

The Dalles Dam Fishway Status Report

Date: 01/05/2014
 Inspection Period: 12/29/2013-01/04/2014

THE DALLES DAM



**US Army Corps
 of Engineers**
 Portland District

The Dalles Project-Fisheries
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Fishways are inspected once daily during the winter.

The Dalles Dam	Inspections Out of Criteria	Criteria Limit	Total Number of Inspections: 7	Temperature: 40.2 F
			Comments	Secchi: 5.5 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 1.3	
Entrance weir N1	0	depth (≥ 8')	Average 9.3	
Entrance weir N2		Closed	Bulkhead installed.	
PUD Intake differential	0	≤ 0.5'		
EAST FISHWAY			East Fishladder dewatered for annual maintenance through Feb3	
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')		
JUVENILE PASSAGE				
Sluiceway operation	0	units 1 & 18	End gate closed; sluiceways open for equalization	
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. Foraging decreasing from fall numbers. Eagle foraging and roosting at Westick increased from last week. See avian zones map and distribution tabs. One sealion observed at 0915 hrs. Jan. 3 near east fishladder west entrance. There were no visible markings.

Operations:

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

Current Outages:

East Fish Ladder OOS 12/3/2013 to 2/3/2013 for /Annual Maintenance
T8 (MU15 & MU16) de-rated to single unit full load ops through 9/14/2017
F1 OOS 12/2/2013 to 2/3/2013 for Annual
F2 OOS 12/2/2013 to 2/3/2013 for O/H and Digital Governor

Maintenance:

Fishway winter maintenance dewatering schedule delayed to Feb3 for lamprey plating installation delay in the lower section of the east ladder;
North fishway dewatering Feb4 through Feb28.
Winter maintenance work; west entrance grating attachment upgrade completed, east exit weir 159 upgrades in progress, east exit deck leak repair in progress, west entrance wheel replacement in Jan, north entrance sill dive Jan 8 to remove gravel buildup.
North entrance sill dive for clearing debris planned for Jan 9. Pre-meeting in Westrick 0800 same day.
Plans underway to build new wier to replace 158 or 159 next year.

Studies:

PIT - Temporary Thin Wall PIT tag antenna in operation. North antenna to be repositioned early Feb when dry. PSMFC investigating feasibility of PIT antenna installation on ice trash sluiceway channel. Project providing prints as needed.

EFL - Plan is for 10' dia. pipe through dam to AWS conduit under east fishladder. Construction start winter '14/'15.
Investigating introducing water through fishlock channel into junction pool rather than into AWS.

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

Lamprey - Plating mods in 14 lower east ladder weir orifices delayed. Target completion Feb2. Objective is to improve lamprey passage conditions.

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) in MU 12 gatewell slot as funding becomes available.
Plans underway for dive removal of remaining pier nose USGS antennas week of Feb17. JSAT antenna pipe removal postponed.
USFWS camera equipment for lamprey monitoring at both count stations to be removed by project fisheries.

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

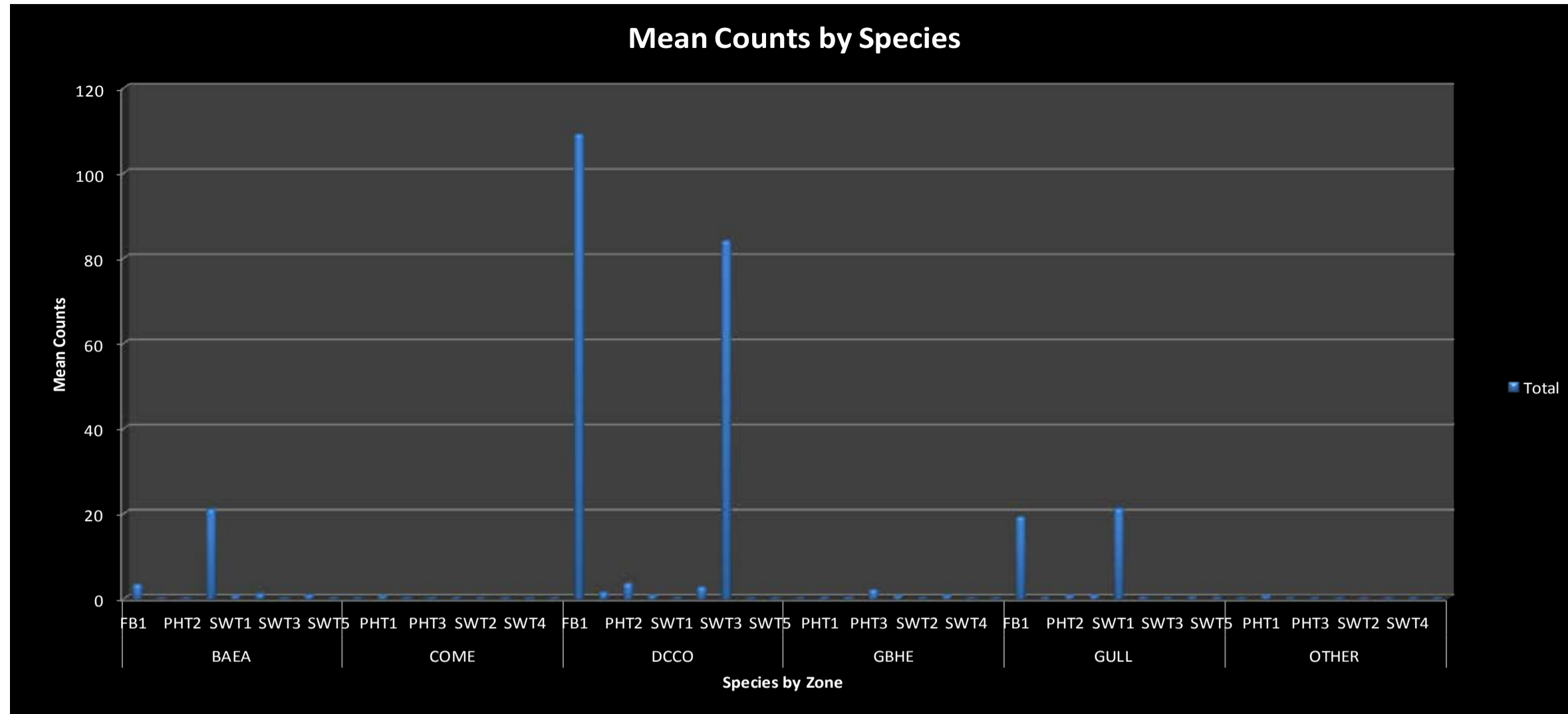
SW-T2

SW-T4

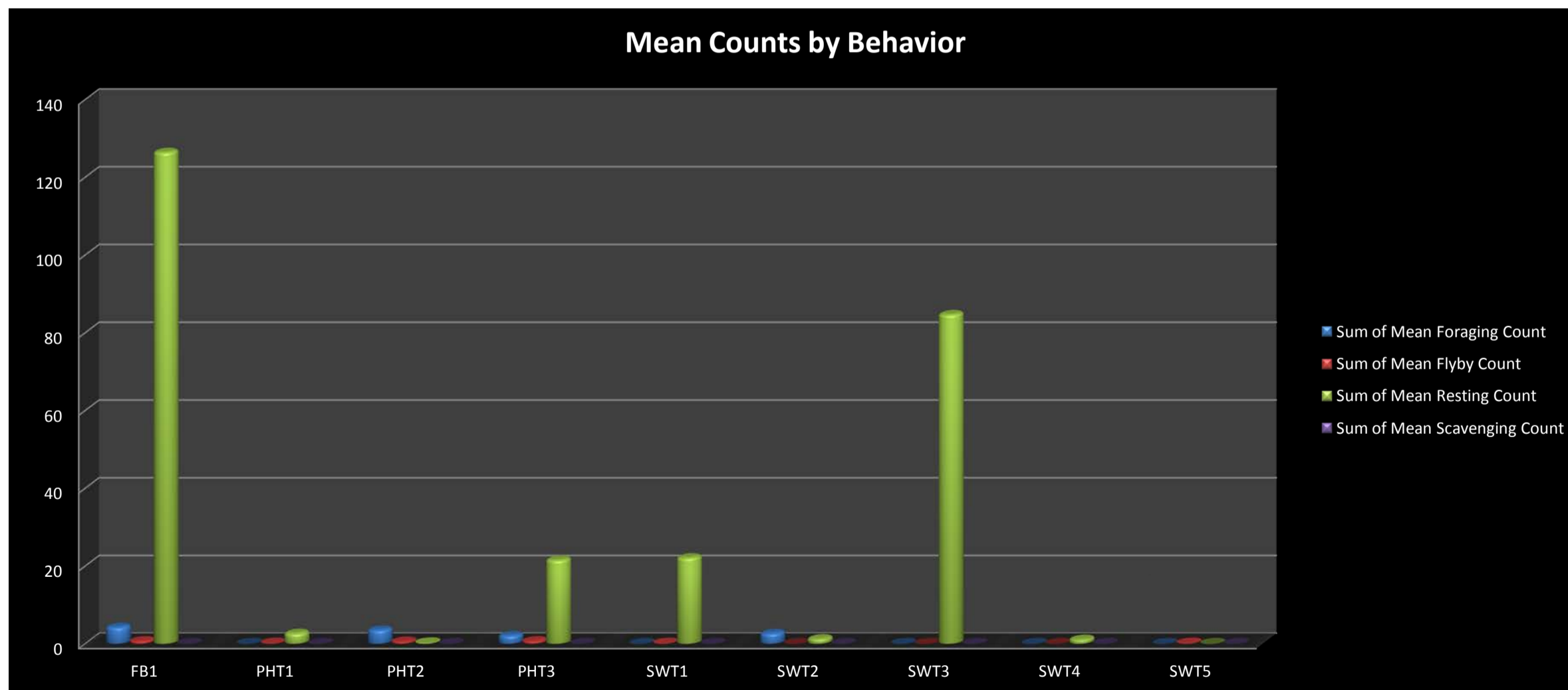
SW-T5

Oregon Shore

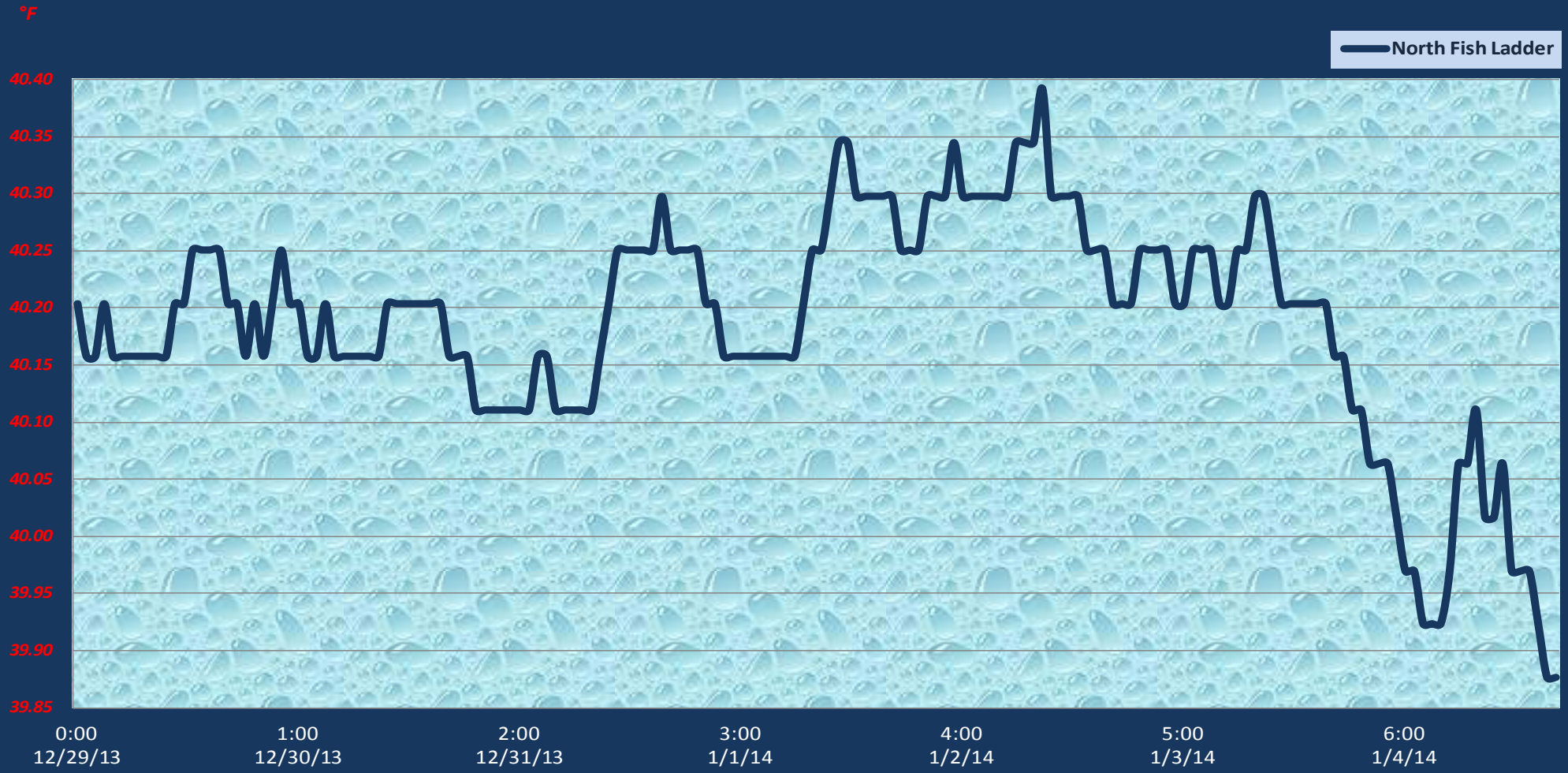




BAEA - Bald Eagle; COME - Common Merganser; DCCO - double crested cormorant; GBHE - Great Blue Heron; GREBE - Grebe; Gull- Gull (all species)



The Dalles Dam North Adult Fish Ladder River/Water Temperatures



Temp:		Secchi:	
40.1	SUN	5.5	
40.1	MON	5.5	
40.1	TUES	5.5	
40.2	WED	5.5	
40.3	THUR	5.5	
40.3	FRI	5.5	
40.1	SAT	5.5	
AVG: 40.2	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
29-Dec-13	1.4	9.1													
30-Dec-13	1.3	9.3													
31-Dec-13	1.4	9.2													
1-Jan-14	1.3	9.7													
2-Jan-14	1.4	9.0													
3-Jan-04	1.3	9.3													
4-Jan-14	1.3	9.3													
AVG:	1.3	9.3									closed				