

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 12/18/2021

Inspection Period: 12/12/2021 thru 12/18/2021



**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: 7				Temperature:	47.1 F
							Secchi:	4.1 Ft.

NORTH FISHWAY

Exit differential	0	≤ 0.5'						
Exit Control weirs	0	High setting	High setting is normal					
Count station differential	0	≤ 0.3'						
Entrance differential	0	1.0' - 2.0'	AVG (Ft.)	N/A				

SOUTH FISHWAY

Exit differential	0	≤ 0.5'						
Exit Control weirs	0	Mid setting	Mid setting is normal					
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.)	9.1				
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.66				
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6				
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	10.2				
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	10.1				

JUVENILE PASSAGE

Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.9				
Submersible traveling screens	0	visual inspect	Next Visual Inspection					
Turbine trashrack drawdown	0	<1.5', wkly						
Vert barrier screen drawdown	0	<1.5', wkly						
Spill volume	0	per FPP	Avg (kcfs)	10.0	Avg %	5.4		
Spill pattern	0	per FPP						
Turbine Unit Priority	1	per FPP	MU1-4 OOS due to BPA Line 1 outage, ETR 12/13/21					
Turbine 1% Efficiency	0	per FPP						

Fisheries Related Operations

Smolt Monitoring Operations:

The Smolt Monitoring Program concluded the 2021 sampling season on 9/15. Smolt Monitoring Facility was dewatered on 12/1.

Adult Ladder Operations:

South fish ladder is operating within criteria. North fish ladder was dewatered on 12/6.

Project Operations:

Current outages: MU3, MU7, MU8, MU12, MU13. Line 1 RTS 12/13.

Maintenance:

JD North Fishway's pump 4 has been pulled for maintenance (RTS to be determined).

Calibration:

All gauges within the 0.3' criteria.

Bird Data:

Decreasing number of cormorants mainly roosting on rocks in SW2 and SW3 or towers in PHFB. Gull numbers decreasing with modest numbers resting in the water in PHFB or SWFB and foraging in the tailrace mainly PH1 and PH3. A couple pelicans seen occasionally resting on Preacher's Island. Grebes have dispersed. (see 'Bird Count' tab for details).

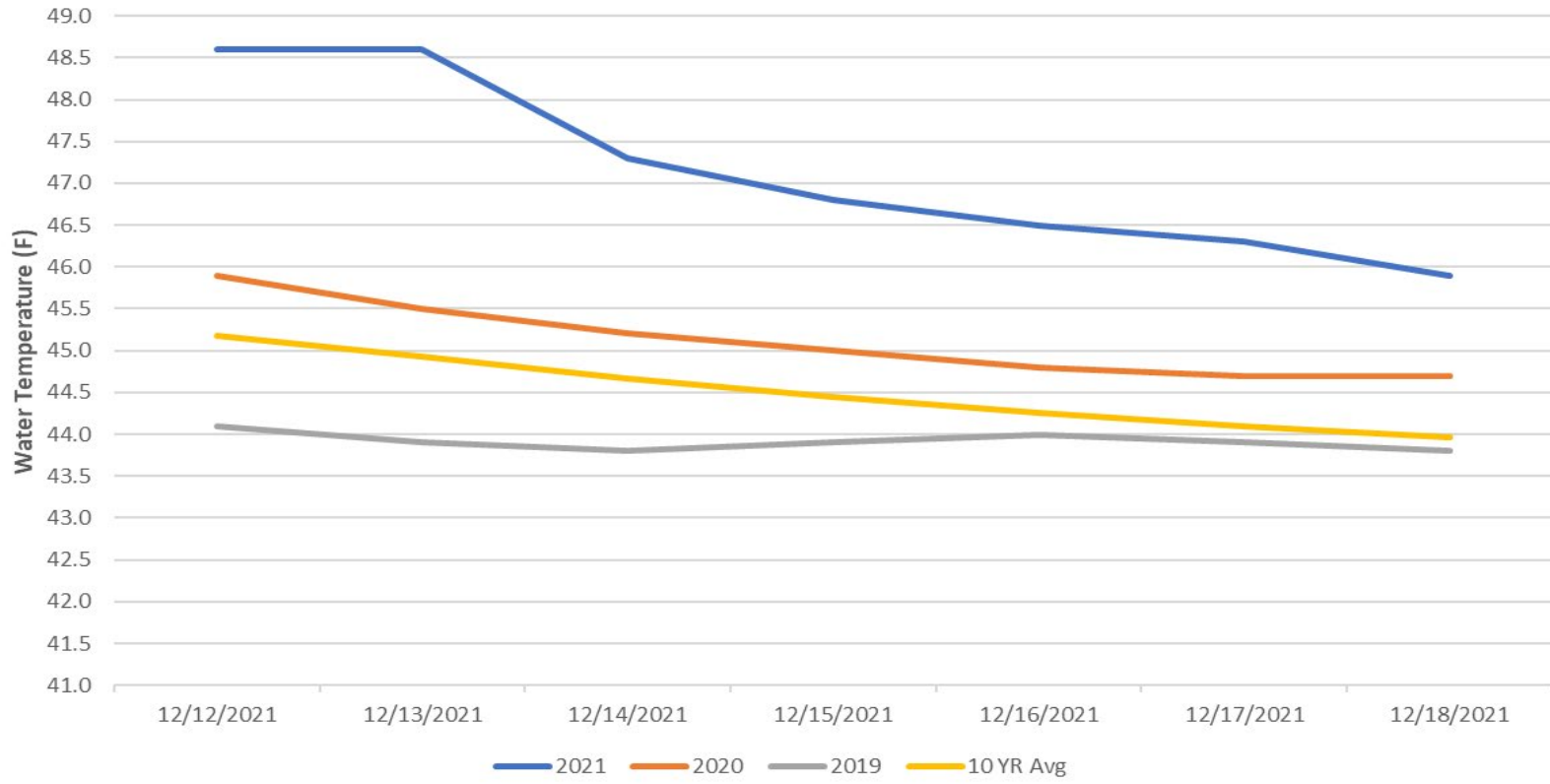
8 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 0 per day

Research:

None

John Day Dam Water Temperatures (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)
12/16/2021	Unit 4	2.54	0,68,68	161.5
12/16/2021	Unit 12	2.64	0,68,68	161.5
12/17/2021	Unit 4	2.60	0,68,68	160.5
12/17/2021	Unit 12	2.65	0,68,68	160.5
12/18/2021	Unit 4	2.77	0,68,68	160.9
12/18/2021	Unit 12	2.75	0,68,68	160.9

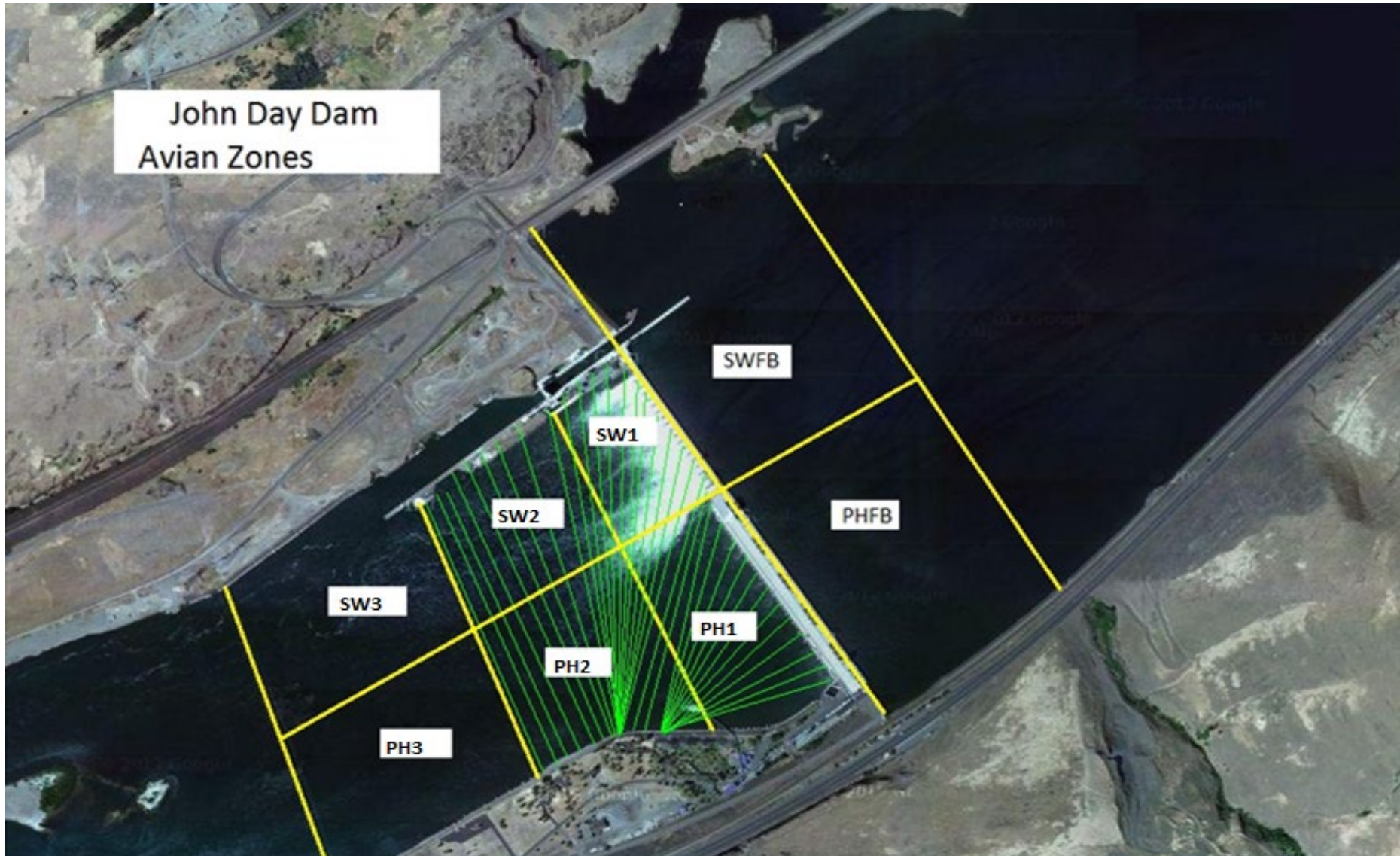
Average Weekly Velocity (ft/sec)	2.66
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JOHN DAY WEEKLY AVERAGES

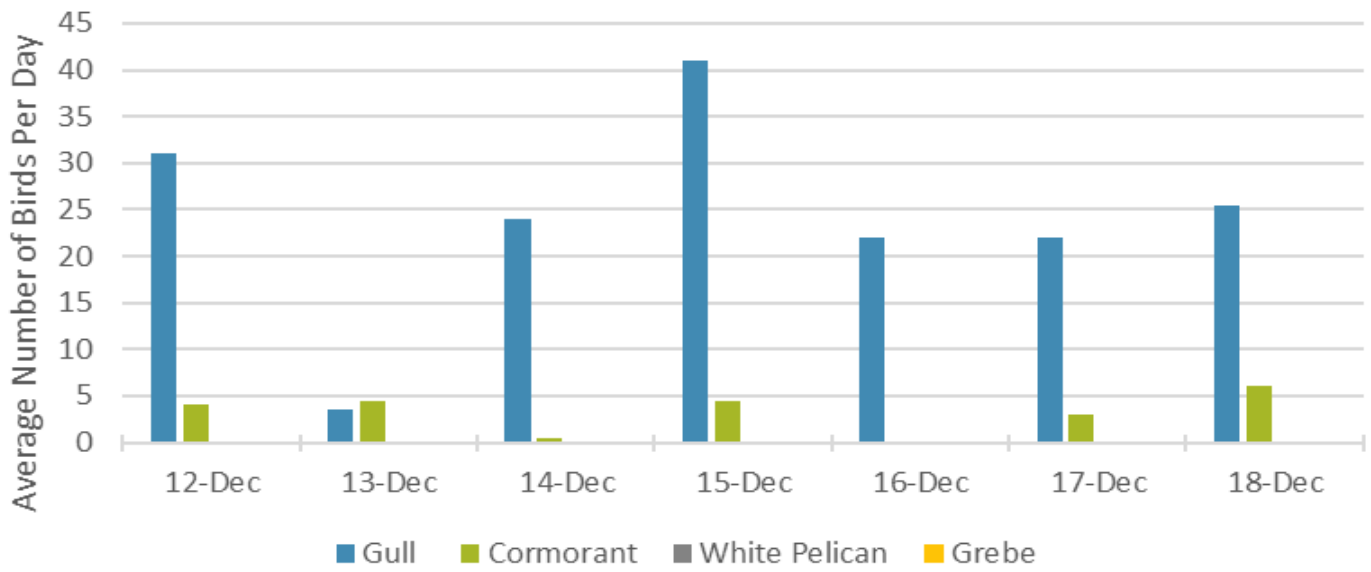
	NE1 (Ft)	NE2 (Ft)	S.Ent (Ft)	SE1 (Ft)	N.Ent (Ft)	JBS Diff (Ft)	Bay19 (Ft)	Spill Vol. (kcfs)	Spill %	# Spillbays
Sunday	9.6	9.5	1.3	8.8		4.9	1.7	44.8	25.2	10
Monday	10.3	10.2	1.2	9.2		4.9	1.5	25.3	12.7	7
Tuesday	10.1	10.1	1.1	8.9		4.9	1.5	0.0	0.0	0
Wednesday	10.3	10.2	1.1	9.3		5.0	1.6	0.0	0.0	0
Thursday	10.8	10.7	1.2	9.6		5.0	1.4	0.0	0.0	0
Friday	9.8	9.7	1.3	8.8		4.7	1.6	0.0	0.0	0
Saturday	10.2	10.1	1.4	9.2		4.8	1.6	0.0	0.0	0
AVG:	10.2	10.1	1.2	9.1	N/A	4.9	1.6	10.0	5.4	2.4

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	48.6	4.0	N/A	0
Monday	48.6	4.0	N/A	0
Tuesday	47.3	4.0	N/A	0
Wednesday	46.8	4.0	N/A	0
Thursday	46.5	4.5	N/A	0
Friday	46.3	4.0	N/A	0
Saturday	45.9	4.0	N/A	0
AVG	47.1	4.1	N/A	0

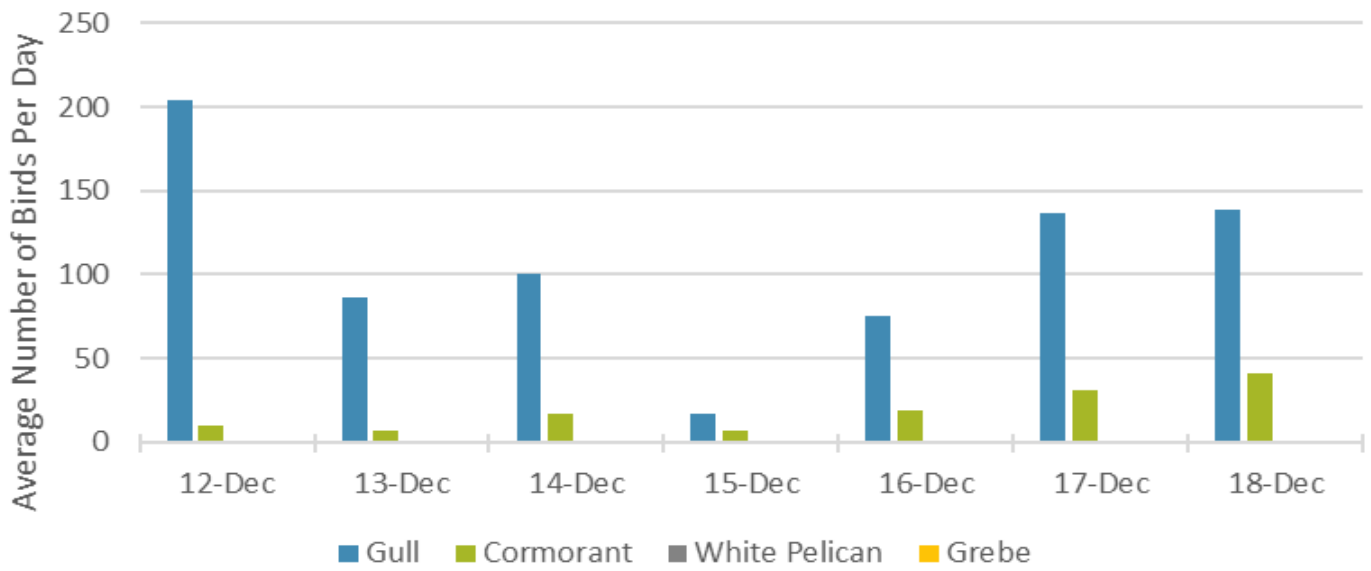
John Day Dam
Avian Zones



Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds





Gulls on the navigation wall in the forebay