

# The Dalles Dam Fishway Status Report

9/24/23

Inspection Period 09/17-09/23, 2023

## THE DALLES DAM



US Army Corps  
of Engineers  
Portland District

The Dalles Project-Fisheries  
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<b>The Dalles Dam</b>	Inspections OOC	Criteria Limit	<b>Total Number of Inspections:</b> 14		<b>Temperature:</b> 67.9°F
			<b>Comments:</b> Fall conditions		<b>Weekly Ave. Secchi:</b> 5.6

### NORTH FISHWAY

Exit differential	0	≤ 0.5'			
Count station differential	0	≤ 0.3'			
Weir crest depth	0	1.0' ± 0.1'			
Entrance weir N1	1	depth (≥ 8')	Average for the week	8.7	
Entrance Differential	0	1.0' - 2.0'	Average for the week	1.4	
N2		Closed			
PUD Intake differential	6	≤ 0.5'	Likely due to aquatic weeds on intake. Rake under repair by PUD.		

### EAST FISHWAY

Exit differential	0	≤ 0.5'			
Removable weirs 154-157	0	Per forebay			
Weir 158-159 differential	0	1.1' ± 0.1'			
Count station differential	0	≤ 0.3'			
153 Weir crest depth	0	1' ± 0.1'	1.0' per FPP.		
Junction pool weir JP6	0	> 7.0'	Weekly average	10.3	
East entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir E1	0	No criteria	Weekly average	3.2	
Entrance weir E2	0	depth (≥ 8')	Weekly average	10.9	
Entrance weir E3	0	depth (≥ 8')	Weekly average	10.9	
Collection channel velocity	0	1.5 - 4 fps	2.18 west 9/5/23		
Transportation channel velocity	0	1.5 - 4 fps	2.96 fps 9/5/23		
North channel velocity	0	1.5 - 4 fps	3.08 fps 9/13/23		
South entrance	0	1.5 - 4 fps	4.01 fps 9/13/23		
West entrance differential	0	1.0' - 2.0'	Weekly average	1.5	
Entrance weir W1	4	depth (≥ 8')	Weekly average	8.3	Due to low tailwater conditions
Entrance weir W2	4	depth (≥ 8')	Weekly average	8.4	Due to low tailwater conditions
Entrance weir W3	0	No criteria	Weekly average	-2.3	
South entrance differential	0	1.0' - 2.0'	Weekly average	1.4	
Entrance weir S1	4	depth (≥ 8')	Weekly average	8.2	Due to low tailwater conditions
Entrance weir S2	2	depth (≥ 8')	Weekly average	8.2	Due to low tailwater conditions

### JUVENILE BYPASS

Sluiceway operation	0	Units 1, 8, 18	1-8-18 gates open.		
Turbine trashrack drawdown	0	<1.5', biwklly	9/16/2023 All MUs and FUs in criteria.		
Spill volume/pattern	0	1 to 22	Spill closed		
Turbine Unit Priority	0	per FPP			
Gatewells	0	Weekly	9/16/2023 no mortality		

### Current Outages

MU4 OOS 04/17/2023 0630 – 9/28/2023 1700, ANNUAL  
MU19 & MU20 FOOS 10/07/2018 1205 – 10/31/2025 1700 T10 ACETYLENE

### Maintenance

Working on contract for north ladder vegetation removal in Feb  
Planning spill gates 9 and 10 cable and gearbox swap. Possible this fall/winter.  
Spillway assessment; Spillgates 1- 9 rehab 2034. Spillway crane replace first priority. Reviewing gate operation frequency.  
Diffuser grating damage discovered at east entrance. Dive repair completed 8/22. Reduced flow 5kcf to 4 kcf rest of season.  
Fixed East exit oil boom on 9/13  
Calibrations all within criteria 9/21

### Predators

Northern Pikeminnow Management Program 2366 YTD  
Planning removal of bass/walleye/catfish from all dewaterings for gut sample analysis. Working on permit.  
Trial of Tori lines installed at east, south and west entrance  
Pacific Lamprey translocation season ended 9/6 w/ a grand total of 1501 fish captured/translocated  
Western gulls on project. DCCO unable to feed at entrances but returned to east exit. Pelicans absent.

### Research/Construction/Contractors

USGS temperature link- [September](#)  
4 Peaks fish count ending 10/31  
Supporting lamprey improvements PDT. Two of 4 exit weir modified with lamprey orifice, other 2 next winter.  
Planning for install of junction pool lamprey trap and entrance weir modifications via contractor this winter.  
ODFW conducting monthly fishway inspections.  
PTAGIS fishladder data collection at count stations continues  
zebra/quagga mussel samples collected on 9/12/2022

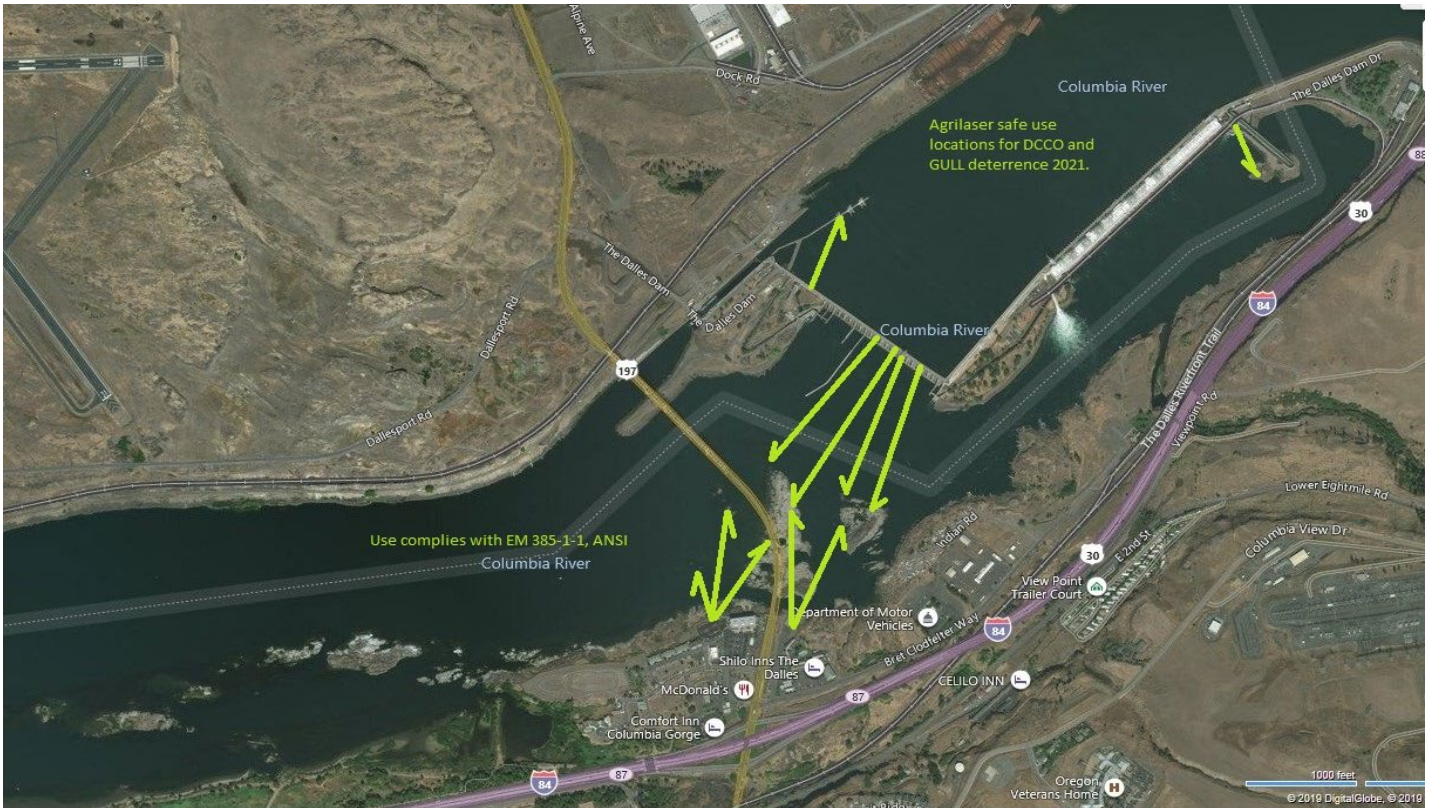
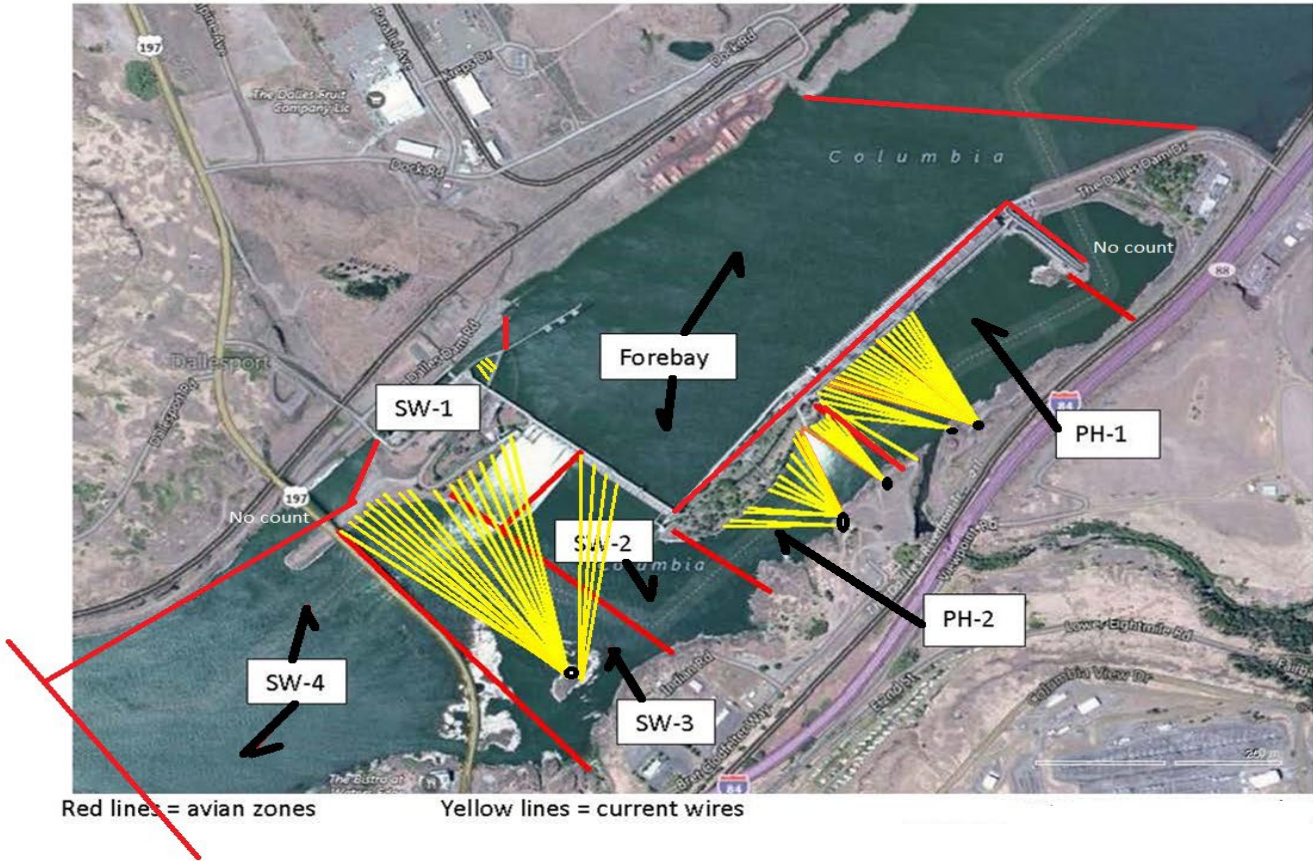
### Operations

Sluice gates 1-1, 1-2, 1-3, 8-1, 8-3, 18-2 in accordance with fish passage criteria

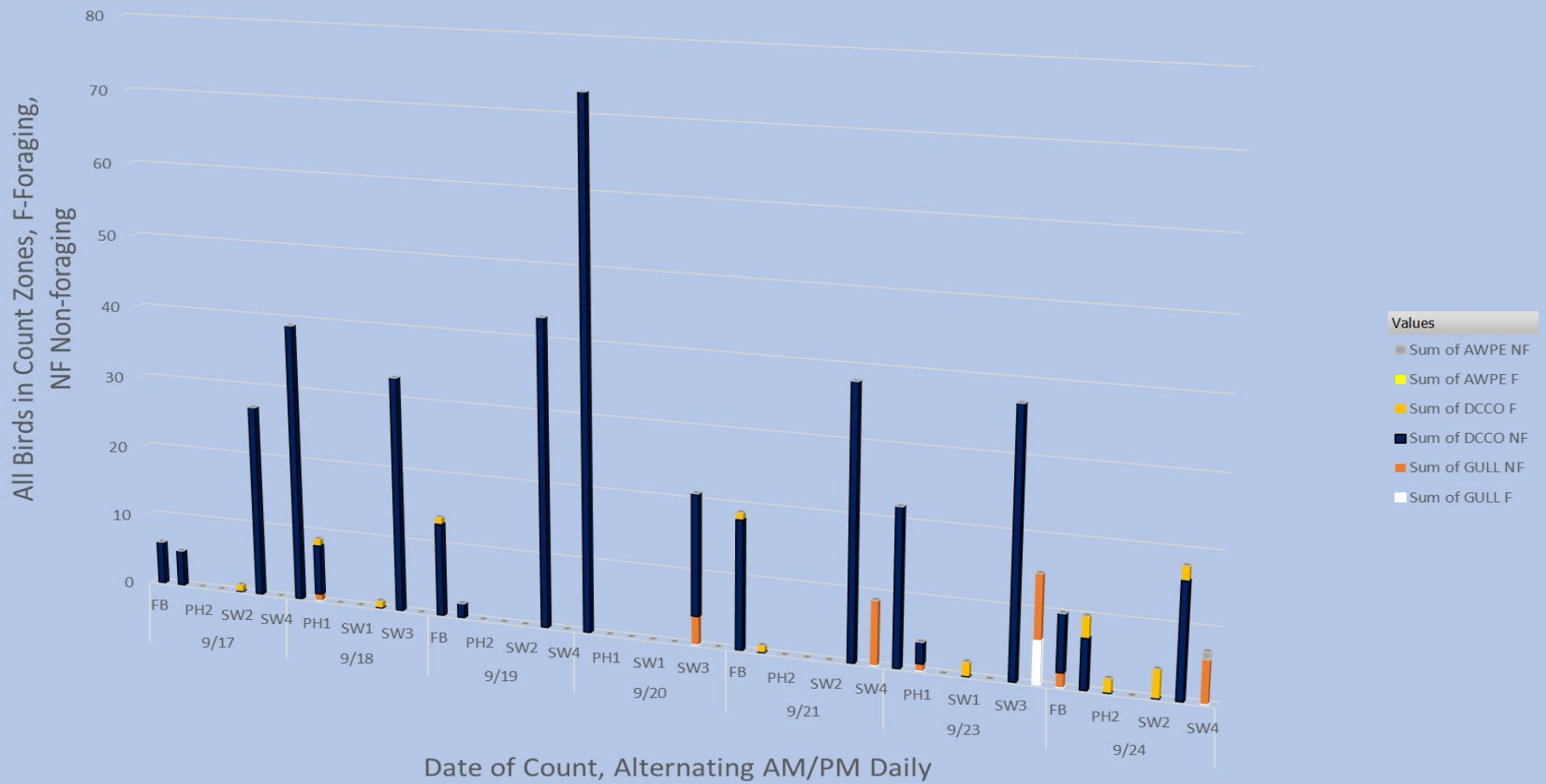
Approved by: Ron Twiner, Operation Project Manager, The Dalles Dam



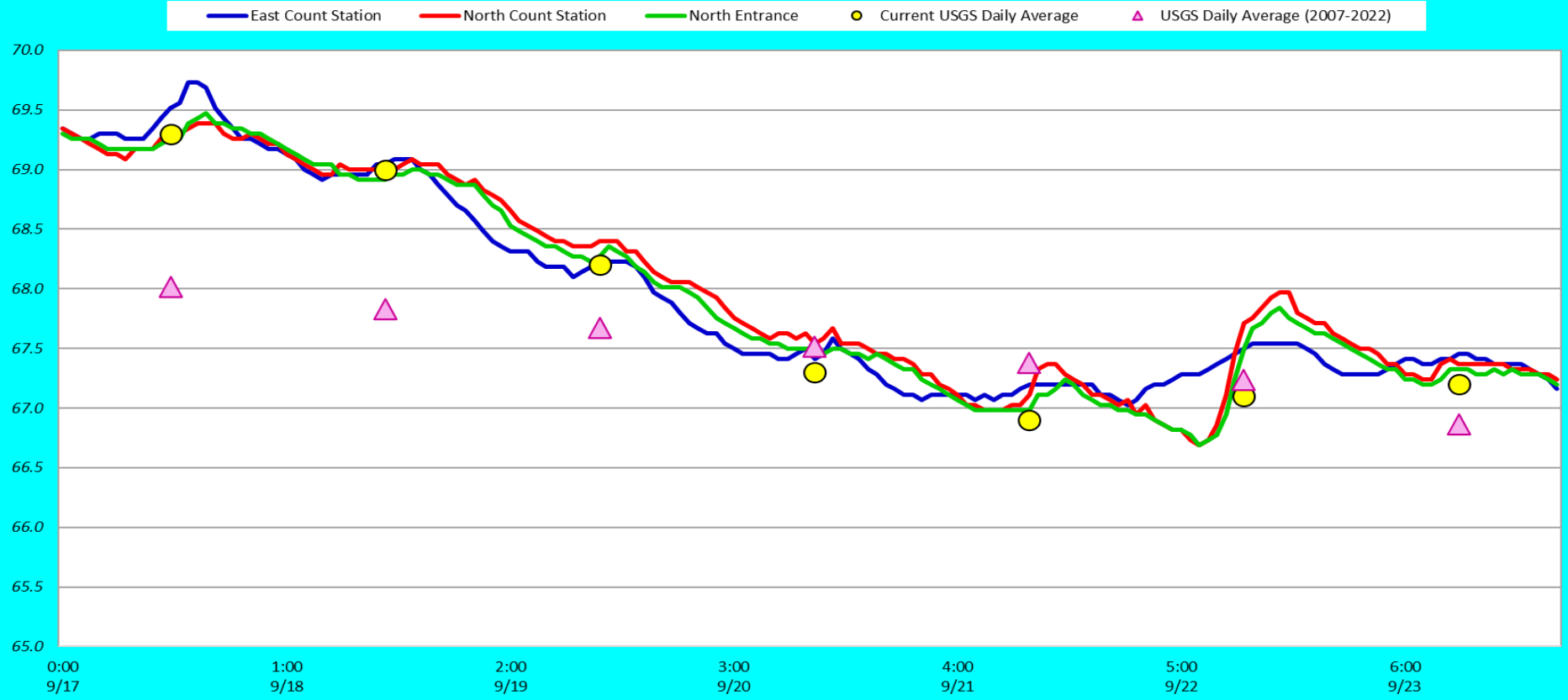
# Bird Count Zones, Avian Lines and Laser Deterrent Sites



### Avian Count at TDA, 9/17 to 9/24/2023



### Adult Fish Ladders-River Temperatures





Secchi:		USGS
6.0	Sun	69.3
6.0	Mon	69.0
5.0	Tue	68.2
6.0	Wed	67.3
5.0	Thurs	66.9
5.0	Fri	67.1
6.0	Sat	67.2
5.6	AVG	67.9

## Reporting week data

Date:	North Ladder		East Ladder											
			East Entrance					West Entrance			South Entrance			
	Differential	N1 Depth	Differential	E1 Depth	E2 Depth	E3 Depth	JP 6	Differential	W1	W2	W3	Differential	S1	S2
9/17	1.5	9.3	1.5	2.6	10.7	10.9	9.7	1.6	7.5	7.5	-3.0	1.4	8.2	8.3
	1.4	9.5	1.3	3.1	11.2	11.4	10.2	1.3	8.5	8.4	-3.0	1.4	8.3	8.1
9/18	1.3	9.3	1.4	3.3	11.2	11.4	10.4	1.3	8.6	8.6	-2.3	1.4	8.2	8.3
	1.5	9.3	1.5	3.3	11.2	11.4	10.3	1.3	8.6	8.6	-2.3	1.4	8.3	8.3
9/19	1.4	9.4	1.5	3.1	11.0	11.2	10.2	1.4	8.2	8.2	-2.5	1.5	7.9	7.9
	1.5	9.3	1.4	3.4	11.3	11.5	10.4	1.5	8.3	8.3	-2.4	1.4	8.4	8.4
9/20	1.3	10.5	1.4	3.3	11.2	11.4	10.4	1.3	8.5	8.5	-2.2	1.4	8.1	8.3
	1.3	9.5	1.4	3.3	11.2	11.4	10.4	1.3	8.5	8.5	-2.2	1.4	8.1	8.3
9/21	1.3	9.5	1.6	3.5	10.5	10.7	10.6	1.5	8.1	10.1	-2.1	1.6	7.9	7.9
	1.4	9.5	1.5	3.7	10.6	10.8	10.7	1.5	8.2	8.2	-2.0	1.4	8.7	8.6
9/22	1.3	-1.3	1.7	3.2	10.4	10.6	10.2	TYPO	9.7	9.7	-0.4	1.6	7.9	8.1
	1.6	9.2	1.6	3.3	10.7	10.9	10.3	1.5	7.7	7.7	-2.5	1.3	8.4	8.3
9/23	1.3	9.4	1.6	3.2	10.8	10.7	10.2	1.6	7.8	7.8	-2.4	1.3	8.0	8.0
	1.3	9.5	1.7	3.1	10.7	10.6	10.1	1.6	7.8	7.8	-2.4	1.5	7.9	8.0
<b>AVG:</b>	<b>1.4</b>	<b>8.7</b>	<b>1.5</b>	<b>3.2</b>	<b>10.9</b>	<b>11.1</b>	<b>10.3</b>	<b>1.5</b>	<b>8.3</b>	<b>8.4</b>	<b>-2.3</b>	<b>1.4</b>	<b>8.2</b>	<b>8.2</b>

*Fishways inspected twice daily*

Double crested cormorants lined up in SW3. 9/22/23. This group is part of the roughly 70 that stay at The Dalles all year. The white arrows indicate the white chest/head of, young of the year. A total of 10-12 juveniles were seen in this survey, compared to 25 in 2022. White chests are easy to see with binoculars.

