

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 3/18/2023

Inspection Period: 3/12/2023 thru 3/18/2023



**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: 39.2 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.)	1.3			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.9			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	1.63			
N. Entrance PH(Bay 19)differential	2	1.0' - 2.0'	AVG (Ft.)	1.9			
Entrance weir NE1	14	depth (≥ 8')	AVG (Ft.)	#DIV/0!			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.4			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	#DIV/0!			
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, NE1 closed (per FPP guidelines)

SFL turbine-2 FOOS 3/1 due to excessive vibration

SFL turbine-3 OOS (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)

MU13 (ETR: 6/14/23) Navlock (ETR: 3/18/23)

Maintenance:

SMF down for Winter Maintenance

Calibration:

All gauges within the 0.3' criteria.

Bird Data:

Grebes haven't been present, gull numbers are fewer than 10, and cormorant numbers are holding steady (~60).

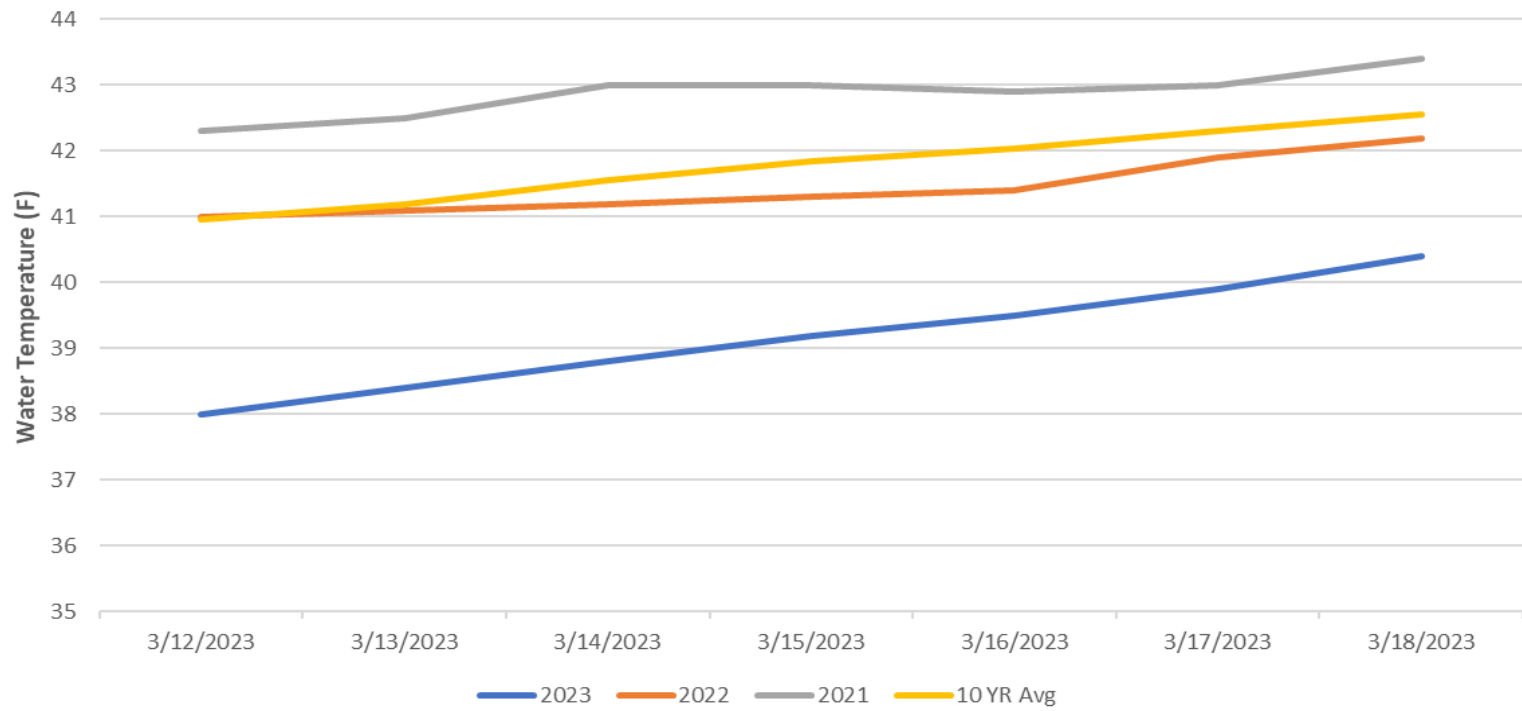
There are approximately 3 pelicans hanging around Preacher's Island with very few foraging observations in JDA bird counting zones.

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)
3/12/2023	Unit 4	1.64	68,0,0	160.1
3/12/2023	Unit 12	1.61	68,0,0	160.1
3/13/2023	Unit 4	1.64	68,0,0	159.6
3/13/2023	Unit 12	1.64	68,0,0	159.6
3/14/2023	Unit 4	1.61	68,0,0	160.4
3/14/2023	Unit 12	1.63	68,0,0	160.4
3/16/2023	Unit 4	1.61	68,0,0	160.2
3/16/2023	Unit 12	1.66	68,0,0	160.2
3/18/2023	Unit 4	1.61	68,0,0	160.1
3/18/2023	Unit 12	1.65	68,0,0	160.1

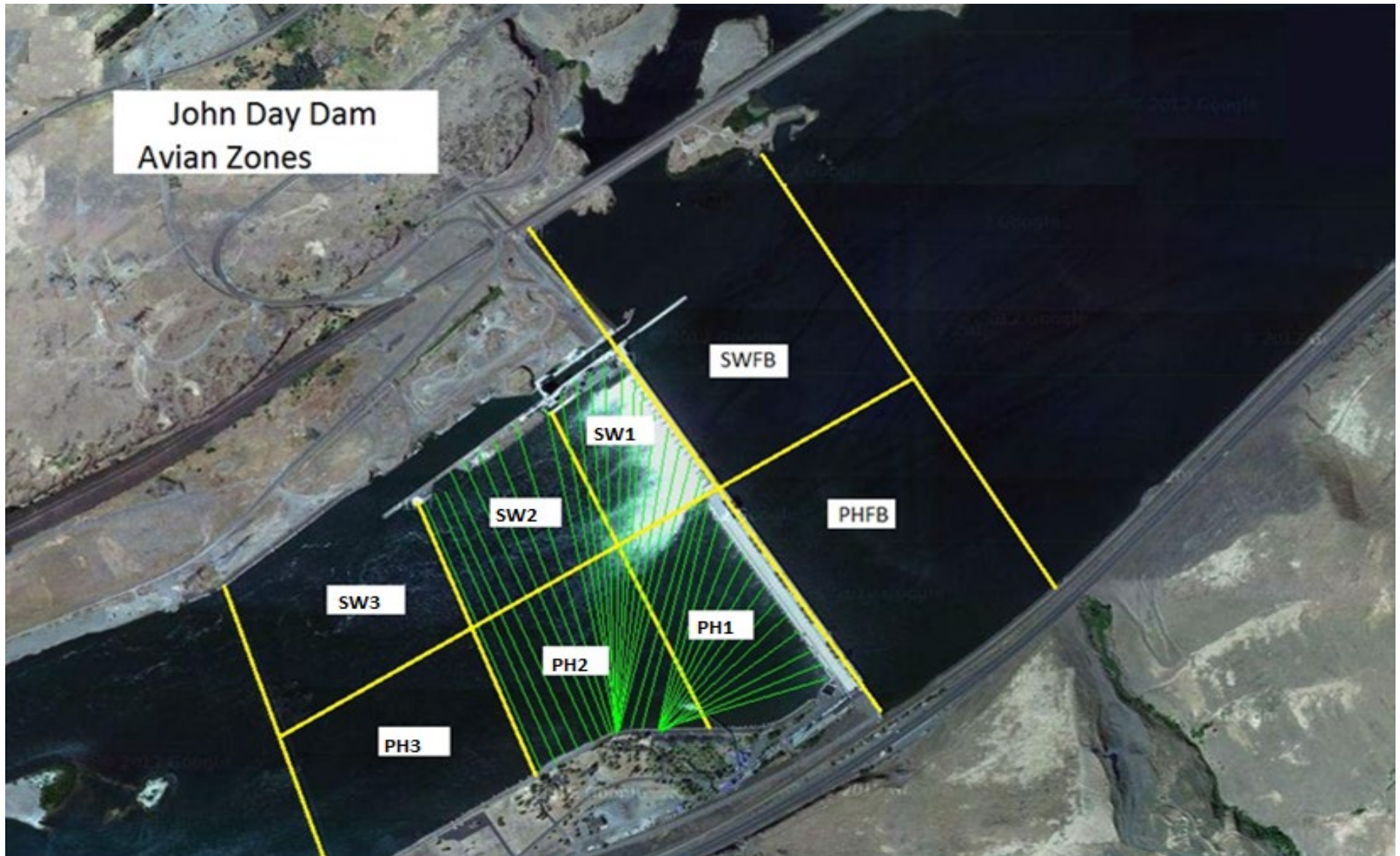
Average Weekly Velocity (ft/sec)	1.63
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JOHN DAY WEEKLY AVERAGES

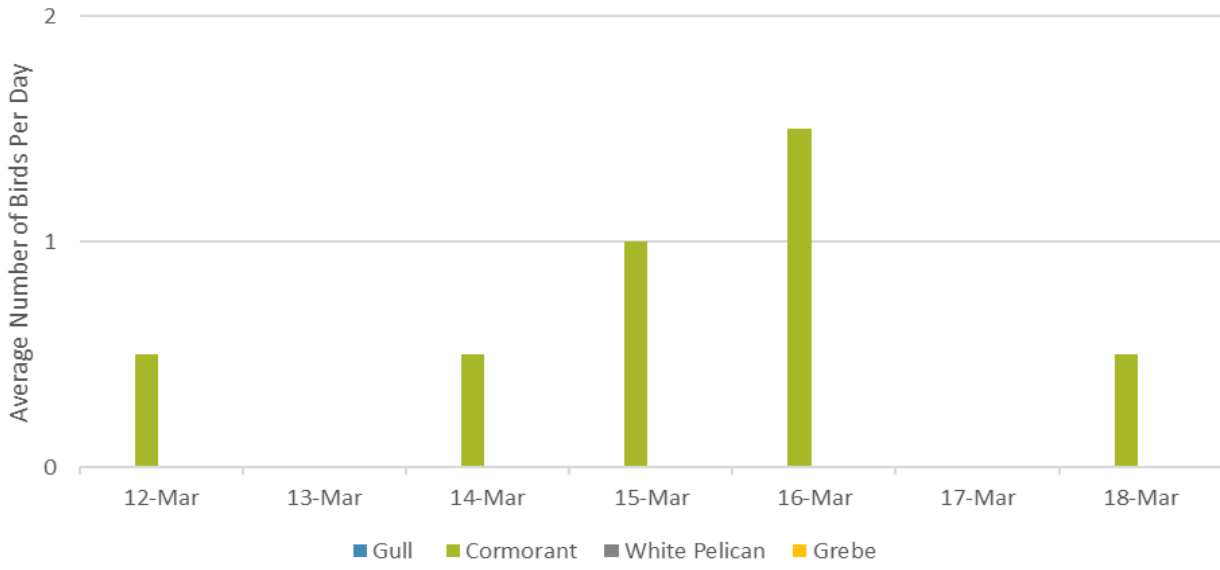
	South Fish Ladder					NFL	JBS	Spill	
	SE1 (Ft)	S.Ent (Ft)	NE1 (Ft)	NE2 (Ft)	Bay19 (Ft)	N.Ent (Ft)	JBS Diff (Ft)	Spill Vol. (kcfs)	# Spillbays
Sunday	9.1	2.0	X	9.8	1.8	1.5	X	0.0	0.0
Sunday	9.7	1.2	X	9.4	2.0	1.5	X	0.0	0.0
Monday	8.4	1.5	X	9.3	1.7	1.6	X	0.0	0.0
Monday	8.8	1.2	X	9.2	2.0	1.5	X	0.0	0.0
Tuesday	9.4	1.0	X	10.0	1.7	1.5	X	0.0	0.0
Tuesday	8.7	1.2	X	9.2	2.1	1.5	X	0.0	0.0
Wednesday	9.2	1.1	X	9.6	2.0	1.5	X	0.0	0.0
Wednesday	8.5	1.3	X	9.5	1.9	1.5	X	0.0	0.0
Thursday	9.4	1.1	X	9.8	2.0	1.6	X	0.0	0.0
Thursday	8.2	1.3	X	8.8	2.2	1.6	X	0.0	0.0
Friday	9.3	1.4	X	9.2	1.9	1.6	X	0.0	0.0
Friday	8.4	1.2	X	9.1	1.9	1.6	X	0.0	0.0
Saturday	9.1	1.9	X	9.7	1.8	1.4	X	0.0	0.0
Saturday	8.0	1.2	X	8.5	1.1	1.6	X	0.0	0.0
AVG:	8.9	1.3	#DIV/0!	9.4	1.9	1.5	#DIV/0!	0.0	0.0

	Temp (F)	Secchi (Ft)	Notes
Sunday	38.0	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 1 turbine operation. In this operation NE 1 is to be closed and SE1 and NE2 are left open to meet the entrance head differential (see FPP).
Monday	38.4	6.0	
Tuesday	38.8	6.0	
Wednesday	39.2	6.0	
Thursday	39.5	6.0	
Friday	39.9	6.0	
Saturday	40.4	6.0	
AVG	39.2	6.0	

John Day Dam
Avian Zones



Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

