

The Dalles Dam Fishway Status Report

05/19/19

Inspection Period: May 12 - May 18, 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: 21	Temperature: 56.2 °F
			Comments:	Secchi: 3.1 feet
NORTH FISHWAY				
Exit differential	1	≤ 0.5'		Low Forebay for barge damage inspection 5/14
Count station differential	0	≤ 0.3'		
Weir crest depth	0	1.0' ± 0.1'		
Entrance differential	0	1.0' - 2.0'	1.4	
Entrance weir N1	0	depth (≥ 8')	10.0	
Entrance weir N2	0	Closed		
PUD Intake differential	1	≤ 0.5'		Low Forebay for barge damage inspection 5/14
EAST FISHWAY				
Exit differential	0	≤ 0.5'		
Removable weirs 154-157	2	Per forebay		Low Forebay for spillway inspection 5/14; weirs 156 & 155 malfunction
Weir 158-159 differential	2	1.0' ± 0.1'		Weir 158 lower limit adjusted 5/16
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	1.0' - 2.0'		short period night of 5/15 due to powerhouse ops
Entrance weir E1	0	No criteria		
Entrance weir E2	0	depth (≥ 8')		
Entrance weir E3	0	depth (≥ 8')		
Collection channel velocity	0	1.5 - 4 fps	2.09fps on 5/16 range 1.59fps to 2.39fps	
Transportation channel velocity	0	1.5 - 4 fps	2.06 fps on 5/16.	
North channel velocity	0	1.5 - 4 fps	1.97 fps on 5/17.	
South channel velocity	0	1.5 - 4 fps	3.33 fps on 5/16.	
West entrance differential	1	1.0' - 2.0'		short period night 5/15 due to powerhous ops
Entrance weir W1	0	depth (≥ 8')		
Entrance weir W2	0	depth (≥ 8')		
Entrance weir W3	closed	No criteria		
South entrance differential	1	1.0' - 2.0'		short period night 5/15 due to powerhous ops
Entrance weir S1	0	depth (≥ 8')		
Entrance weir S2	0	depth (≥ 8')		
JUVENILE PASSAGE				
Sluicelgate operation	0	Units 1, 8, 18;		
Turbine trashrack drawdown	0	<1.5', biwklly		Gatewells inspection 5/16/19.
Spill volume/pattern	0	None		Gates 1 through 8 open to flex spill pattern.
Turbine Unit Priority	0	per FPP		MU 5 and 6 OOS for maintenance
Turbine 1% Efficiency	0	per FPP		

OTHER ISSUES:

Operation:

East & North fish ladders in full operation.
Sluiceway open with 6 sluiceways per Fish Passage Plan.
Spillway open with spring flex spill for juvenile passage.

Current Outages;

MU3 OOS Annual. RTS 5/23/19
MU4 OOS Overhaul. RTS 5/23/19
MU5 FOOS bladeseals and T3 GSU transformer replacement and Overhaul. RTS 8/29/19
MU6 OOS T3 GSU transformer replacement. RTS 8/29/19
T10(MU19 & 20) FOOS through 10/28/21 due to acetylene levels

Maintenance:

East exit weir 158 limit failure 5/14. Repair complete.
East count station window/crowder brush failed, repair continues.
Calibration check 5/13: East entrance tailwater off by 0.4'. Multiple entrance weirs need adjustment but maintaining criteria depth.
Collection channel dewatering pumps 5 and 6 rehab in progress.
Fishway automation parts purchase continues. More labor focus in FY20.
Engineering evaluation of east fishway diffuser valve status planned.
Goats effectively removing vegetation on top side of south channel 5/17.
Fish related /non-fish funded items; Spillway assessment underway. Spillway crane replace and spillgate 9 repair included.

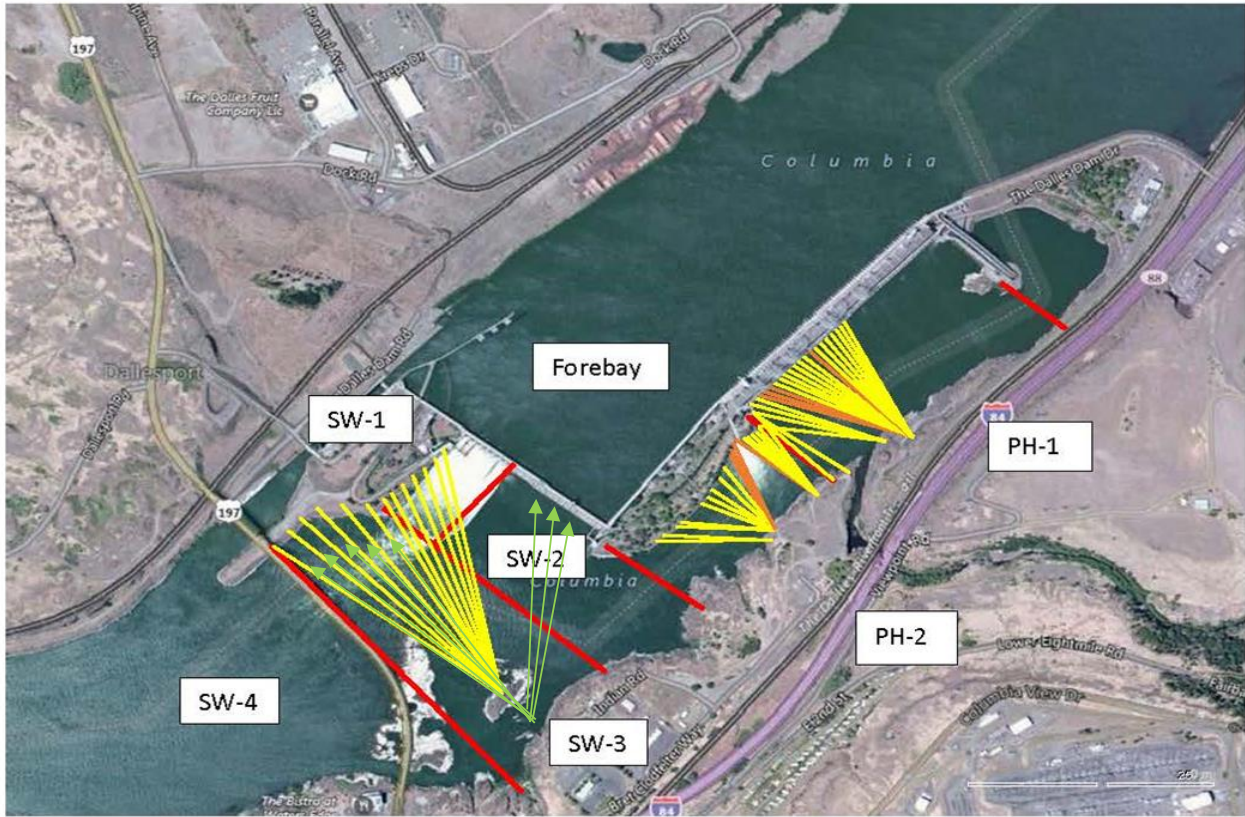
Predators;

USDA hazing from boat and shore. Evaluation of laser deterrence for gulls loafing on rocks underway.
Pikeminnow dam angling removed 58 pikeminnow last week from tailrace deck.
Cormorant nesting on forebay towers increasing from previous years. Evaluating if results in increased near dam foraging.
Tribes reported sea lion stealing fish from nets along OR shore fishing sites. No sea lion sightings near entrances this week.

Research/Construction/Contractors:

Fish counting contractors (Four Peaks) on site and counting.
For fish count data and ladder passage splits, refer to; http://www.fpc.org/adults/adult_queries/Q_adultcoequeries_adultrunsum_queryv2.php
AWS backup - Compiling list for follow on contract items and spare parts.
Transformer replacement - Ongoing. Schedule adjusted for fisheries requirements.
PSMFC weekly sampling for North Wasco County PUD continues. Refer to PCMFC weekly sample report.
PITAGS north and east fishladder data collection at count stations continues.
Pikeminnow dam angling - Ongoing this week with WDFW crew. **Bass/Walleye release continues, unlike dam angling at PUD projects**
ODFW monthly fishway inspections ongoing.
Lamprey minor mods - Planning for potential LPS in junction pool.
Univ of Idaho lamprey radiotelemetry - Second season of lamprey passage night flow reduction test to resume in May.
Tribal lamprey trapping - Materials and plans on hand for new hoist system. Install next week.
Fish unit breaker replace .- Fish units returned to service. Substantial cleanup likely next winter.
Fish unit rehab - Design on hold until further notice.

Approved by: Mike Colesar acting for Ron Twiner
Operation Project Manager The Dalles Dam



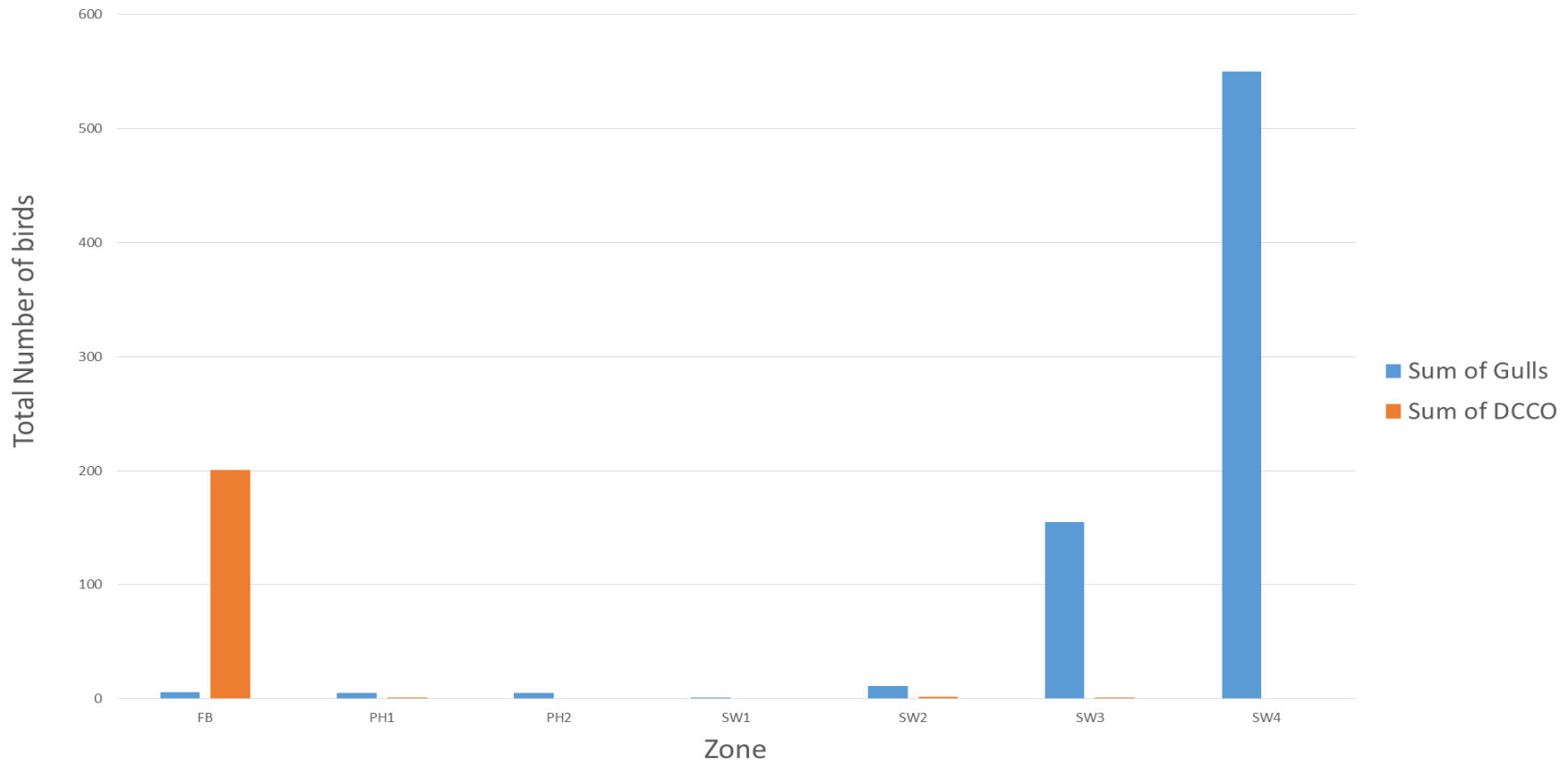
Red lines = avian zones

Yellow lines = current wires

Orange lines = down or missing wires

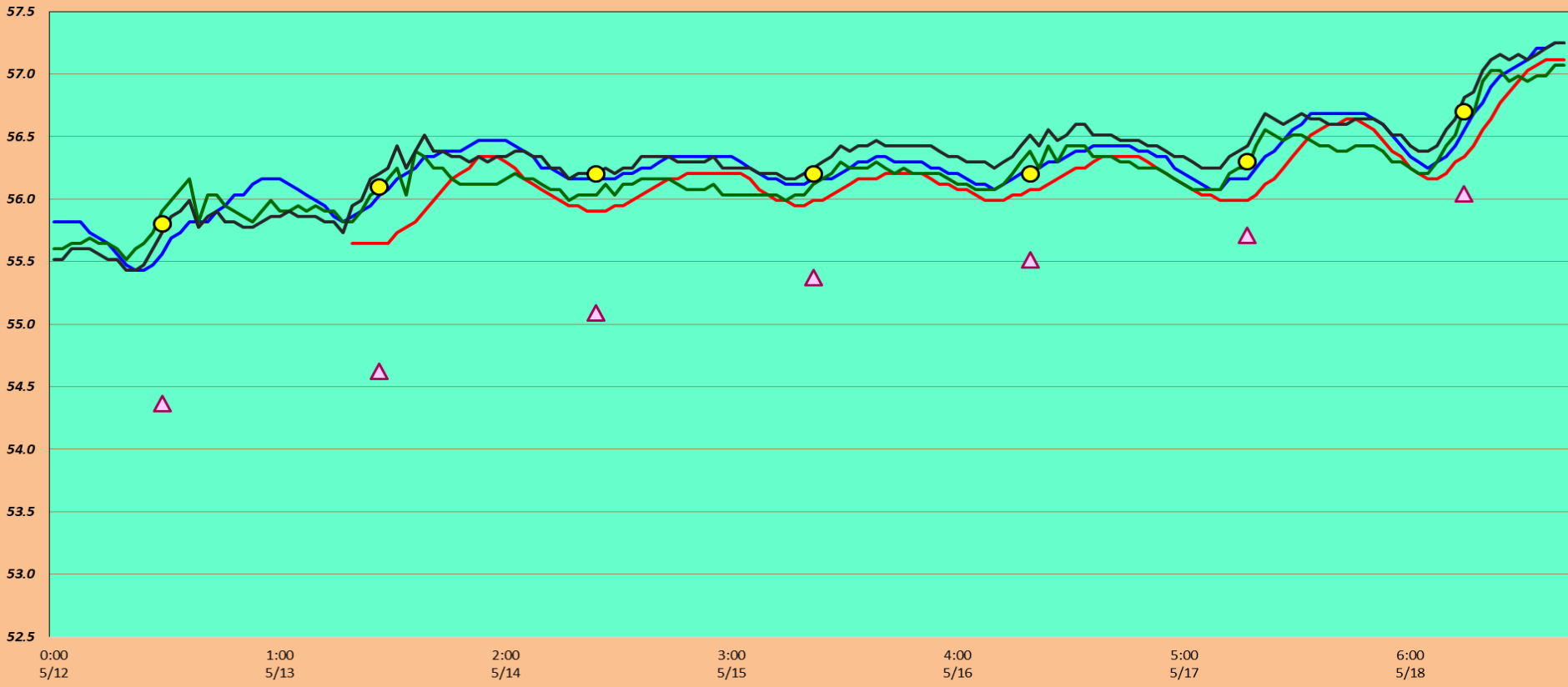
→ Additional avian lines installed 9/2018

Bird Observations 5.12-5.18

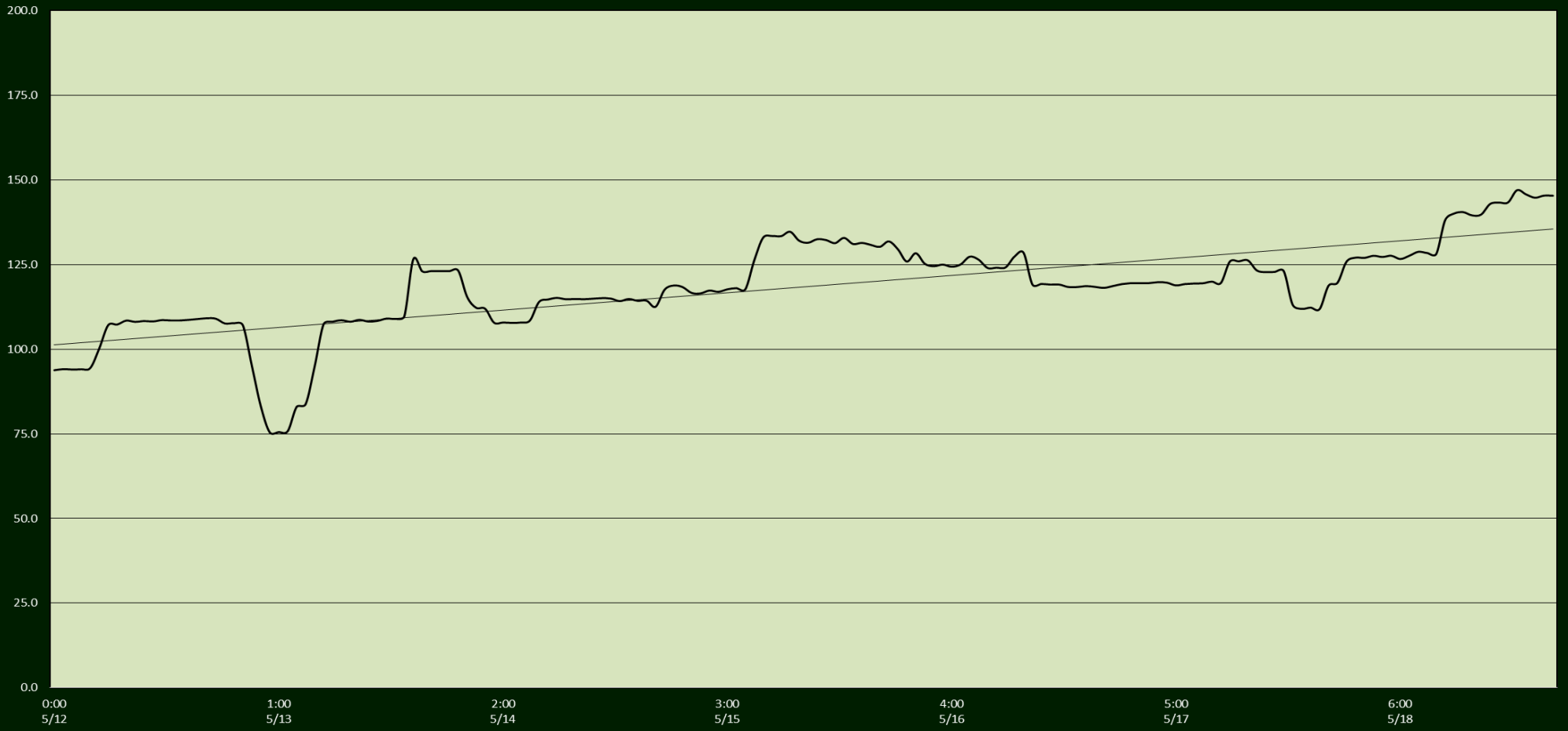


The Dalles Dam Adult Fish Ladder(s)-River Temperatures

— East Count Station — South Entrance — North Count Station — North Entrance ● Current USGS Daily Average ▲ USGS Daily Average (2007-2017)



Spill KCFS



		USGS:
Secchi:		Temperatures
5/12	3.0	Sun 55.8
5/13	3.0	Mon 56.1
5/14	3.5	Tue 56.2
5/15	3.5	Wed 56.2
5/16	3.0	Thurs 56.2
5/17	3.0	Fri 56.3
5/18	3.0	Sat 56.7
	3.1	AVG 56.2

May

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

SCADA INSPECTION
= Out of criteria

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
5/12			1.7		13.5	13.5	14.0	1.4	8.6	8.6		1.3	8.4	8.4
	1.4	10.1	1.9		13.8	13.8	15.0	1.5	8.8	8.5		1.3	8.6	8.6
	1.4	9.9	1.9		13.7	13.7	14.9	1.5	8.5	8.5		1.4	8.5	8.5
5/13			1.8		13.7	13.7	14.1	1.4	8.6	8.6		1.4	8.5	8.5
	1.4	10.0	1.9		13.8	13.8	14.2	1.4	8.5	8.5		1.4	8.4	8.4
	1.4	9.9	1.9		13.2	13.2	14.6	1.4	8.6	8.6		1.4	8.5	8.5
5/14			2.0		13.9	13.9	14.9	1.4	8.6	8.6		1.3	8.6	8.6
	1.4	10.0	1.9		13.8	13.8	15.4	1.5	8.6	8.6		1.4	8.6	8.6
	1.4	9.9	1.8		13.7	13.7	15.3	1.4	8.7	8.7		1.5	8.4	8.4
5/15			1.7		13.5	13.5	16.6	1.3	8.5	8.5		1.7	8.5	8.5
	1.3	10.1	1.9		13.9	13.9	16.7	1.4	8.5	8.5		1.5	8.5	8.5
	1.3	10.1	1.9		13.8	13.8	16.6	1.5	8.6	8.6		1.5	8.4	8.4
5/16			1.8		13.9	13.9	16.5	1.3	9	9		1.3	9.1	9.1
	1.4	9.9	1.8		13.8	13.8	16.4	1.4	8.9	8.9		1.3	9	9
	1.4	9.9	1.8		13.6	13.5	15.9	1.3	9	9		1.3	8.9	9
5/17			1.7		13.4	13.4	15.5	1.3	9	9		1.3	8.9	8.9
	1.4	10.0	1.7		13.5	13.5	15.6	1.3	8.7	8.7		1.2	9	9
	1.4	10.0	1.7		13.5	13.5	15.8	1.4	8.7	8.7		1.3	8.8	8.7
5/18			1.8		13.5	13.6	15.9	1.3	8.8	8.8		1.3	8.9	8.9
	1.4	10.1	1.8		13.5	13.5	16	1.4	8.7	8.7		1.4	8.7	8.8
	1.4	10.0	1.9		13.7	13.7	16.7	1.3	9.1	9.1		1.3	9.1	9.1
AVG:	1.4	10.0	1.8		13.7	13.7	15.6	1.4	8.7	8.7		1.4	8.7	8.7

Fishways are inspected twice daily plus one SCADA inspection.



Gull loafing rock downstream of bridge before laser test.



Gull loafing rock after laser test.