

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 7/31/2021

Inspection Period: 7/25/2021 thru 7/31/2021



**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:	71.8 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.)	1.3					
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.3					
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.58					
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6					
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.0					
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.5					

JUVENILE PASSAGE

Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6					
Submersible traveling screens	0	visual inspect	Next Visual Inspection 7/12-7/15						
Turbine trashrack drawdown	0	<1.5', wkly							
Vert barrier screen drawdown	0	<1.5', wkly							
Spill volume	0	per FPP	AVG (kcfs)	46.3	Avg %	36.0			
Spill pattern	0	per FPP							
Turbine Unit Priority	0	per FPP							
Turbine 1% Efficiency	0	per FPP							

Fisheries Related Operations

Smolt Monitoring Operations:

High temperature sampling protocols went into effect on 7/8/21 due to water temperatures exceeding 70°F. Smolt Monitoring Facility is currently conducting condition sampling on Monday and Thursday each week until daily average water temperatures drop below 70°F.

Adult Ladder Operations:

North and South fish ladders are operating within criteria. Entered shad mode on 6/3/21.

Project Operations:

Current outages: MU7, MU8, MU9-12 (Line 3 BPA MOD work) MU11, MU12, MU13, MU16. Summer Spill started on June 16.

Tailwater Average Weekly TDG: 114.9

Maintenance:

JD North Fishway's pump 4 has been pulled for maintenance (RTS to be determined). Spillbay #10 will be operated manually until further notice.

Calibration - All gauges within the 0.3' criteria. Spillbay #3 failed on 6/5/21 at 0503, the motor for spill gate #3 will need to be replaced.

Bird Data:

Cormorants have dispersed. Gull numbers low. Pelican numbers increasing on Preacher's Island, with more foraging behavior seen in spillway. Steady number of Grebes in PHFB. (see 'Bird Count' tab for details). USDA Hazing ended 7/31/21.

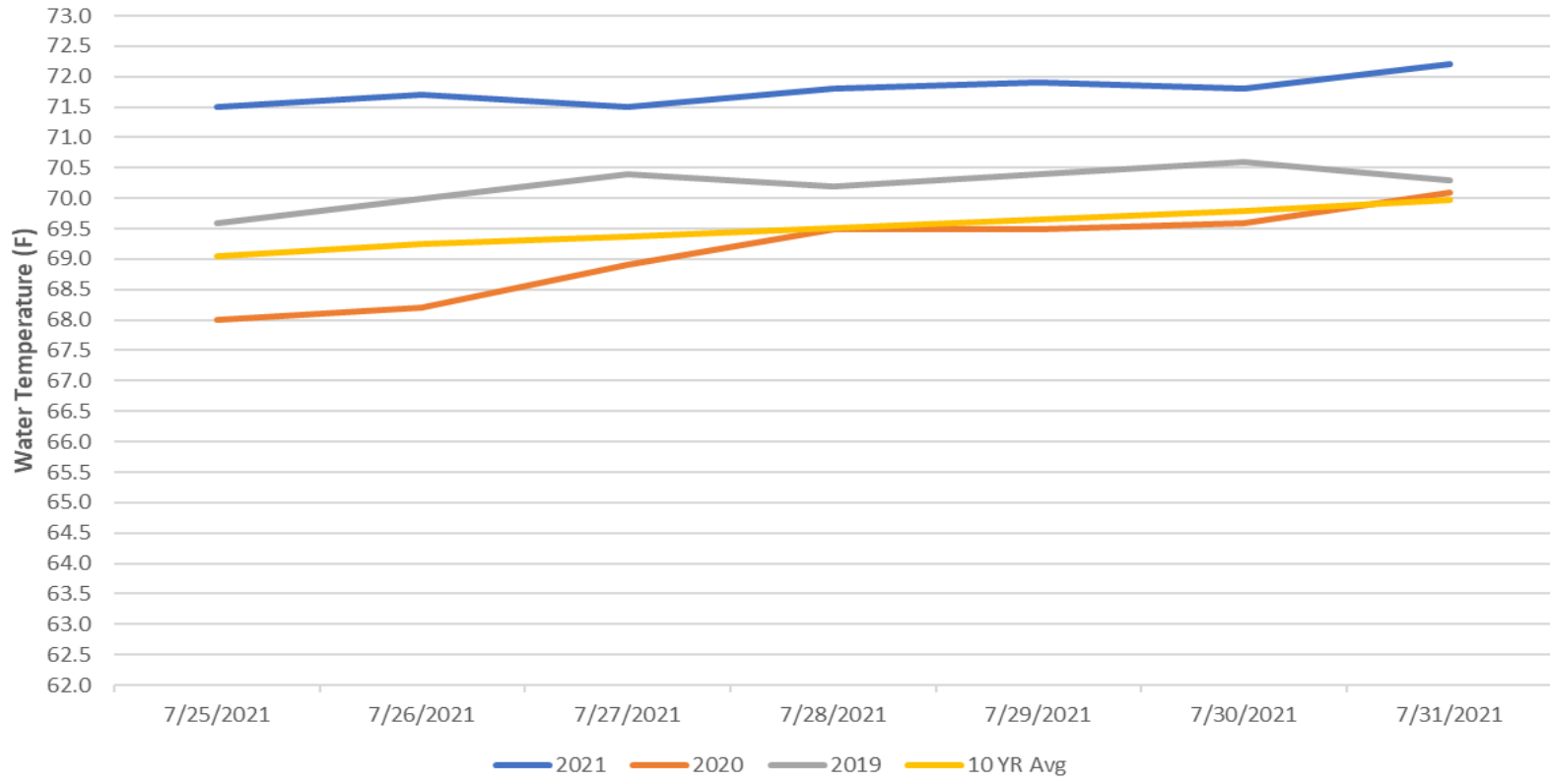
1 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 150 per day

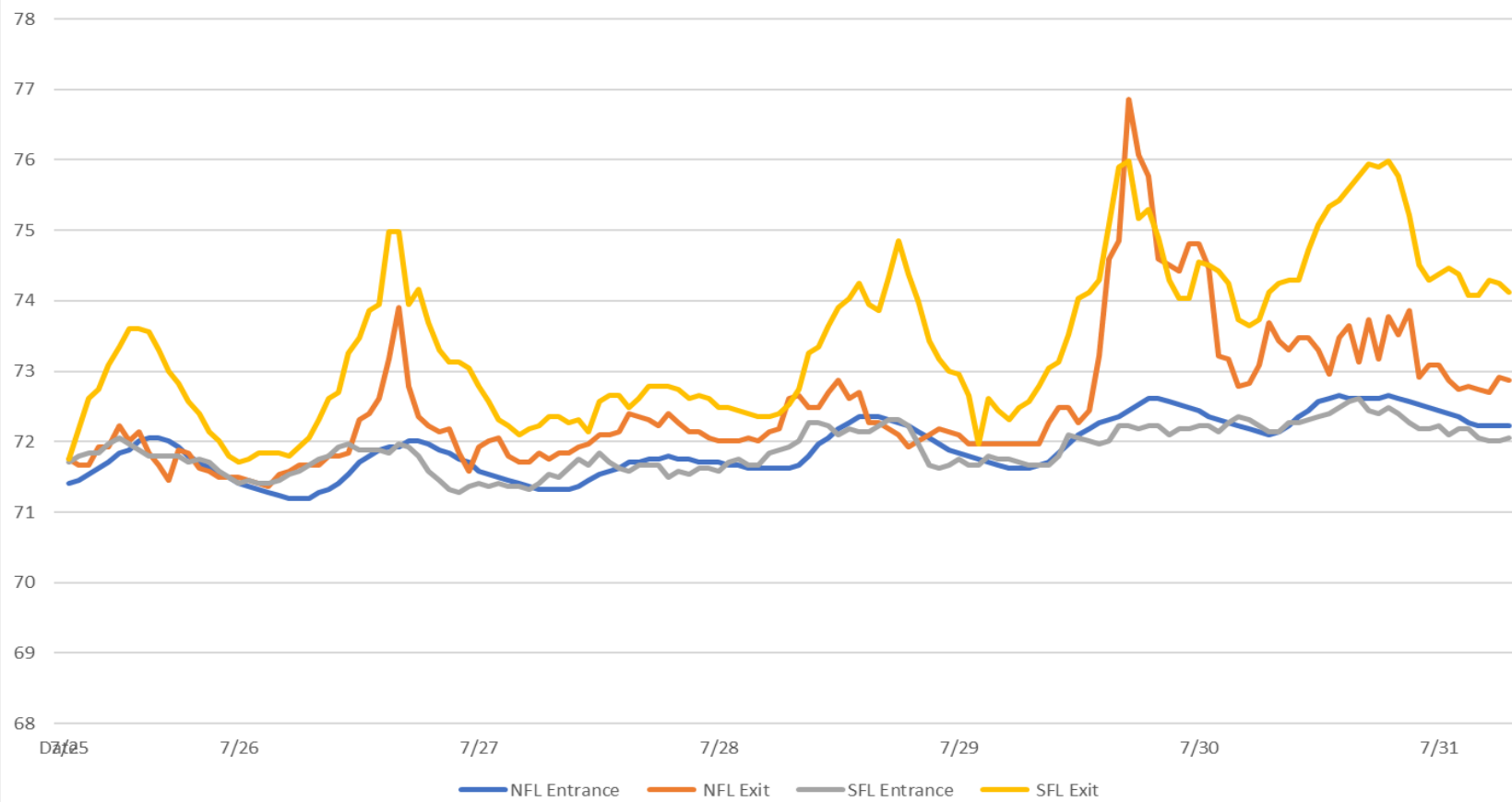
Research:

PSMFC Juvenile lamprey genetic work continues.

John Day Dam Water Temperatures (F)



JDA Ladder Temperatures



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)
7/25/2021	Unit 4	2.50	0,68,68	159.6
7/25/2021	Unit 12	2.56	0,68,68	159.6
7/27/2021	Unit 4	2.54	0,68,68	159.8
7/27/2021	Unit 12	2.78	0,68,68	159.8
7/31/2021	Unit 4	2.54	0,68,68	159.1
7/31/2021	Unit 12	2.53	0,68,68	159.1

Average Weekly Velocity (ft/sec)	2.58
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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	9.3	1.5	8.8	1.7	4.6	1.7	49.0	35.0	17
Sunday	9.3	9.8	1.2	9.4	1.5	4.6	1.7	46.2	35.6	17
Monday	9.7	10.2	1.3	9.3	1.4	4.8	1.3	46.0	46.0	35
Monday	9.7	9.9	1.3	10.8	1.4	4.4	1.5	56.0	35.0	18
Tuesday	8.6	9.1	1.5	8.5	1.5	4.5	1.7	48.0	33.6	18
Tuesday	10.2	10.7	1.3	10.1	1.4	4.8	1.7	56.0	35.0	18
Wednesday	8.5	9.0	1.3	8.9	1.4	4.6	1.9	50.0	36.2	17
Wednesday	9.1	9.6	1.4	9.3	1.5	4.6	1.6	58.0	35.0	18
Thursday	8.9	9.4	1.3	8.9	1.6	4.5	1.5	35.0	35.0	12
Thursday	9.8	10.3	1.0	9.8	1.4	4.6	1.5	56.3	35.7	18
Friday	8.4	8.9	1.3	9.0	1.4	4.5	1.8	39.0	35.7	14
Friday	8.5	9.0	1.2	9.0	1.5	4.5	1.7	37.0	36.0	12
Saturday	8.3	8.8	1.4	9.8	1.7	4.6	1.4	34.0	35.7	10
Saturday	8.3	8.8	1.4	8.9	1.6	4.6	1.6	37.0	35.0	13
AVG:	9.0	9.5	1.3	9.3	1.5	4.6	1.6	46.3	36.0	16.9

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	71.5	6.0	N/A	120
Monday	71.7	6.0	26	158
Tuesday	71.5	6.0	N/A	150
Wednesday	71.8	6.0	N/A	210
Thursday	71.9	6.0	22	125
Friday	71.8	6.0	N/A	320
Saturday	72.2	6.0	N/A	125
AVG	71.8	6.0	24	173

John Day Dam
Avian Zones

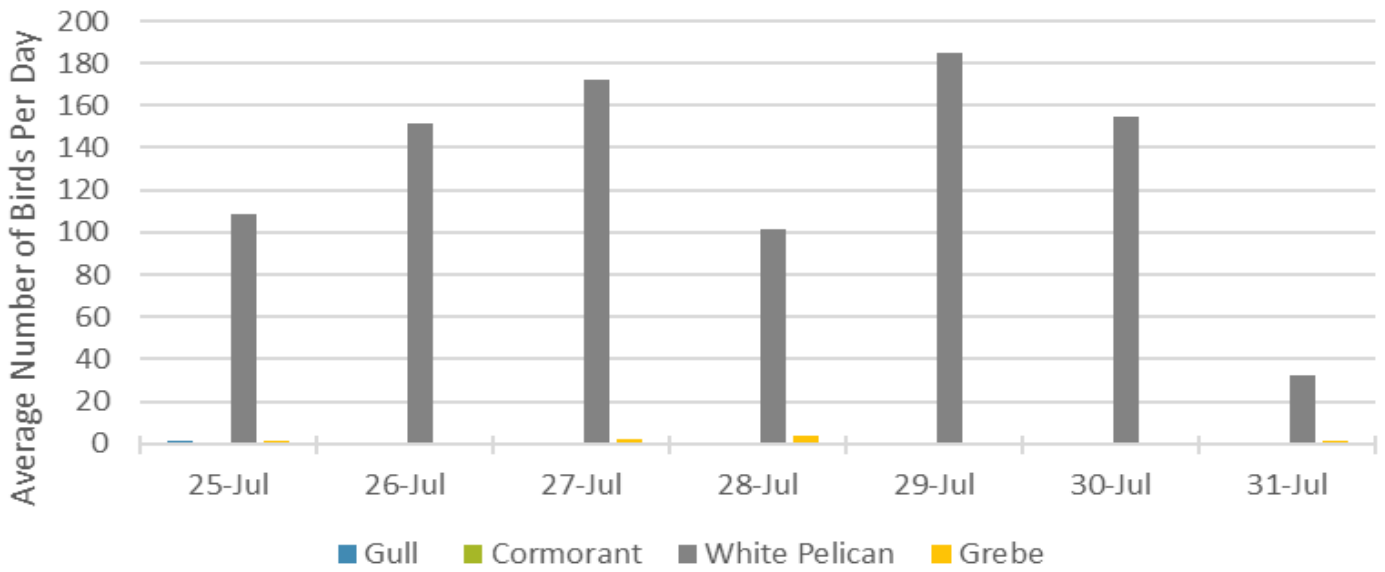


JDA Bird Counts: 7/25/21 to 7/31/21

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				Bald Eagle				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)	F(1)	F(2)	NF(1)	NF(2)					
25-Jul	PHFB	0	0	11	1	0	0	0	0	0	0	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	17
25-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jul	PH3	2	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
25-Jul	SW1	1	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
25-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	127	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	137
25-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	58	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61
Avg/Survey		2		6		0		0		0		0		109		0		1		0		0		0		118				
26-Jul	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
26-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	20	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
26-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	53	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
26-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
26-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	47	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
26-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	124	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	129
Avg/Survey		0		0		0		0		0		0		152		0		0		0		0		0		152				
27-Jul	PHFB	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	3	1	0	0	0	0	0	0	0	0	0	0	7
27-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
27-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	2	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
27-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
27-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	67	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82
27-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	34	149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183
Avg/Survey		0		1		0		0		0		0		173		0		2		0		0		0		176				
28-Jul	PHFB	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	5	2	0	0	0	0	0	0	0	0	0	0	10
28-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
28-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	3	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
28-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	1	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
28-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
28-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	31	36	45	0	0	0	0	0	0	0	0	0	0	0	0	0	112
28-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	15	55	51	25	0	0	0	0	0	0	0	0	0	0	0	0	146
Avg/Survey		0		1		0		0		0		0		102		61		4		0		0		0		167				

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

