

## FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 3/25/2023

Inspection Period: 3/19/2023 thru 3/25/2023



**US Army Corps  
of Engineers**  
Portland District

JD/WC Project-Fisheries  
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All JD Fishways are inspected twice per day during fish passage season, Mar. 1 - Nov. 30.  
Additional and frequent monitoring, of the PLC displays in SMF Fisheries Office, as necessary.

John Day Dam	Inspection OOC	Criteria Limit	Total Number of Inspections: 14			Temperature:	41.6 F
						Secchi:	6.0 Ft.
<b>NORTH FISHWAY</b>							
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	High setting					
Count station differential	0	≤ 0.3'					
Entrance differential	0	1.0' - 2.0'	AVG (Ft.)	1.5			
<b>SOUTH FISHWAY</b>							
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	Mid setting					
Count station differential	0	≤ 0.3'					
Weir crest depth (US gauge)	0	1.0' ± 0.1'					
South entrance differential	0	1.0' - 2.0'	AVG (Ft.)	1.4			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.6			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.26			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.7			
Entrance weir NE1	4	depth (≥ 8')	AVG (Ft.)	8.6			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.2			
<b>JUVENILE PASSAGE</b>							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.7			
Submersible traveling screens	0	visual inspect					
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.2', wkly					
Spill volume	0	per FPP	Avg (kcfs)	0.0	Avg %		
Spill pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

## Fisheries Related Operations

### **Smolt Monitoring Operations:**

SMF is dewatered, ETR 3/27/23

JBS is dewatered, ETR 3/27/23

### **Adult Ladder Operations:**

NFL in criteria

SFL - 1 turbine operation 3/1 - 3/20, NE1 closed from 3/1 - 3/20 (per FPP 1-turbine operation guidelines)

SFL turbine 2 RTS 3/20 @ reduced RPMs (55 RPMs) to prolong the repairs

SFL turbine 3 still OOS (Philadelphia gear inspected on 2/22 and recommended FOOS - See 23JDA03)

FOG's removed

### **Project Operations:**

Current outages: MU4 (ETR: 11/2/23), MU5 (ETR: 4/27/23) MU7 (ETR: 7/31/28), MU8 (ETR: 1/10/24), MU10 (ETR: 11/15/23)

MU12 (ETR: 3/28/23), MU13 (ETR: 6/14/23)

### **Maintenance:**

SMF down for Winter Maintenance

### **Calibration:**

All gauges within the 0.3' criteria.

### **Bird Data:**

1-Grebe has been spotted occasionally, gull numbers are fewer than 10, and cormorant numbers are starting to decrease (~30).

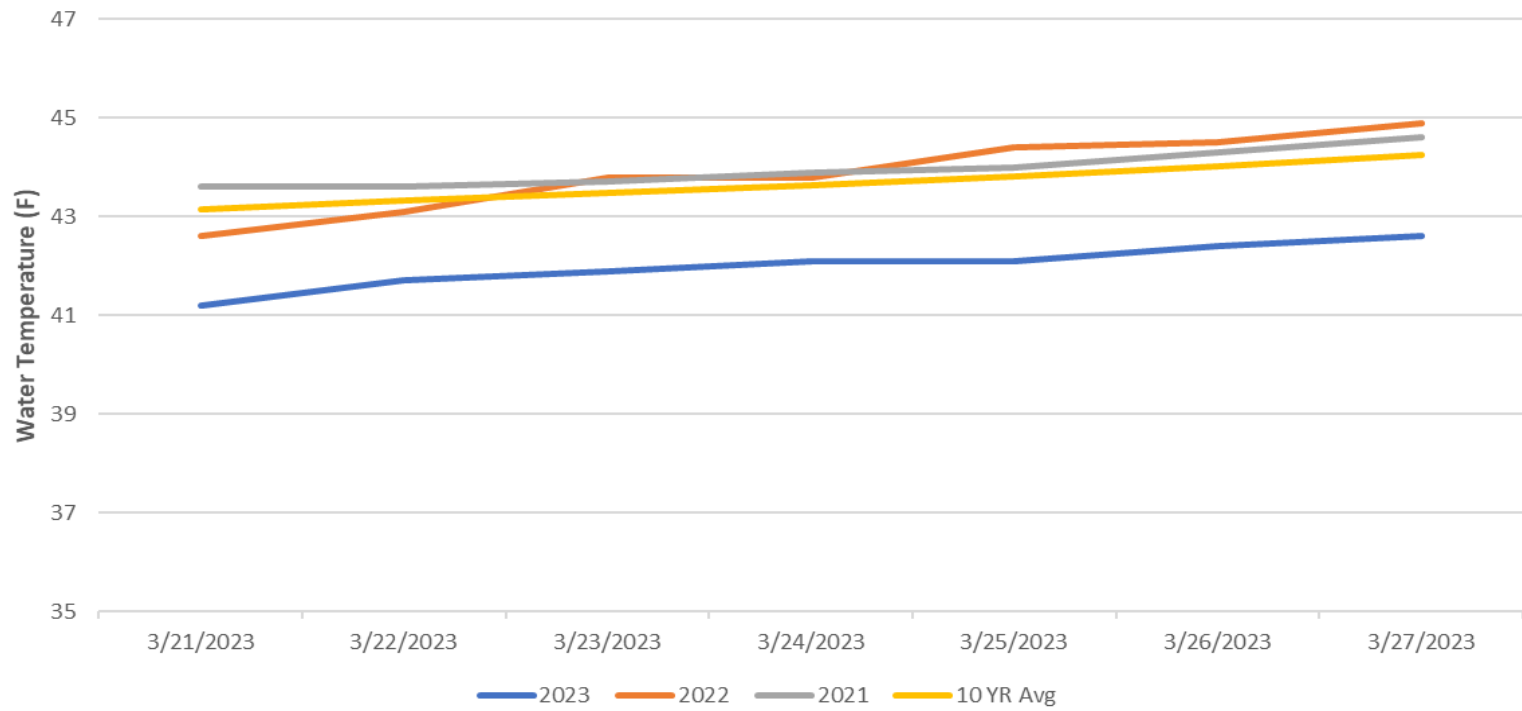
There are approximately 3 pelicans hanging around Preacher's Island with very few foraging observations in JDA bird counting zones.

11 of 125 avian lines down, in contracting phase for replacement of 9 lines from powerhouse roof.

### **Research:**

Preparations for the 2023 Research Season are underway - No new research is scheduled at this time

### John Day Dam Water Temperature (F)



# JDA Collection Channel Velocity

FPP Criteria: 1.5–4.0 feet per second (2 fps optimum)

Date	Measurement Location	Speed (ft/sec)	SFL Turbine RPMs (1,2,3)	Bay 19 TW (ft)
3/19/2023	Unit 4	1.66	68,0,0	159.9
3/19/2023	Unit 12	1.65	68,0,0	159.9
3/20/2023	Unit 4	1.59	68,0,0	159.4
3/20/2023	Unit 12	1.63	68,0,0	159.4
3/21/2023	Unit 4	2.76	55,55,0	159.8
3/21/2023	Unit 12	2.71	55,55,0	159.8
3/23/2023	Unit 4	2.63	55,55,0	159.4
3/23/2023	Unit 12	2.60	55,55,0	159.4
3/25/2023	Unit 4	2.65	55,55,0	159.8
3/25/2023	Unit 12	2.68	55,55,0	159.8

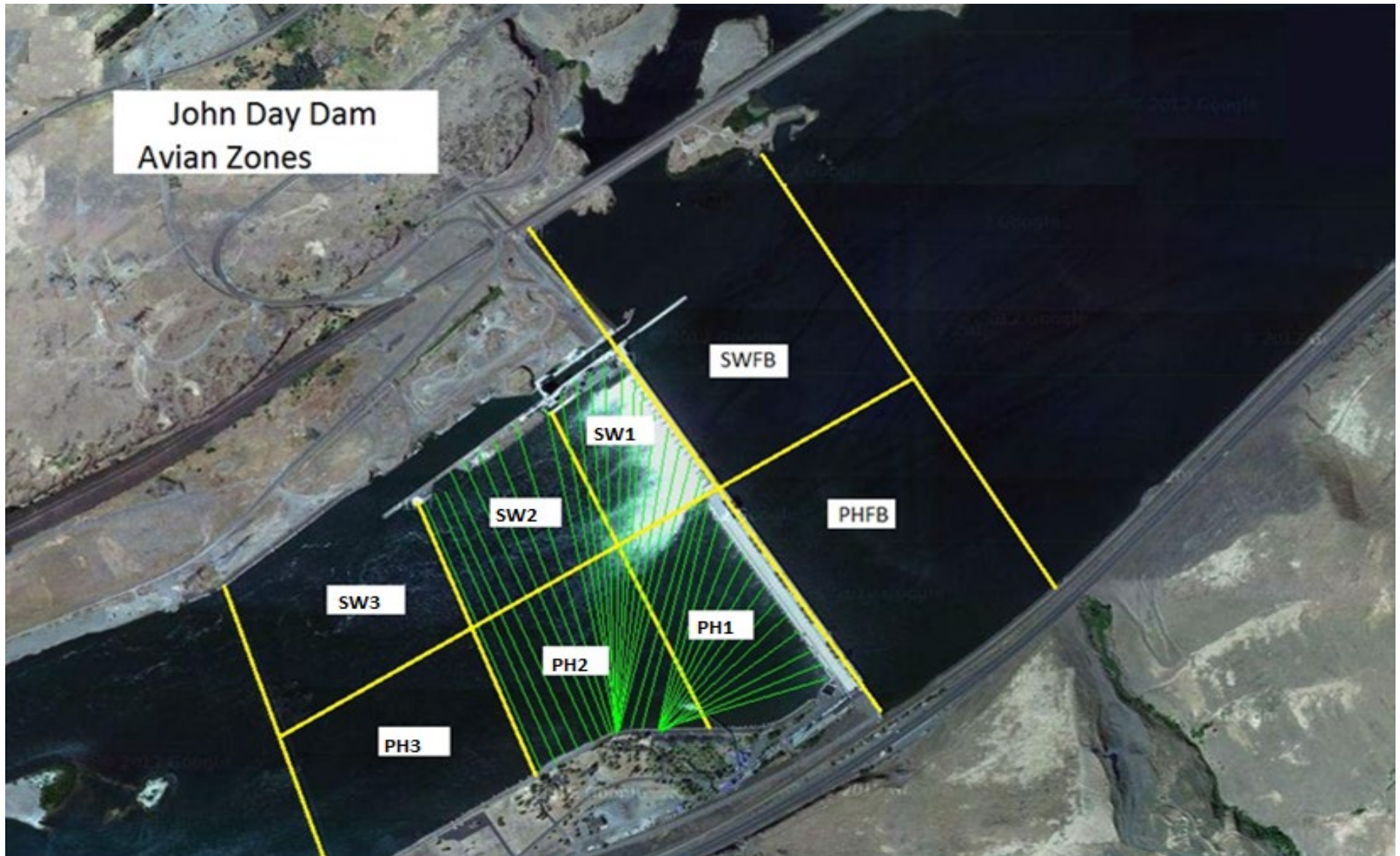
Average Weekly Velocity (ft/sec)	2.26
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## JOHN DAY WEEKLY AVERAGES

	South Fish Ladder					NFL	JBS	Spill	
	SE1 (Ft)	S.Ent (Ft)	NE1 (Ft)	NE2 (Ft)	Bay19 (Ft)	N.Ent (Ft)	JBS Diff (Ft)	Spill Vol. (kcfs)	# Spillbays
Sunday	9.0	1.1	X	9.0	1.9	1.1	X	0.0	0.0
Sunday	8.6	1.2	X	9.2	1.2	1.5	X	0.0	0.0
Monday	9.0	1.3	X	9.5	1.8	1.5	X	0.0	0.0
Monday	8.0	1.4	X	8.8	1.7	1.5	5.0	0.0	0.0
Tuesday	9.0	1.3	8.8	9.5	1.8	1.5	4.8	0.0	0.0
Tuesday	8.0	1.4	8.1	8.8	1.7	1.5	4.9	0.0	0.0
Wednesday	8.3	1.3	8.2	8.9	1.8	1.6	4.9	0.0	0.0
Wednesday	8.7	1.3	8.7	9.3	1.6	1.4	4.5	0.0	0.0
Thursday	8.6	1.4	9.2	9.2	1.6	1.7	4.6	0.0	0.0
Thursday	8.4	1.4	8.4	9.1	1.6	1.5	4.4	0.0	0.0
Friday	8.5	1.5	8.5	9.2	1.9	1.6		0.0	0.0
Friday	8.3	1.5	8.3	9.0	1.8	1.6		0.0	0.0
Saturday	8.8	1.5	8.8	9.5	1.8	1.4	4.6	0.0	0.0
Saturday	8.9	1.5	8.8	9.5	1.8	1.5	4.5	0.0	0.0
<b>AVG:</b>	<b>8.6</b>	<b>1.4</b>	<b>8.6</b>	<b>9.2</b>	<b>1.7</b>	<b>1.5</b>	<b>4.7</b>	<b>0.0</b>	<b>0.0</b>

	Temp (F)	Secchi (Ft)	Notes
Sunday	41.0	6.0	X: Winter Maintenance  On Wednesday 3/1 South Fish Turbine 2 was forced out of service (south fish turbine 3 also OOS) which left the SFL in a 1 turbine operation. In this operation NE 1 is to be closed. Turbine #2 came back online March 20th and NE-1 opened
Monday	41.3	6.0	
Tuesday	41.2	6.0	
Wednesday	41.7	6.0	
Thursday	41.9	6.0	
Friday	42.1	6.0	
Saturday	42.1	6.0	
<b>AVG</b>	<b>41.6</b>	<b>6.0</b>	

John Day Dam  
Avian Zones

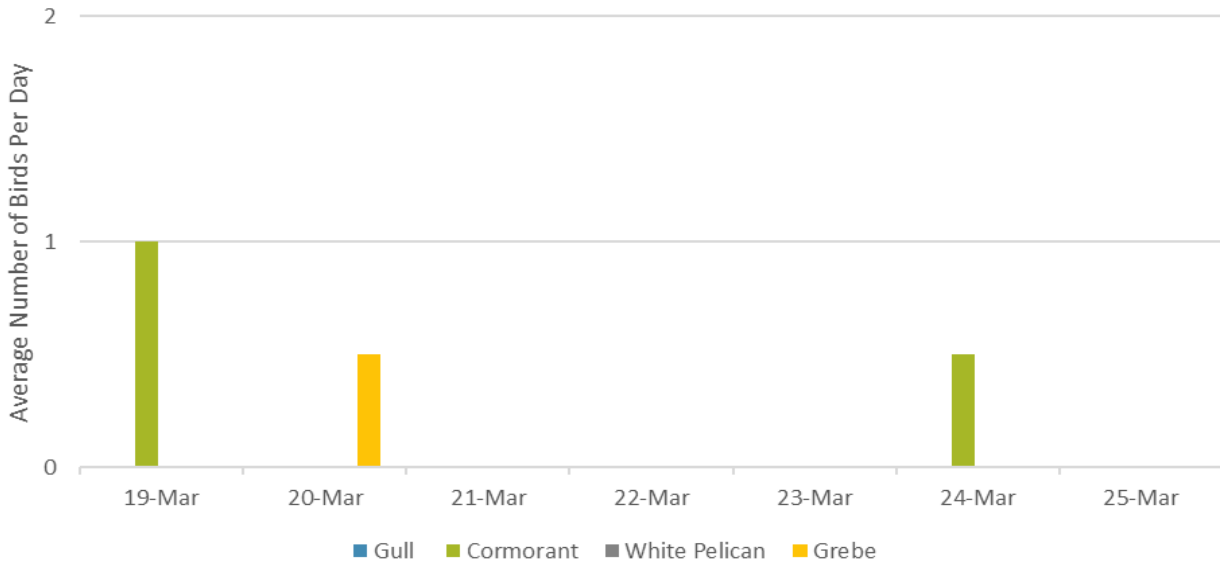








### Foraging Piscivorous Birds



### Non-Foraging Piscivorous Birds

