

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 7/18/2020

Inspection Period: 7/12/2020 thru 7/18/2020



**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:	65.5 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.)	1.4			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.0			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.44			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.8			
Entrance weir NE1	1	depth (≥ 8')	AVG (Ft.)	8.5			
Entrance weir NE2	1	depth (≥ 8')	AVG (Ft.)	8.5			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	Last Visual Inspection 6/15-6/18		Next Visual Inspection 7/20-7/23		
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.5', wkly					
Spill volume	0	per FPP	Avg (kcfs)	70.6	Avg %	34.5	
Spill pattern	0	per FPP	#spillbays	19			
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

Fisheries Related Operations

Smolt Monitoring Operations:

Condition sampling started 4/01/2020 and with COVID-19 restrictions, Oregon and Washington stay at home orders, and USACE limited staffing levels, the SMF will continue limited conditioning sampling (every other day) until further notice.

Adult Ladder Operations:

JD South Adult Fishway was out of criteria (NE 1 and NE 2) July 16th
JD North Adult Fishway is operating within criteria.

Project Operations:

Currently 6 of 16 units are unavailable (6,7,8,10,12,15)
Spillbay #11 went OOS on July 9th. RTS to service July 14th at 1330
Forebay Average weekly TDG-109.49, Tailwater Average Weekly TDG-119.77

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:

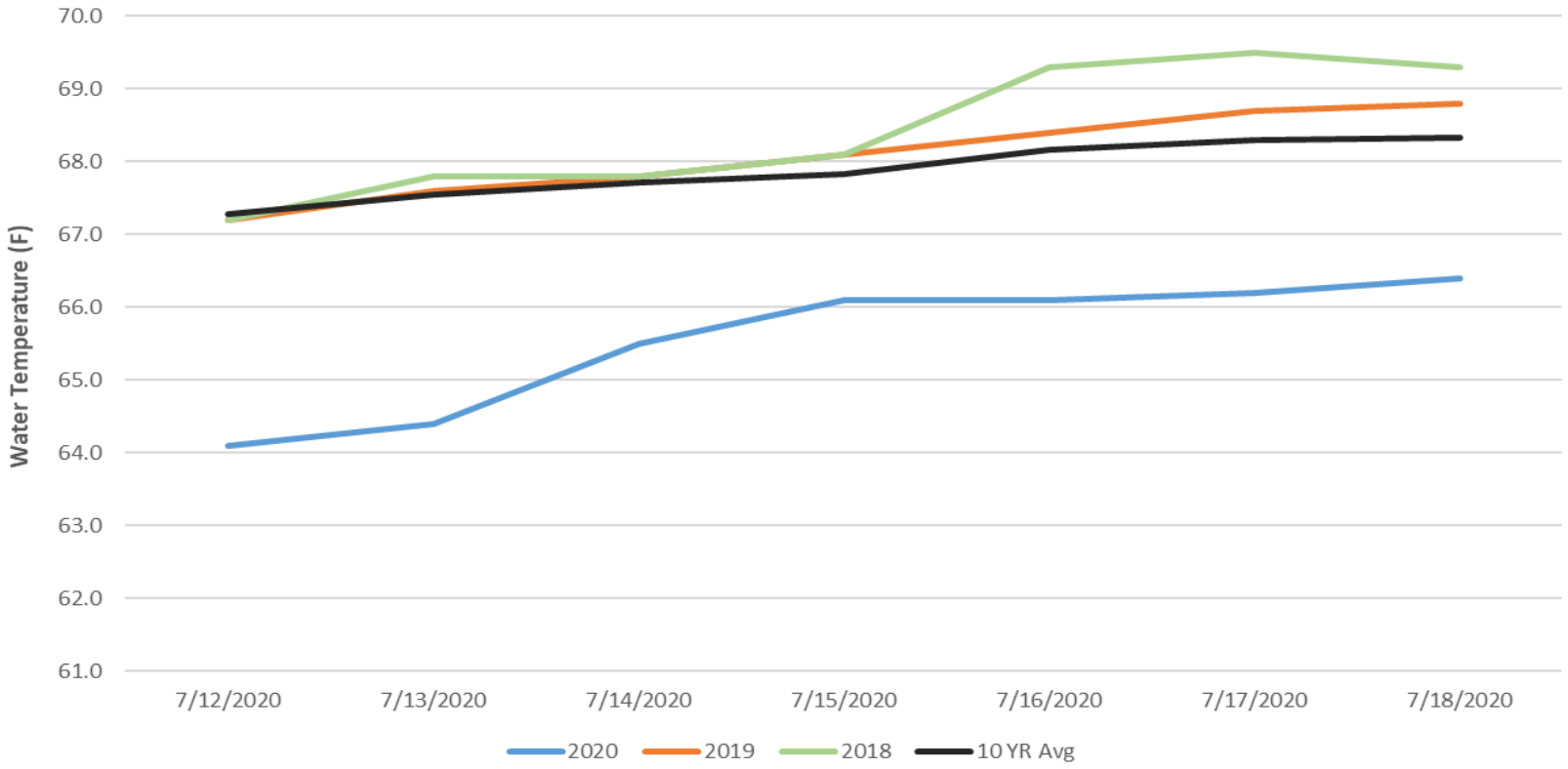
Few foraging gulls this week, high number of foraging pelicans (see 'Bird Count' tab for details).
All 125 avian lines in place without any deficiencies.
Pelicans on Preacher's Island: averaged 300-500 per day

Research:

CRITFC genetics study at SMF

Approved by: Ron Twiner, Acting OPM

John Day Dam Water Temperatures (F)



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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)
7/12/2020	Unit 4	2.36	0,68,68	161.20
7/12/2020	Unit 12	2.40	0,68,68	161.20
7/15/2020	Unit 4	2.53	0,68,69	161.10
7/15/2020	Unit 12	2.43	0,68,69	161.10
7/17/2020	Unit 4	2.42	0,68,69	160.30
7/17/2020	Unit 12	2.52	0,68,69	160.30

Average Weekly Velocity (ft/sec)	2.44
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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	8.7	1.2	9.0	1.5	4.6	1.6	70.0	34.7	18
Sunday	9.1	9.1	1.4	9.6	1.5	4.7	1.9	80.1	35.4	18
Monday	8.1	8.1	1.1	9.3	1.5	4.6	1.9	71.2	33.0	18
Monday	8.5	8.5	1.3	9.4	1.4	4.7	1.9	74.4	34.5	18
Tuesday	8.2	8.2	1.5	8.5	1.4	4.6	1.8	72.0	34.0	18
Tuesday	9.0	9.0	1.4	9.4	1.4	4.5	1.9	86.0	34.6	19
Wednesday	8.0	8.0	1.5	8.4	1.6	4.5	1.8	71.1	35.5	19
Wednesday	8.6	8.6	1.5	9.0	1.4	4.6	2.0			19
Thursday	7.5	7.5	1.4	8.6	1.4	4.6	1.8	60.2	35.1	19
Thursday	8.5	8.5	1.5	9.8	1.3	4.5	1.9			19
Friday	8.5	8.5	1.6	8.1	1.6	4.6	2.0	59.0	35.0	19
Friday	8.9	8.9	1.3	9.4	1.5	4.6	1.5	70.0	34.9	19
Saturday	8.9	8.9	1.6	8.9	1.5	4.6	1.6	64.9	33.0	19
Saturday	8.7	8.7	1.4	9.1	1.5	4.6	1.8	68.1	33.8	19
AVG:	8.5	8.5	1.4	9.0	1.5	4.6	1.8	70.6	34.5	18.6

	Temp (F)	Secchi (Ft)	Fallbacks	Pelicans on Island
Sunday	64.1	6.0	50	120
Monday	64.4	6.0	N/A	150
Tuesday	65.5	6.0	60	147
Wednesday	66.1	6.0	N/A	300
Thursday	66.1	6.0	20	150
Friday	66.2	6.0	N/A	75
Saturday	66.4	6.0	39	135

AVG	65.5	6.0	42	154
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John Day Dam
Avian Zones



JDA Bird Counts: 7/12/20 to 7/18/20

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)	
12-Jul	PHFB	0	102	51	0	0	0	0	0	0	0	0	0	6	4	0	0	11	7	0	0	181
12-Jul	SWFB	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
12-Jul	PH1	0	2	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	6
12-Jul	PH2	0	8	0	0	0	0	0	0	0	0	0	0	21	7	0	0	0	0	0	0	36
12-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	57	37	0	0	0	0	0	0	94
12-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	28	6	0	0	0	0	0	0	34
12-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	35	20	0	0	0	0	0	0	55
12-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	88	2	0	0	0	0	0	0	90
Avg/Survey		57		26		0		0		0		0		158		0		9		0		499
13-Jul	PHFB	7	0	0	4	0	0	0	0	0	0	0	0	4	2	0	0	6	12	0	0	35
13-Jul	SWFB	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
13-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	13	26	0	0	0	0	0	0	39
13-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	48	74	0	0	0	0	0	0	122
13-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	54	46	0	0	0	0	0	0	100
13-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	8	15	0	0	0	0	0	0	23
13-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	63	23	0	0	0	0	0	0	86
13-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	157	25	0	0	0	0	0	0	182
Avg/Survey		4		9		0		0		0		0		279		0		9		0		601
14-Jul	PHFB	0	0	14	0	0	0	0	0	0	0	0	0	11	4	0	0	7	0	0	0	36
14-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	11
14-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	38	4	0	0	0	0	0	0	42
14-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	47	5	0	0	0	0	0	0	52
14-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	51	54	0	0	0	0	0	0	105
14-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	64	30	0	0	0	0	0	0	94
14-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	188	31	0	0	0	0	0	0	219
Avg/Survey		0		7		0		0		0		0		269		0		4		0		559
15-Jul	PHFB	0	0	0	1	0	0	0	0	0	0	0	0	2	1	0	0	7	8	0	0	19
15-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	0	11
15-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	17	7	0	0	0	0	0	0	24
15-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	32	15	0	0	0	0	0	0	47
15-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	62	15	0	0	0	0	0	0	77
15-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	88	47	0	0	0	0	0	0	135
15-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	114	25	0	0	0	0	0	0	139
Avg/Survey		0		1		0		0		0		0		218		0		8		0		452

JDA Bird Counts: 7/12/20 to 7/18/20

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)	
16-Jul	PHFB	0	0	6	0	0	0	0	0	0	0	0	0	2	3	0	0	7	6	0	0	24
16-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
16-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
16-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	20	11	0	0	0	0	0	0	31
16-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	78	44	0	0	0	0	0	0	122
16-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	84	27	0	0	0	0	0	0	111
Avg/Survey		0	0	3	0	0	0	0	0	0	0	0	0	137	0	0	0	7	0	0	0	293
17-Jul	PHFB	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	5	0	0	57
17-Jul	SWFB	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
17-Jul	PH1	0	0	0	0	0	2	0	0	0	0	0	0	10	0	0	0	0	0	0	0	12
17-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	80	1	0	0	0	0	0	0	81
17-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	40
17-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	50	1	0	0	0	0	0	0	51
17-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	120	0	0	0	0	0	0	0	120
17-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	175	0	25	0	0	0	0	0	200
Avg/Survey		33	0	0	0	1	0	0	0	0	0	0	0	239	13	0	0	9	0	0	0	586
18-Jul	PHFB	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	12	12	0	0	32
18-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	75	5	0	0	0	0	0	0	80
18-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	50	10	0	0	0	0	0	0	60
18-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	25	10	0	0	0	0	0	0	35
18-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	20	5	0	0	0	0	0	0	25
18-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	130	20	0	0	0	0	0	0	150
18-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	200	20	0	0	0	0	0	0	220
Avg/Survey		4	0	0	0	0	0	0	0	0	0	0	0	286	0	0	0	12	0	0	0	602

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	193	90	2	0	0	0	0	0	0	0	0	0	3170	25	112	0	3592				
Avg/Survey	14	6	0	0	0	0	0	0	0	0	0	0	226	2	8	0	257				