

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 7/24/2021

Inspection Period: 7/18/2021 thru 7/24/2021



**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:	71.6 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.)	1.2					
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.8					
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.62					
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.5					
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.8					
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	10.3					

JUVENILE PASSAGE

Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6					
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)	50.8	Avg %	35.0			
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 69.5°F.

Adult Ladder Operations:

North and South fish ladders are operating within criteria. Ladders removed from shad mode 6/21/21.

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: 114.7

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.

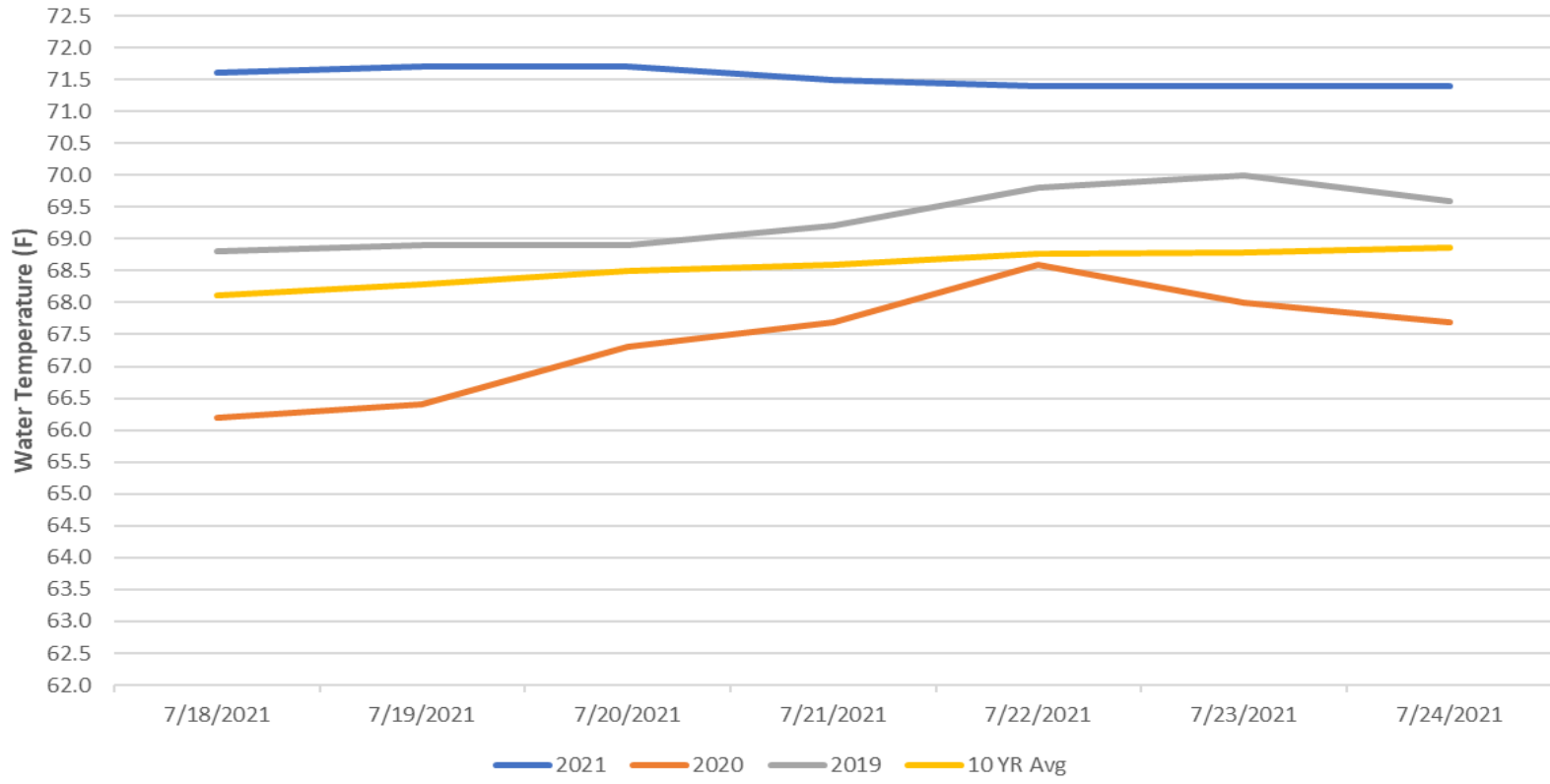
Bird Data:

Few cormorants seen in PHFB . Foraging gull numbers low, increasing numbers seen nonforaging in SWFB. Pelican numbers increasing on Preacher's Island, with a lot of foraging behavior seen in spillway. Slight decrease of number of Grebes in PHFB. (see 'Bird Count' tab for details). USDA Hazing started on 04/16/21.
1 of 125 avian lines down, will need to be replaced
Pelicans on Preacher's Island: averaged 135 per day

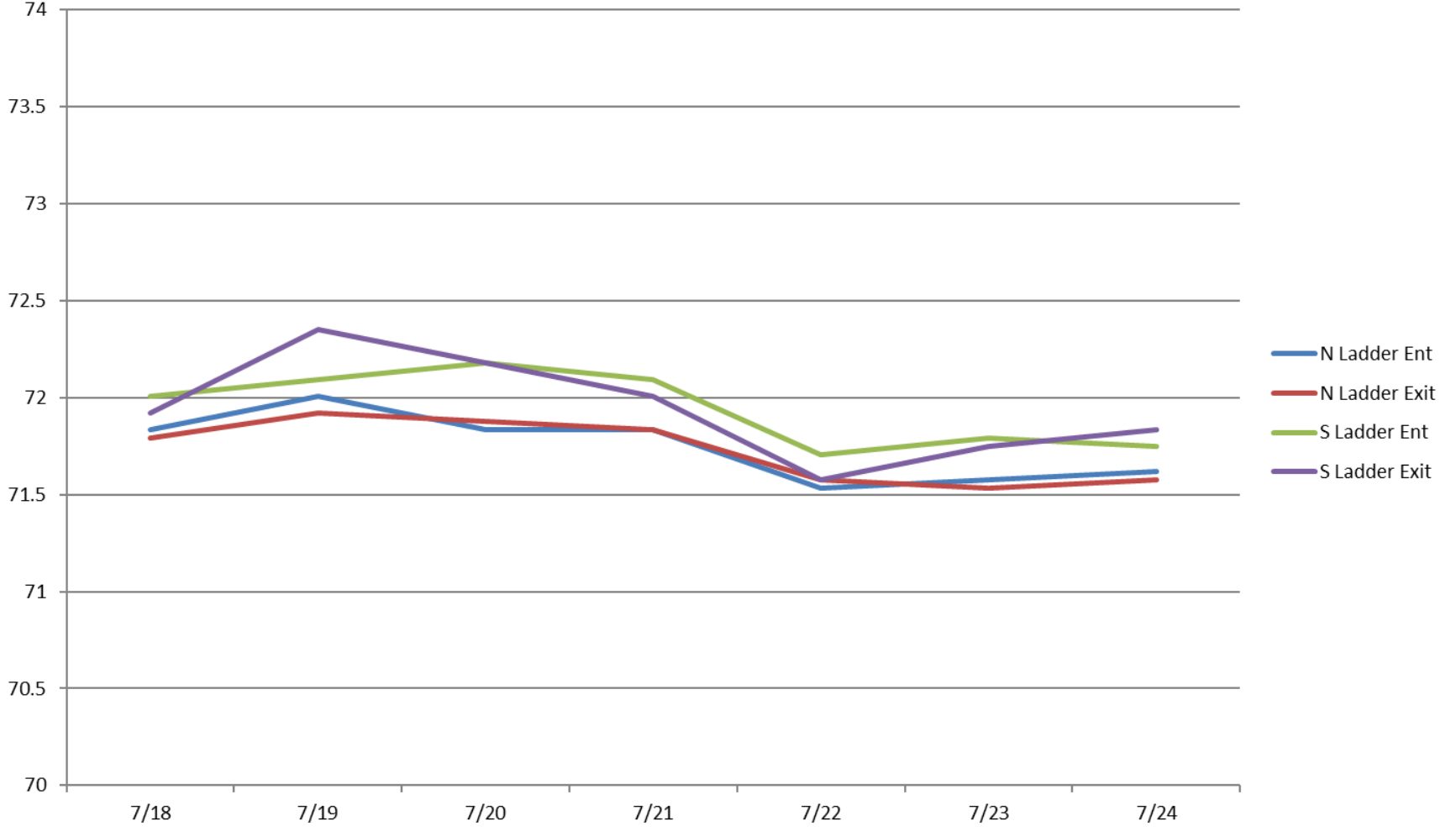
Research:

PSMFC Juvenile lamprey genetic work continues.

John Day Dam Water Temperatures (F)



John Day 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)
7/19/2021	Unit 4	2.63	0,68,68	160.1
7/19/2021	Unit 12	2.68	0,68,68	160.1
7/22/2021	Unit 4	2.66	0,68,68	160.0
7/22/2021	Unit 12	2.68	0,68,68	160.0
7/25/2021	Unit 4	2.50	0,68,68	159.6
7/25/2021	Unit 12	2.56	0,68,68	159.6

Average Weekly Velocity (ft/sec)	2.62
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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	10.1	1.4	9.3	1.5	4.6	1.6	49.0	34.8	17
Sunday	10.3	10.8	1.0	10.1	1.4	4.6	1.5	63.1	34.7	18
Monday	9.3	9.8	1.3	9.2	1.5	4.5	1.8	44.1	34.8	15
Monday	9.6	10.1	1.3	9.4	1.5	4.6	1.6	57.1	35.6	18
Tuesday	9.8	10.3	1.2	9.5	1.6	4.5	1.6	53.7	35.1	18
Tuesday	9.7	10.2	1.0	10.3	1.7	4.5	1.3	57.0	35.0	18
Wednesday	10.0	10.5	1.2	9.8	1.4	4.6	1.6			
Wednesday	10.2	10.7	1.2	9.8	1.4	4.6	1.6	49.0	35.0	17
Thursday	9.8	10.3	1.2	9.6	1.3	4.5	1.5	45.0	35.1	16
Thursday	9.6	10.1	1.2	9.6	1.5	4.6	1.6	52.0	34.8	18
Friday	9.7	10.2	1.3	10.6	1.5	4.6	1.4	48.0	36.0	17
Friday	9.9	10.4	1.2	10.7	1.5	4.6	1.3	48.0	34.0	17
Saturday	9.7	10.2	1.3	9.4	1.5	4.5	1.5	44.0	35.1	15
Saturday	10.0	10.5	1.5	9.8	1.5	4.6	1.4			
AVG:	9.8	10.3	1.2	9.8	1.5	4.6	1.5	50.8	35.0	17.0

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	71.6	6.0	N/A	192
Monday	71.7	6.0	26	110
Tuesday	71.7	6.0	N/A	210
Wednesday	71.7	6.0	N/A	250
Thursday	71.5	6.0	22	150
Friday	71.4	6.0	N/A	175
Saturday	71.4	6.0	N/A	140
AVG	71.6	6.0	24	175

John Day Dam
Avian Zones

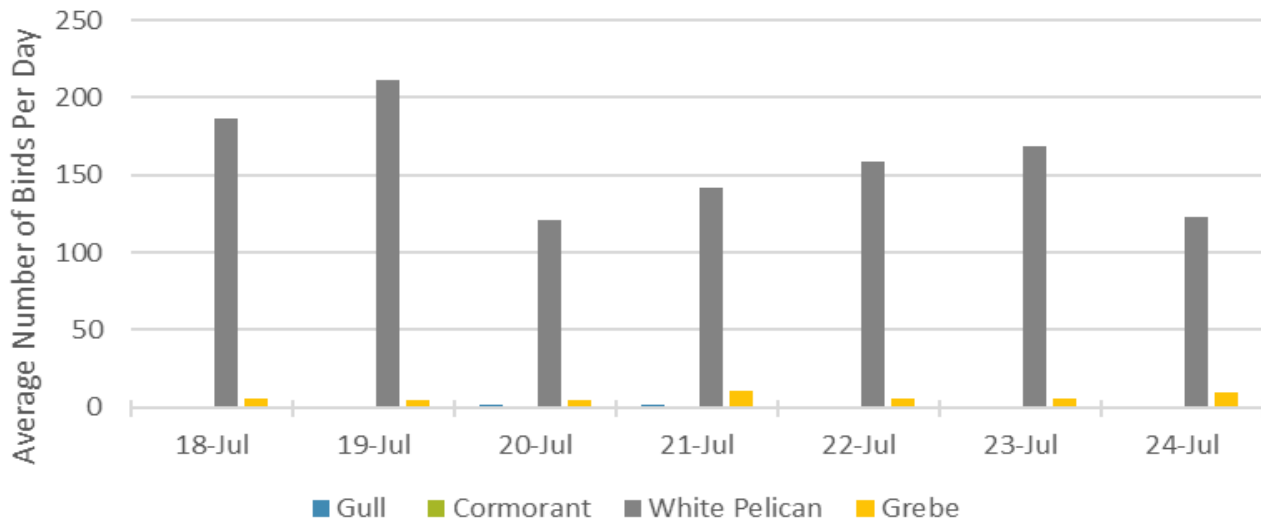


JDA Bird Counts: 7/18/21 to 7/24/21

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)	
18-Jul	PHFB	0	0	2	104	0	0	0	0	0	0	0	0	5	2	0	0	6	4	0	0	0	0	0	0	123
18-Jul	SWFB	0	0	67	10	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	79
18-Jul	PH1	1	0	0	0	0	0	0	0	0	0	0	0	8	6	0	0	0	0	0	0	0	0	0	0	15
18-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	16	5	0	0	0	0	0	0	0	0	0	0	21
18-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	117	56	0	0	0	0	0	0	0	0	0	0	173
18-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	0	0	0	0	0	0	0	11
18-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	39	6	0	0	0	0	0	0	0	0	0	0	45
18-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	83	19	0	0	0	0	0	0	0	0	0	0	102
Avg/Survey		1		92		0		0		0		0		187		0		6		0		0		0		285
19-Jul	PHFB	0	0	16	2	0	0	0	0	0	0	0	0	6	3	0	0	4	6	0	0	0	0	0	0	37
19-Jul	SWFB	0	0	140	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	167
19-Jul	PH1	1	0	0	0	0	0	0	0	0	0	0	0	25	3	0	0	0	0	0	0	0	0	0	0	29
19-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	24	9	0	0	0	0	0	0	0	0	0	0	33
19-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	127	54	0	0	0	0	0	0	0	0	0	0	181
19-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	22	4	0	0	0	0	0	0	0	0	0	0	26
19-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	54	6	23	0	0	0	0	0	0	0	0	0	83
19-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	67	18	11	0	0	0	0	0	0	0	0	0	96
Avg/Survey		1		93		0		0		0		0		211		17		5		0		0		0		326
20-Jul	PHFB	0	0	4	3	0	0	0	0	0	0	0	0	0	3	0	0	4	6	0	0	0	0	0	0	20
20-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
20-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6
20-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
20-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	11
20-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	44	12	0	0	0	0	0	0	0	0	0	0	56
20-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	63	5	0	0	0	0	0	0	0	0	0	0	68
20-Jul	SW3	3	0	0	0	0	0	0	0	0	0	0	0	78	17	0	0	0	0	0	0	0	0	0	0	98
Avg/Survey		2		4		0		0		0		0		121		0		5		0		0		0		131
21-Jul	PHFB	0	0	0	13	0	0	0	0	0	0	0	0	6	3	0	0	15	6	0	0	0	0	0	0	43
21-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
21-Jul	PH1	3	0	0	0	0	0	0	0	0	0	0	0	11	5	0	0	0	0	0	0	0	0	0	0	19
21-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	61	0	0	0	0	0	0	0	0	0	0	0	61
21-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	19
21-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	54	3	0	0	0	0	0	0	0	0	0	0	57
21-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	79	10	0	0	0	0	0	0	0	0	0	0	89
21-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	21	12	0	0	0	0	0	0	0	0	0	0	33
Avg/Survey		2		7		0		0		0		0		142		0		11		0		0		0		161

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

