

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 9/18/2021

Inspection Period: 9/12/2021 thru 9/18/2021



**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: 14		Temperature: 69.1 F	Secchi: 6.0 Ft.
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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.)	1.6					
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.0					
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.77					
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.9					
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.2					
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.1					

JUVENILE PASSAGE

Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6					
Submersible traveling screens	0	visual inspect	Next Visual Inspection	9/27-9/30					
Turbine trashrack drawdown	0	<1.5', wkly							
Vert barrier screen drawdown	0	<1.5', wkly							
Spill volume	0	per FPP	AVG (kcfs)	1.6	Avg %	2.1			
Spill pattern	0	per FPP							
Turbine Unit Priority	0	per FPP							
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. Entered shad mode on 6/3/21. Returned ladders to salmon mode on 7/20/21.

Project Operations:

Current outages: MU7, MU8, MU12, MU13, MU13-16 (Line 4 BPA mod work), MU15, MU16. Summer Spill ended on 8/31 and TSW's were removed. Adult attraction flow for the North fish ladder is provided through spill bay #2 open one stop during daylight hours through November 30th.

Tailwater Average Weekly TDG: 102.9

Maintenance:

JD North Fishway's pump 4 has been pulled for maintenance (RTS to be determined). Spillway #10 will be operated manually until further notice. Spillway #3 failed on 6/5/21 at 0503, the motor for spill gate #3 will need to be replaced.

Calibration:

All gauges within the 0.3' criteria.

Bird Data:

Steady number of cormorants mainly roosting on PHFB towers and Preacher's Island. Gull numbers increasing with high numbers resting on the wing wall in the SWFB and modest numbers foraging in the tailrace mainly in the morning. Pelican numbers decreasing, few foraging in the tailrace, mostly seen resting on Preacher's Island. Slight increase of grebes in PHFB. (see 'Bird Count' tab for details).

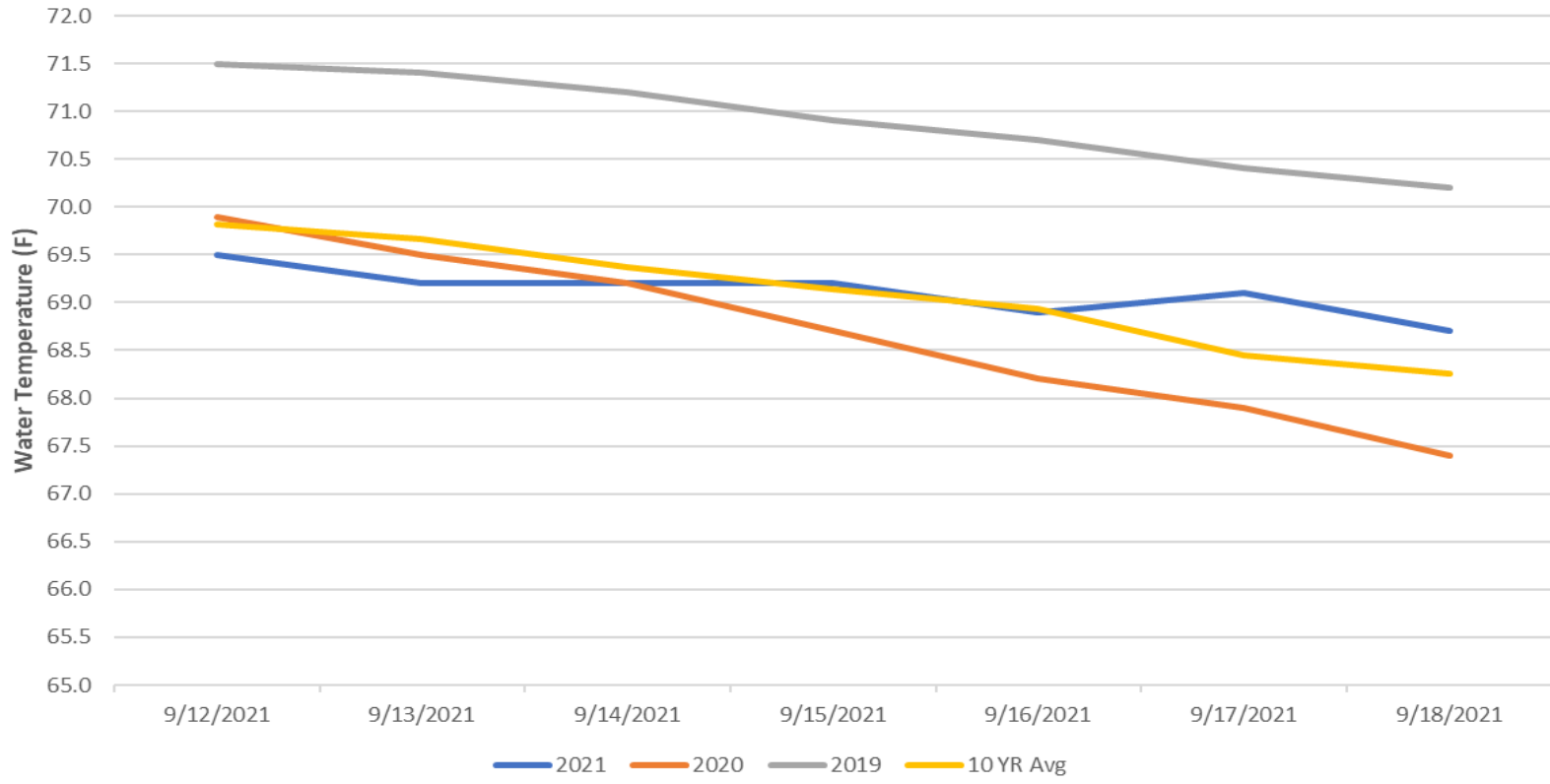
1 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 17 per day

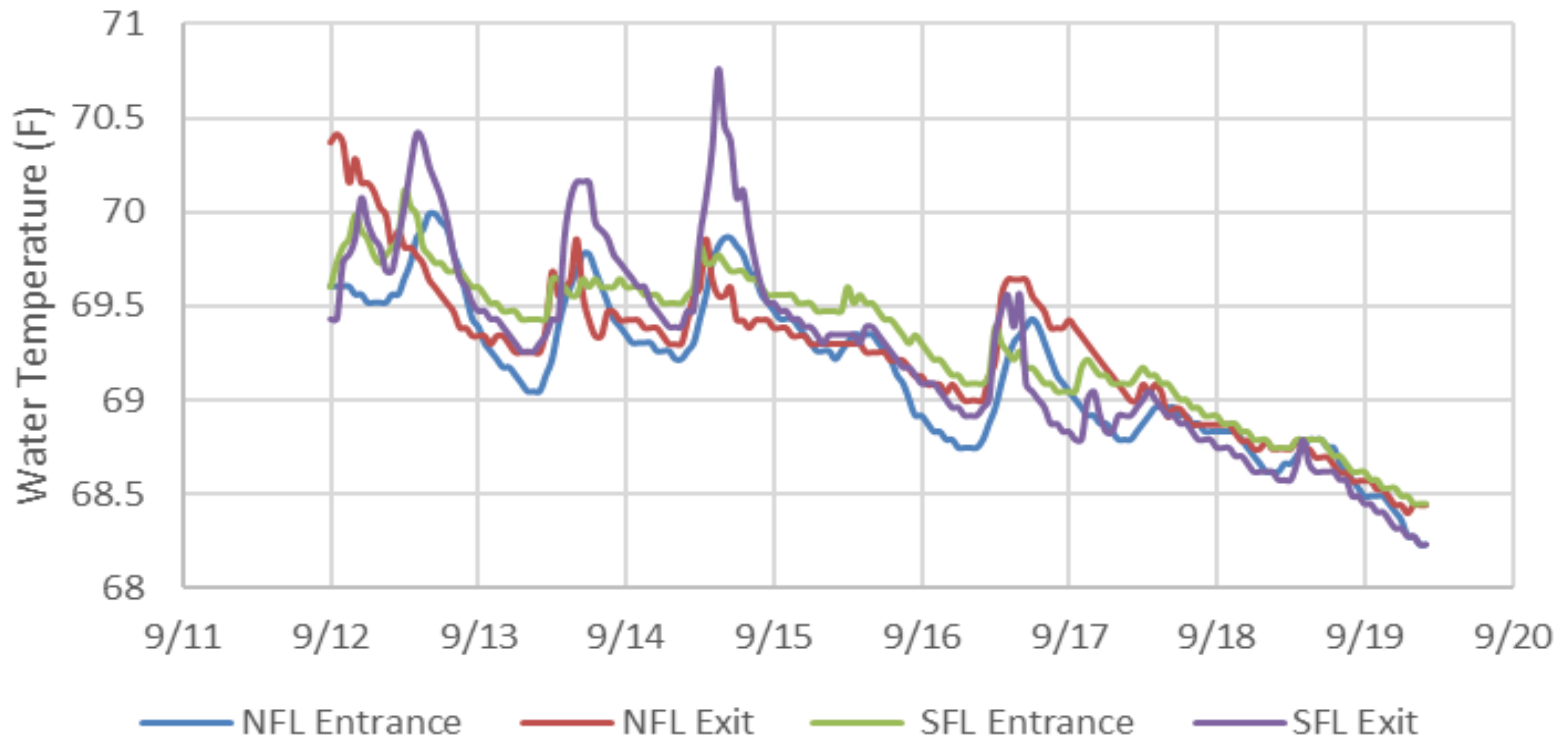
Research:

None

John Day Dam Water Temperatures (F)



JDA Ladder Temperatures (9/12 - 9/18)



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)
9/13/2021	Unit 4	2.70	0,68,68	159.8
9/13/2021	Unit 12	2.78	0,68,68	159.8
9/17/2021	Unit 4	2.72	0,68,68	159.9
9/17/2021	Unit 12	2.78	0,68,68	159.9
9/18/2021	Unit 4	2.70	0,68,68	160.2
9/18/2021	Unit 12	2.92	0,68,68	160.2

Average Weekly Velocity (ft/sec)	2.77
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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	8.8	1.7	8.7	1.5	4.5	2.0	1.6	2.5	1
Sunday	9.0	9.0	1.6	8.9	1.5	4.5	2.0	1.6	2.5	1
Monday	9.0	9.0	1.5	8.9	1.5	4.6	1.9	1.6	2.0	1
Monday	9.3	9.3	1.3	9.5	1.4	4.6	2.0	1.6	1.6	1
Tuesday	9.8	9.7	1.5	9.2	1.4	4.6	1.4	1.6	1.7	1
Tuesday	9.2	9.2	1.4	9.2	1.4	4.5	1.9	1.6	1.7	1
Wednesday	8.8	8.8	1.5	8.5	1.7	4.5	1.7	1.6	2.5	1
Wednesday	9.2	9.2	1.6	9.4	1.4	4.7	1.8	1.6	2.1	1
Thursday	9.2	9.1	1.6	8.9	1.7	4.6	1.8	1.6	2.3	1
Thursday	9.1	9.1	1.6	8.9	1.5	4.7	1.8	1.6	1.7	1
Friday	9.2	9.1	1.6	9.0	1.5	4.6	1.9	1.6	2.1	1
Friday	9.3	9.3	1.6	9.3	1.4	4.7	1.7	1.6	1.8	1
Saturday	9.5	9.4	1.6	9.1	1.4	4.6	2.0	1.6	2.0	1
Saturday	8.8	8.8	1.7	8.9	1.7	4.5	2.0	1.6	2.3	1
AVG:	9.2	9.1	1.6	9.0	1.5	4.6	1.9	1.6	2.1	1.0

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	69.5	6.0	N/A	13
Monday	69.2	6.0	38	24
Tuesday	69.2	6.0	N/A	
Wednesday	69.2	6.0	49	14
Thursday	68.9	6.0	N/A	
Friday	69.1	6.0	N/A	19
Saturday	68.7	6.0	N/A	13
AVG	69.1	6.0	44	17

John Day Dam
Avian Zones



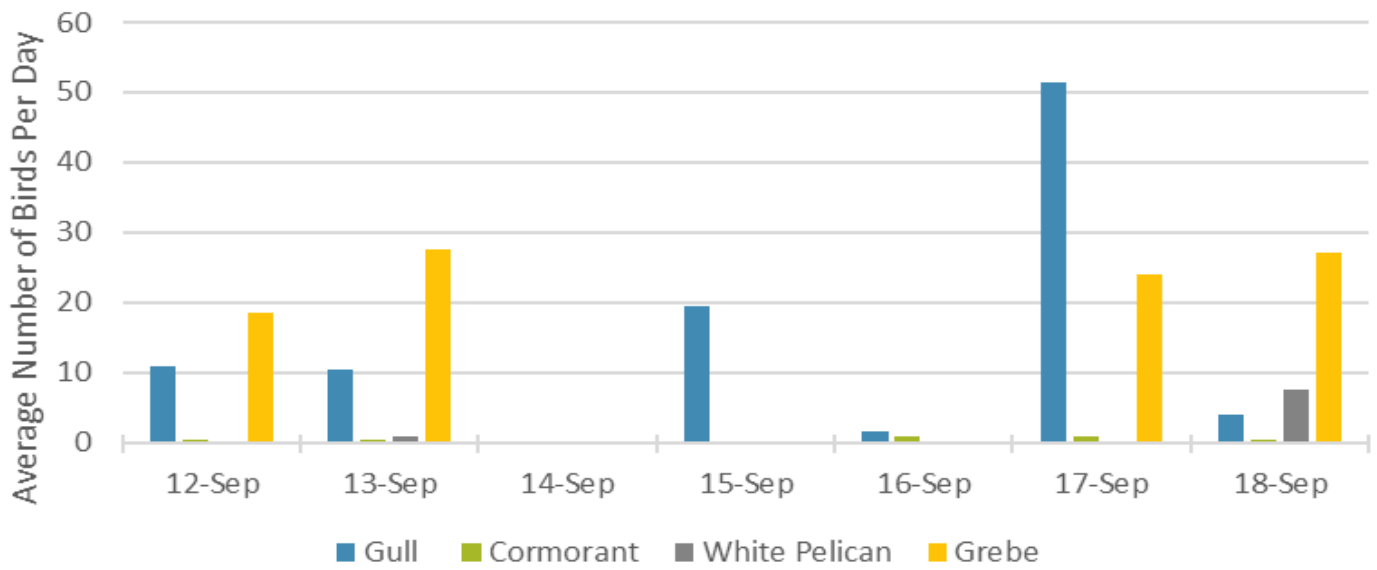
JDA Bird Counts: 9/12/21 to 9/18/21

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)	
16-Sep	PHFB	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	38
16-Sep	SWFB	0	0	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93
16-Sep	PH1	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
16-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	10
16-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Sep	SW3	0	0	0	0	0	0	4	15	0	0	0	0	0	0	0	0	0	0	0	0	19
Avg/Survey		2		47		1		29		0		0		0		5		0		0		83
17-Sep	PHFB	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	25	23	0	0	59
17-Sep	SWFB	0	0	47	224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	271
17-Sep	PH1	12	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
17-Sep	PH2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
17-Sep	PH3	59	24	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154
17-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Sep	SW2	0	0	0	0	0	0	11	21	0	0	0	0	0	0	0	0	0	0	0	0	32
17-Sep	SW3	4	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
Avg/Survey		52		182		1		22		0		0		0		0		24		0		280
18-Sep	PHFB	0	0	0	0	0	0	9	4	0	0	0	0	0	0	0	0	28	26	0	0	67
18-Sep	SWFB	0	0	105	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	164
18-Sep	PH1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Sep	PH3	0	2	0	0	0	0	0	0	0	0	0	0	13	1	0	0	0	0	0	0	16
18-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Sep	SW2	0	0	0	0	0	0	5	27	0	0	0	0	0	0	0	0	0	0	0	0	32
18-Sep	SW3	0	5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	6
Avg/Survey		4		82		1		23		0		0		8		0		27		0		144

Totals	Gulls		Cormorant		Caspian tern		White Pelican		Grebe		Total
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	196	1819	7	301	0	0	17	10	194	0	1272
Avg/Survey	14	130	1	22	0	0	1	1	14	0	182

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

