

FISHWAY STATUS REPORT

THE DALLES DAM

Date: 2/8/2011
 Inspection Period: 1/30 - 2/5/2011



**US Army Corps
 of Engineers**
 Portland District

The Dalles Project-Fisheries
 P.O. Box 564
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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:	7	Temperature:	40.3	F
	Out of Criteria	Limit	Comments		Secchi:	3.3	Ft.
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	Daily differentials & weir depths, see AVGS tab.		
Entrance weir N1	0	depth (≥ 8')	Average	9.7			
Entrance weir N2		Closed	Bulkhead installed				
PUD Intake differential	0	≤ 0.5'	0.6'. Maintenance has increased raking frequency due to high debris load.				
EAST FISHWAY							
Exit differential	0	≤ 0.5'					
Removable weirs 154-157	0	Per forebay					
Weir 158-159 differential	0	1.0' ± 0.1'					
Count station differential	0	≤ 0.3'					
Weir crest depth	0	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					
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	NA	units 1,5,18	Endgate closed; sluiceways 1-1 & 18-1 open per FPP.				
Turbine trashrack drawdown	NA	<1.5', wkly					
Spill volume	NA	40%, 24hr	Spill is on seal.				
Spill Pattern	NA	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

East fish ladder RTS Feb 1, 2011
 Fish units 1 and 2 OOS

OTHER ISSUES:

Birds: Eagle numbers decreasing. Cormorant numbers still high. Refer to avian observation map and picture of cormorants roosting on boom north ladder exit.

New avian lines planned for spillway under post spillwall contract. New avian lines also planned for sluiceway and powerhouse tailrace gaps pending district approvals.

Pikeminnow: Awaiting post season evaluation meeting. 2010 catch number was 884 pikeminnow, 92% off powerhouse and 8% sluice outfall.

Operations: Fish unit 1 was forced out of service 2/2 due to an oil leak on the hydraulic headgate system. Currently there are no fish units in operation. The oil spill was contained in the gatewell and no oil observed in the fishway.

Maintenance: East fishway maintenance completed. Water up 1/1. North fishway to be dewatered 2/7. North fishway maintenance tasks include; replace diffuser grating at count station, remove brush from ladder rock walls, repair leaking expansion joint at count station,

The east entrance channel transmitter has malfunctioned. The needed part has been ordered and will be replaced by TDE in two weeks. Readings are now completed by stillwell readings and slope meter.

New warning signage has been ordered to deter fisherman from casting their fishing gear onto the avian lines. The specific locations for deployment to be determined.

Dive to clean north entrance sill for bulkhead placement to occur 2/7.

Studies: East fishway backup water supply study reviewing latest alternatives. Project supporting as needed. Spillway avian line plan complete Contractor site visit occurred 1/26 for anchor pole installation planning.

TDA East Ladder lamprey tour: 1/31, representatives' from NOAA, USFWS, FPC, CRITFC, RCC, District USACE and Project Fisheries toured the east fish ladder for potential minor modifications to increase lamprey passage. New potential items include; install concrete ramps, install diffuser plating in lower ladder, install smooth metal plating through floor based orifices, the removal of obsolete brackets at an expansion joint downstream of count station area, fill in bubbler beam slot at base of count window (completed), install brushes or seals around base of count station to prevent lamprey access, fill in/plate over obsolete bulkhead/grating guides just downstream of count, install pivoting/hinged vertical plate on down stream edge of count station crowder to improve flows, and install/modify bulkhead at fish elevator exit. The new alternative mods will be further discussed for planning and possible implementation next winter outage. Video system brace installed between count station picket leads for counting lamprey that pass behind crowder.

Research: Dive to remove old USGS gear from powerhouse, sluiceway and spillway planned for week of 2/14. New pipes for Battelle acoustic telemetry to be installed at units 8 and 9 on 2/9, to replace temporary shallow pipes.

PNNL's request has been approved for access to The Dalles Dam for the purpose of conducting lower river survival studies. Acoustic telemetry equipment, including hydrophones and autonomous node arrays will be deployed at various locations around TDA Project. These locations will be coordinated with Project Fisheries.

The University of Idaho's request has been approved for access to The Dalles Dam for the purpose of monitoring passage events of PIT tagged lamprey released downstream of the Bonneville Dam. This activity will include frequent downloading and maintenance of HD PIT interrogators.

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

The Dalles:

Temp:			Secchi:	
42.0	SUN		3.0	
40.0	MON		3.0	
40.0	TUES		5.0	
40.0	WED		3.0	
40.0	THUR		3.0	
40.0	FRI		3.0	
40.0	SAT		3.0	
AVG: 40.3	AVG:		3.3	

North Fish Ladder			East Fish Ladder												% Spill
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	
30-Jan	1.3	9.7													
31-Jan	1.3	9.8													
1-Feb	1.4	9.6													
2-Feb	1.2	9.9													
3-Feb	1.3	9.6													
4-Feb	1.3	9.8													
5-Feb	1.2	9.7													
AVG:	1.3	9.7									Closed				On seal

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

The Dalles Dam Daily Bird Observation Range

Washington Shore

Oregon Shore

FB: 11 - 87 cormorants resting on water and boom, 2 - cormorants resting on BRZ buoys, 6 - 8 bulls resting on navlock guide wall, 5 - 8 gull active, two eagles roosting on north side trees, three eagles active, one eagle fly by with fish.

PH-T1: 0 - 6 cormorants resting on rocks, one scaup, and five gulls resting on water.

SW-T1: No birds.

PH-T2: 0 - 2 gulls fly by.

SW-T3: One eagle resting on rocks, 31 - 60 cormorants resting on rocks, one gull resting on water, 0 - six gulls active.

PH-T3: Two eagles fly by, 3 - 16 eagles roosting in trees, one eagle roosting on electrical tower, three great blue herons resting on fence, five gulls active.

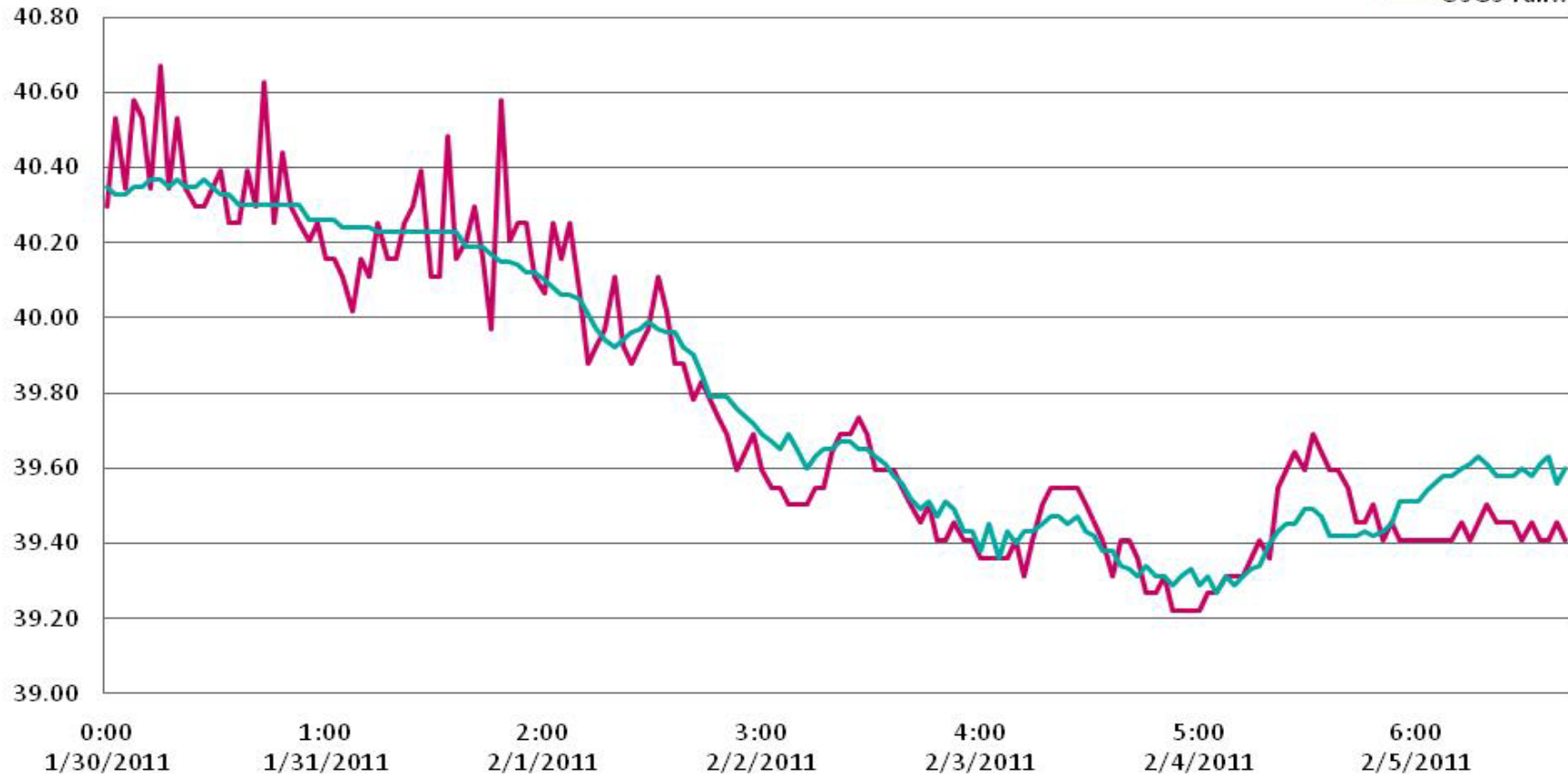
SW-T4: No birds.

SW-T2: One great blue heron resting on rocks.

Deg F

The Dalles River Temperatures

North Fish Ladder
USGS Tailwater





North exit debris boom/cormorant roosting. Primarily a fall/winter behavior. Not as prevalent during spring/summer passage season.