

The Dalles Dam Fishway Status Report

08/04/19

Inspection Period: July 28 - August 3, 2019

THE DALLES DAM



US Army Corps
of Engineers
Portland District

The Dalles Project-Fisheries
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The Dalles Dam	Inspections OOC	Criteria Limit	Total Number of Inspections: Comments:	21	Temperature: 70.7 °F	Secchi: 5+ feet
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'		1.3		
Entrance weir N1	0	depth (≥ 8')		9.7		
Entrance weir N2	0	Closed				
PUD Intake differential	0	≤ 0.5'				
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'				
153 Weir crest depth	0	1.1' ± 0.1'				
Junction pool weir JP6	0	0.0				
East entrance differential		1.0' - 2.0'		1.5 average		
Entrance weir E1	0	No criteria				
Entrance weir E2	0	depth (≥ 8')		13.5 average		
Entrance weir E3	0	depth (≥ 8')		13.5 average		
Collection channel velocity	0	1.5 - 4 fps				
Transportation channel velocity	0	1.5 - 4 fps				
North channel velocity	0	1.5 - 4 fps				
South channel velocity	0	1.5 - 4 fps				
West entrance differential	0	1.0' - 2.0'		1.5 average		
Entrance weir W1	0	depth (≥ 8')		8.4 average		
Entrance weir W2	0	depth (≥ 8')		8.4 average		
Entrance weir W3	closed	No criteria				
South entrance differential	0	1.0' - 2.0'		1.5 average		
Entrance weir S1	0	depth (≥ 8')		8.4 average		
Entrance weir S2	0	depth (≥ 8')		8.4 average		
JUVENILE PASSAGE						
Sluiceway operation	0	Units 1, 8, 18				
Turbine trashrack drawdown	0	<1.5', biwkly		Inspection 7/28/19. Shad mort 7-2, live chinook yearlings in MU1-1, 1-3, 3-1, 18-1, 18-3.		
Spill volume/pattern	0	None				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

OTHER ISSUES:

Operation

East & North fish ladders in full operation.
Sluiceway open with 6 gates total. Units 1, 8 and 18
Spillway open with summer juvenile passage (40% river).
Spill below 100 kcfs= increase passage north.

Outages

MU5 FOOS through 8/29/2019 for T3 GSU transformer replacement
MU6 OOS through 8/29/2019 for T3 GSU transformer replacement
T10 (MU19 & 20) FOOS through 10/28/2021 due to acetylene levels
SSO2 OOS through 8/15/2019 for O/H.
MU15 & MU16 OOS through 8/8/2019 for Annuals.

Maintenance

Calibration check 7/29: TDE trouble report: West entrance tailwater/channel still experiencing issues but not out of criteria.
Collection channel dewatering pumps 5 and 6 rehab work remains. To be completed prior to Dec for dewatering.
Fishway automation parts purchase ongoing. Labor for assembly and install FY20.
Engineering evaluation of east fishway diffuser valve status/rehab to resume.
Spillway assessment (MRER) in progress. Higher priority gates 1-9 for rehab.

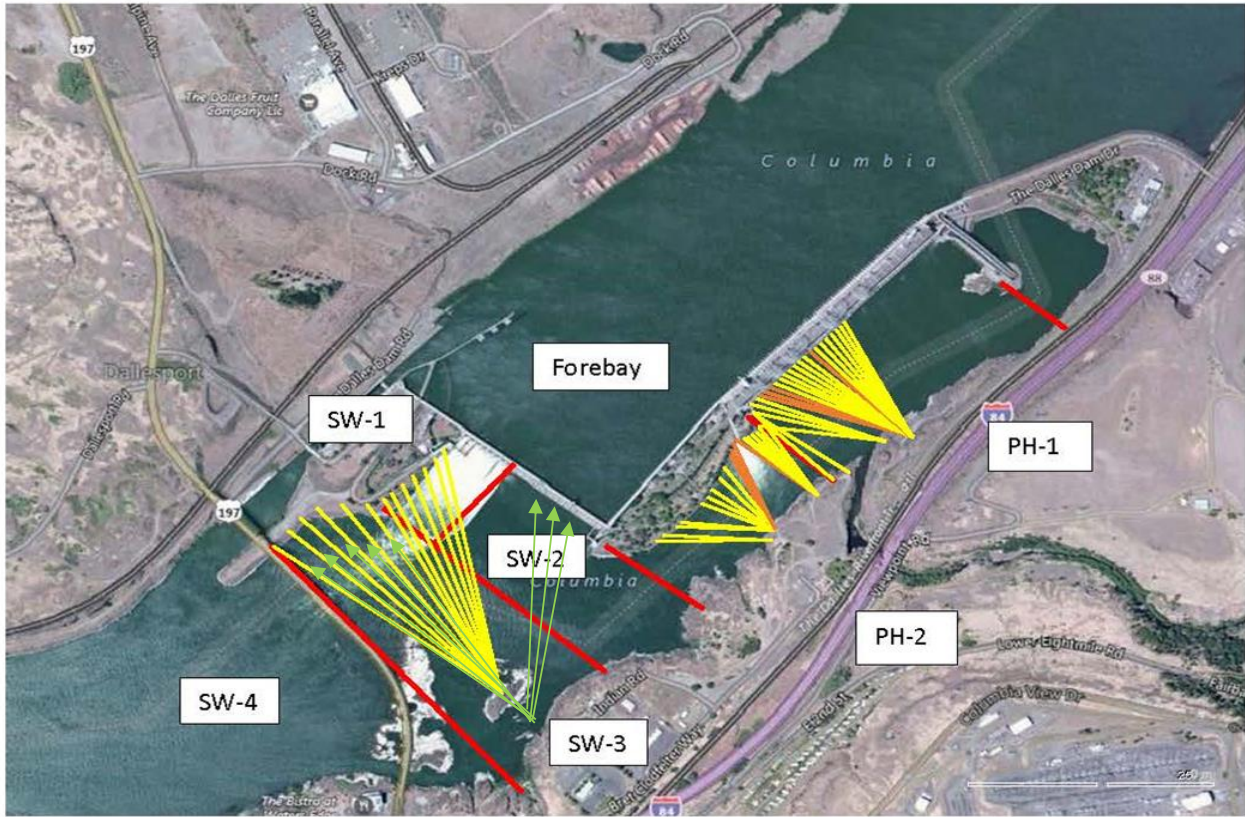
Predators

USDA hazing season concluded July 31. end of season meeting TBD
Continue collecting dip and tip count evidence of Pelicans targeting shad. Numbers of pelicans high, gull counts low normal.
Sea Lions not observed from dam year to date.

Research/Construction/Contractors

Fish counting contractors (Four Peaks) on site and counting.
For fish count data refer to; [FPC FISH COUNTS](#)
AWS backup - Team compiling list for follow on contract items and spare parts.
Transformer replacement - T3 ongoing. Testing after august completion. Date to be determined
PSMFC weekly PUD sampling last sample taken for season on 7/31
PITAGS north and east fishladder data collection at count stations continues.
Pikeminnow dam angling-147/week & 2094 YTD. **Bass/Walleye catch and release continues.**
ODFW monthly fishway inspections ongoing.
Lamprey minor mods - Planning for potential LPS in junction pool. Awaiting planning meetings.
Univ of Idaho lamprey radiotelemetry - Second season of lamprey passage night flow started 6/4. 12 of 18 completed.
Lamprey trapping - 355 YTD
Fish unit breaker replace.- Fish units returned to service. Substantial cleanup likely next winter. Awaiting schedule from contractor.
Fish unit rehab - Ongoing for phase 1A.

Approved by: Mike Colesar
Operation Project Manager The Dalles Dam

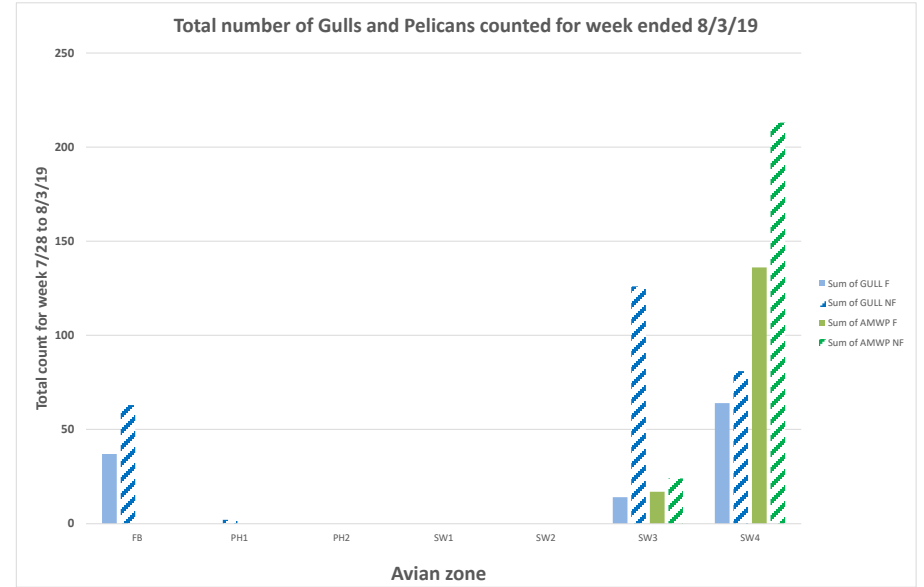
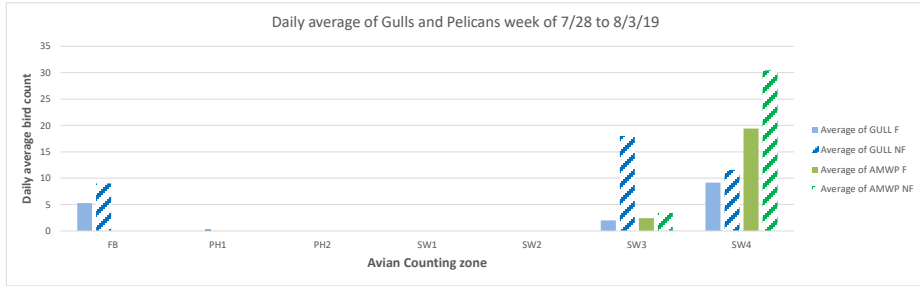


Red lines = avian zones

Yellow lines = current wires

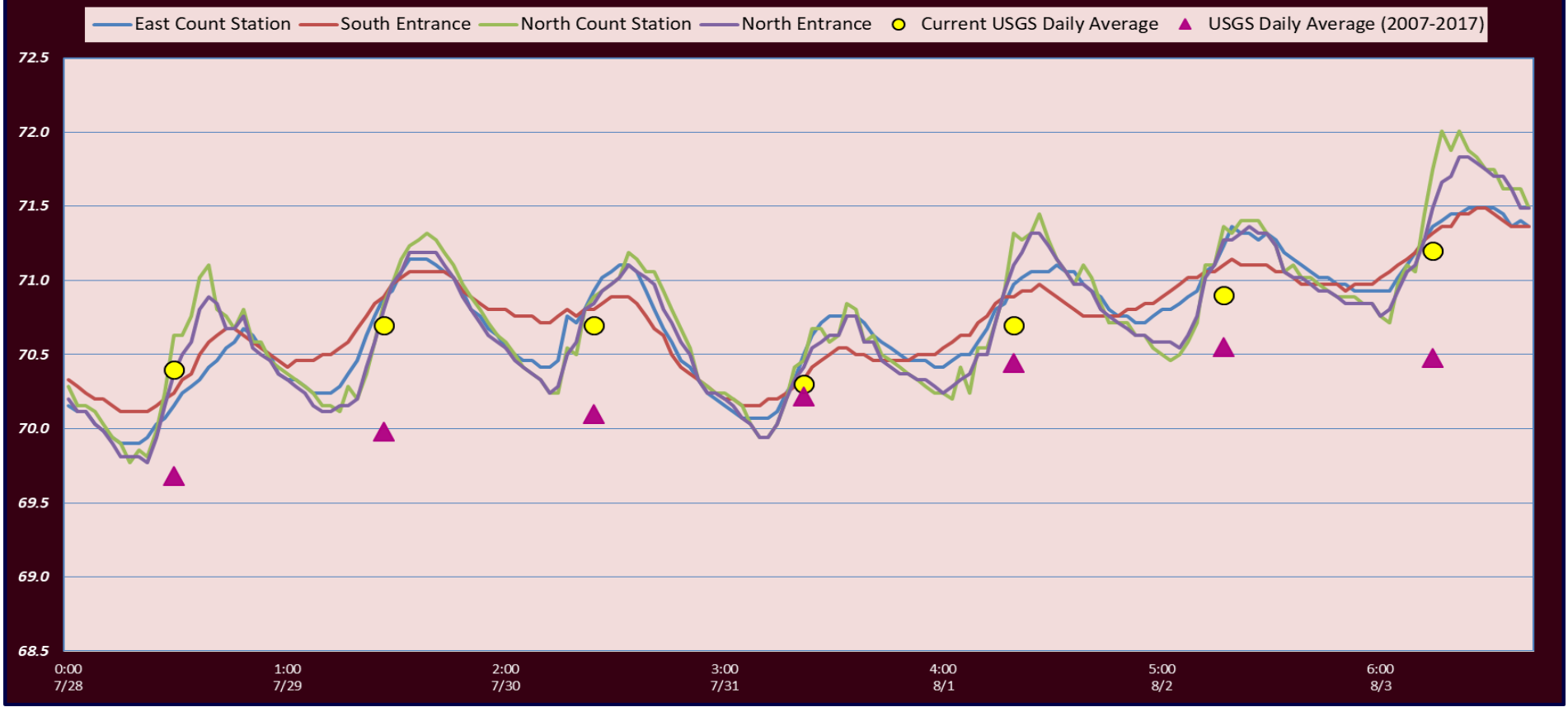
Orange lines = down or missing wires

→ Additional avian lines installed 9/2018

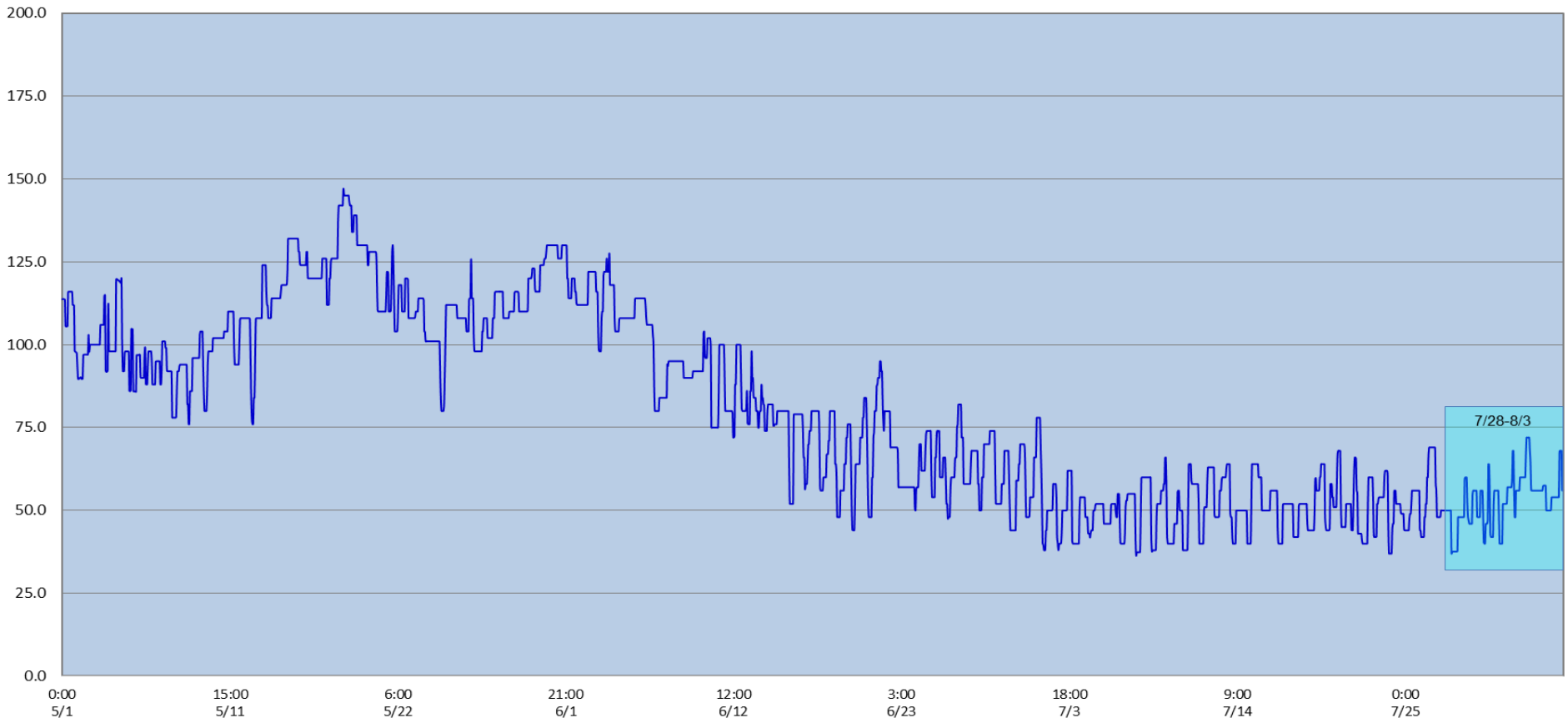


Date	Observer	AM/PM	Zone	GULL F	GULL NF	DCCO F	DCCO NF	TERN F	TERN NF	Grebe F	Grebe NF	AMWP F	AMWP NF	OtherF	OtherNF	Total	
7/28/19	JED	AM	FB	2	0	2	110	0	0	0	0	0	0	2	0	116	
7/28/19		AM	PH1	0	0	0	0	0	0	0	0	0	0	0	0	1	
7/28/19		AM	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/28/19		AM	SW1	0	0	0	0	0	0	0	0	0	0	0	2	2	
7/28/19		AM	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/28/19		AM	SW3	3	30	0	0	0	0	0	0	5	0	0	0	38	
7/28/19		AM	SW4	6	16	0	2	0	0	0	0	12	30	0	0	66	
7/28/19		AM	SW4	35	0	1	38	0	0	0	0	0	0	0	0	74	
7/29/19	JED	PM	PH1	0	0	0	0	0	0	0	0	0	0	0	1	1	
7/29/19		PM	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/29/19		PM	SW1	0	0	0	0	0	0	0	0	0	0	0	3	3	
7/29/19		PM	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/29/19		PM	SW3	0	20	1	1	0	0	0	0	3	20	0	0	45	
7/29/19		PM	SW4	0	0	0	0	0	0	0	0	74	60	0	0	134	
7/29/19		PM	SW4	0	0	1	37	0	0	0	0	0	0	0	0	38	
7/29/19		PM	SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/30/19	JWR	AM	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/30/19		AM	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/30/19		AM	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/30/19		AM	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/30/19		AM	SW3	7	14	0	0	0	0	0	0	0	0	0	0	21	
7/30/19		AM	SW4	0	0	0	0	0	0	0	0	6	28	0	0	34	
7/30/19		PM	FB	0	18	2	16	0	0	0	0	0	0	0	0	36	
7/30/19		PM	PH1	0	2	0	0	0	0	0	0	0	0	0	0	2	
7/31/19	JWR	PM	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/31/19		PM	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/31/19		PM	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
7/31/19		PM	SW3	0	3	0	0	0	0	0	0	0	0	0	0	3	
7/31/19		PM	SW4	0	12	0	0	0	0	0	2	0	0	0	0	14	
8/1/19		JWR	AM	FB	0	44	0	21	0	0	0	0	0	0	0	0	65
8/1/19			AM	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0
8/1/19			AM	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0
8/1/19	AM		SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
8/1/19	AM		SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
8/1/19	AM		SW3	1	0	2	0	0	0	0	0	4	0	0	0	7	
8/1/19	AM		SW4	5	37	0	0	0	0	0	0	10	23	0	0	75	
8/1/19	AM		SW4	0	0	0	20	0	0	0	0	0	0	0	0	20	
8/2/19	JWR	PM	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	
8/2/19		PM	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
8/2/19		PM	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
8/2/19		PM	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
8/2/19		PM	SW3	3	35	0	0	0	0	0	0	0	0	0	0	38	
8/2/19		PM	SW4	53	16	0	0	0	0	0	0	2	20	0	0	91	
8/2/19		PM	SW4	0	1	1	81	0	0	0	0	0	0	0	0	83	
8/2/19		PM	SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	
8/3/19	JWR	AM	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	
8/3/19		AM	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	
8/3/19		AM	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	
8/3/19		AM	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	
8/3/19		AM	SW3	0	24	0	0	0	0	0	0	5	4	0	0	33	
8/3/19		AM	SW4	0	0	0	0	0	0	0	0	32	52	0	0	84	

The Dalles Dam Fish Ladder(s)/River Temperatures



Hourly Spill KCFS



Secchi:		USGS:
		Temperatures
7/28	Sun	70.4
7/29	Mon	70.7
7/30	Tue	70.7
7/31	Wed	70.3
8/1	Thurs	70.7
8/2	Fri	70.9
8/3	Sat	71.2
AVG		70.7

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

SCADA INSPECTION
Out of criteria
Lamprey passage modifications Data omitted

Date:	North Ladder Entrance		East Ladder											
			East Entrance- open					West Entrance			South Entrance			
	Differential	N1 Depth	Differential	E1 Depth	E2 Depth	E3 Depth	JP 6	Differential	W1	W2	W3	Differential	S1	S2
7/28			1.4		13.6	13.6	11.3	1.4	9.0	9.0		1.4	8.6	8.6
	1.3	9.6	1.5		13.5	13.5	11.2	1.5	8.2	8.2		1.5	8.5	8.4
	1.3	9.7	1.5		13.3	13.3	11.5	1.5	8.3	8.3		1.6	8.4	8.4
7/29			1.7		13.6	13.6	12.3	1.5	8.3	8.3		1.6	8.6	8.6
	1.4	9.6	1.7		13.6	13.6	12.3	1.7	8.4	8.4		1.6	8.5	8.5
	1.3	9.7	1.6		13.5	13.5	12	1.5	8.3	8.3		1.6	8.4	8.4
7/30			1.9		13.5	13.5	12.8	1.7	8.4	8.4		1.5	8.5	8.5
	1.3	9.6	1.5		13.5	13.5	12.3	1.6	8.6	8.6		1.5	9	9
	1.3	9.7	1.6		13.4	13.4	12.6	1.5	8.7	8.7		1.4	9	9
7/31			1.3		13.5	13.5	10.6	1.4	8.7	8.7		1.3	9	9
	1.3	9.7	1.6		13.5	13.5	11.1	1.5	8.3	8.3		1.5	8.4	8.4
	1.3	9.7	1.6		13.5	13.5	11.1	1.5	8.3	8.3		1.5	8.4	8.4
8/1			1.5		13.5	13.5	11.5	1.6	8.4	8.4		1.6	8.4	8.4
	1.3	9.7	1.6		13.5	13.5	11.4	1.6	8.2	8.2		1.6	8.4	8.4
	1.4	9.6	1.6		13.4	13.4	11.3	1.5	8.2	8.2		1.6	8.4	8.4
8/2			1.5		13.5	13.5	11.4	1.4	8.3	8.3		1.5	8.5	8.6
	1.3	9.7	1.5		13.5	13.5	11.3	1.6	8.2	8.2		1.6	8.5	8.5
	1.3	9.7	1.6		13.5	13.5	11.3	1.5	8.4	8.4		1.6	8.6	8.6
8/3			1.4		13.4	13.4	11	1.4	8.3	8.3		1.6	8.5	8.5
	1.3	9.7	1.4		13.5	13.5	10.9	1.6	8.2	8.2		1.5	8.5	8.5
	1.3	9.6	1.4		13.4	13.4	10.8	1.5	8.3	8.3		1.5	8.4	8.4
AVG:	1.3	9.7	1.5		13.5	13.5	11.5	1.5	8.4	8.4		1.5	8.5	8.5

Fishways are inspected twice daily plus one SCADA inspection.



Shad run tailing off, pelicans continue to investigate