

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 1/14/2023

Inspection Period: 1/8/2023 thru 1/14/2023



**US Army Corps
of Engineers**
Portland District

JD/WC Project-Fisheries
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Rufus, Oregon 97050
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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: 7			Temperature: 38.0 F	Secchi: 6.0 Ft.
NORTH FISHWAY							
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.)	1.6			
SOUTH FISHWAY							
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.)	1.2			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.7			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.55			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.7			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.8			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.6			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.5			
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 was dewatered on 12/7

Adult Ladder Operations:

NFL RTS on 1/12 and SFL was set to office flow on 1/12 to prepare for dewatering on 1/17.

Project Operations:

Current outages: MU4 (ETR: 11/2/23), MU5 (ETR: 1/31/23) MU7 (ETR: 7/31/28), MU8 (ETR: 2/16/23), MU10 (ETR: 3/30/23)
MU13 (ETR: 3/23/23)

Spill Season ended on November 29th at JDA

Maintenance:

NFL RTS 1/12

SMF down for Winter Maintenance (ETR: 2/21/23)

Calibration:

All gauges within the 0.3' criteria.

Bird Data:

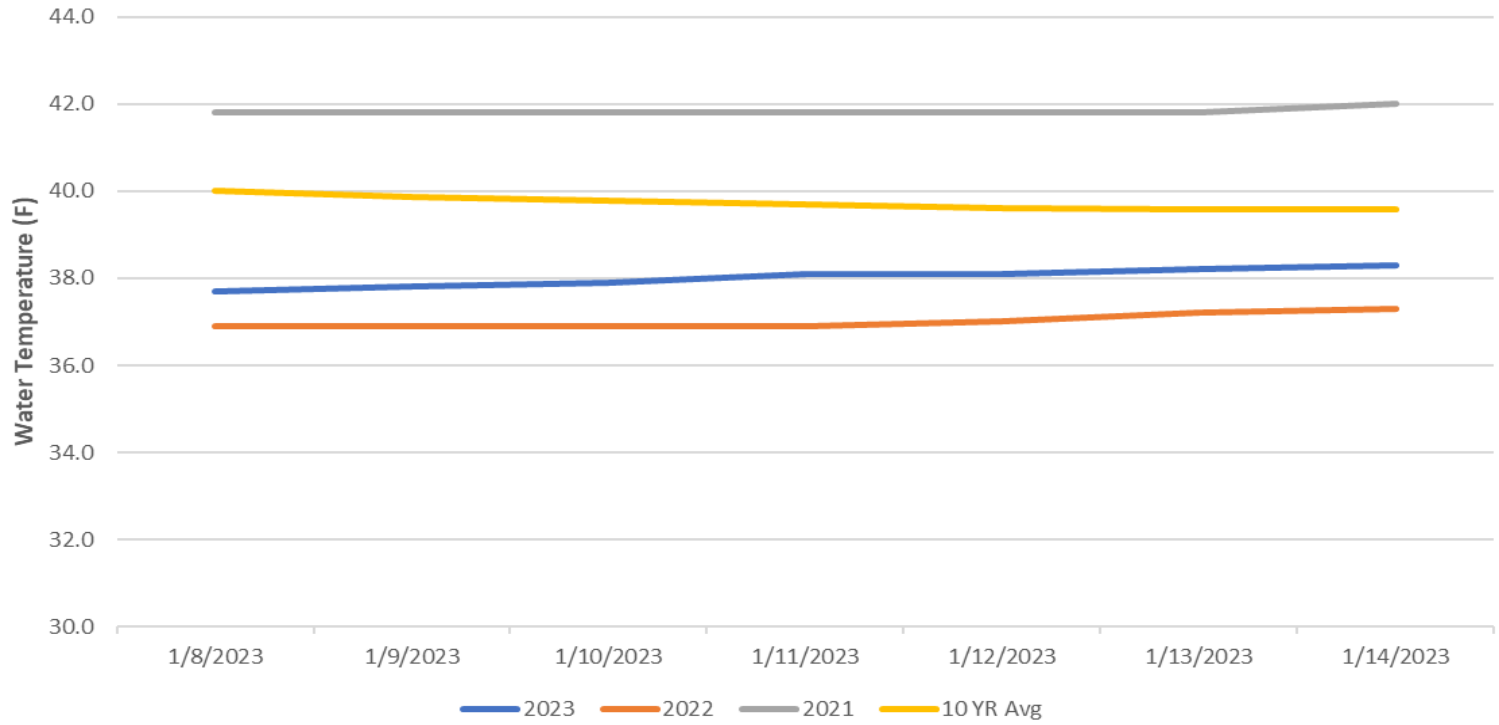
Gull and Grebe numbers are fewer than 10, cormorant numbers are holding steady. There are approximately 3 pelicans hanging around Preacher's Island with very few foraging observations in JDA bird counting zones.

11 of 125 avian lines down. No bird counts are currently being conducted on Saturdays and Sundays.

Research:

Preperations 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)
1/9/2023	Unit 4	2.48	0,68,68	159.8
1/9/2023	Unit 12	2.51	0,68,68	159.8
1/11/2023	Unit 4	2.63	0,68,68	159.7
1/11/2023	Unit 12	2.59	0,68,68	159.7

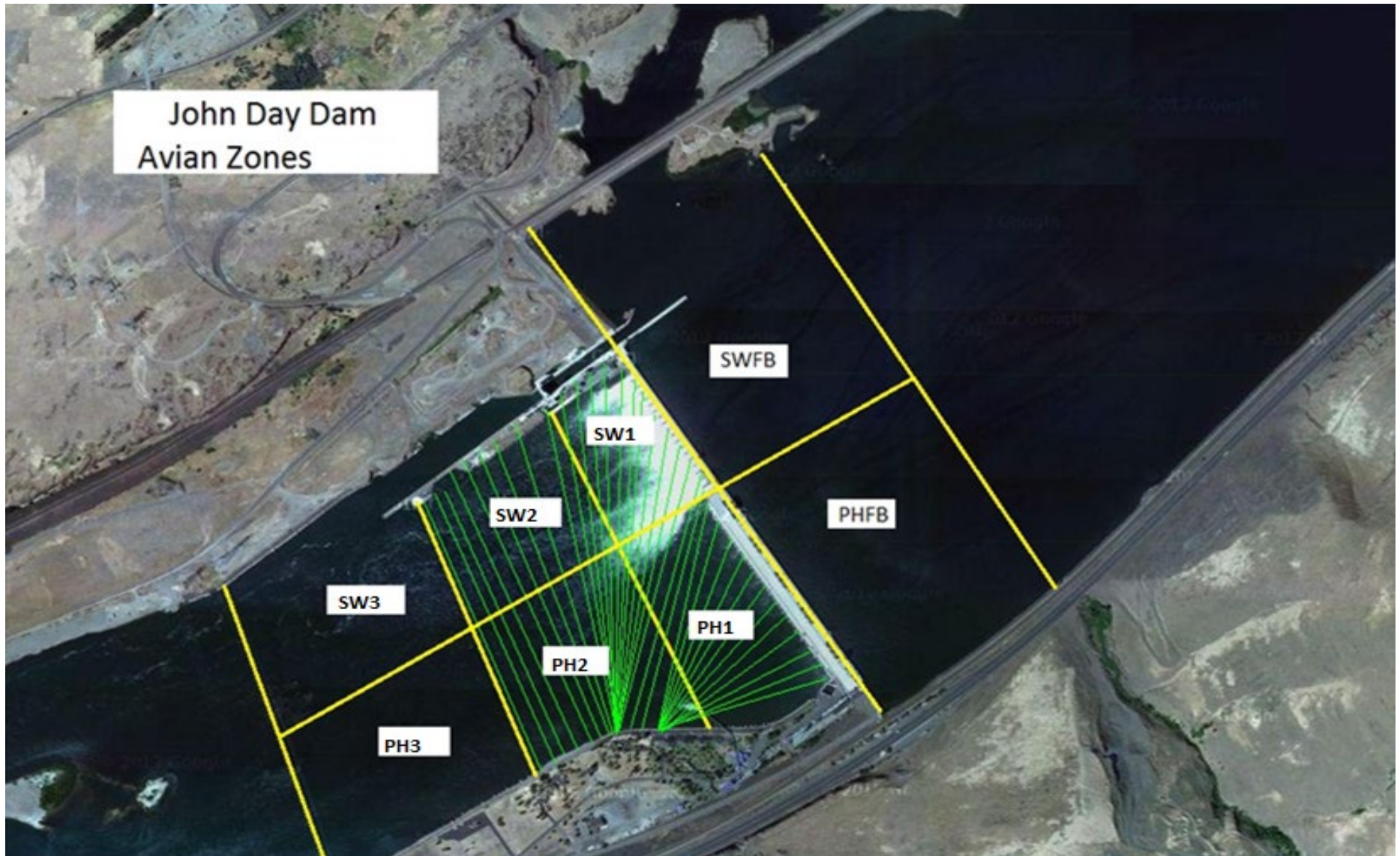
Average Weekly Velocity (ft/sec)	2.55
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JOHN DAY WEEKLY AVERAGES

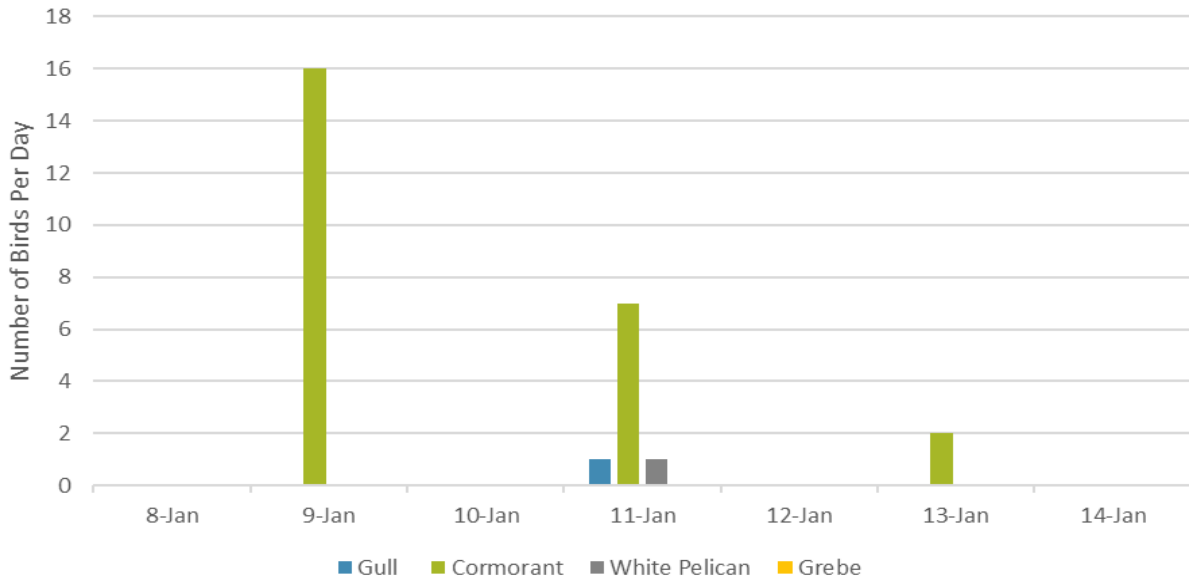
	South Fish Ladder					NFL	JBS	Spill	
	SE1 (Ft)	S.Ent (Ft)	NE1 (Ft)	NE2 (Ft)	Bay19 (Ft)	N.Ent (Ft)	JBS Diff (Ft)	Spill Vol. (kcfs)	# Spillbays
Sunday	8.8	1.1	9.7	9.5	1.8	X	4.0	0.0	0.0
Monday	8.5	1.3	9.6	9.3	1.6	X	4.6	0.0	0.0
Tuesday	8.5	1.1	9.6	9.4	1.7	X	4.6	0.0	0.0
Wednesday	9.0	1.4	10.2	10.0	1.7	X	4.7	0.0	0.0
Thursday	X	X	X	X	X	1.7	4.7	0.0	0.0
Friday	X	X	X	X	X	1.5	4.5	0.0	0.0
Saturday	X	X	X	X	X	1.6	4.1	0.0	0.0
AVG:	8.7	1.2	9.8	9.6	1.7	1.6	4.5	0.0	0.0

	Temp (F)	Secchi (Ft)	Notes
Sunday	37.7	6.0	X: Winter Maintenance
Monday	37.8	6.0	
Tuesday	37.9	6.0	
Wednesday	38.1	6.0	
Thursday	38.1	6.0	
Friday	38.2	6.0	
Saturday	38.3	6.0	
AVG	38.0	6.0	

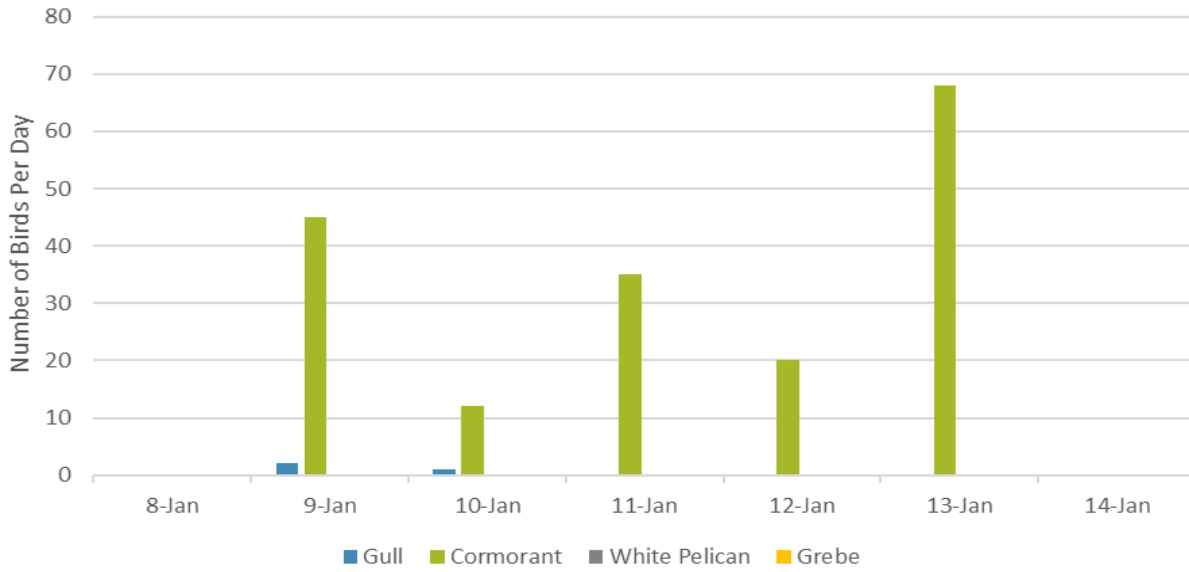
John Day Dam
Avian Zones



Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds





NFL Entrance Weir staged for downstream UHMW panel replacement. The image is of the downstream side. Currently there are STS mesh panels in lieu of UHMW panels. This is the lowest panel when deployed. The other 2-panels are stacked visibly behind.



NFL variable width entrance weir with UHMW panels installed.