

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 11/6/2021

Inspection Period: 10/31/2021 thru 11/6/2021



**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: 14			Temperature: 56.8 F	Secchi: 6.0 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.)	1.5			
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.)	1.5			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.6			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.50			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.7			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.2			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.2			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	Next Visual Inspection 11/22-11/25				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.5', wkly					
Spill volume	0	per FPP	Avg (kcfs)	12.9	Avg %	10.8	
Spill pattern	0	per FPP					
Turbine Unit Priority	14	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.

Adult Ladder Operations:

North and South fish ladders are operating within criteria.

Project Operations:

Current outages: MU1-4 (BPA Line 1 outage), MU2, MU7, MU8, MU12, MU13, MU16. Adult attraction flow for the North fish ladder is provided through spill bay #2 open one stop (1.6kcfs) during daylight hours through November 30th.

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:

Steady number of cormorants mainly roosting on rocks in SW2 and SW3. Gull numbers increasing with high numbers resting on the wing wall in the SWFB and modest numbers foraging in the tailrace mainly PH1 and PH3 in the morning. Pelican numbers minimal, a couple seen resting on Preacher's Island. Decrease in number of grebes in PHFB. (see 'Bird Count' tab for details).

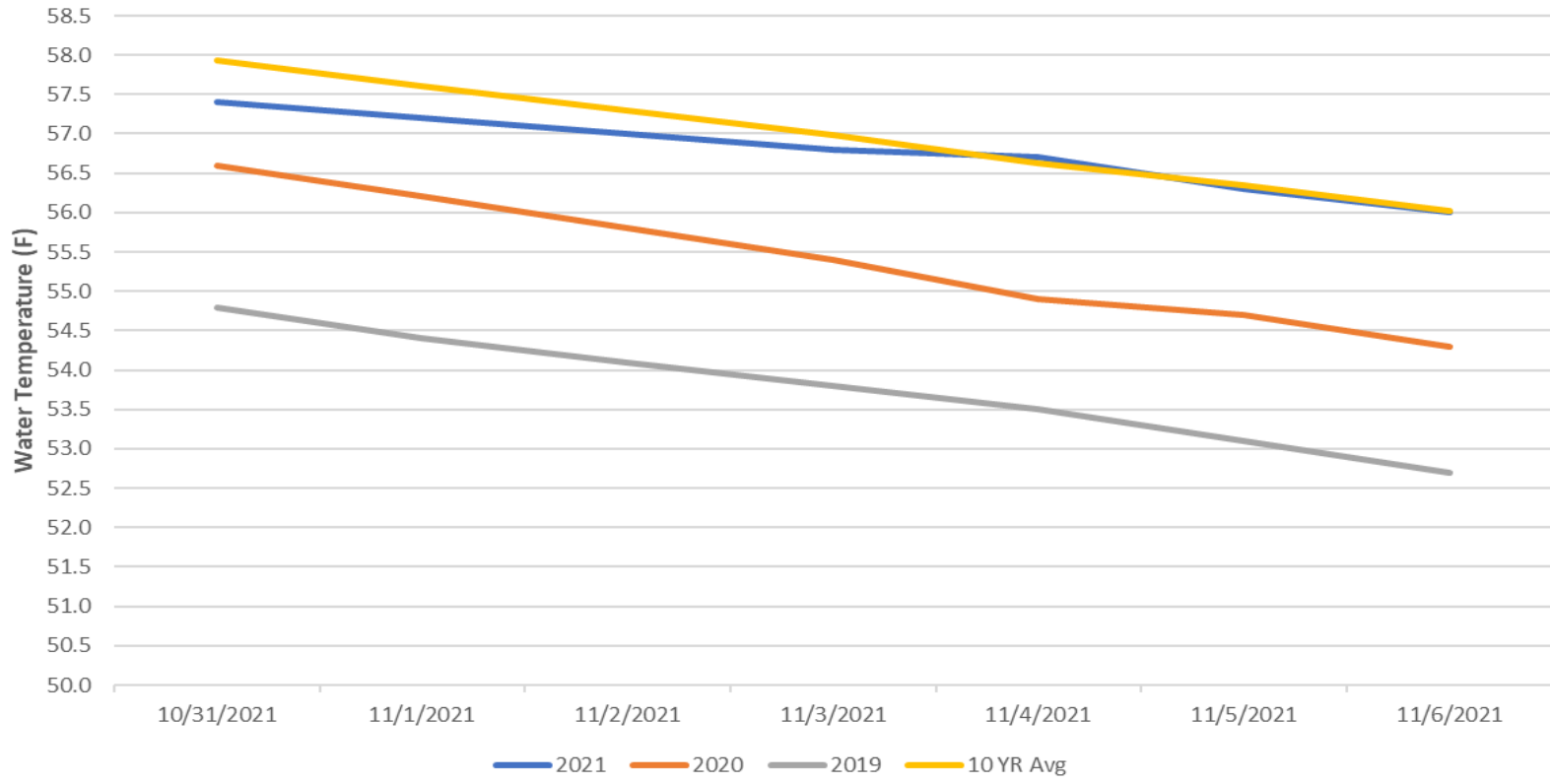
8 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 1 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)
11/4/2021	Unit 4	2.41	0,68,68	159.8
11/4/2021	Unit 12	2.54	0,68,68	159.8
11/5/2021	Unit 4	2.42	0,68,68	160.3
11/5/2021	Unit 12	2.58	0,68,68	160.3
11/6/2021	Unit 4	2.48	0,68,68	160.7
11/6/2021	Unit 12	2.59	0,68,68	160.7

Average Weekly Velocity (ft/sec)	2.50
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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	8.9	8.8	1.7	8.4	1.5	4.6	2.0	1.6	1.9	1
Sunday	8.8	8.8	1.8	8.4	1.5	4.6	2.0	1.6	2.2	1
Monday	9.3	9.2	1.7	8.4	1.7	4.6	1.8	10.1	8.8	5
Monday	9.2	9.2	1.7	8.4	1.4	4.6	1.9	10.1	8.8	5
Tuesday	9.3	9.2	1.6	8.6	1.5	4.6	1.8	30.1	24.2	7
Tuesday	9.3	9.2	1.6	8.0	1.5	4.6	1.9	30.1	24.0	7
Wednesday	8.8	8.8	1.5	8.5	1.5	4.5	1.8	30.1	24.3	7
Wednesday	9.0	8.9	1.3	8.7	1.4	4.6	1.6	24.9	20.5	7
Thursday	9.1	9.1	1.3	8.7	1.7	4.5	1.5	25.0	21.0	7
Thursday	9.0	8.9	1.5	8.5	1.6	4.6	1.6	10.0	9.5	3
Friday	9.5	9.4	1.2	8.9	1.5	4.5	1.6	1.6	1.3	1
Friday	9.6	9.5	1.2	9.0	1.5	4.6	1.5	1.6	1.5	1
Saturday	10.0	9.9	1.2	9.4	1.3	4.4	1.4	1.6	1.5	1
Saturday	9.6	9.6	1.2	9.1	1.5	4.6	1.6	1.6	1.5	1
AVG:	9.2	9.2	1.5	8.6	1.5	4.6	1.7	12.9	10.8	3.9

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	57.4	6.0	N/A	0
Monday	57.2	6.0	N/A	1
Tuesday	57.0	6.0	N/A	0
Wednesday	56.8	6.0	N/A	2
Thursday	56.7	6.0	N/A	0
Friday	56.3	6.0	N/A	2
Saturday	56.0	6.0	N/A	2
AVG	56.8	6.0	N/A	1

John Day Dam
Avian Zones



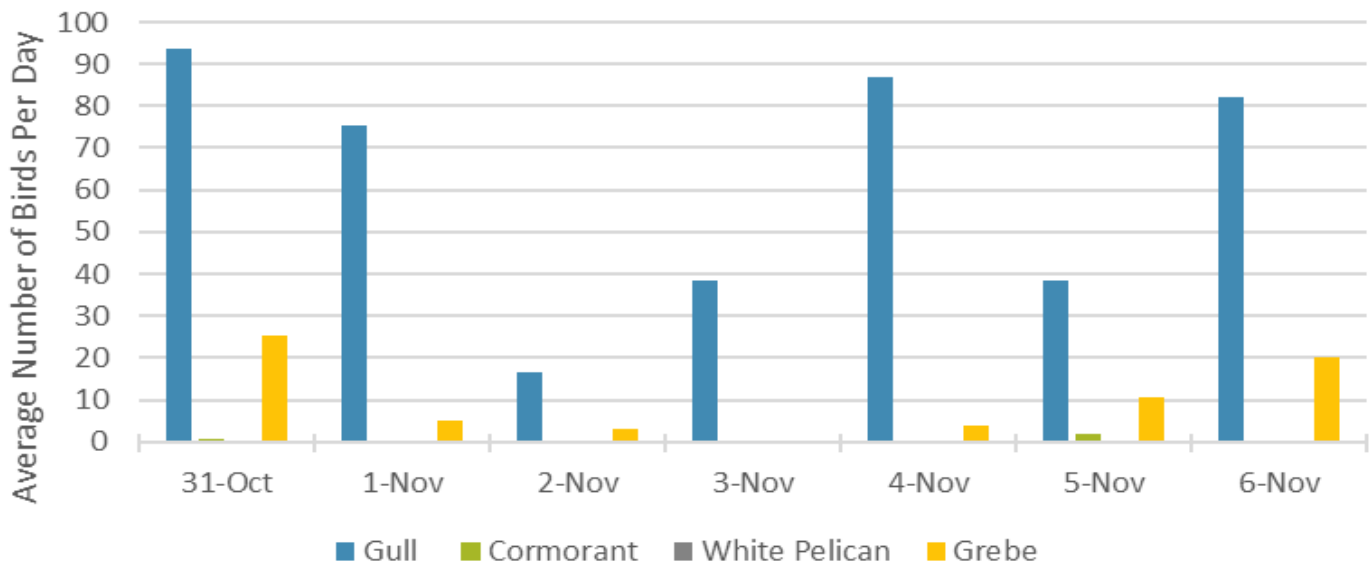
JDA Bird Counts: 10/31/21 to 11/6/21

NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
4-Nov	PHFB	0	0	187	103	0	0	53	0	0	0	0	0	0	0	0	0	0	8	0	0	351
4-Nov	SWFB	0	0	237	143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	380
4-Nov	PH1	25	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78
4-Nov	PH2	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
4-Nov	PH3	7	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
4-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Nov	SW2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
4-Nov	SW3	43	6	0	0	0	0	5	21	0	0	0	0	0	0	0	0	0	0	0	0	75
Avg/Survey		87		335		0		40		0		0		0		0		4		0		466
5-Nov	PHFB	0	0	0	733	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	754
5-Nov	SWFB	0	0	606	218	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	824
5-Nov	PH1	5	32	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
5-Nov	PH2	25	11	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
5-Nov	PH3	4	0	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82
5-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Nov	SW2	0	0	0	0	0	0	6	36	0	0	0	0	0	0	0	0	0	0	0	0	42
5-Nov	SW3	0	0	0	0	0	0	45	19	0	0	0	0	0	0	0	0	0	0	0	0	64
Avg/Survey		39		818		2		53		0		0		0		0		11		0		922
6-Nov	PHFB	0	0	0	241	0	0	11	0	0	0	0	0	0	0	0	13	27	0	0	0	292
6-Nov	SWFB	0	0	754	312	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1066
6-Nov	PH1	0	109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109
6-Nov	PH2	26	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
6-Nov	PH3	5	20	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78
6-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Nov	SW2	0	0	0	0	0	0	35	43	0	0	0	0	0	0	0	0	0	0	0	0	78
6-Nov	SW3	0	0	0	0	0	0	10	7	0	0	0	0	0	0	0	0	0	0	0	0	17
Avg/Survey		82		680		0		53		0		0		0		0		20		0		835

Totals	Gulls		Cormorant		Caspian tern		White Pelican		Grebe		Total
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	863	8045	5	611	0	0	0	2	136	0	4831
Avg/Survey	62	575	0	44	0	0	0	0	10	0	690

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

