

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 12/4/2021

Inspection Period: 11/28/2021 thru 12/4/2021



**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: 10			Temperature: 49.3 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.)	1.4			
Entrance weir SE1	1	depth (≥ 8')	AVG (Ft.)	8.6			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.56			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.5			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.4			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.3			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	1	4.0' - 5.0'	AVG (Ft.)	4.5			
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)	12.0	Avg %	7.9	
Spill pattern	0	per FPP					
Turbine Unit Priority	10	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:

North and South fish ladders are operating within criteria. North fish ladder went to orifice flow on 12/2 pm to prepare for dewatering on 12/6.

Project Operations:

Current outages: MU1-4 (BPA Line 1 outage), MU2, MU5, MU7, MU8, MU12, MU13. 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. Attraction flow stopped on 12/1. SMF was dewatered on 12/1.

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 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. Decrease in number of grebes in PHFB. (see 'Bird Count' tab for details).

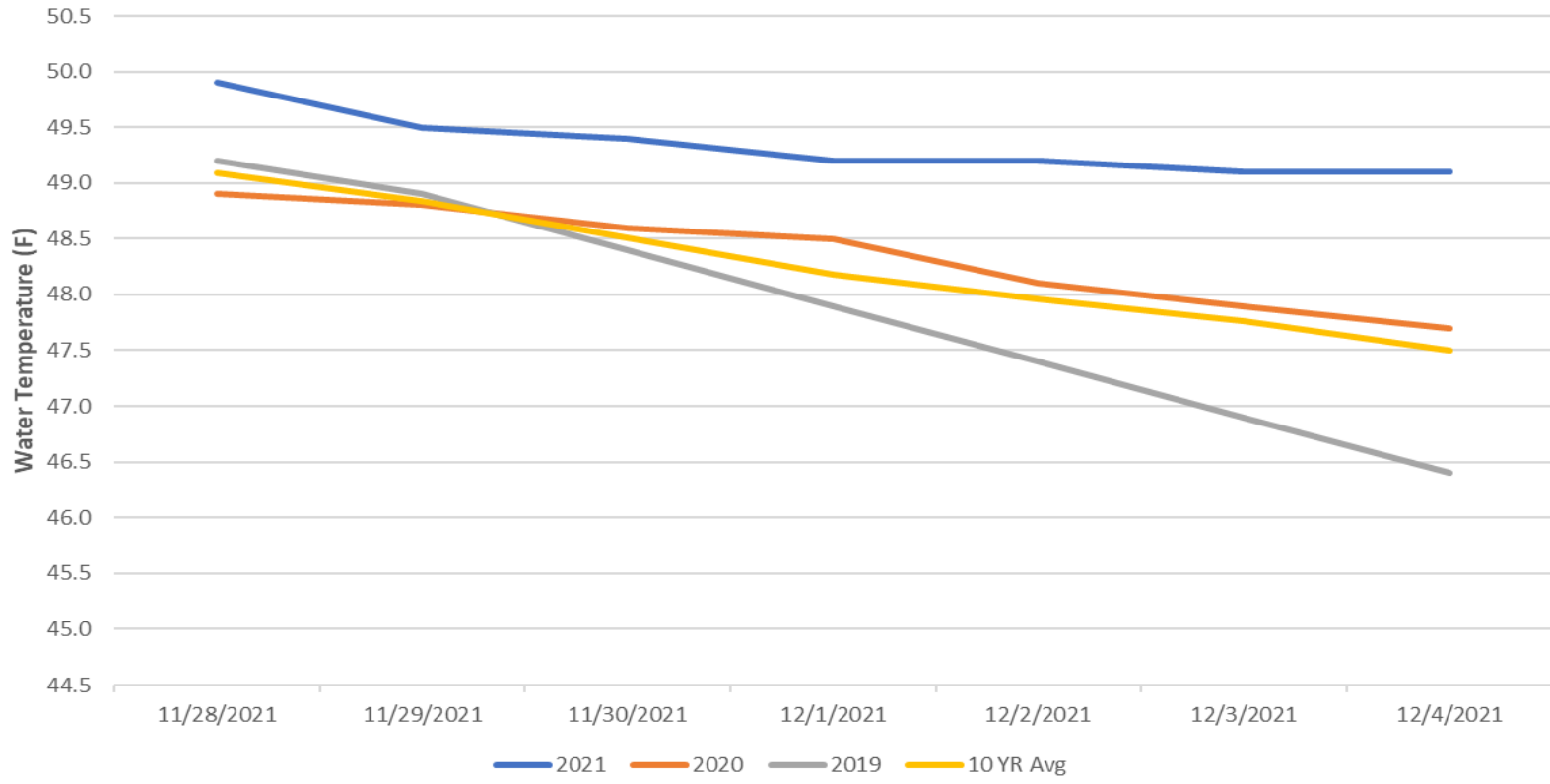
8 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 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)
11/29/2021	Unit 4	2.45	0,68,68	159.9
11/29/2021	Unit 12	2.57	0,68,68	159.9
12/3/2021	Unit 4	2.48	0,68,68	159.5
12/3/2021	Unit 12	2.65	0,68,68	159.5
12/4/2021	Unit 4	2.60	0,68,68	159.9
12/4/2021	Unit 12	2.62	0,68,68	159.9

Average Weekly Velocity (ft/sec)	2.56
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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	8.8	8.7	1.5	8.2	1.6	4.6	1.7	1.6	1.3	1
Sunday	9.2	9.2	1.3	8.7	1.5	4.6	1.5	1.6	1.2	1
Monday	8.4	8.3	1.5	7.8	1.6	4.6	1.6	1.7	1.3	1
Monday	9.6	9.5	1.2	9.1	1.5	4.7	1.5	1.7	1.3	1
Tuesday	10.1	10.0	1.1	9.1	1.5	4.5	1.3	1.7	1.3	1
Tuesday	9.7	9.7	1.4	8.8	1.5	4.5	1.5	1.7	1.3	1
Wednesday	9.2	9.2	1.5	8.3	1.5	3.4	1.7	24.9	18.1	7
Thursday	9.6	9.6	1.3	8.7	1.5	4.6	1.5	24.9	16.0	7
Friday	9.8	9.9	1.2	8.9		4.7	1.5	25.1	16.7	7
Saturday	9.2	9.1	1.5	8.2		4.9	1.6	35.0	20.6	7
AVG:	9.4	9.3	1.4	8.6	1.5	4.5	1.5	12.0	7.9	3.4

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	49.9	6.0	N/A	0
Monday	49.5	6.0	N/A	0
Tuesday	49.4	6.0	N/A	0
Wednesday	49.2	6.0	N/A	0
Thursday	49.2	6.0	N/A	0
Friday	49.1	6.0	N/A	0
Saturday	49.1	6.0	N/A	2
AVG	49.3	6.0	N/A	0

John Day Dam
Avian Zones



JDA Bird Counts: 11/28/21 to 12/4/21

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

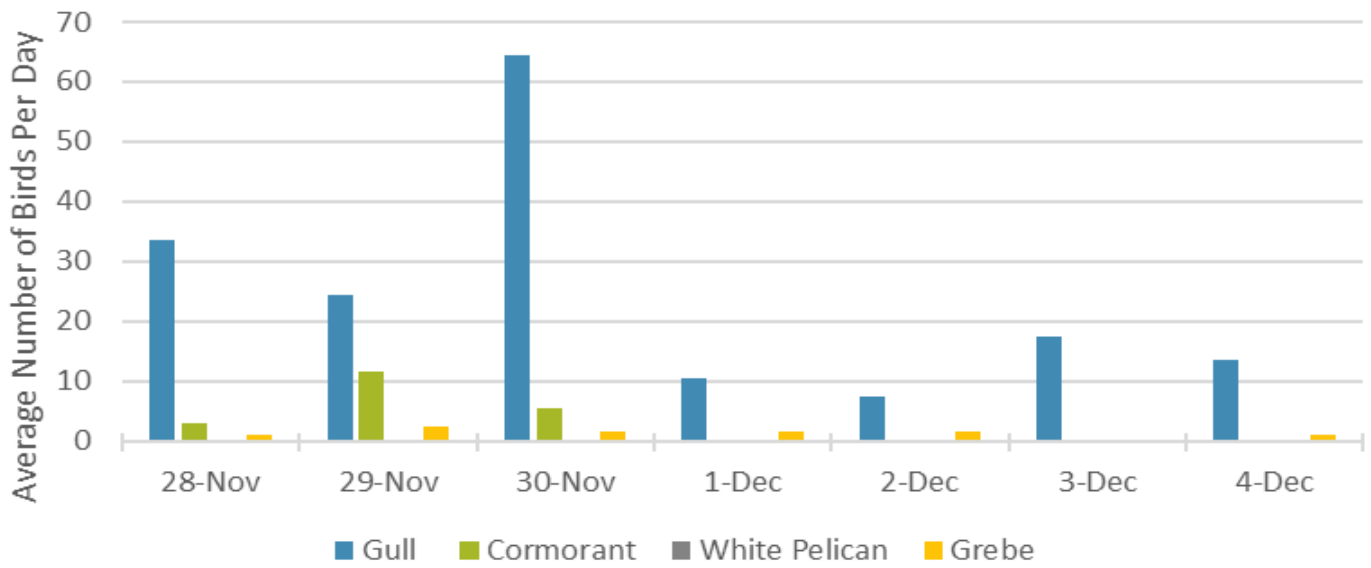
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
28-Nov	PHFB	0	0	106	257	0	0	0	6	0	0	0	0	0	0	0	0	1	1	0	0	371
28-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Nov	PH1	9	55	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
28-Nov	PH2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
28-Nov	PH3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
28-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Nov	SW2	0	0	0	0	0	0	50	39	0	0	0	0	0	0	0	0	0	0	0	0	89
28-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		34		182		3		48		0		0		0		0		1		0		267
29-Nov	PHFB	0	0	43	42	0	0	47	23	0	0	0	0	0	0	0	0	2	3	0	0	160
29-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Nov	PH1	9	35	0	0	14	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
29-Nov	PH2	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
29-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Nov	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Nov	SW3	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
Avg/Survey		25		43		12		38		0		0		0		0		3		0		119
30-Nov	PHFB	0	0	123	0	0	0	26	0	0	0	0	0	0	0	0	0	1	2	0	0	152
30-Nov	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Nov	PH1	21	93	0	0	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125
30-Nov	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Nov	PH3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
30-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Nov	SW2	0	0	0	0	0	0	9	42	0	0	0	0	0	0	0	0	0	0	0	0	51
30-Nov	SW3	0	14	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	26
Avg/Survey		65		62		6		45		0		0		0		0		2		0		178
1-Dec	PHFB	0	0	148	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	151
1-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Dec	PH1	21	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
1-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Dec	SW2	0	0	0	0	0	0	41	0	0	0	0	0	0	0	0	0	0	0	0	0	41
1-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		11		85		0		21		0		0		0		0		2		0		117

JDA Bird Counts: 12/2/21 to 12/4/21

F(1): Forage AM survey F(2): Forage PM Survey 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)	
2-Dec	PHFB	0	0	193	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	197
2-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Dec	PH1	15	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
2-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		8		107		0		1		0		0		0		0		2		0		117
3-Dec	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Dec	SWFB	0	0	176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	176
3-Dec	PH1	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
3-Dec	PH2	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
3-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Dec	SW2	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
3-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		18		88		0		11		0		0		0		0		0		0		116
4-Dec	PHFB	0	0	154	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	156
4-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Dec	PH1	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
4-Dec	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4-Dec	PH3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Dec	SW2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4-Dec	SW3	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Avg/Survey		14		78		0		5		0		0		0		0		1		0		97
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		343		1286		40		332		0		0		0		0		18		0		1010
Avg/Survey		25		92		3		24		0		0		0		0		1		0		144

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

