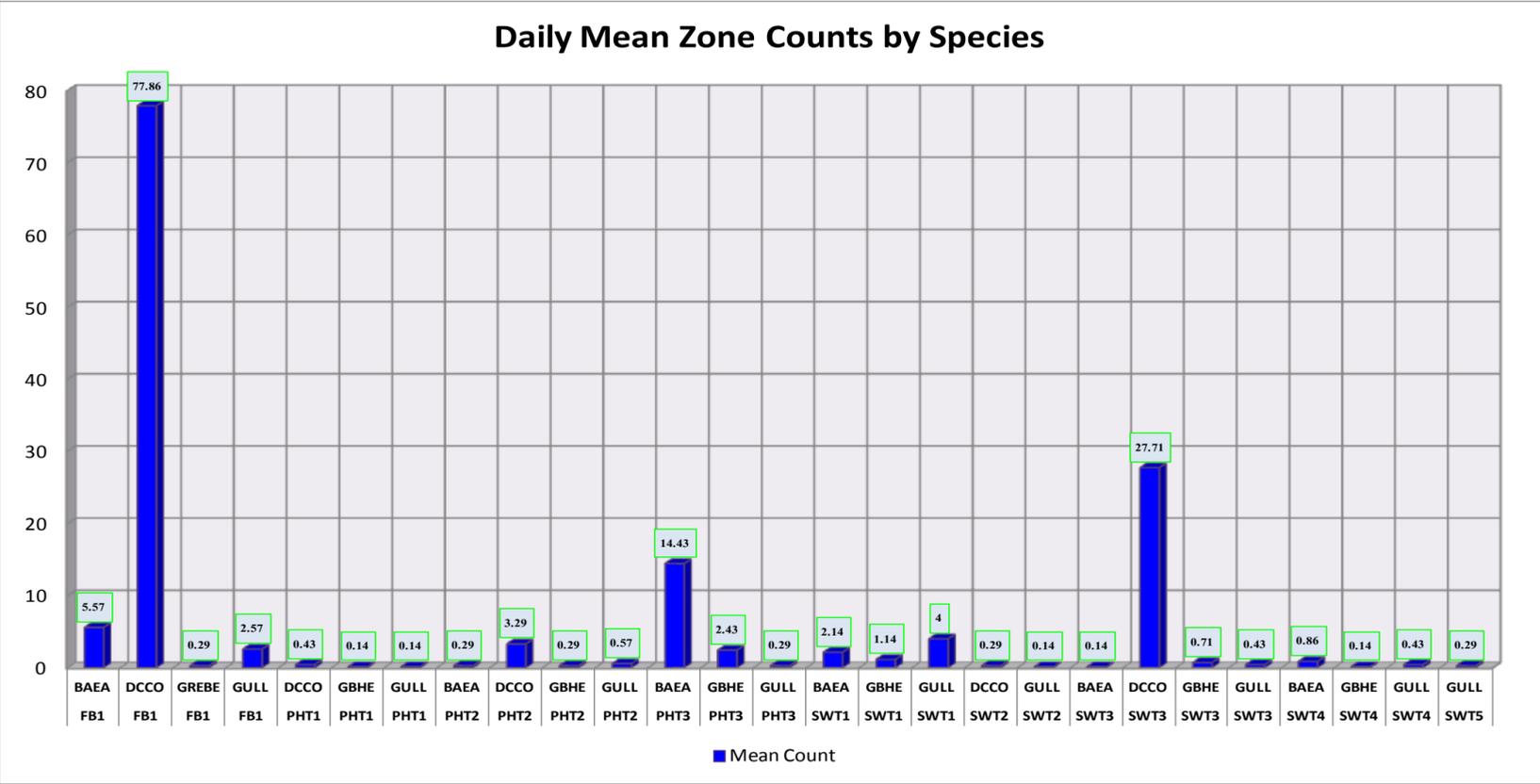
SW-T2

SW-T4

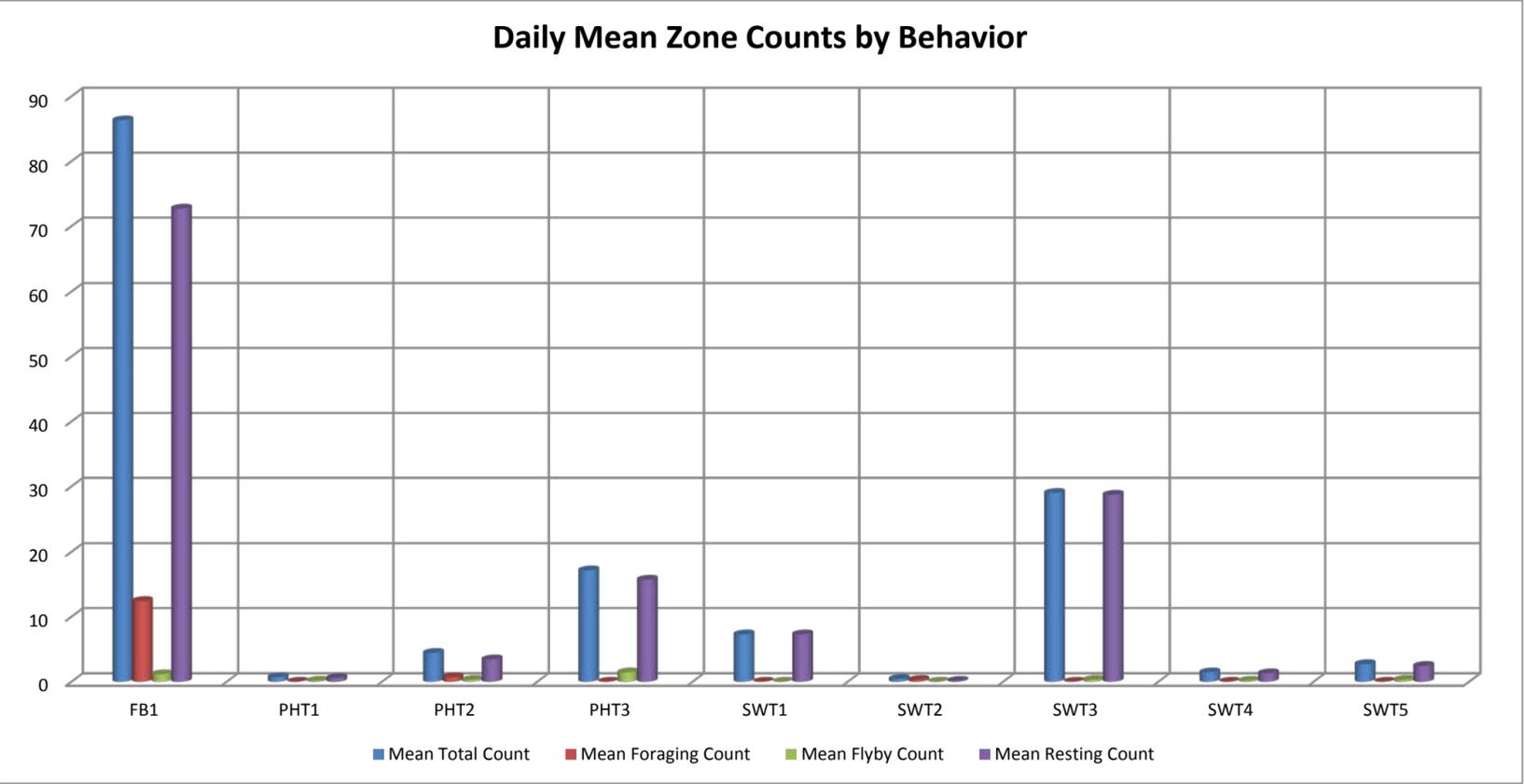
SW-T5

Oregon Shore

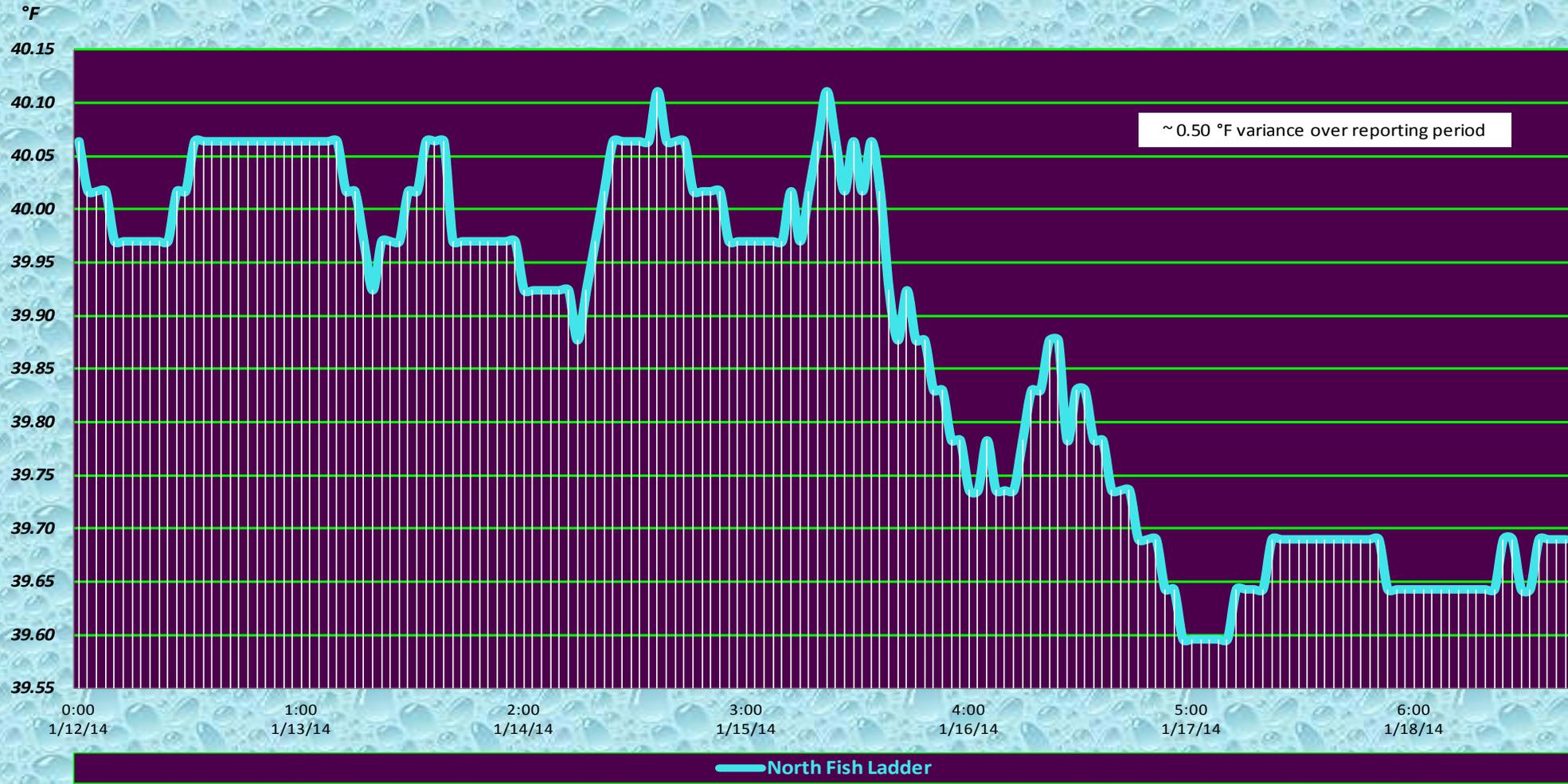




BAEA - Bald Eagle; COME - Common Merganser; DCCO - double crested cormorant; GBHE - Great Blue Heron; GREBE - Grebe; Gull- Gull (all species)



# The Dalles Dam North Adult Fish Ladder Water/River Temperatures



Temp:		Secchi:	
40.1	SUN	5.5	
40.1	MON	5.5	
40.2	TUES	5.5	
40.1	WED	5.5	
39.9	THUR	5.5	
39.7	FRI	5.5	
39.7	SAT	5.5	
AVG: 40.0	AVG:	5.5	

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

= out of criteria

North Fish Ladder			East Fish Ladder											S P I L L  O N  S E A L	
North Entrance			East Entrance				West Entrance				South Entrance				
Date:	Differential	N1 Depth	Differential	E1Depth	E2 Depth	E3 Depth	JP 6	Differential	W1Depth	W2 Depth	W3 Depth	Differential	S1 Depth		S2 Depth
12-Jan-14	1.4	9.1													
13-Jan-14	1.4	9.1													
14-Jan-14	1.4	9.1													
15-Jan-14	1.3	9.2													
16-Jan-14	1.4	9.1													
17-Jan-14	1.4	9.0													
18-Jan-14	1.4	9.1													
<b>AVG:</b>	<b>1.4</b>	<b>9.1</b>									closed				

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Lamprey perspective of the new weir orifice attachment plates in lower east fishladder.