

The Dalles Dam Fishway Status Report

Date: 11/24/2013
Inspection Period: 11/17 to 11/23/2013

THE DALLES DAM



**US Army Corps
of Engineers**
Portland District

The Dalles Project-Fisheries
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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:	50.9 F
	Out of Criteria	Limit	Comments		Secchi: in '	5.5
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	9.1		
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. 156 weir off by 0.1'.			
Weir 158-159 differential	0	1.0' ± 0.1'				
Count station differential	0	≤ 0.3'	Picketed leads raked several times per week due to milfoil.			
Weir crest depth	0	1.0' ± 0.1'				
Junction pool weir JP6	0	depth (≥ 7')				
East entrance differential	0	1.0' - 2.0'	Average	1.5		
Entrance weir E1	0	No criteria	Average	9.2	Manually adjusted.	
Entrance weir E2	0	depth (≥ 8')	Average	13.0		
Entrance weir E3	0	depth (≥ 8')	Average	13.0		
Collection channel velocity	0	1.5 - 4 fps	Average	2.6	See Velocities tab for more complete information.	
Transportation channel velocity	0	1.5 - 4 fps	Average	2.6		
North channel velocity	0	1.5 - 4 fps	Average	2.8		
South channel velocity	0	1.5 - 4 fps	Average	3.5		
West entrance differential	0	1.0' - 2.0'	Average	1.5	Daily differentials & weir depths, see AVGS tab.	
Entrance weir W1	0	depth (≥ 8')	Average	9.0		
Entrance weir W2	0	depth (≥ 8')	Average	9.0		
Entrance weir W3	0	No criteria	Average	closed		
South entrance differential	0	1.0' - 2.0'	Average	1.4		
Entrance weir S1	0	depth (≥ 8')	Average	8.1		
Entrance weir S2	0	depth (≥ 8')	Average	8.1		
JUVENILE PASSAGE						
Sluiceway operation	0	units 1,8,18				
Turbine trashrack drawdown	0	<1.5', wkly	Range: 0.2-0.5'			
Spill volume	0	40%, 24hr	On seal.			
Spill Pattern	0	per FPP	On seal.			
Turbine Unit Priority	8	per FPP	Main Units 13, 14, and 15 out of service for maintenance purposes; see Outages below.			
Turbine 1% Efficiency	0	per FPP				

OTHER ISSUES:

Birds/Sea lions:

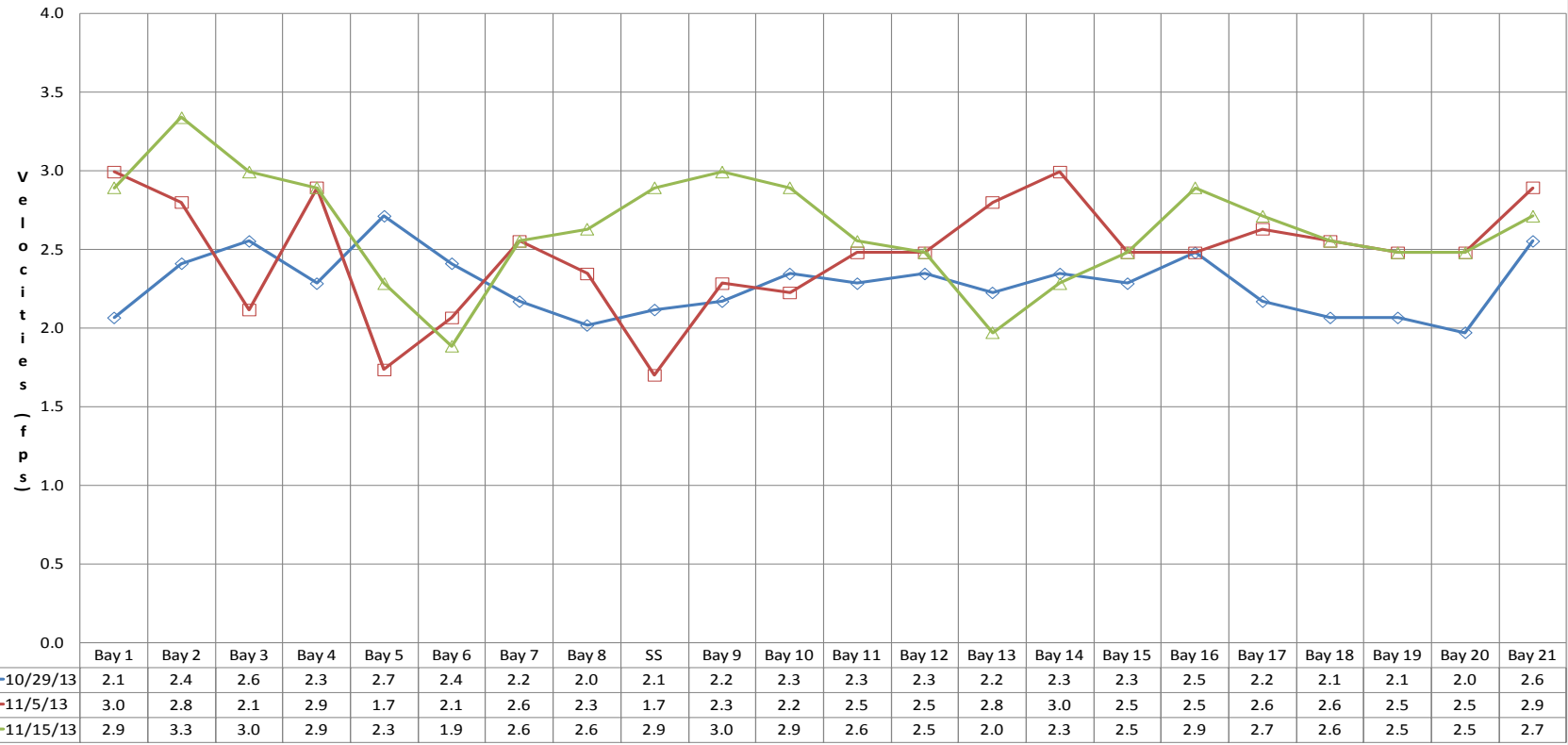
Bird observation data collected twice daily. There are mostly gulls and cormorants around the project, with grebes in the forebay. Most foraging occurring at west end of the powerhouse (PHT2) and downstream of sluiceway outfall (PHT3).

See avian zones map and distribution tabs. No sea lion sightings this week.

First bald eagle sighting near westrick. Data of observation numbers will resume this winter, but behavior data collection reduced from previous years.

Operations:

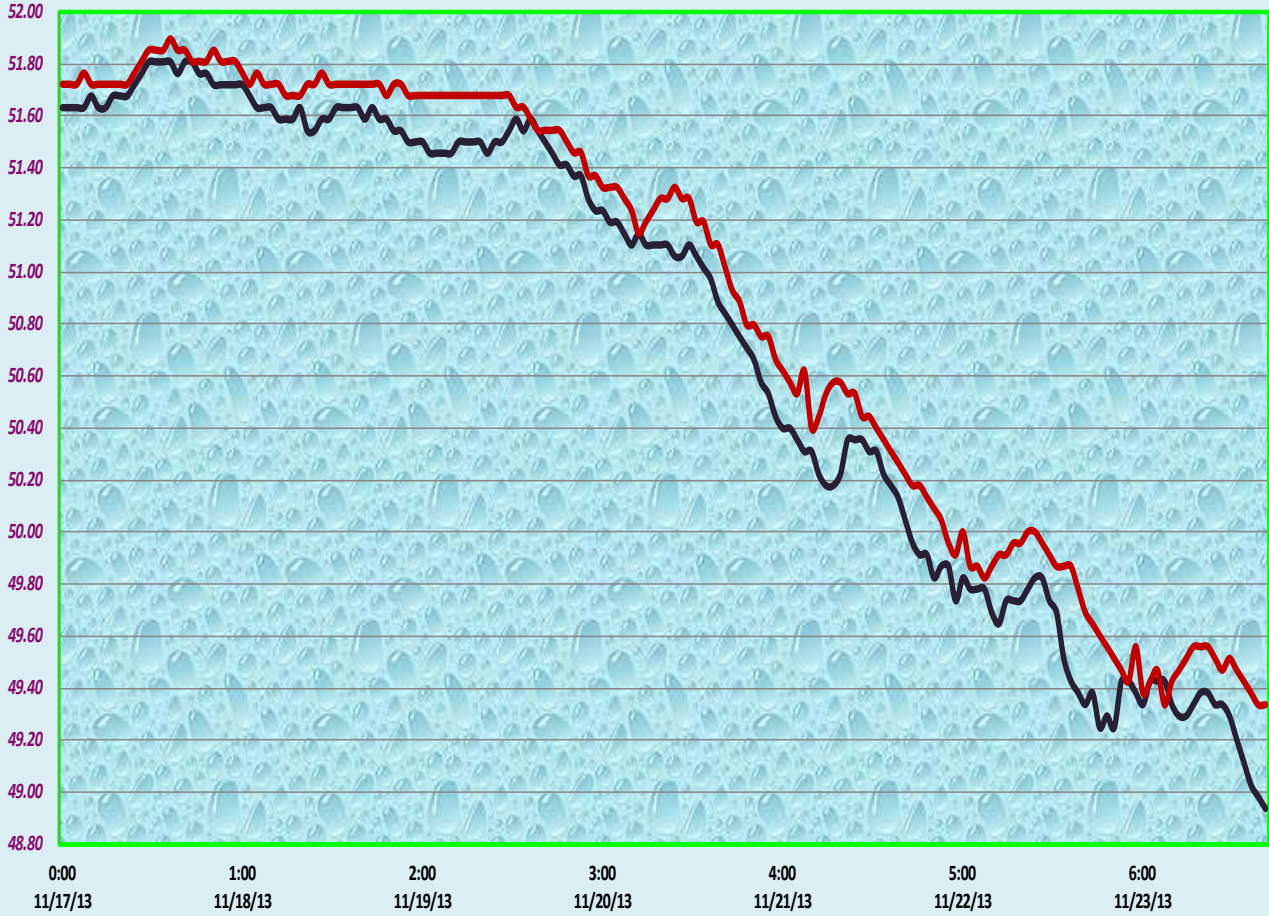
The Dalles Dam Collection Channel Velocities (In criteria 1.5 - 4.0 fps)



The Dalles Dam Adult Fish Ladder(s) River/Water Temperatures

°F

— East Fish Ladder — North Fish Ladder





Temp:		Secchi:	
51.8	SUN	5.5	
51.7	MON	5.5	
51.6	TUES	5.5	
51.2	WED	5.5	
50.5	THUR	5.5	
49.9	FRI	5.5	
49.5	SAT	5.5	
AVG: 50.9	AVG:	5.5	

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

red = out of criteria

North Fish Ladder			East Fish Ladder												KCFS
North Entrance			East Entrance					West Entrance			South Entrance			% Spill	
Date:	Differential	N1 Depth	Differential	E1Depth	E2 Depth	E3 Depth	JP 6	Differential	W1Depth	W2 Depth	W3 Depth	Differential	S1 Depth	S2 Depth	
17-Nov-13	1.3	9.1	1.4	8.0	13.0	13.0	9.6	1.4	9.0	9.0		1.3	8.1	8.1	O n s e a l
17-Nov-13	1.3	9.1	1.4	8.0	13.0	12.9	9.6	1.4	9.0	9.0		1.3	8.1	8.1	
17-Nov-13			1.5	7.8	12.8	12.9		1.4	8.9	9.0		1.3	8.1	8.1	
18-Nov-13	1.4	9.0	1.5	7.6	13.0	12.9	10.1	1.6	8.6	8.6		1.4	8.0	8.0	
18-Nov-13	1.4	9.0	1.6	7.4	13.0	12.9	10.3	1.7	8.4	8.4		1.4	8.1	8.1	
18-Nov-13			1.4	8.1	13.1	13.0		1.4	9.0	9.1		1.3	8.2	8.2	
19-Nov-13	1.4	9.1	1.7	9.0	13.0	13.0	10.6	1.6	9.0	9.0		1.5	8.1	8.0	
19-Nov-13	1.4	9.1	1.7	9.0	13.0	13.0	10.6	1.6	9.0	9.0		1.5	8.1	8.0	
19-Nov-13			1.6	7.6	13.0	13.1		1.6	8.6	8.5		1.3	8.2	8.2	
20-Nov-13	1.4	9.0	1.5	9.1	13.1	13.1	10.9	1.5	9.0	9.0		1.5	8.1	8.1	
20-Nov-13	1.3	9.1	1.5	9.0	12.9	13.0	10.6	1.5	8.9	8.9		1.4	8.1	8.1	
20-Nov-13			1.4	10.1	13.1	13.2		1.4	9.1	9.1		1.2	8.3	8.1	
21-Nov-13	1.4	9.2	1.7	9.0	12.9	12.9	10.6	1.6	9.1	9.0		1.5	8.0	8.0	
21-Nov-13	1.4	9.2	1.7	8.9	13.0	13.0	11.5	1.7	9.0	9.1		1.4	8.2	8.2	
21-Nov-13			1.5	9.0	13.1	13.1		1.5	9.0	8.9		1.4	8.1	8.1	
22-Nov-13	1.4	9.2	1.5	11.0	13.0	13.3	11.8	1.7	9.0	9.0		1.6	8.0	8.1	
22-Nov-13	1.4	9.2	1.6	11.0	13.0	13.0	12.2	1.7	9.1	9.1		1.5	8.2	8.1	
22-Nov-13			1.7	11.1	13.1	13.2		1.5	9.2	9.2		1.3	8.2	8.3	
23-Nov-13	1.4	9.1	1.7	9.0	12.9	12.9	1.6	1.6	9.1	9.0		1.5	8.0	8.0	
23-Nov-13	1.4	9.1	1.6	11.0	13.0	13.0	11.1	1.4	9.2	9.3		1.4	8.1	8.1	
23-Nov-13			1.2	11.6	13.6	13.6		1.3	9.2	9.2		1.4	8.0	8.0	
AVG:	1.4	9.1	1.5	9.2	13.0	13.0	10.1	1.5	9.0	9.0	closed	1.4	8.1	8.1	
Third fish way inspection for east fish ladder, east, west, and south entrances completed via automation system in fisheries office (SCADA).															