

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/3/2020

Inspection Period: 9/27/2020 thru 10/3/2020



**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:	65.6 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.)	1.3			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.8			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.61			
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.)	9.3			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	Last Visual Inspection 8/19 - 8/24		Next Visual Inspection 9/14 - 9/17		
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 %	1.5	
Spill pattern	0	per FPP					
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. River temperatures have reached 70 degrees and sampling will now be Mondays and Thursdays (as per FPP). Condition sampling finished September 15.

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, MU15. MU9 is scheduled to return 10/15/2020
Tailwater Average Weekly TDG-102.28

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:

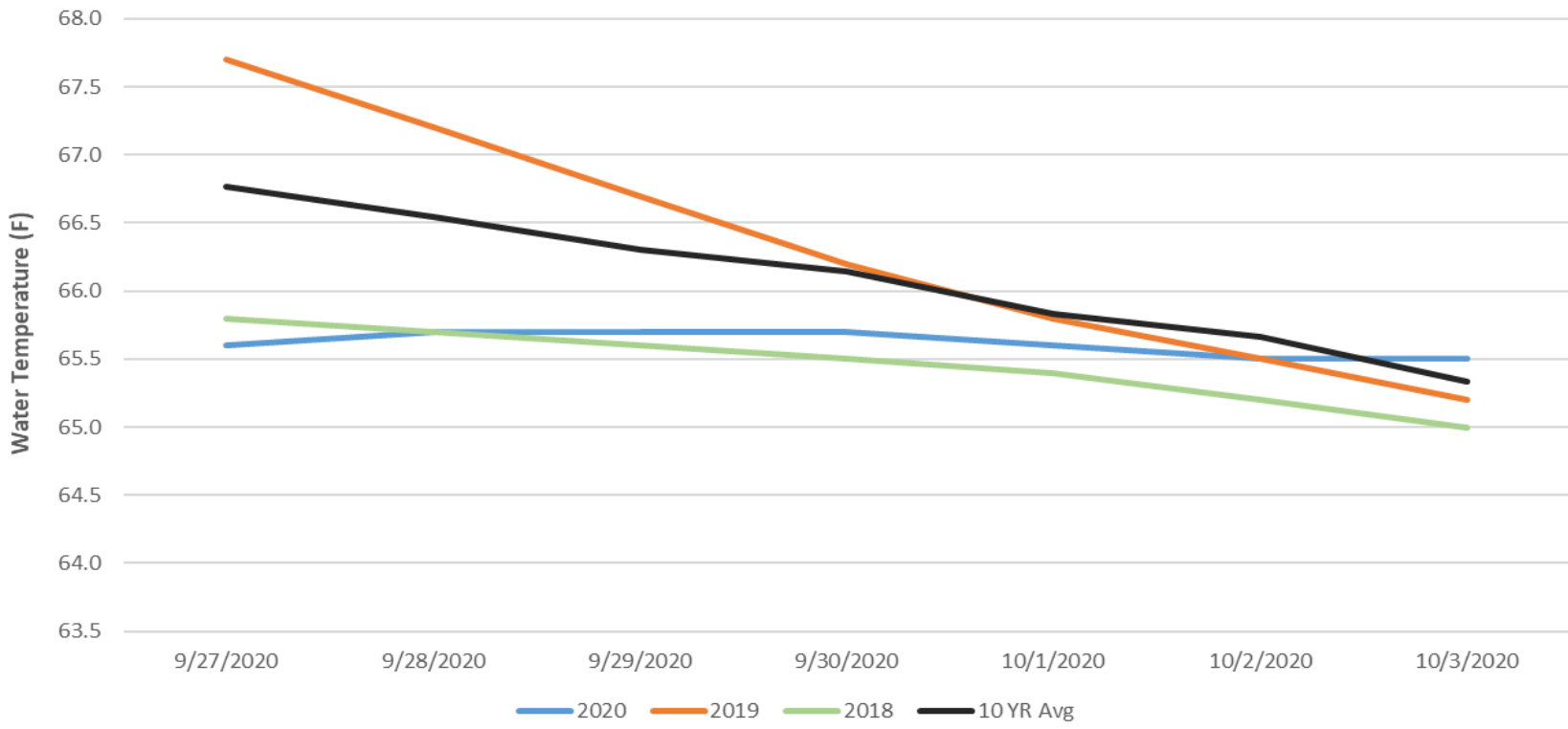
Few foraging gulls this week, decreasing number of foraging pelicans (see 'Bird Count' tab for details).
1 of 125 avian lines down, will need to be replaced
Pelicans on Preacher's Island: averaged 1 per day (see Pelicans tab)

Research:

CRITFC genetics study at SMF

Approved by: Brett Call, OPM

John Day Dam Water Temperatures (F)



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)
9/28/2020	Unit 4	2.58	0,68,68	159.8
9/28/2020	Unit 12	2.59	0,68,68	159.8
9/29/2020	Unit 4	2.61	0,68,68	159.2
9/29/2020	Unit 12	2.70	0,68,68	159.2
10/2/2020	Unit 4	2.58	0,68,68	159.2
10/2/2020	Unit 12	2.60	0,68,68	159.2

Average Weekly Velocity (ft/sec)	2.61
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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	8.6	8.8	1.3	8.5	1.5	4.6	1.7	1.6	1.9	1
Sunday	8.7	9.0	1.2	8.7	1.6	4.6	1.8	1.6	2.0	1
Monday	9.0	9.2	1.3	8.6	1.5	4.6	1.7	1.6	1.5	1
Monday	9.1	9.4	1.1	8.8	1.5	4.7	1.9	1.6	1.3	1
Tuesday	9.8	9.8	1.1	9.0	1.4	4.7	1.3	1.6	1.3	1
Tuesday	9.7	9.7	1.6	8.6	1.4	4.4	1.5	1.6	1.2	1
Wednesday	9.8	9.8	1.4	9.0	1.4	4.6	1.6	1.6	1.3	1
Wednesday	9.8	9.8	1.4	8.9	1.5	4.6	1.4	1.6	1.2	1
Thursday	9.4	9.4	1.4	8.7	1.5	4.6	1.4	1.6	1.8	1
Thursday	9.3	10.0	1.4	9.0	1.5	4.7	1.8	1.6	1.4	1
Friday	8.4	8.6	1.7	8.3	1.6	4.7	1.1	1.6	1.7	1
Friday	8.9	9.2	1.2	9.1	1.6	4.6	1.7	1.6	1.3	1
Saturday	8.5	8.7	1.4	8.7	1.7	4.5	1.8	1.6	2.2	1
Saturday	9.0	9.3	1.3	9.1	1.6	4.6	1.9	1.6	1.3	1
AVG:	9.1	9.3	1.3	8.8	1.5	4.6	1.6	1.6	1.5	1.0

	Temp (F)	Secchi (Ft)	Fallbacks	Pelicans on Island
Sunday	65.6	6.0	N/A	15
Monday	65.7	6.0	N/A	20
Tuesday	65.7	6.0	N/A	17
Wednesday	65.7	6.0	N/A	15
Thursday	65.6	6.0	N/A	12
Friday	65.5	6.0	N/A	12
Saturday	65.5	6.0	N/A	12
AVG	65.6	6.0	N/A	15

John Day Dam
Avian Zones



JDA Bird Counts: 9/27/20 to 10/3/20

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)	
27-Sep	PHFB	0	0	0	0	0	0	17	1	0	0	0	0	0	0	0	0	64	64	0	0	146
27-Sep	SWFB	0	0	125	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	227
27-Sep	PH1	30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
27-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Sep	SW2	0	0	0	0	0	0	17	35	0	0	0	0	0	0	0	0	0	0	0	0	52
27-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		15		114		1		35		0		0		0		0		64		0		456
28-Sep	PHFB	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	70	35	0	0	107
28-Sep	SWFB	0	0	50	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
28-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Sep	PH2	20	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	21
28-Sep	PH3	30	5	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	36
28-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Sep	SW2	0	0	0	0	0	0	25	40	0	0	0	0	0	0	0	0	0	0	0	0	65
28-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		28		40		0		34		0		0		1		0		53		0		309
29-Sep	PHFB	0	0	15	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	40
29-Sep	SWFB	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
29-Sep	PH1	13	0	0	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
29-Sep	PH2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
29-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
29-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Sep	SW2	0	0	0	0	1	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	15
29-Sep	SW3	0	3	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Avg/Survey		11		28		5		23		0		0		1		0		0		0		134
30-Sep	PHFB	0	0	0	1	0	0	19	0	0	0	0	0	0	0	0	0	35	0	0	0	55
30-Sep	SWFB	0	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
30-Sep	PH1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
30-Sep	PH2	1	7	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
30-Sep	PH3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
30-Sep	SW1	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
30-Sep	SW2	0	0	0	0	1	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	29
30-Sep	SW3	0	0	0	0	0	0	19	1	0	0	0	0	0	0	0	0	0	0	0	0	20
Avg/Survey		20		19		2		34		0		0		0		0		18		0		183

JDA Bird Counts: 9/27/20 to 10/3/20

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)	
1-Oct	PHFB	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	22	0	0	0	46
1-Oct	SWFB	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
1-Oct	PH1	23	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
1-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Oct	SW1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1-Oct	SW2	0	0	0	0	0	0	0	22	0	0	0	0	2	0	0	0	0	0	0	0	24
1-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6
Avg/Survey		12		18		4		23		0		0		1		3		11		0		142
2-Oct	PHFB	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	65	59	0	0	141
2-Oct	SWFB	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
2-Oct	PH1	20	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
2-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
2-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Oct	SW2	0	0	0	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	40
2-Oct	SW3	0	0	0	0	0	0	10	0	0	0	0	0	6	0	0	0	0	0	0	0	16
Avg/Survey		10		60		0		34		0		0		6		0		62		0		343
3-Oct	PHFB	0	0	0	0	0	1	30	0	0	0	0	0	0	0	0	0	68	0	0	0	99
3-Oct	SWFB	0	52	30	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	90
3-Oct	PH1	10	3	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
3-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Oct	SW2	0	0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	34
3-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		33		15		2		36		0		0		0		0		34		0		238

Totals	Gulls		Cormorant		Caspian tern		White Pelican		Grebe		Total
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	255	585	25	436	0	0	16	6	482	0	1805
Avg/Survey	18	42	2	31	0	0	1	0	34	0	129