

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 3/16/2024

Inspection Period: 3/10/2024 thru 3/16/2024



**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:	43.2 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.)	1.5					

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.)	1.1					
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.7					
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	1.90					
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.4					
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	8.7					
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	8.7					

JUVENILE PASSAGE

Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	OOS					
Submersible traveling screens	0	Removed							
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 (%)	0.0			
Spill pattern	0	per FPP							
Turbine Unit Priority	0	per FPP							
Turbine 1% Efficiency	0	per FPP							

Fisheries Related Operations

Smolt Monitoring Operations:

The JBS is scheduled to be watered up on 3/18/24, with SMF monitoring to begin on 4/1/24

Adult Ladder Operations:

NFL is operating in criteria.

SFL RTS 2/29/24.

SFL turbine #3 RTS 02/29/24, FOG's removed. Operating 2 SFL Turbines @ 55 RPM.

Project Operations:

TSW spill through Bay-19 set to begin on March 21st

Current outages: MU4 (ETR: 3/21/24), MU7 (ETR: 7/31/28), MU13 (ETR: 11/14/24) .

Spillbay Outages: #1-missing brake/motor (ETR Unknown), #6 and #10-operates in manual/local mode only (ETR: Unknown).

Weekly Average Tailwater TDG: 102.6

Maintenance:

NFL AWS pump #4 is OOS with an unknown RTS date (see 21JDA02). NFL AWS pump #2 has a failed RTD sensor that keeps it from reading an accurate temperature on the lower bearing (occurred 4/22/23). Therefore, there is no overheat fail safe and it is being run as a last on first off pump (the pump will need to be unstacked to repair the sensor). The repair date is unknown.

Calibration: All gauges within the 0.3' criteria.

Bird Data:

Very low foraging gull numbers (~1/inspection), no foraging grebe observations, and very low foraging cormorant numbers (~1/inspection).

There are ≤6 pelicans hanging around Preacher's Island and occasionally feeding in Powerhouse Zone 2 and 3.

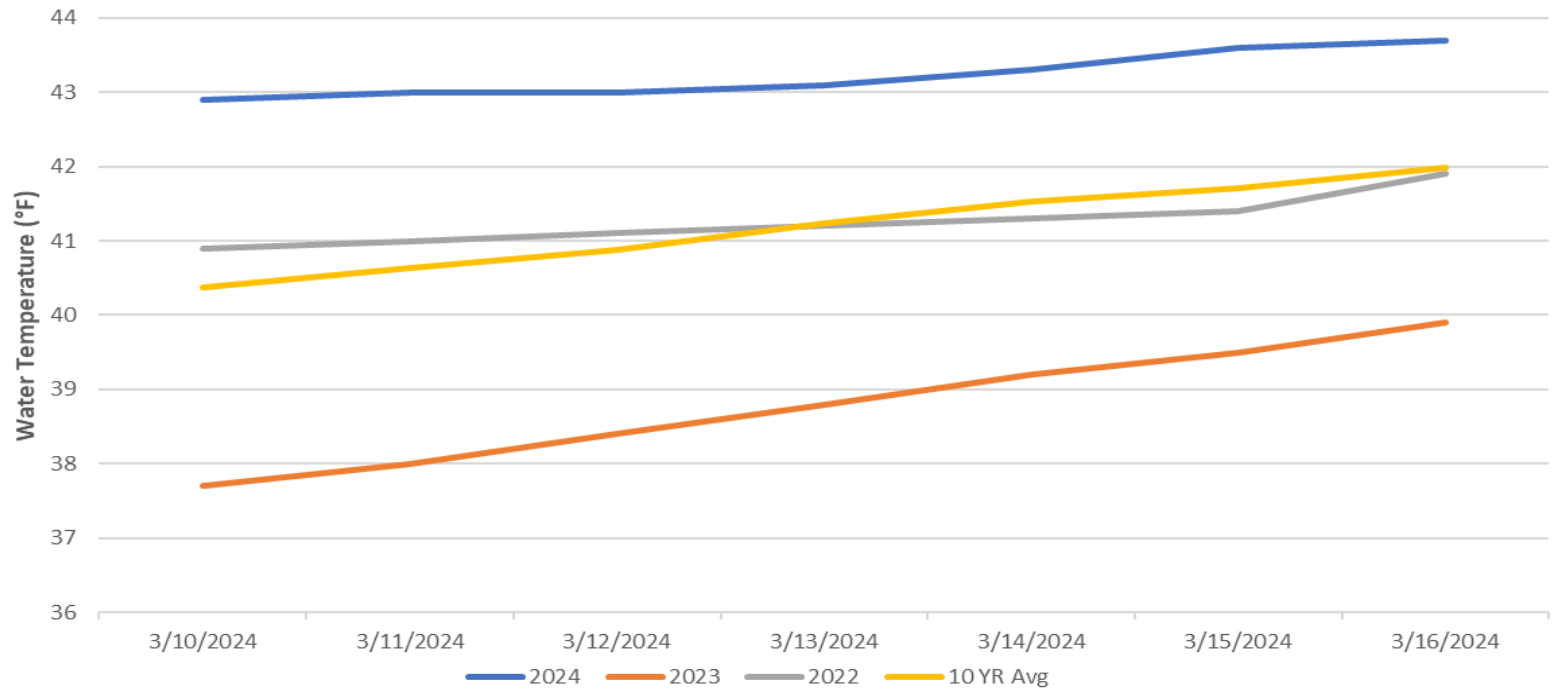
4 of 125 avian lines are down. USDA replaced the 17 lines from the powerhouse on 3/13/24 & 3/14/24.

Research:

Four Peaks started ladder counts on 3/1/23 and are performing year-round counts for the 2023 season (Day video 11/1/23 - 2/29/24).

Research preparation/paperwork for FY'24 is ongoing. PNNL Started installation of Lamprey monitoring research project on spillway.

John Day Water Temperatures



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)
3/10/2024	Unit 4	1.83	55,0,55	160.0
3/10/2024	Unit 12	1.85	55,0,55	160.0
3/12/2024	Unit 4	1.98	55,0,55	159.9
3/12/2024	Unit 12	1.93	55,0,55	159.9
3/16/2024	Unit 4	1.90	55,0,60	159.9
3/16/2024	Unit 12	1.88	55,0,60	159.9

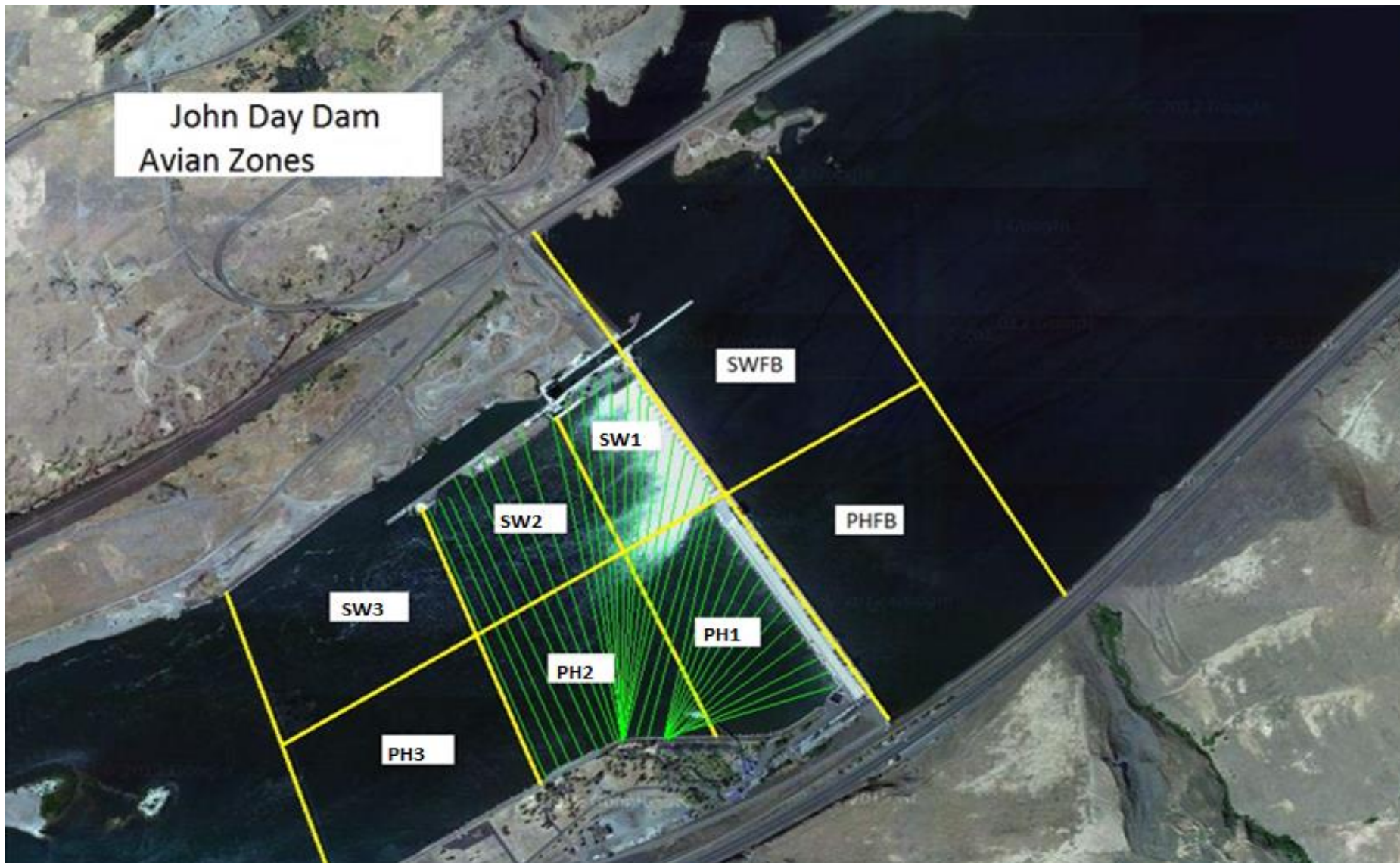
Average Weekly Velocity (ft/sec)	1.90
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JOHN DAY WEEKLY AVERAGES

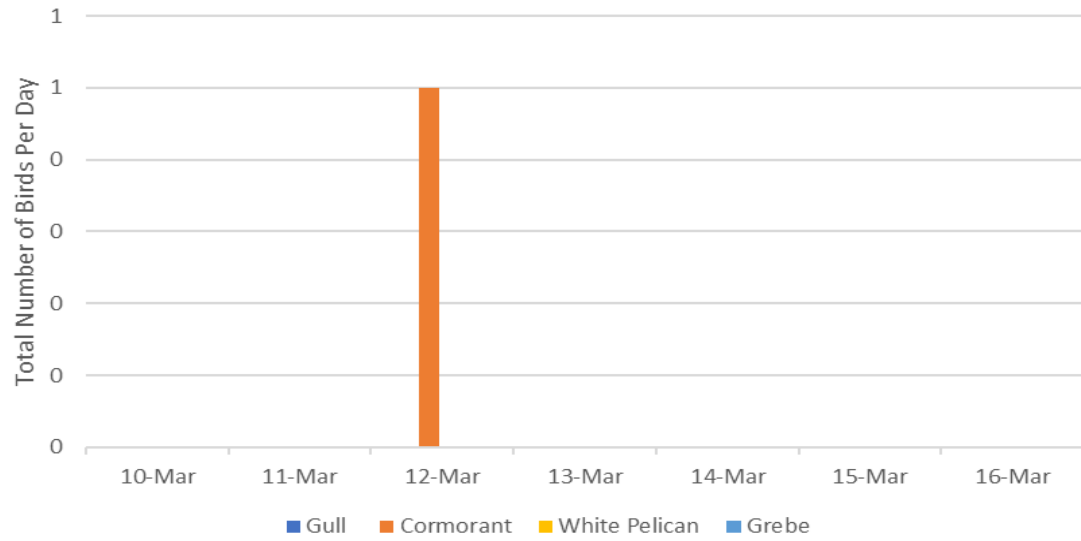
	South Fish Ladder					NFL	JBS	Spill		
	SE1 (Ft)	S.Ent (Ft)	NE1 (Ft)	NE2 (Ft)	Bay19 (Ft)	N.Ent (Ft)	JBS Diff (Ft)	Spill Vol. (kcfs)	Spill (%)	# Spillbays
Sunday	8.7	1.3	8.7	8.7	1.4	1.5	OOS	0.0	0.0	0
Sunday	8.1	1.1	8.2	8.2	1.3	1.5	OOS	0.0	0.0	0
Monday	8.9	1.0	8.7	8.7	1.4	1.5	OOS	0.0	0.0	0
Monday	8.1	1.0	8.2	8.2	1.3	1.7	OOS	0.0	0.0	0
Tuesday	8.9	1.2	8.8	8.8	1.4	1.5	OOS	0.0	0.0	0
Tuesday	8.6	1.3	8.7	8.7	1.3	1.6	OOS	0.0	0.0	0
Wednesday	9.2	1.0	9.2	9.2	1.5	1.5	OOS	0.0	0.0	0
Wednesday	8.4	1.0	8.5	8.5	1.1	1.6	OOS	0.0	0.0	0
Thursday	9.0	1.0	8.9	8.9	1.5	1.6	OOS	0.0	0.0	0
Thursday	8.4	1.1	8.7	8.7	1.2	1.6	OOS	0.0	0.0	0
Friday	9.4	1.3	9.4	9.4	1.5	1.4	OOS	0.0	0.0	0
Friday	8.8	1.2	8.9	8.9	1.3	1.5	OOS	0.0	0.0	0
Saturday	8.6	1.4	8.6	8.6	1.5	1.5	OOS	0.0	0.0	0
Saturday	8.4	1.1	8.3	8.5	1.3	1.6	OOS	0.0	0.0	0
AVG:	8.7	1.1	8.7	8.7	1.4	1.5	OOS	0.0	0.0	0.0

	Temp (F)	Secchi (Ft)	Notes
Sunday	42.9	6.0	
Monday	43.0	6.0	
Tuesday	43.0	6.0	
Wednesday	43.1	6.0	
Thursday	43.3	6.0	
Friday	43.6	6.0	
Saturday	43.7	6.0	
AVG	43.2	6.0	

John Day Dam
Avian Zones



Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

