

FISHWAY STATUS REPORT

Date: 8/26/2013
 Inspection Period: 8/18 to 08/24/2013

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

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

The Dalles Dam	Inspections	Criteria	Total Number of Inspections:	21	Temperature:	71.9 F
	Out of Criteria	Limit	Comments		Secchi:	5.3 Ft.
NORTH FISHWAY						
Exit differential	0	≤ 0.5'				
Count station differential	0	≤ 0.3'	Count station window cleaned 8/18.			
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	9.6		
Entrance weir N2		Closed	Bulkhead installed.			
PUD Intake differential	0	≤ 0.5'				
EAST FISHWAY						
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'	Raked east count station picket leads daily. Window cleaned 8/18, 8/19.			
Weir crest depth	0	1.0' ± 0.1'				
Junction pool weir JP6	0	depth (≥ 7')	Manually adjusted as needed.			
East entrance differential	0	1.0' - 2.0'	Average	1.5		
Entrance weir E1	0	No criteria	Average	10.2	Manually adjusted.	
Entrance weir E2	0	depth (≥ 8')	Average	12.8		
Entrance weir E3	0	depth (≥ 8')	Average	12.2		
Collection channel velocity	0	1.5 - 4 fps	Average	2.1	See Velocities tab for more complete information.	
Transportation channel velocity	0	1.5 - 4 fps	Average	2.2		
North channel velocity	0	1.5 - 4 fps	Average	2.7		
South channel velocity	0	1.5 - 4 fps	Average	2.9		
West entrance differential	1	1.0' - 2.0'	Average	1.2	Low tailwater. Out of criteria by 0.1'; manually adjusted.	
Entrance weir W1	0	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	1.3	Daily differentials & weir depths, see AVGS tab.	
Entrance weir S1	1	depth (≥ 8')	Average	8.2	Low tailwater. Out of criteria by 0.1'; manually adjusted.	
Entrance weir S2	0	depth (≥ 8')	Average	8.2		
JUVENILE PASSAGE						
Sluiceway operation	0	units 1,8,18				
Turbine trashrack drawdown	0	<1.5', wkly	Range:	0.3' - 0.5'		
Spill volume	1	40%, 24hr	Out of criteria at 37.3% 8/21 pm inspection; the 24hr. average for the day was 40%.			
Spill Pattern	0	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

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

Bird observation data collected twice daily. Bird numbers are low, the majority of piscivorous birds are gulls upstream and downstream of the bridge. See avian zones map and distribution tabs. There were no sea lion sightings this week.

Operations:

Main Unit 15, 16, and T8 limited to 120 MW and 50MVAR; forced through ~1700 8/21/2013

MU9 out of service 0600 7/15/2013 to 1700 8/22/2013 for digital governor installation.

MU5 out of service 0600 7/15/2013 to 1700 8/22/2013 for five year over haul.

MU21 out of service 0600 8/5/2013 to 1700 9/19/2013 for digital governor installation.

MU4 out of service 0600 8/20/2013 to 1700 8/21/2013 for turbine shaft oil leak repair.

Maintenance:

Calibration completed 8/21; W2, east channel and tailwater OOC by 0.15', 0.5', 0.5'. TDE repaired.

Fishway grating attachment parts ordered for resecure west entrance grating during winter maintenance dewatering.

West entrance weirs lift beam and weir wheel replacement planned as funding allows. Still operational.

PUD rake repair complete. Debris loading low.

Minor automation problems with east entrance E2. Electricians corrected.

All fishways in operation according to the Fish Passage Plan.

Spill response team practice scheduled for the 8/29. Priority to protect fishway exits from upstream oil spills.

Sluiceway 1-3 lift beam drags in flow at >159' forebay. Not considered fish impact, but possible debris buildup. Investigation underway to correct.

Studies:

PIT - Temporary Thin Wall PIT tag Antenna continues to work successfully. Minor shad paneling repair planned for winter.

EFL - Current design 10' intake pipe near fish lock. Value Engineering (VE) study completed and some proposals accepted.

PUD - "Freedom" turbine proposal out for review. Pursuing modification of original FERC license. Public meeting and site tour planned 9/11.

Lamprey - Lamprey improvements; PDT developing weir orifice floor plating in lower ladders to improve lamprey passage through high velocity areas. Also investigating feasibility of having a holding tank on project to hold collected lamprey for Tribes.

Research/Contractors:

Fisheries updating FY14 USDA annual work plan including hazing of piscivorous birds to reduce avian predation on juvenile salmonids, controlling nuisance birds and animals, and hazing pinnipeds.

The Inland Avian Predation Work Group (IAPWG) occurred August 21st Westrick Center. Focus on nesting habitat abatement in NWW district.

Nez Perce concluded summer lamprey trapping for restocking efforts. 54 adults collected from The Dalles. All other tribal collections complete.

ODFW and Pacific States Marine Fisheries Commission collecting gut samples of pikeminnow from dam anglers through August.

WDFW Columbia River Northern Pikeminnow Management Program Dam Angling continues with low catch rates. Most fishing primarily from powerhouse deck.

University of Idaho adult RT new antennas both fish ladders completed and operating. Plans to clean up unused antennas this winter.

Normandeau fish counters continue 16/day fish counts through October. Chinook and steelhead passage steadily increasing. Peak expected around mid September.

Derelict USGS I-beams on pier noses to be removed by project maintenance. Plans to remove remaining pier nose antennas this winter by dive.

Removed derelict Vertical Barrier Screen (VBS) panels from gatewell slot on unit 5 leftover from early 90s screen bypass research.

Checking with other projects if usable. One more set of 11 panels to be removed as time allows.

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

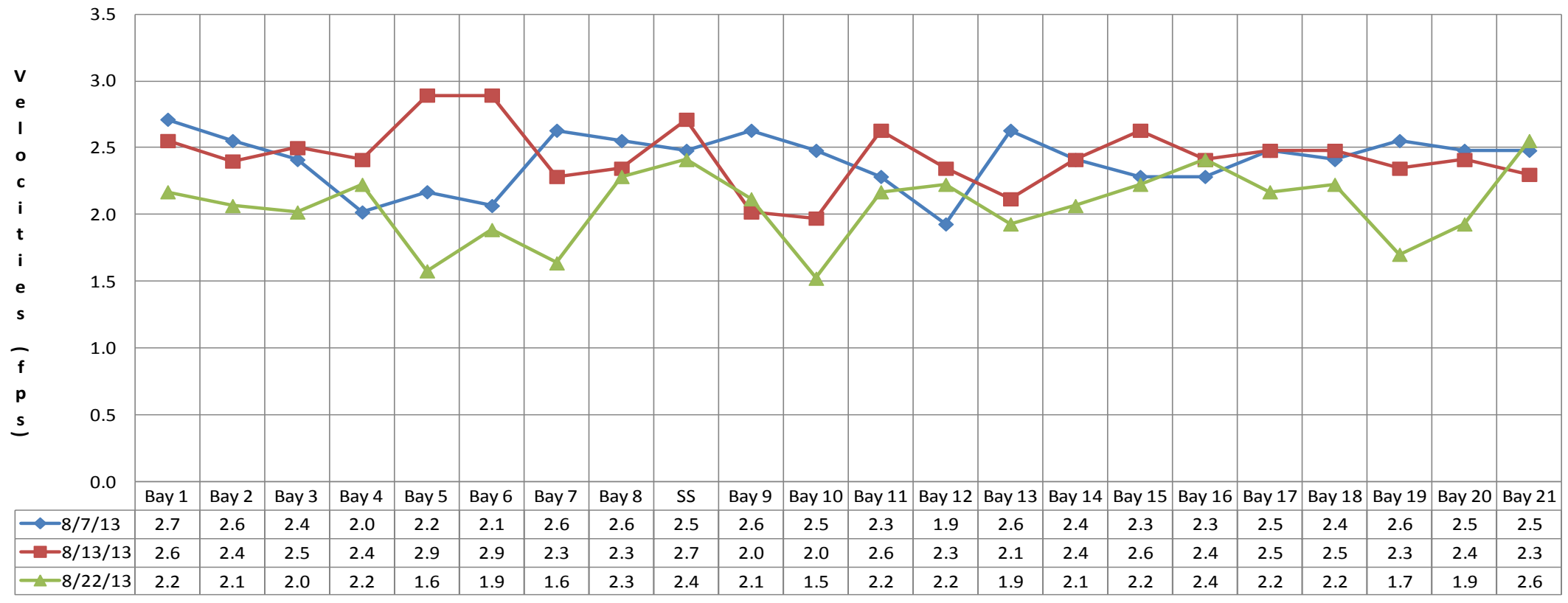
DART The Dalles Adult Ladders Daily Usage with Spill Percent and Outflow

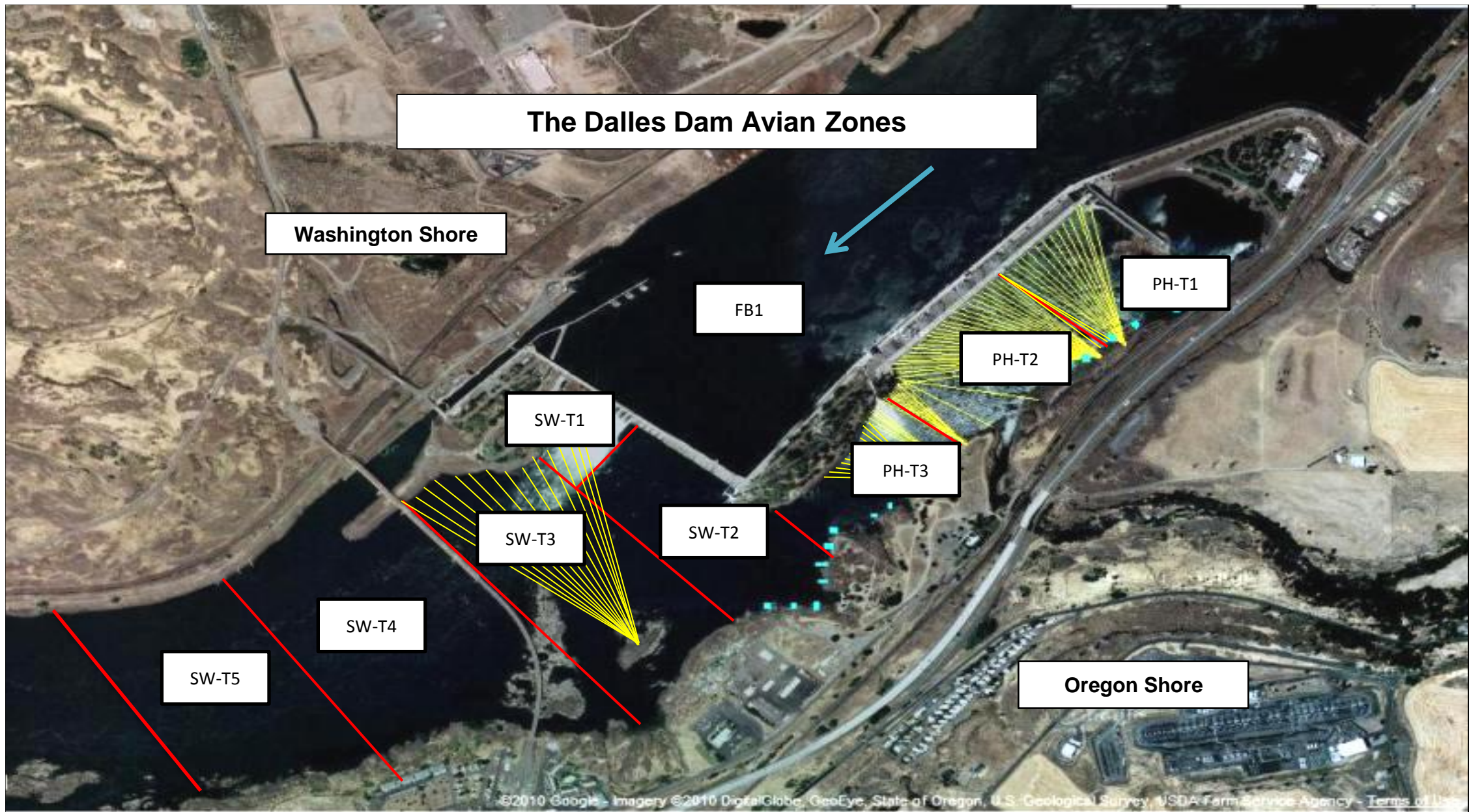
Date	Chinook				Jack Chinook				Steelhead				Steelhead Wild				Sockeye				Coho				Jack Coho				Lamprey				Spill Pct [Right]	Outflow (kcfs)
	Left Ladder		Right Ladder		Left Ladder		Right Ladder		Left Ladder		Right Ladder		Left Ladder		Right Ladder		Left Ladder		Right Ladder		Left Ladder		Right Ladder		Left Ladder		Right Ladder							
	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#	Pct	#						
8/18/2013	66	893	34	460	75	226	25	77	64	504	36	279	64	218	36	125	50	4	50	4		0		0		-1		0	71	25	29	10	39.7	124.5
8/19/2013	70	634	30	272	76	197	24	62	65	547	36	301	63	235	37	138	50	2	50	2	100	1	0	0		0		0	53	18	47	16	39.8	128.5
8/20/2013	55	960	45	782	80	268	20	68	52	468	48	430	49	191	51	196	100	5	0	0	86	6	14	1		0		0	47	14	53	16	40	136
8/21/2013	67	1352	33	676	74	328	26	116	52	668	48	606	53	288	47	260	100	2	0	0	88	7	13	1	0	0	100	1	44	24	56	30	39.9	132.2
8/22/2013	78	2773	22	779	87	505	13	77	73	948	27	356	72	383	28	146		0		0	100	8	0	0	100	2	0	0	60	24	40	16	39.9	128.3
8/23/2013	61	2092	39	1334	78	569	22	160	66	727	34	380	64	248	36	139	100	4	0	0	83	19	17	4	100	16	0	0	33	13	67	26	40.1	125.2
8/24/2013	65	2972	36	1637	79	690	21	182	63	720	37	428	62	248	38	152		0		0	83	19	17	4	100	5	0	0	44	20	57	26	40.3	109.6
Weekly Sum		11676		5940		2783		742		4582		2780		1811		1156		17		6		60		10		22		1		138		140		
Date	Chinook				Jack Chinook				Steelhead				Steelhead Wild				Sockeye				Coho				Jack Coho				Lamprey				Spill Pct	Outflow
YTD	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct	Left Ladder Pct	Right Ladder Pct		
	66.3	33.7	79	21	62.2	37.8	61	39	73.9	26.1	85.7	14.3	95.7	4.3	49.6																			

NOTES:

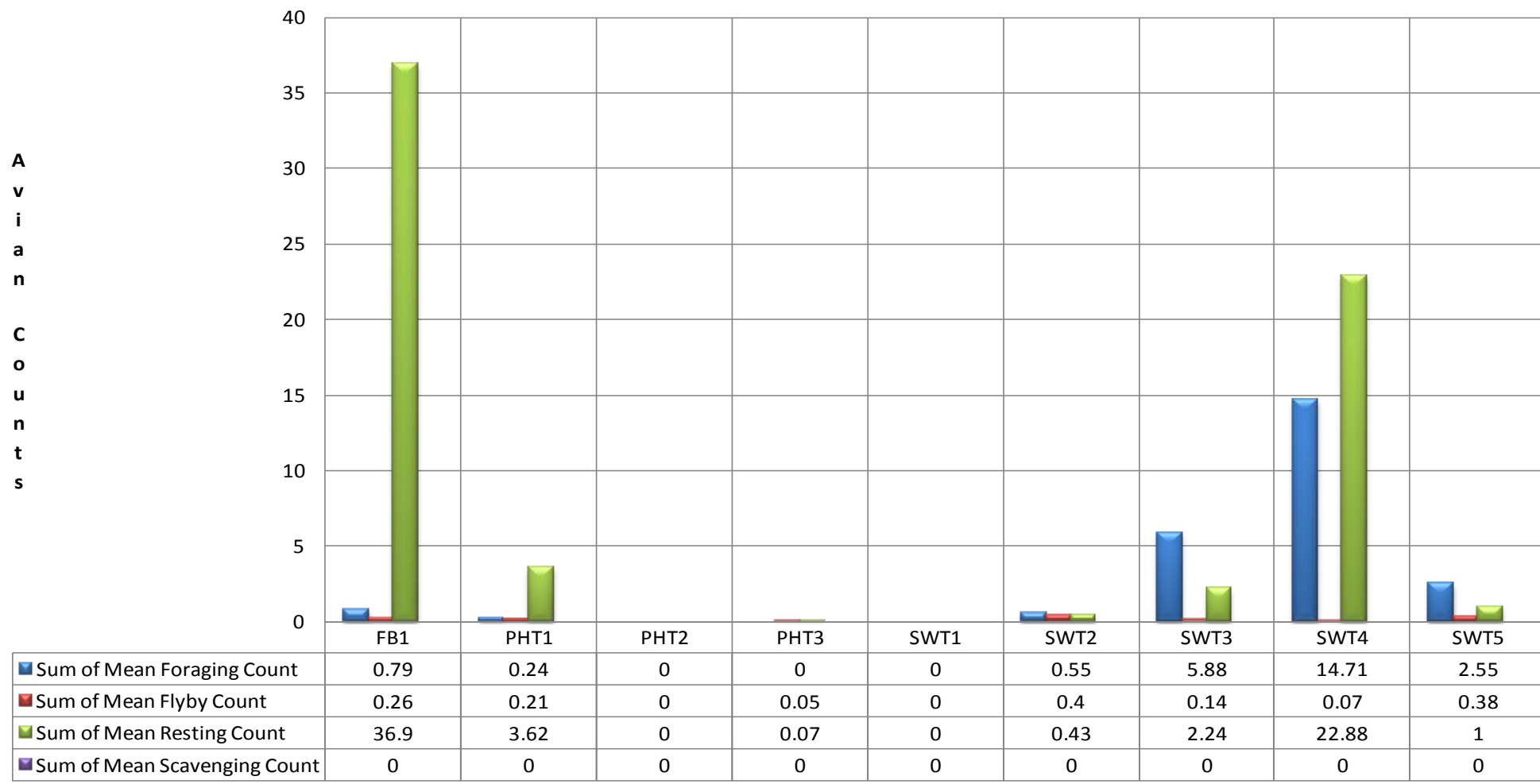
1. The species passage percent is not calculated for either ladder on a day, if either the Right Ladder or Left Ladder species count is: negative or null for the day.
2. Ladder orientations reference the side of the river when facing downstream.
3. Data Provided Courtesy of U.S. Army Corps of Engineers

The Dalles Dam Collection Channel Velocities (In criteria 1.5 - 4.0 fps)



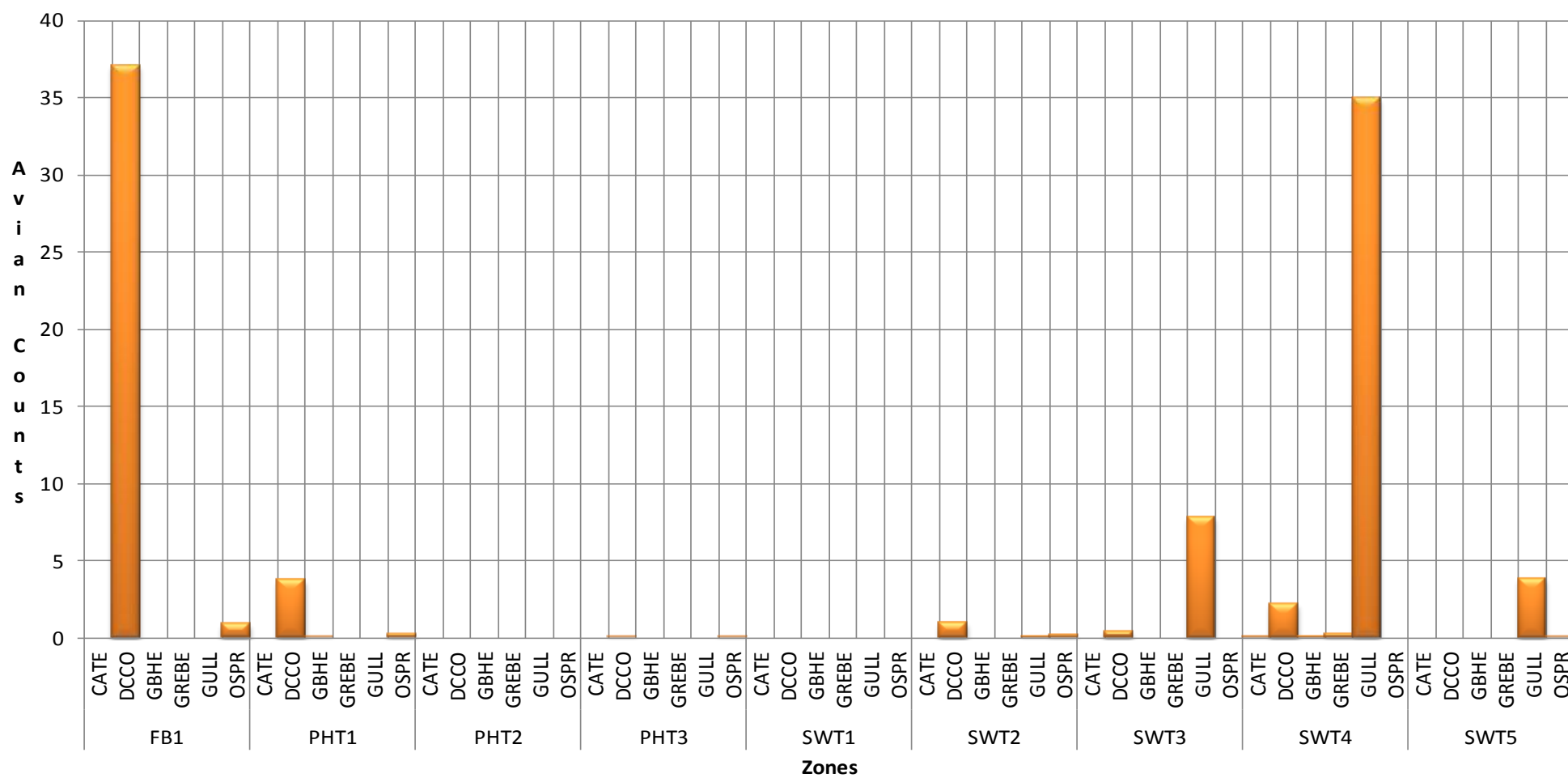


Avian Mean Counts by Behavior



AWPE - American White Pelican; BAEA - Bald Eagle; CATE - Caspian Tern; COME - Common Merganser; DCCO - double crested cormorant; GBHE - Great Blue Heron; GREBE - Grebe; GULL - Gull (all species); OSPR - Osprey

Avian Counts by Species



Temp:			Secchi:	
71.9	SUN		5.0	
71.8	MON		5.5	
71.7	TUES		5.5	
71.9	WED		5.0	
72.1	THUR		5.0	
72.1	FRI		5.5	
71.9	SAT		5.5	
AVG: 71.9	AVG:		5.3	

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

Out of Criteria

Date:	North Fish Ladder		East Fish Ladder											KCFS % 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	
18-Aug-13	1.3	9.5	1.4	8.5	12.4	12.3	7.7	1.1	8.0	8.0		1.4	8.5	8.4	39.4
18-Aug-13	1.3	9.6	1.5	9.1	12.5	12.5	7.9	1.3	8.0	8.0		1.4	8.3	8.4	39.1
18-Aug-13			1.3	9.5	13.5	13.1		1.0	8.1	8.1		1.3	8.5	8.4	
19-Aug-13	1.3	9.6	1.6	10.1	13.1	10.0	7.6	1.2	8.0	8.1		1.5	8.3	8.3	38.7
19-Aug-13	1.4	9.5	1.6	9.9	13.0	10.9	8.5	1.2	8.3	8.2		1.4	8.3	8.4	39.1
19-Aug-13			1.5	10.0	13.1	11.0		1.0	8.1	8.1		1.3	8.4	8.3	
20-Aug-13	1.4	9.5	1.8	12.9	13.0	9.9	8.7	1.2	8.1	8.2		1.4	8.3	8.3	40.3
20-Aug-13	1.3	9.6	1.4	11.1	13.1	13.1	8.6	1.2	8.2	8.2		1.4	8.3	8.3	39.3
20-Aug-13			1.7	10.0	12.9	11.0		1.2	8.0	8.1		1.5	8.2	8.2	
21-Aug-13	1.4	9.5	1.4	8.1	13.0	13.0	7.8	1.0	8.2	8.1		1.4	8.2	8.2	39.9
21-Aug-13	1.4	9.5	1.5	6.0	13.0	13.0	7.8	1.1	8.1	8.2		1.4	8.3	8.3	37.3
21-Aug-13			1.4	10.9	13.1	13.0		1.1	8.0	8.0		1.4	8.3	8.3	
22-Aug-13	1.0	9.5	1.4	6.1	12.9	13.0	7.4	1.4	8.3	8.2		1.4	8.3	8.3	40.0
22-Aug-13	1.3	9.8	1.5	12.9	13.0	13.0	8.0	1.5	8.3	8.2		1.3	7.9	8.0	40.0
22-Aug-13			1.4	6.0	13.0	12.4		0.9	8.1	8.1		1.4	8.2	8.3	
23-Aug-13	1.2	9.8	1.4	12.5	12.5	12.6	7.6	1.4	8.1	8.0		1.1	8.2	8.1	40.9
23-Aug-13	1.3	9.8	1.7	13.1	12.5	12.6	8.2	1.6	8.1	8.2		1.2	8.2	8.1	40.7
23-Aug-13			1.4	12.1	13.0	12.9		1.3	8.3	8.3		1.2	8.0	8.1	
24-Aug-13	1.2	9.8	1.3	11.9	12.6	12.5	7.0	1.4	8.0	8.2		1.1	8.1	8.0	40.2
24-Aug-13	1.3	9.8	1.7	12.7	12.1	12.1	7.8	1.4	8.2	8.3		1.1	8.0	8.2	39.9
24-Aug-13			1.4	11.6	12.5	12.4		1.4	8.0	8.0		1.1	8.0	8.0	
AVG:	1.3	9.6	1.5	10.2	12.8	12.2	7.9	1.2	8.1	8.1	closed	1.3	8.2	8.2	39.6
Third fish way inspection for east fish ladder, east, west, and south entrances completed via automation system in fisheries office (SCADA).															