

FISHWAY STATUS REPORT

Date: 3/18/2012

Inspection Period: 3/11 - 3/17/2012

THE DALLES DAM



**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:	21	Temperature:	41.8	F
	Out of Criteria	Limit	Comments		Secchi:	4.6	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	9.8			
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	0	Per forebay	Auto adjusts 1' increments.				
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	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	8.4	Manually adjusted.		
Entrance weir E2	0	depth (≥ 8')	Average	11.1			
Entrance weir E3	0	depth (≥ 8')	Average	11.1			
Collection channel velocity	0	1.5 - 4 fps	Average	2.4	See Velocities tab for more complete information.		
West entrance differential	0	1.0' - 2.0'	Average	1.5			
Entrance weir W1	0	depth (≥ 8')	Average	8.5			
Entrance weir W2	0	depth (≥ 8')	Average	8.5			
Entrance weir W3	0	No criteria	Average	Closed			
South entrance differential	0	1.0' - 2.0'	Average	1.5	Daily differentials & weir depths, see AVGS tab.		
Entrance weir S1	0	depth (≥ 8')	Average	8.3	Manually adjusted.		
Entrance weir S2	0	depth (≥ 8')	Average	8.3			
JUVENILE PASSAGE							
Sluiceway operation	0	units 1,18	Sluiceways 1-2, 1-3, 18-1 & 18-2 are open.				
Turbine trashrack drawdown	0	<1.5', wkly	Range: 0.1-0.6'				
Spill volume	0	40%, 24hr	Average	0.0	Fish spill starts Apr 10		
Spill Pattern	0	per FPP	On seal				
Turbine Unit Priority	0	per FPP	Unit 19 out of service 6 weeks for digital governor install				
Turbine 1% Efficiency	0	per FPP					

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

The number of gulls has increased but remains relatively low. See bird tab below for more information on numbers, species and location. Very few eagle sightings around project. Westrick's eagle monitoring has been reduced to twice weekly for eagle/avian line interaction information due to low eagle numbers.

Operations:

Gatewell drawdown completed Mar 16 . Differentials range 0.1' - 0.6' , within criteria (1.5'). Trashracks inspected in Feb with army divers. Calibration completed Mar 3. All values were within criteria. Power will be off to the north fishway Monday, Mar 19 for electrical maintenance; no criteria affect to fishway operation expected. The Dalles North and East Fishladders in service and conforming to fish passage criteria.

Maintenance:

East count station crowder panel hit the cleaner brush. Crowder motor replaced with spare. East exit removable weir replacement in design phase, including minor lamprey revisions. Completion expected Mar30.

Studies:

Adult PIT Tag District study team continues alternative study review with project support as needed. Reviewing count station and weir locations. East Fishway Backup Water Supply District study team continues alternative study. The fishlock supply determined as starting point for 400cfs. An additional 1000 cfs still needed. Two alternatives investigated; siphon frm the forebay just downstream of fishway exit and deep intake just downstream of fishlock. Inland Avian Predation Work Group scheduled Mar 27 at Westrick.

Research:

WDFW started fish count program, via video monitoring through March. Fish count personnel reviewing tapes in the count stations. Sixteen hours/day visual counting to start Apr 1. University of Idaho to conduct a study involving the monitoring of movements of Pacific lamprey outfitted with half-duplex PIT tags. The main activity involves downloading half-duplex PIT receivers. USFWS lamprey video and DIDSON mounts installed at north exit for conducting an evaluation of adult lamprey passage and behavior during 2012. Batelle/PNNL acoustic telemetry (JSAT) equipment installation complete. Equipment testing underway. Summer performance testing early June.

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

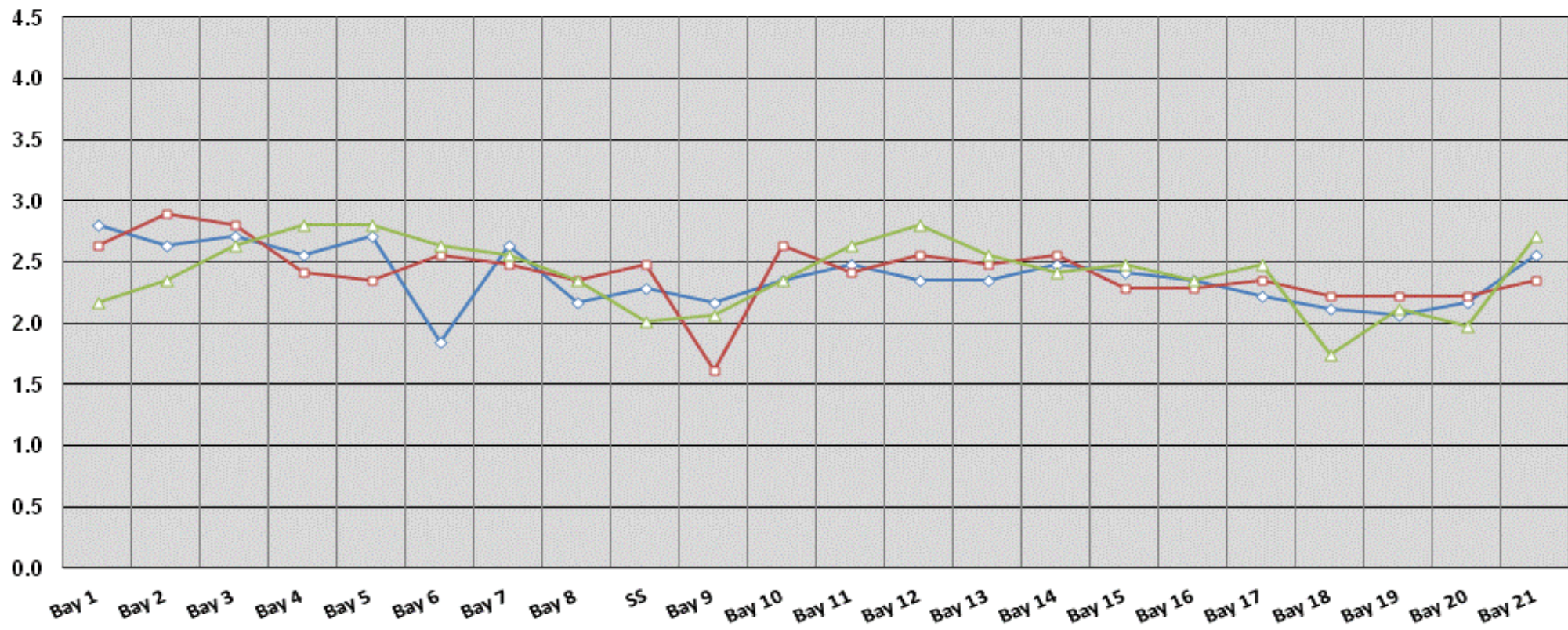
The Dalles Dam Fish Counts by video

Date	East	North	East	North	Total	Total	East	North					East	North			East	North	Spill	
	Chinook	Chinook	Chinook	Chinook	East	North	Unclipped	Unclipped	East	North	East	North	Coho	Coho	East	North	East	North	Spill	
	Adult	Adult	Jack	Jack	Sthd	Sthd	Sthd	Sthd	Sock	Sock	Coho	Coho	Jack	Jack	Lamprey	Lamprey	Pink	Pink	Volume	
11-Mar	1	0	0	0	10	8	5	3	0	0	0	0	0	0	0	0	0	0	0	
12-Mar	1	0	0	0	19	6	9	4	0	0	0	0	0	0	0	0	0	0	0	
13-Mar	0	0	0	0	18	1	10	0	0	0	0	0	0	0	0	0	0	0	0	
14-Mar	1	0	0	0	26	2	15	1	0	0	0	0	0	0	0	0	0	0	0	
15-Mar	1	0	0	0	23	1	11	0	0	0	0	0	0	0	0	0	0	0	0	
16-Mar	1	0	0	0	21	5	9	3	0	0	0	0	0	0	0	0	0	0	0	
17-Mar	0	0	0	0	32	4	17	3	0	0	0	0	0	0	0	0	0	0	0	
Wkly Tot	5	0	0	0	149	27	76	14	0	0	0	0	0	0	0	0	0	0	0	
% Split	100.0%				84.7%	15.3%	84.4%	15.6%												On seal

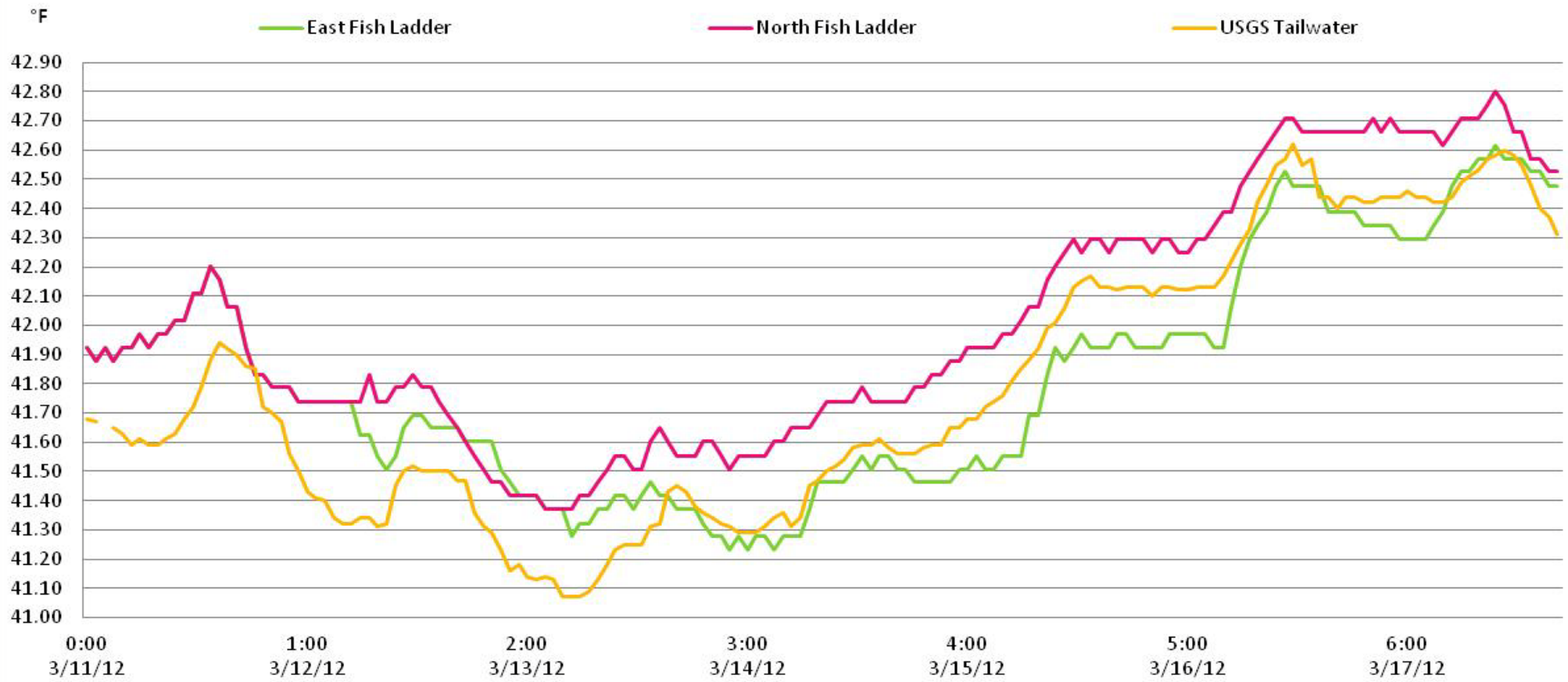
Spill range: Spill for juvenile salmonids starts April 10.

The Dalles Dam Collection Channel Velocities (fps)

3/11/2012 3/12/2012 3/13/2012



The Dalles River/Water Temperatures



The Dalles Dam Maximum Daily Bird Observations

Washington Shore

SW-T1: 32 gulls resting on spillway wall

SW-T3: 10 cormorants and one gull resting

SW-T4: 188 gulls and one cormorant resting on rocks; 131 gulls resting on water

FB1: Five mergansers, five grebes, two cormorants and one gull resting on water; two gulls resting on wall

SW-T2: none

PH-T1: four cormorants, one grebe and one gull resting

PH-T2: two gulls flying by

PH-T3: 16 herons and one

Oregon Shore

Temp:		Secchi:
41.7	SUN	5.0
41.4	MON	5.0
41.2	TUES	4.5
41.5	WED	5.0
41.9	THUR	4.5
42.3	FRI	4.5
42.5	SAT	4.0
AVG: 41.8	AVG:	4.6

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			% Spill
Date:	Differential	N1 Depth	Differential	E1Depth	E2 Depth	E3 Depth	JP 6	Differential	W1Depth	W2 Depth	W3 Depth	Differential	S1 Depth	S2 Depth	
3/11/12	1.2	9.7	1.3	9.0	11.0	11.0	10.9	1.3	8.3	8.4		1.4	8.2	8.2	
3/11/12	1.2	9.8	1.4	8.9	11.0	10.8	11.3	1.2	8.2	8.3		1.3	8.2	8.2	
3/11/12			1.3	9.1	11.0	11.0		1.3	8.4	8.3		1.4	8.2	8.2	
3/12/12	1.3	10.0	1.5	9.9	11.0	11.0	11.4	1.4	8.4	8.3		1.5	8.2	8.1	
3/12/12	1.3	9.7	1.5	8.0	11.0	11.0	10.8	1.6	8.2	8.2		1.6	8.2	8.2	
3/12/12			1.7	8.9	10.9	11.0		1.6	8.3	8.2		1.6	8.2	8.2	
3/13/12	1.4	9.6	1.6	11.0	10.8	10.8	12.1	1.6	8.8	8.8		1.6	8.1	8.2	
3/13/12	1.3	9.8	1.5	11.0	11.1	10.9	14	1.5	9.1	9.1		1.6	1.2	1.3	
3/13/12			1.6	10.0	10.9	10.9		1.9	8.2	8.2		1.7	8.2	8.2	
3/14/12	1.3	9.2	1.6	11.1	11.1	10.9	11.3	1.6	9.0	9.0		1.3	9.1	9.1	
3/14/12	1.5	9.1	1.4	11.1	11.1	11.0	12.6	1.6	9.1	9.0		1.5	8.2	8.2	
3/14/12			1.4	11.0	11.0	11.1		1.5	8.9	9.0		1.5	9.4	8.2	
3/15/12	1.3	9.7	1.5	6.0	11.1	11.0	11.4	1.5	8.6	8.5		1.4	9.0	9.1	
3/15/12	1.3	9.8	1.1	10.0	11.1	11.0	11.2	1.4	8.5	8.4		1.3	9.0	9.1	
3/15/12			1.3	9.9	11.0	10.9		1.2	8.5	8.4		1.2	8.9	8.9	
3/16/12	1.4	9.6	1.6	6.0	11.0	11.0	12.2	1.6	8.6	8.6		1.6	8.9	8.9	
3/16/12	1.3	9.6	1.6	4.9	11.4	11.4	8.5	1.5	8.5	8.5		1.5	9.0	9.0	
3/16/12			1.5	6.0	11.0	11.0		1.5	8.5	8.5		1.0	9.4	9.3	
3/17/12	1.3	9.7	1.4	5.4	11.5	11.6	12	1.6	8.3	8.4		1.6	8.9	8.9	
3/17/12	1.3	11.7	1.7	4.9	11.4	11.5	11.9	1.7	8.3	8.4		1.6	8.9	9.0	
3/17/12			1.6	5.1	11.6	11.5		1.6	8.6	8.5		1.5	9.1	9.0	
AVG:	1.3	9.8	1.5	8.4	11.1	11.1	11.5	1.5	8.5	8.5	Closed	1.5	8.3	8.3	

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



PNNL testing telemetry equipment via remote operated boat in forebay. (No, not the tug/barge in the background)