

FISHWAY STATUS REPORT

Date: 11/27/2011

Inspection Period: 11/20-26/2011

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:	48.7	F
	Out of Criteria	Limit	Comments		Secchi:	6.0	Ft.
NORTH FISHWAY							
Exit differential	0	≤ 0.5'					
Count station differential	0	≤ 0.3'	Picket leads are open.				
Weir crest depth	0	1.0' ± 0.1'					
Entrance differential	0	1.0' - 2.0'	Average 1.4		Daily differentials & weir depths, see AVGS tab.		
Entrance weir N1	0	depth (≥ 8')	Average 9.2				
Entrance weir N2		Closed	Bulkhead installed				
PUD Intake differential	0	≤ 0.5'	Trash rack raked on				
EAST FISHWAY							
Exit differential	0	≤ 0.5'					
Removable weirs 154-157	4	Per forebay	Auto adjusts 1' increments. Weir 156 inadvertently locked out. Returned to service.				
Weir 158-159 differential	0	1.0' ± 0.1'					
Count station differential	0	≤ 0.3'	Picket leads are open.				
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		Daily differentials & weir depths, see AVGS tab.		
Entrance weir E1	0	No criteria	Average 7.5		Manually adjusted.		
Entrance weir E2	0	depth (≥ 8')	Average 11.0				
Entrance weir E3	0	depth (≥ 8')	Average 11.1				
Collection channel velocity	0	1.5 - 4 fps	Average 2.5		See Velocities tab for more complete information.		
West entrance differential	0	1.0' - 2.0'	Average 1.3				
Entrance weir W1	0	depth (≥ 8')	Average 8.4				
Entrance weir W2	0	depth (≥ 8')	Average 8.4				
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	0	depth (≥ 8')	Average 8.2		Manually adjusted.		
Entrance weir S2	0	depth (≥ 8')	Average 8.2				
JUVENILE PASSAGE							
Sluiceway operation	3	units 1,8,18	Nov22 and 24 unit 8 off, and 11/23 unit 18 off line. Control notified and corrected.				
Turbine trashrack drawdown	0	<1.5', wkly	Range: 0.0' - 0.5'				
Spill volume	0	40%, 24hr	On seal.				
Spill Pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

OTHER ISSUES:**THE DALLES****Birds:**

Many grebes, cormorants and mergansers have been observed resting around the project. See tab below for more information on species, species, number and locations. Abatement efforts to resume mid Apr for juvenile salmonid protection.

Operations:

Calibrations were completed 11/26. Two values were slightly off. To be corrected prior to next passage season.

Gatewell drawdown was completed on 11/23. The differentials ranged 0.0' - 0.5', all in criteria.

Main Unit 10 scheduled out of service week of Dec12 for servo repair. Fish salvage to occur due to potential threat of flushing fish through turbine on start up. The final fishway dewatering g schedule and task list planning completed with edits from meeting with maintenance staff. See "Dewatering Schedule" tab below for details.

The third fishway daily inspections trend taken from the fisheries office SCADA system indicated that all entrance and exits were in criteria from 1700 to 0630 hours.

Due to low tailwater, fisheries are unable to maintain >7' depth for water over weir JP-6. Currently the weir has been raised completely out of the junction pool to achieve criteria.

All fishways are maintaining criteria operation as per Fish Passage Plan (FPP).

Maintenance:

Preparing for annual maintenance of fishways. East ladder to be dewatered 12/5. East fishway workload includes; grating replacement lower ladder, repair of exit weir 154 - 5 guide wear, east weir E2 lift beam stiffener and routine annual maintenance.

Project fisheries and Environmental to meet 12/1 with firm to discuss the use goats for removing weeds around the project and fishladders.

Studies:

East fishway backup; Project engineering and maintenance moving forward with fishlock rehab. Testing Feb 2012. Maintenance completed bulkhead reseal for dewatering fishlock channel and scheduled to rehab 4 diffuser valves associate with fishlock.

Adult PIT tag study periodic planning meetings moving forward.

NOAA representatives to assess possible lamprey improvement options during 12/8 site visit.

Research/Contractors:

Washington Department of Fish and Wildlife (WDFW) fish counting completed end of October. To resume Apr1.

Oregon Department of Fish and Wildlife (ODFW) bass angling finished and their field activities at the end of August and are currently working on diet sample lab work. The draft report will be completed some time in February. Preliminary analysis of the catch and effort data propose a June to September sample period for next year.

Finalizing contract MIPR with USDA for avian hazing 2012.

Planning is underway for Battelle's Juvenile Salmon Acoustic Telemetry System (JSATS) project and specific issues that need to be addressed for the 2012 field season. The dive team will remove the rest of the USGS derelict acoustic gear from powerhouse main turbine Unit pier-noses (5 - 22) and ice/trash sluiceway. Some spillway trolley pipes that need to be fabricated/repared and installed as well.

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

The Dalles Dam Maximum Daily Bird Observations

Washington Shore

SW-T1: No birds.

SW-T3: 73 gulls and 38 cormorants

SW-T4: No birds.

FB1: 226 grebes and 11 gulls resting on water and 11 cormorants resting on log boom

SW-T2: No birds.

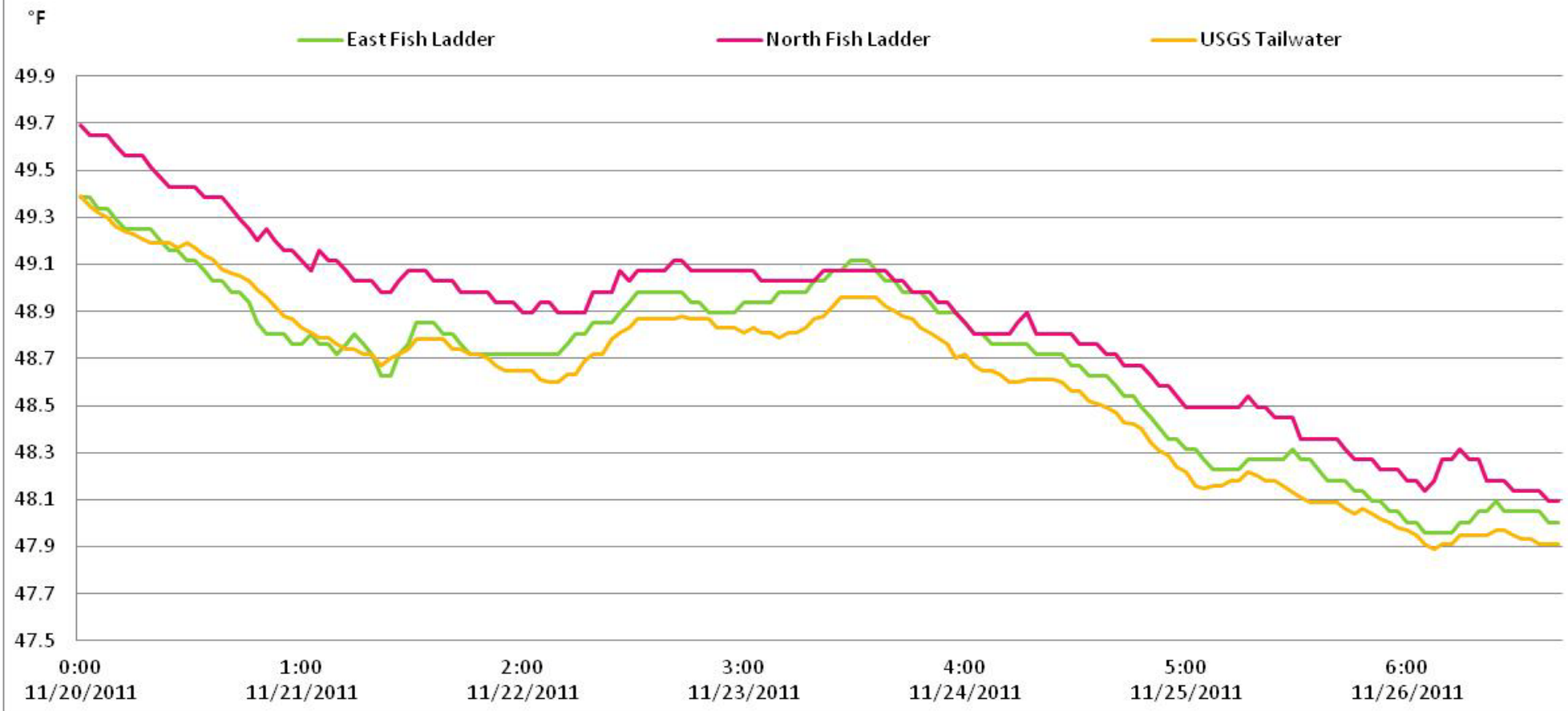
PH-T1: 65 merganser and 51 cormorants resting

PH-T2: 33 mergansers and 22 cormorants resting

PH-T3: one bald eagle

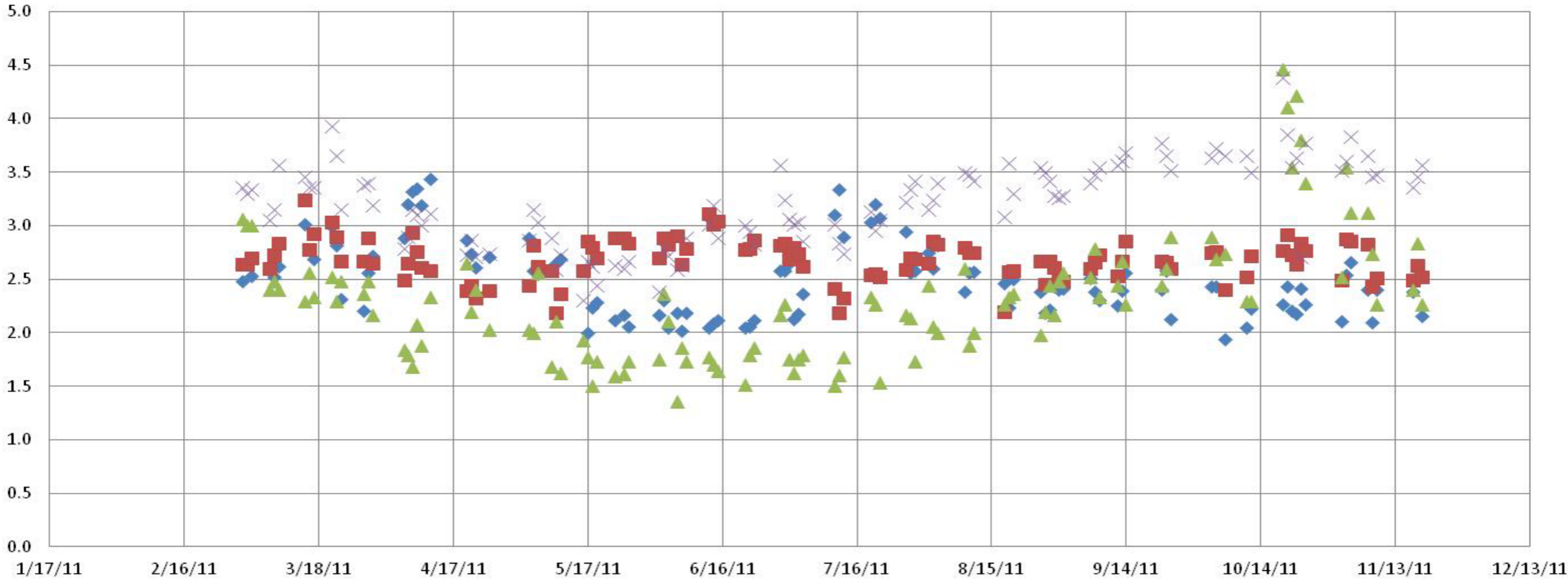
Oregon Shore

The Dalles River/Water Temperatures



The Dalles Dam Fishways Average Velocities (fps)

◆ The Dalles Collection Channel ■ The Dalles Transportation Channel ▲ The Dalles North Entrance × The Dalles South Rock Channel





The first American Bald eagle sighting on project by Westrick Conference Center near east fish ladder south entrance.
Observations planned for overwintering eagle population using westrick park to determine if negative interactions with avian lines over sluiceway.

Final2

THE DALLES DAM FISHWAY DEWATER SCHEDULE
WINTER 2011/2012

Fishlock Flow Test	-Operate	~Nov -Feb
<ul style="list-style-type: none">• Install channel bulkheads and dewater (TDS)• Clean pipes (Eng) - contract• Run fish lock and test (Eng, TDO)		
East Fish Ladder	-Dewater	Dec. 5, '11 – Jan.31, '12
<ul style="list-style-type: none">• PM count station and exit weirs (TDM, TDE)• Inspect/repair joint over fish office (TDS?)• Resume grating installation (Eng, TDS) priority 3• Count station grating access and storage hooks (TDS)• Renumber exit staff gages (TDF)• Clean Stillwell ports (TDM)• 154-9 weir guide inspect/repair (TDS) priority 1		
East Entrances, Coll. Chan., Trans. Chan.-Dewater		Dec. 6, '11
<ul style="list-style-type: none">• PM entrance weirs (TDM, TDE, TDS)• Install new S1 weir (TDS) priority 4• Complete FSQ6 replace (Eng)• Clear stillwell ports (TDM)• Add stiffener to E2 weir extension (TDS) priority 2		
Ice/Trash Sluiceway	-Inspect	~Dec-Feb
<ul style="list-style-type: none">• Inspect flume spalling d/s endgate (TDF)		
North Fish Ladder	- Dewater	Feb 1, '12 – Feb 28, '12
<ul style="list-style-type: none">• PM count station and exit weirs (TDM, TDE)• Continue brush removal (TDF)• Check count station grating clips (TDS)• Count station grating access and storage hooks (TDS)• Count station brush bushing (TDM)		
North Entrance	-ROV inspect	Feb 6, '12
<ul style="list-style-type: none">• Inspect diffuser grating (Eng)• Clear Stillwell ports (TDM)		

	Temp:		Secchi:
	49.2	SUN	6.0
	48.9	MON	6.0
	48.9	TUES	6.0
	49.0	WED	6.0
	48.7	THUR	6.0
	48.3	FRI	6.0
	48.1	SAT	6.0
AVG:	48.7	AVG:	6.0

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

North Fish Ladder			East Fish Ladder												
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	% Spill
11/20/11	1.4	9.2	1.4	8.1	11.0	11.0	10.3	1.5	8.2	8.1		1.4	8.3	8.3	
11/20/11	1.4	9.1	1.4	8.1	11.0	11.1	10.6	1.5	8.1	8.1		1.4	8.3	8.3	
11/20/11			1.4	7.9	11.1	11.1		1.4	8.3	8.2		1.5	8.1	8.1	
11/21/11	1.3	9.2	1.6	8.0	10.9	11.0	9.5	1.3	8.3	8.2		1.4	8.1	8.2	
11/21/11	1.4	9.1	1.5	8.0	11.0	11.1	10.2	1.4	8.3	8.2		1.4	8.2	8.2	
11/21/11			1.3	8.0	11.0	11.1		1.2	8.2	8.3		1.3	8.3	8.2	
11/22/11	1.3	9.4	1.8	8.0	10.9	10.9	10.1	1.8	8.0	8.0		1.6	8.2	8.2	
11/22/11	1.4	9.2	1.7	7.9	10.9	10.9	10.7	1.4	8.4	8.5		1.4	8.2	8.2	
11/22/11			1.2	8.1	11.1	11.1		1.2	8.6	8.6		1.2	8.5	8.3	
11/23/11	1.4	9.3	1.7	8.8	11.0	11.0	10	1.4	8.5	8.5		1.4	8.2	8.1	
11/23/11	1.4	9.3	1.6	9.0	10.9	10.9	10.3	1.4	8.6	8.5		1.4	8.2	8.2	
11/23/11			1.5	8.0	11.1	11.1		1.2	8.7	8.7		1.2	8.4	8.3	
11/24/11	1.3	9.2	1.4	8.9	11.0	10.9	8.9	1.2	8.6	8.5		1.3	8.2	8.2	
11/24/11	1.3	9.3	1.6	8.9	10.9	10.9	9.7	1.3	8.5	8.5		1.3	8.2	8.2	
11/24/11			1.3	9.1	11.0	11.1		1.2	8.5	8.4		1.3	8.2	8.1	
11/25/11	1.3	9.3	1.6	3.0	11.0	11.1	9.4	1.3	8.5	8.6		1.4	8.1	8.0	
11/25/11	1.3	9.3	1.6	5.0	11.3	11.3	9.4	1.3	8.5	8.4		1.4	8.1	8.1	
11/25/11			1.1	9.1	11.0	11.0		1.1	8.6	8.5		1.2	8.3	8.2	
11/26/11	1.4	9.3	1.9	4.9	11.3	11.3	10	1.4	8.2	8.3		1.4	8.2	8.3	
11/26/11	1.4	9.2	1.2	5.0	11.3	11.3	9	1.2	8.6	8.5		1.2	8.3	8.2	
11/26/11			1.3	5.0	11.3	11.4		1.2	8.5	8.4		1.3	8.2	8.3	
AVG:	1.4	9.2	1.5	7.5	11.0	11.1	9.9	1.3	8.4	8.4	Closed	1.4	8.2	8.2	

Third fish way inspection for east fish ladder, east, west, and south entrances completed via automation system in fisheries office.