

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 9/26/2020

Inspection Period: 9/20/2020 thru 9/26/2020



**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:	66.5 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.)	8.8			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.55			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.1			
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	Last Visual Inspection 9/14 - 9/17		Next Inspection 10/19 - 10/22		
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 %	1.9	
Spill pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

Fisheries Related Operations

Smolt Monitoring Operations:

Sampling ended September 15th and the SMF is operating in primary bypass.

Adult Ladder Operations:

JD South Adult Fishway is operating within criteria.

JD North Adult Fishway is operating within criteria.

Project Operations:

Current outages: MU6, MU7, MU9, MU12. MU9 is scheduled to return 10/15/2020, this may be extended a week (10/22/2020)

Forebay Average weekly TDG-99.31, Tailwater Average Weekly TDG-100.89

Maintenance:

SMF SCADA update completed 17 March 2020. JD Electricians are working on SCADA programming and controls. Slowed by COVID-19 availability

JD North Fishway's pump 4 has been pulled for maintenance. - JD Maintenance continue repairs of AWS fish pump 4. RTS has yet TBD.

Calibration - All gauges within the 0.3' criteria. However NE-1, NE-2, Bay 19 tw, and Bay 19 ch sensors OOC - Running in manual mode (0 out of criteria inspections). These OOC are believed to be related to the unfinished SCADA upgrades (lack of comms)

Bird Data:

Few foraging gulls this week, decreasing number of foraging pelicans (see 'Bird Count' tab for details).

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

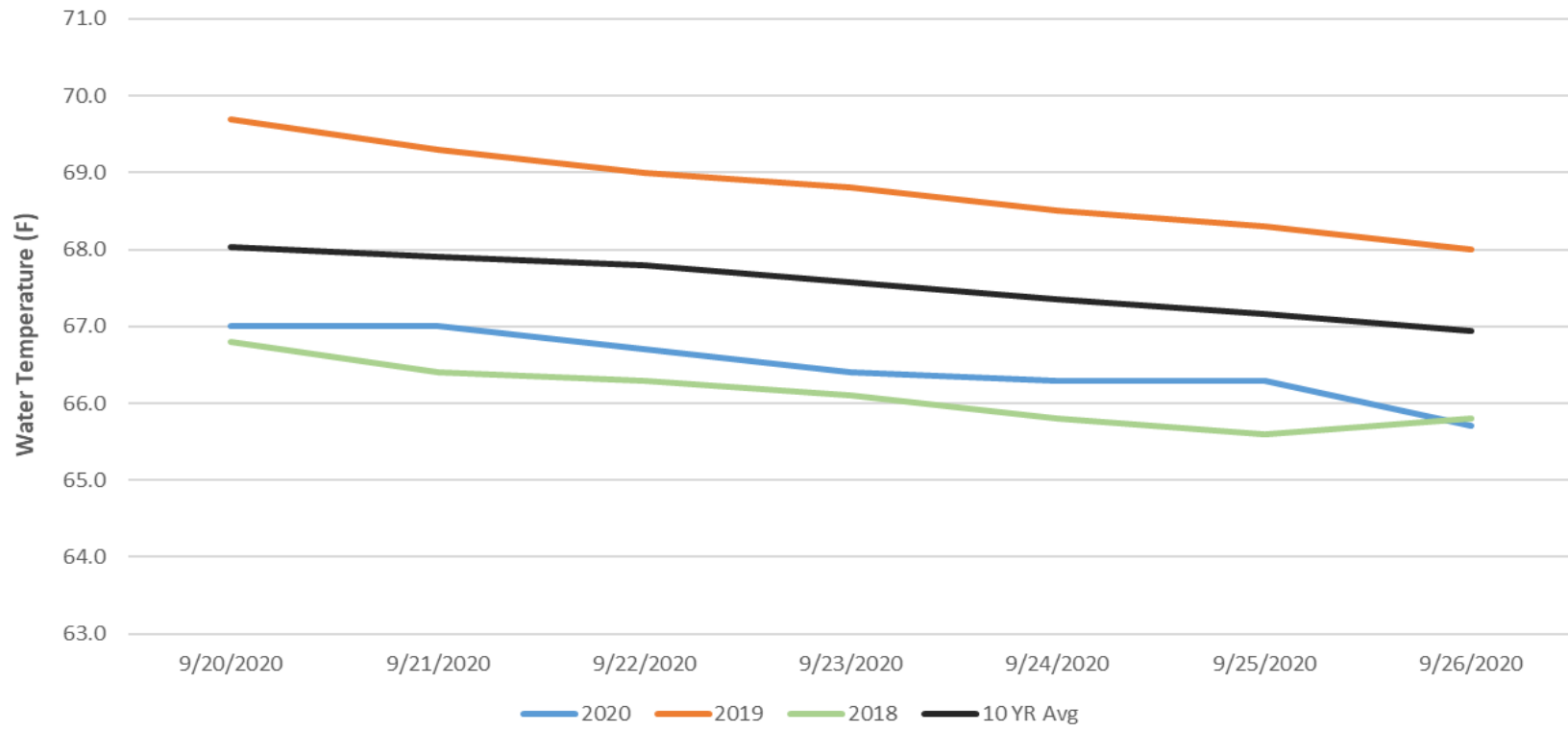
Pelicans on Preacher's Island: averaged 14 per day (see Pelicans tab)

Research:

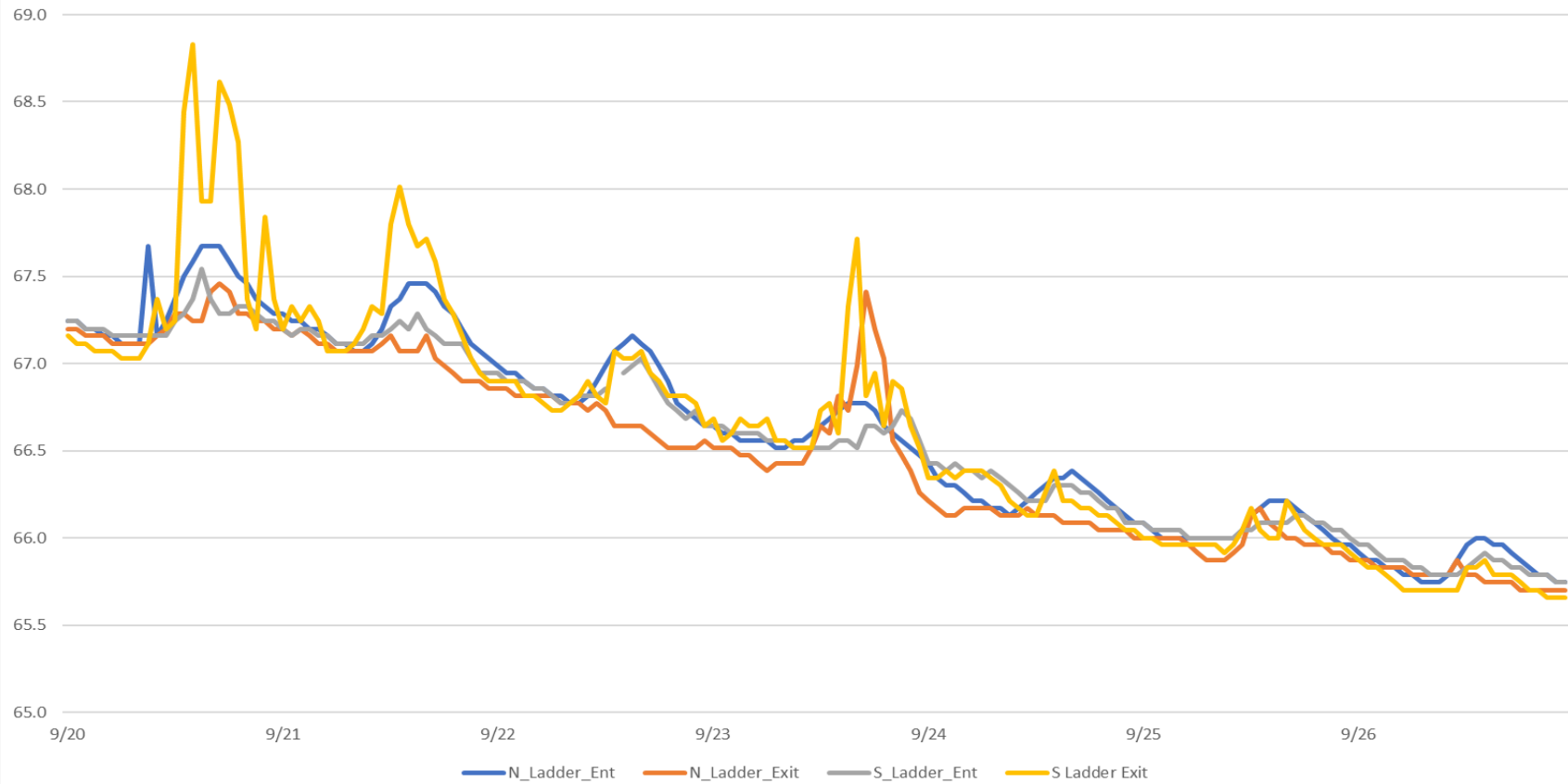
No research at this time

Approved by: Ron Twiner, Acting OPM

John Day Dam Water Temperatures (F)



John Day Fish Ladder Water Temperatures (F°) (9/20/20 - 9/26/20)



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)
9/18/2020	Unit 4	2.54	0,68,68	159.8
9/18/2020	Unit 12	2.67	0,68,68	159.8
9/20/2020	Unit 4	2.52	0,68,68	159.5
9/20/2020	Unit 12	2.56	0,68,68	159.5
9/21/2020	Unit 4	2.43	0,68,68	160.5
9/21/2020	Unit 12	2.58	0,68,68	160.5

Average Weekly Velocity (ft/sec)	2.55
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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	8.7	8.9	1.4	8.5	1.6	4.5	1.7	1.6	2.5	1
Sunday	8.7	9.0	1.4	8.6	1.5	4.6	1.8	1.6	1.7	1
Monday	9.1	9.3	1.2	8.9	1.5	4.6	1.5	1.6	1.7	1
Monday	9.6	9.8	1.0	9.2	1.5	4.7	1.3	1.6	1.8	1
Tuesday	8.7	8.9	1.2	8.6	1.5	4.6	1.8	1.6	1.8	1
Tuesday	8.7	8.9	1.0	8.7	1.6	4.6	1.7	1.6	1.8	1
Wednesday	9.5	9.5	1.5	8.6	1.4	4.6	1.4	1.6	1.8	1
Wednesday	9.8	9.8	1.1	9.2	1.4	4.6	1.5	1.6	1.3	1
Thursday	9.2	9.2	1.3	8.5	1.6	4.7	1.7	1.6	2.2	1
Thursday	9.7	9.7	1.4	8.9	1.4	4.6	1.5	1.6	1.6	1
Friday	8.7	9.0	1.2	8.8	1.6	4.6	1.8	1.6	1.9	1
Friday	8.8	8.9	1.2	8.7	1.7	4.6	1.5	1.6	1.8	1
Saturday	8.7	8.9	1.5	8.5	1.6	4.6	1.5	1.6	2.5	1
Saturday	8.8	9.1	1.2	8.8	1.5	4.5	1.7	1.6	2.2	1
AVG:	9.1	9.2	1.3	8.8	1.5	4.6	1.6	1.6	1.9	1.0

	Temp (F)	Secchi (Ft)	Fallbacks	Pelicans on Island
Sunday	67.0	6.0	N/A	10
Monday	67.0	6.0	N/A	7
Tuesday	66.7	6.0	N/A	15
Wednesday	66.4	6.0	N/A	15
Thursday	66.3	6.0	N/A	11
Friday	66.3	6.0	N/A	15
Saturday	65.7	6.0	N/A	22
AVG	66.5	6.0	N/A	14

John Day Dam
Avian Zones



JDA Bird Counts: 9/20/20 to 9/26/20

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)	
20-Sep	PHFB	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	65	35	0	0	126
20-Sep	SWFB	0	0	0	175	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	180
20-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
20-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Sep	SW2	0	0	0	0	0	0	12	30	0	0	0	0	0	0	0	0	0	0	0	0	42
20-Sep	SW3	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Avg/Survey		0	0	93	0	0	34	0	0	0	0	0	0	5	50	0	0	0	0	0	363	
21-Sep	PHFB	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	64	0	0	0	95
21-Sep	SWFB	0	0	159	150	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	319
21-Sep	PH1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
21-Sep	PH2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	6	0	3	0	0	0	0	0	9
21-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Sep	SW2	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	30
21-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	0	155	3	31	0	0	0	3	2	37	0	0	458							
22-Sep	PHFB	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	51	0	0	64
22-Sep	SWFB	0	0	75	202	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	277
22-Sep	PH1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
22-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Sep	SW2	0	0	0	0	0	0	10	30	0	0	0	0	0	0	0	0	0	0	0	0	40
22-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	4
Avg/Survey		0	0	139	1	27	0	0	2	3	26	0	0	390								
23-Sep	PHFB	0	0	35	0	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	72
23-Sep	SWFB	0	0	103	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140
23-Sep	PH1	0	0	3	0	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
23-Sep	PH2	0	6	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	10
23-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3
23-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Sep	SW2	0	0	0	0	0	0	4	22	0	0	0	0	0	0	0	0	0	0	0	0	26
23-Sep	SW3	0	0	0	0	0	1	3	0	0	0	0	0	0	1	0	0	0	0	0	0	5
Avg/Survey		3	89	6	33	0	0	4	0	0	0	0	270									

JDA Bird Counts: 9/20/20 to 9/26/20

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)	
24-Sep	PHFB	0	0	0	21	0	0	11	0	0	0	0	0	0	0	0	0	1	0	0	0	33
24-Sep	SWFB	0	0	127	133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	260
24-Sep	PH1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
24-Sep	PH2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
24-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Sep	SW2	0	0	0	0	0	0	18	27	0	0	0	0	0	0	0	0	0	0	0	0	45
24-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		3		141		1		28		0		0		0		0		1		0		346
25-Sep	PHFB	0	0	0	0	0	0	16	3	0	0	0	0	0	0	0	3	1	0	0	0	23
25-Sep	SWFB	0	0	200	108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	308
25-Sep	PH1	10	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
25-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Sep	SW2	0	0	0	0	0	0	1	20	0	0	0	0	0	0	0	0	0	0	0	0	21
25-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		5		154		1		20		0		0		0		0		2		0		363
26-Sep	PHFB	0	0	1	0	0	0	27	0	0	0	0	0	0	0	0	70	63	0	0	0	161
26-Sep	SWFB	0	0	125	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	250
26-Sep	PH1	14	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
26-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Sep	SW2	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	20
26-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		7		126		1		24		0		0		0		0		67		0		446

Totals	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF					
Weekly Total	36	1789	22	391	0	0	17	18	363	0	2636										
Avg/Survey	3	128	2	28	0	0	1	1	26	0	188										