

FISHWAY STATUS REPORT

Date: 4/27/2019
Inspection Period: 4/21/2019 thru 4/27/2019

JOHN DAY DAM



**US Army Corps
of Engineers**
Portland District

JD/WC Project-Fisheries
P.O. Box 823
Rufus, Oregon 97050
Phone: 541-506-7860

All JD Fishways are inspected twice per day during fish passage season, Mar. 1 - Nov. 30.
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:	52 F
					Secchi:	1.4 Ft.
NORTH FISHWAY						
Exit differential	0	≤ 0.5'				
Exit Control weirs	0	High setting	High setting is normal for JDN			
Count station differential	0	≤ 0.3'				
Weir crest depth (DS gauge)	0	1.0' ± 0.1'				
Entrance differential	0	1.0' - 2.0'	AVG	1.5		
SOUTH FISHWAY						
Exit differential	0	≤ 0.5'				
Exit Control weirs	0	Mid setting	Mid setting is normal for JDS			
Count station differential	0	≤ 0.3'				
Weir crest depth (US gauge)	0	1.0' ± 0.1'	Set to Shad setting to provide more flow to SE1			
South entrance differential	1	1.0' - 2.0'	AVG	1.5	Turbine 3 oos. 2 turbine operation as of 1200 on 25 April.	
Entrance weir SE1	9	depth (≥ 8')	AVG	7.3		
Collection channel velocity	0	1.5 - 4 fps	AVG	3.03		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.9		
Entrance weir NE1	9	depth (≥ 8')	AVG	2.0		
Entrance weir NE2	0	depth (≥ 8')	AVG	10.2		
JUVENILE PASSAGE						
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.6		
Submersible traveling screens	0	visual inspect				
Turbine trashrack drawdown	0	<1.5', wkly	N/A			
Vert barrier screen drawdown	0	<1.5', wkly	N/A			
Spill volume	0	per FPP	Spill season started 10 April			
Spill pattern	0	per FPP	None			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

SMOLT MONITORING FACILITY

Operation:

SMOLT MONITORING FACILITY began sampling on 3/13 at 1400. A broken pipe flange that supplies flume and rotating gate water was cracked preventing start up on 3/11.

Maintenance:

SMF SCADA update by JD Electrical/ Portland District's engineers is underway but its completion is delayed by one year to February 2020. Due to complexity of electronic components and incomplete as-builts which are pending at this time.

Research:

CRITFC genetic samples were collected by PSMFC.

ADULT FISHWAYS & TW AVIAN GRID

Birds:

USDA Bird Hazing began on 15 April. 20 Pelicans observed on island below project in tailrace
All 125 avian lines in place without any deficiencies.

Operations:

Turbine 1 rts on 25 April. The heat exchanger had broken and needed repair. Awaiting clutch on turbine 3.

Trash raking of units began on 3/21.

MU Gatewell Drawdown All MUs trashrack differentials are 1.5' or below according to twice a week inspections.

Maintenance:

JD North AWS pump 2 returned to service on 3/27.

JD North AWS pumps frequent SKF alarms (auto greasing issues) continue and are cleared by JD Maintenance & Ops immediately. Planning for a long term fix underway.

JD South fish turbine's anti-ratchet gear was damaged beyond repair on 9 Apr. A spare is being assessed as a possible repair part.

JD North Fishway's LPS: Installation of the old pump assembly and electric controls will proceed at the end of April for start of trapping season.

JD South AWS turbine 3 is OOS, Part are to arrive on 26 April.

Calibration: All gauges/ sensors are within the criteria of 0.3'.

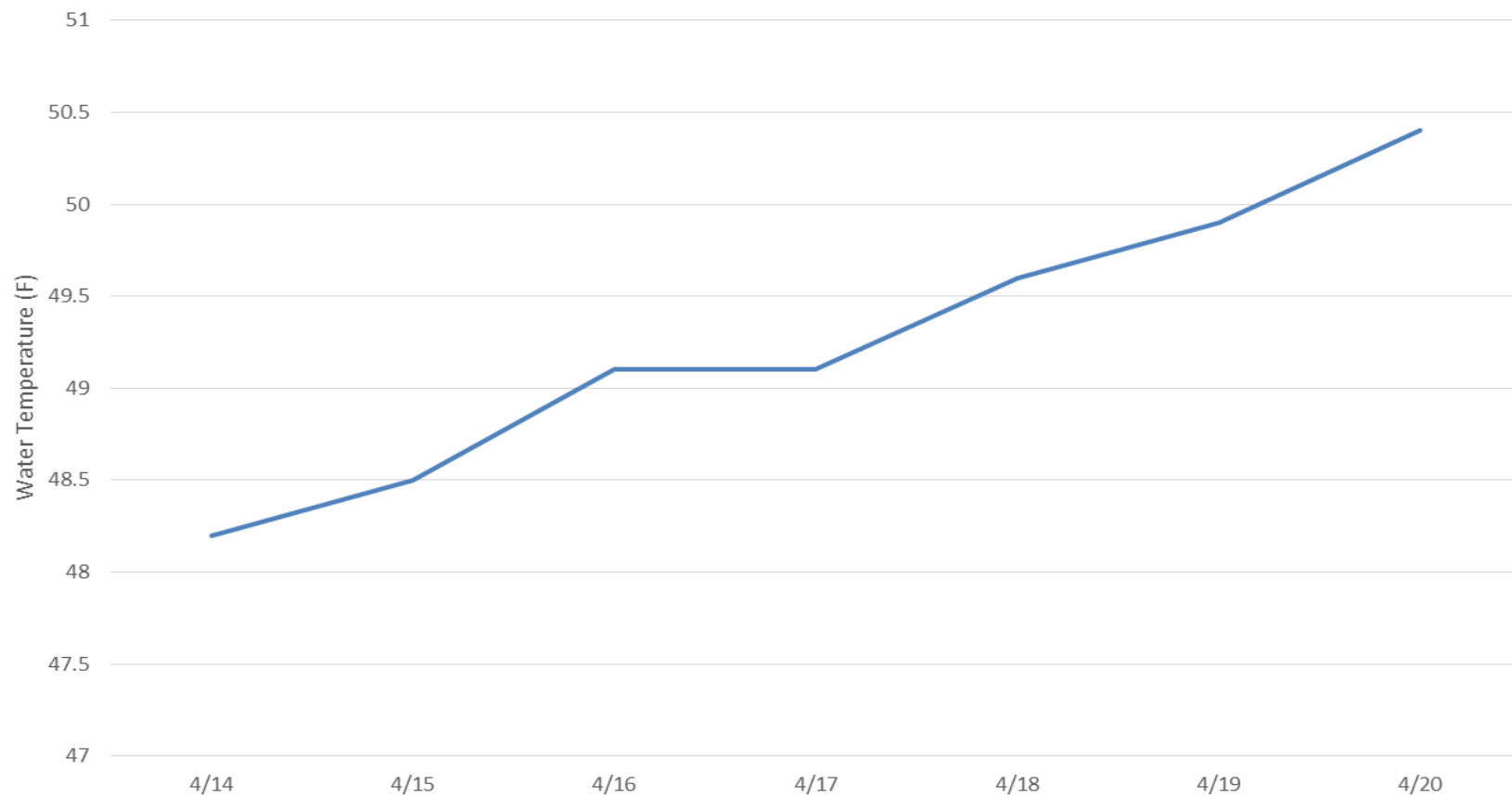
Research:

JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18.

Uof I crew continues monitoring the RT Adult Lamprey passage at both JD Adult Fishways.

Approved by: Ron Twiner, Acting OPM

JDA Forebay Water Temperature (4/14/19 - 4/20/19)



JDA Collection Channel Velocity

Date 25-Apr-19

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:00	60	3.00
2 - 4	2:01	121	2.95
4 - 6	3:02	182	2.95
6 - 8	4:04	244	2.90
8 - 10	5:03	303	3.05
10 - 12	6:07	367	2.81
12 - 14	7:07	427	3.00
14 - 16	8:02	482	3.27
16 - 18	8:56	536	3.33
			3.03

Bay 19 TW:	161.6
Turbine 1&2:	68 RPM

Turbine #3 OOS

FPP Criteria: 1.5–4.0 feet per second (2 fps optimum)

John Day Weekly Averages

	Temp:	Secchi:	Fallbacks	
Sun	51	1.5	12	Bypass
Mon	51	1.5	70	Sample
Tue	51	1.5	27	Bypass
Wed	51	1.0	100	Sample
Thur	52	1.0	51	Bypass
Fri	53	1.5	70	Sample
Sat	53	1.5	14	Bypass
AVG:	52	AVG: 1.4	AVG/Sample 64	
			MAX 100	
			MIN 12	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	-4.4	8.6	1.1	6.9	1.6	4.5	1.9
Sun	-3.3	9.7	1.2	6.1	1.5	4.6	1.8
Mon	-2.9	10.0	1.0	6.8	1.4	4.6	2.0
Mon	-2.9	10.1	1.3	5.7	1.5	4.7	2.0
Tues	-2.7	10.3	1.2	6.1	1.4	4.6	2.0
Tues	-3.2	9.8	1.3	5.4	1.6	4.6	1.7
Wed	-2.6	10.3	1.0	7.0	1.4	4.6	1.8
Wed	-1.7	11.3	2.1	6.9	1.4	4.7	1.6
Thur	-1.9	11.2	1.1	6.4	1.5	4.5	1.5
Thur	10.0	11.3	1.9	10.0	1.0	4.6	1.9
Fri	8.5	9.8	1.9	8.2	1.5	4.6	2.0
Fri	11.7	10.3	1.8	8.8	1.4	4.6	1.9
Sat	11.8	10.4	1.7	8.9	1.4	4.6	1.9
Sat	11.7	10.3	1.8	8.4	1.6	4.5	1.9
AVG:	2.0	10.2	1.5	7.3	1.4	4.6	1.9

JDA Bird Counts: 4/21/19 to 4/27/19

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)	
21-Apr	PHFB	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	30	36	29	36	133
21-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Apr	PH1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21-Apr	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
21-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Apr	SW3	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Avg/Survey		5		0		0		1		0		0		0		0		33		33		143
22-Apr	PHFB	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	37	35	36	35	147
22-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Apr	SW3	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Avg/Survey		10		2		0		0		0		0		0		0		36		36		167
23-Apr	PHFB	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	82	10	0	0	94
23-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Apr	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		0		1		0		0		0		0		46		0		94
24-Apr	PHFB	3	0	0	7	1	0	7	0	0	0	0	0	0	0	0	0	72	26	0	0	116
24-Apr	SWFB	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
24-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Apr	PH2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
24-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Apr	SW3	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Avg/Survey		5		5		1		4		0		0		0		0		49		0		126

JDA Bird Counts: 4/21/19 to 4/27/19

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)	
25-Apr	PHFB	0	0	2	0	0	0	7	0	0	0	0	0	0	0	0	0	63	0	0	0	72
25-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Apr	SW3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Avg/Survey		3		1		0		4		0		0		0		0		32		0		77
26-Apr	PHFB	2	0	0	0	1	0	21	0	0	0	0	0	0	0	0	0	66	75	0	0	165
26-Apr	SWFB	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
26-Apr	PH1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
26-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Apr	PH3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
26-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Apr	SW3	6	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
Avg/Survey		9		1		1		11		0		0		0		0		71		0		183
27-Apr	PHFB	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	64	0	0	132
27-Apr	SWFB	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
27-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Apr	PH2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
27-Apr	PH3	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
27-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Apr	SW3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Avg/Survey		7		2		0		0		0		0		0		0		65		0		146
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		76		21		2		39		0		0		0		0		662		136		936
Avg/Survey		5		2		0		3		0		0		0		0		47		10		67

John Day Dam
Avian Zones

