

The Dalles Dam Fishway Status Report

Date: 01/12/2014
 Inspection Period: 01/05/2014-01/011/2014

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: 39.9 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 1.4	
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. Eagle foraging and roosting at Westick similar to last week with a maximum of 39. Public eagle watch held at Suefert Jan11. 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 to 2/3/2014 for annual maintenance.
T8 (MU15 & MU16) de-rated to single unit full load ops
Fish unit F1 out of service until 2/3/2013 for annual maintenance
Fish unit F2 out of service until 2/3/2013 for overhaul and digital governor installation

Maintenance:

East fishway dewatered to Feb3 for lamprey plate contract work and maintenance. North fishway scheduled dewatering Feb4-Feb28.
Winter maintenance work; west entrance diffiser grating attachment complete, east exit weir 159 upgrades in progress, east exit deck leak repair in progress, west entrance wheel replacement delayed, north entrance sill dive Jan 8 to remove gravel buildup complete.
Plans underway to build new weir to replace 158 or 159 next year. Plans for east fishway dewatering pump upgrades due to failing electrical conduit.

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 on ice trash sluiceway channel. Project providing prints as needed.

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.

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

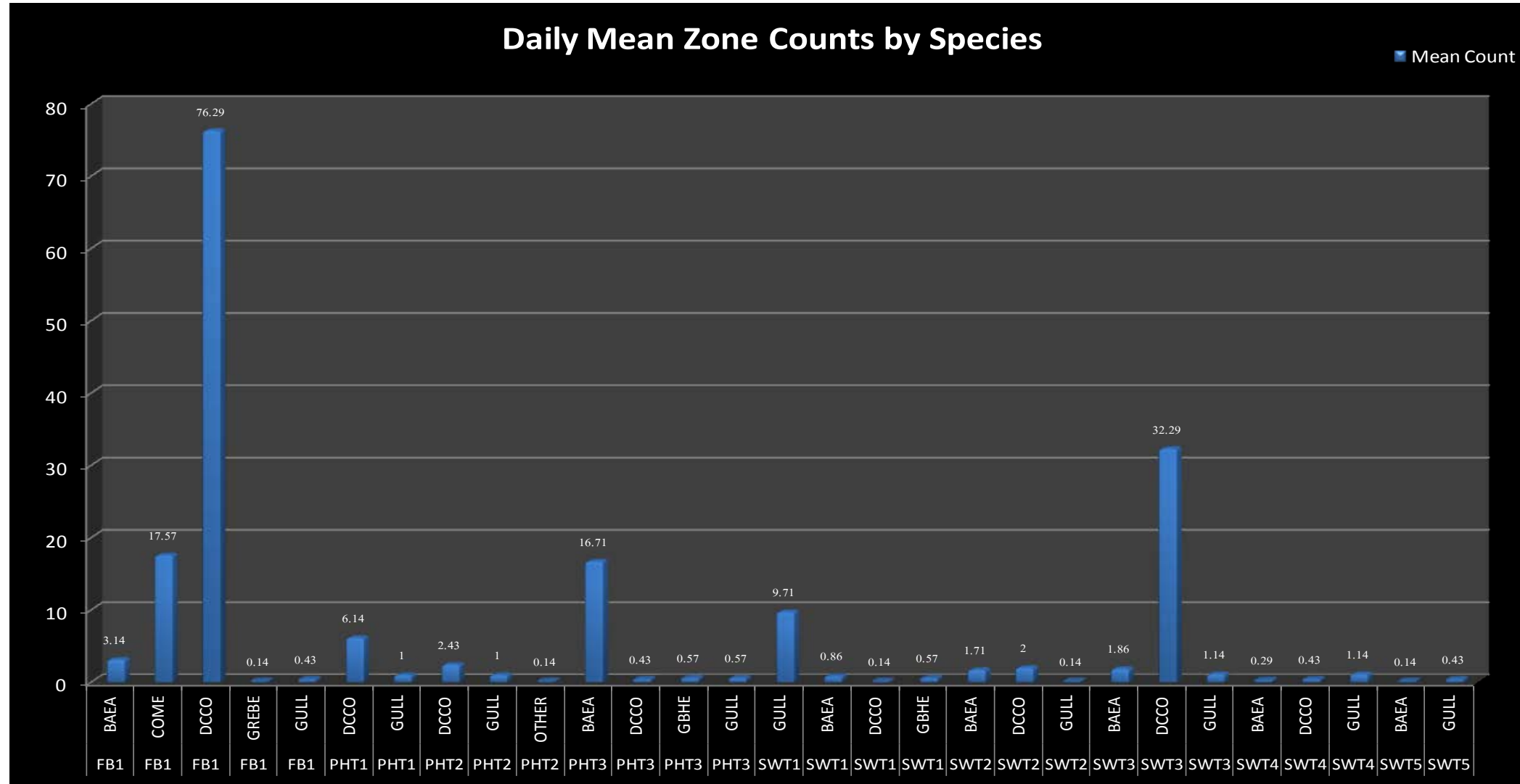
SW-T2

SW-T4

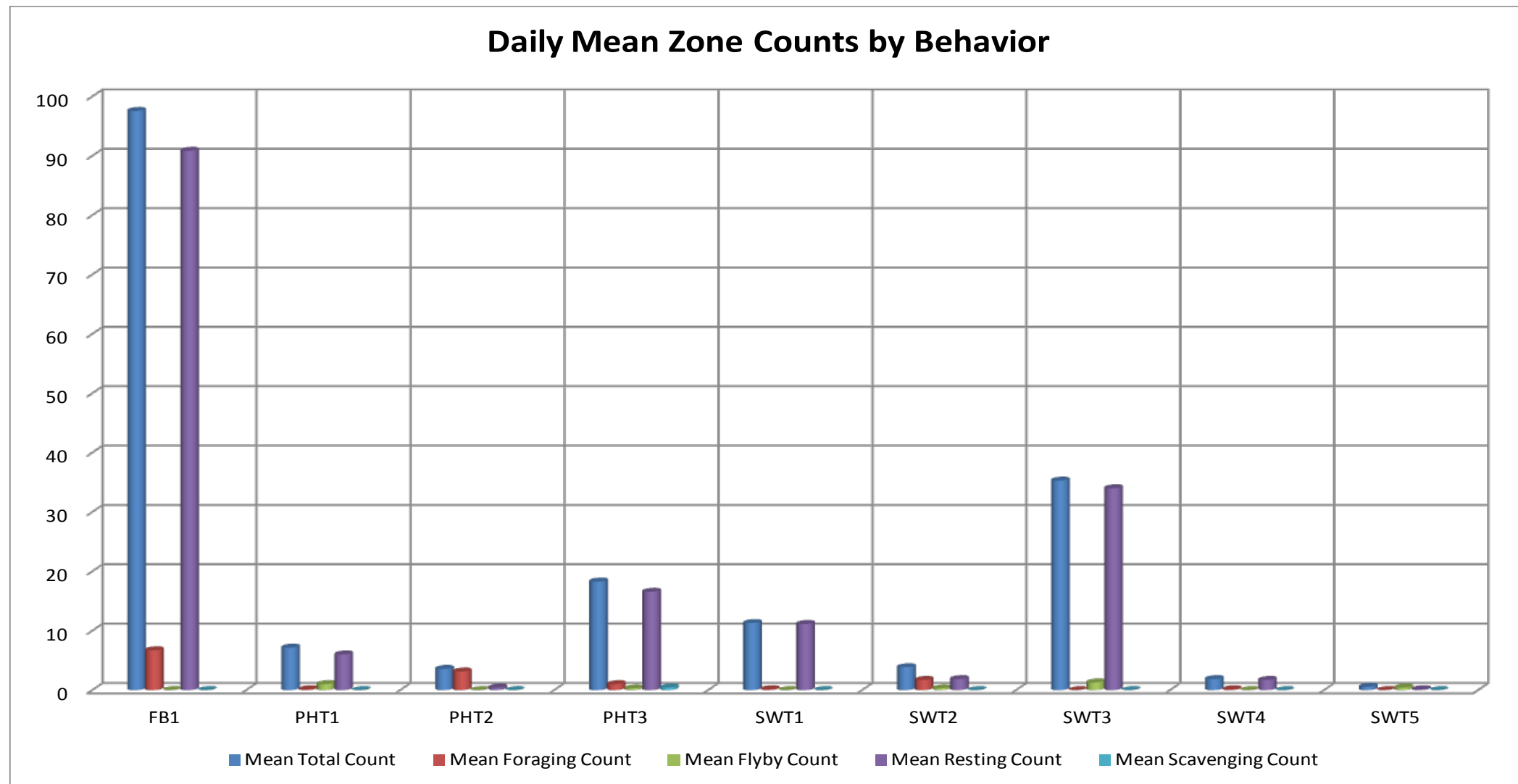
SW-T5

Oregon Shore

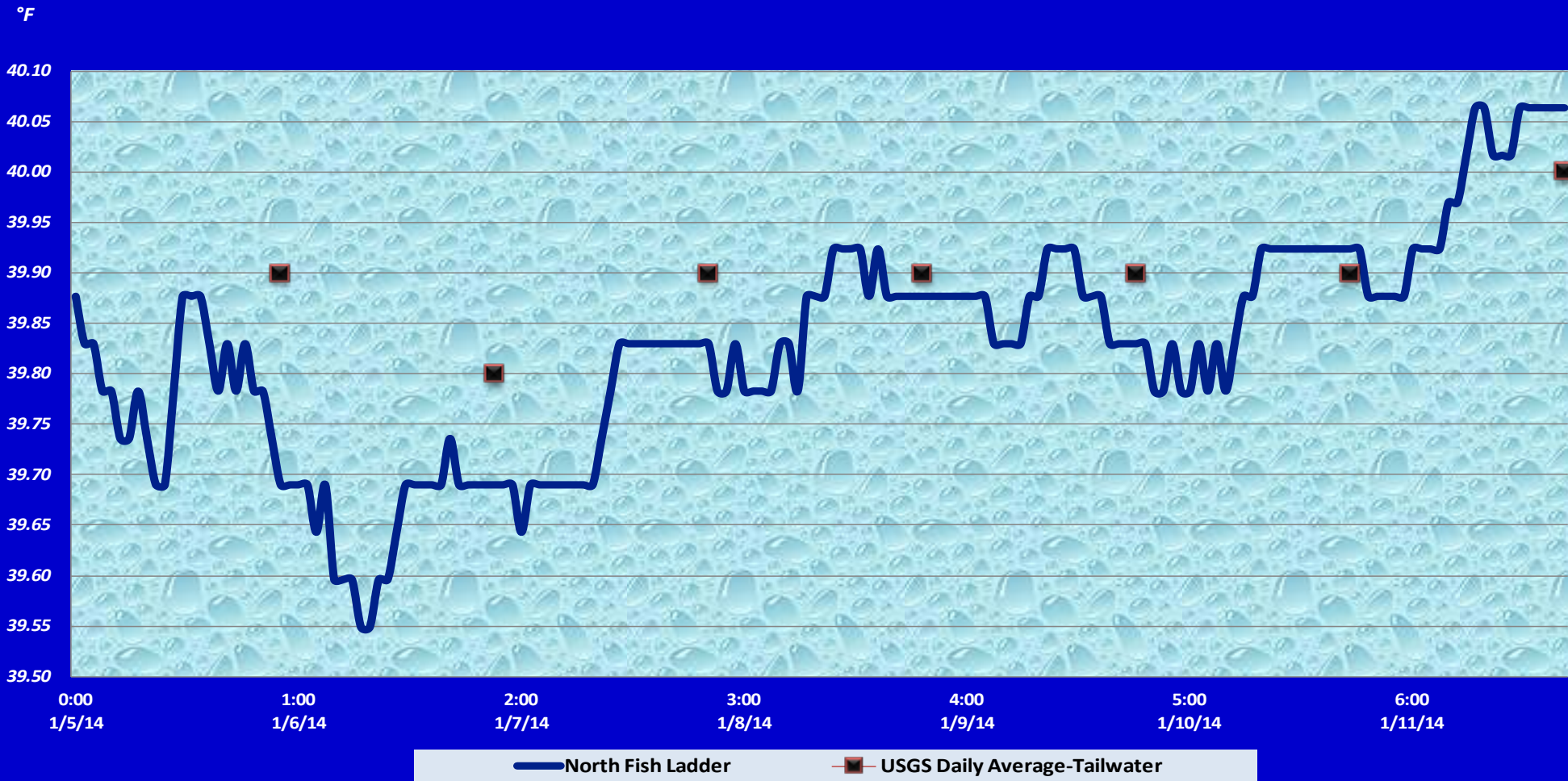




BAEA - Bald Eagle; COME - Common Merganser; DCCO - double crested cormorant; GBHE - Great Blue Heron; GREBE - Grebe; Gull- Gull (all species)



The Dalles Dam North Adult Fish Ladder River/Water Temperatures



Temp:		Secchi:	
39.9	SUN	5.5	
39.8	MON	5.5	
39.9	TUES	5.5	
39.9	WED	5.5	
39.9	THUR	5.5	
39.9	FRI	5.5	
40.0	SAT	5.5	
AVG: 39.9	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
5-Jan-14	1.3	9.2													
6-Jan-14	1.4	9.1													
7-Jan-14	1.4	9.1													
8-Jan-14	1.4	9.2													
9-Jan-14	oos/dive														
10-Jan-14	1.5	10.1													
11-Jan-14	1.4	9.2													
AVG:	1.4	9.3									closed				