

## FISHWAY STATUS REPORT

**Date:** 6/15/2019  
**Inspection Period:** 6/9/2019 thru 6/15/2019

## 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:	13	Temperature:	64 F
					Secchi:	4.7 Ft.
<b>NORTH FISHWAY</b>						
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'	Set to Shad setting @ 1.3'			
Entrance differential	0	1.0' - 2.0'	AVG	1.5		
<b>SOUTH FISHWAY</b>						
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 @ 1.3'			
South entrance differential	0	1.0' - 2.0'	AVG	1.4		
Entrance weir SE1	0	depth (≥ 8')	AVG	8.8		
Collection channel velocity	0	1.5 - 4 fps	AVG	2.35		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.8		
Entrance weir NE1	0	depth (≥ 8')	AVG	9.4		
Entrance weir NE2	0	depth (≥ 8')	AVG	8.8		
<b>JUVENILE PASSAGE</b>						
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	Spill bay 7 oos			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

Turbine 3 oos. 2 turbine operation as of 1200 on 22 May.

## 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. Sampling will occur every other day during the 2019 season.

### 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. 160 Pelicans observed on island below project in tailrace  
All 125 avian lines in place without any deficiencies.

### Operations:

South Fish turbine 3 oos due to thrust bearing failure.

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'.

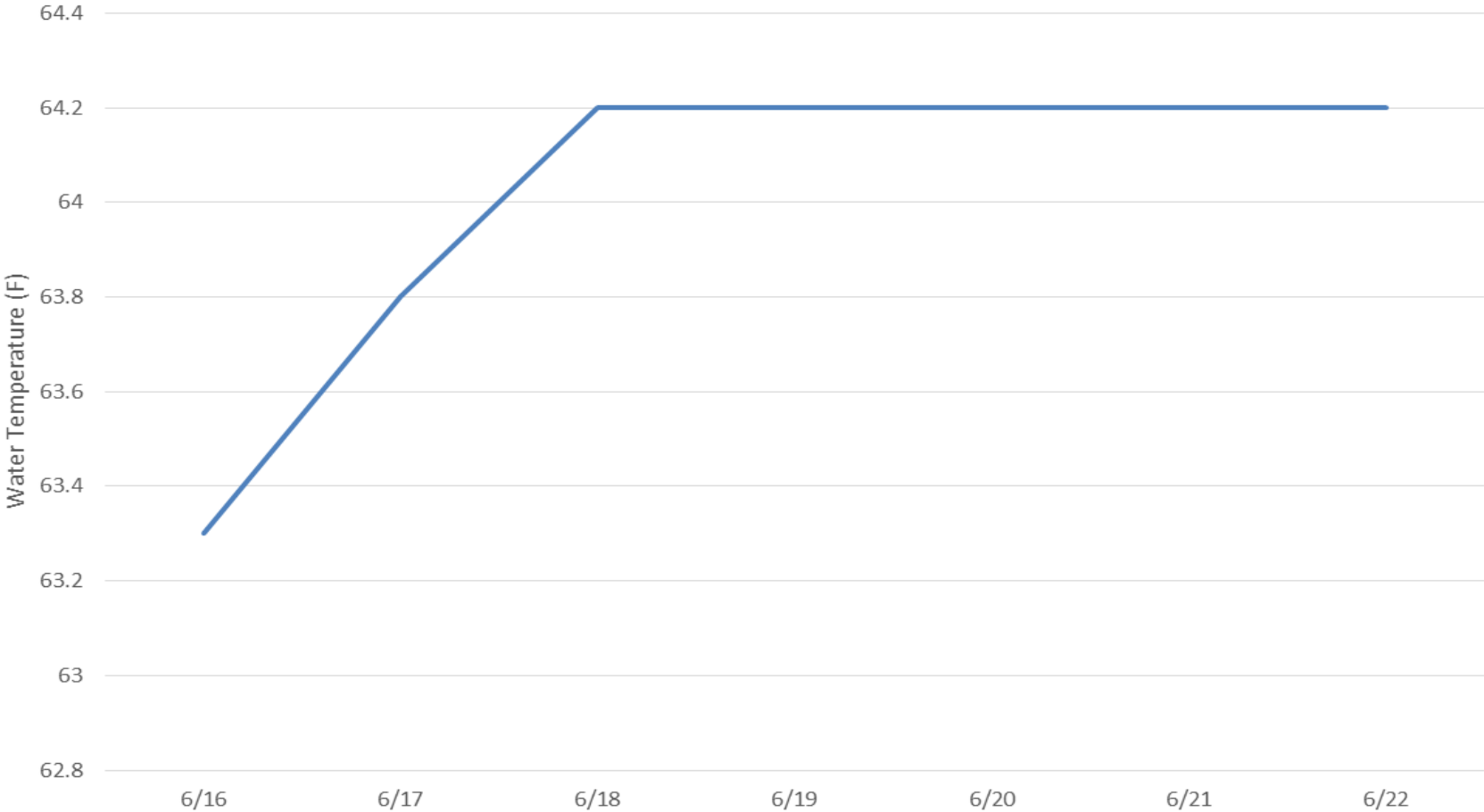
### Research:

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 (6/16/19 - 6/22/19)



## JDA Collection Channel Velocity

**Date** 22-Jun-19

**By:** MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:16	76	2.37
2 - 4	2:28	148	2.50
4 - 6	3:53	233	2.12
6 - 8	5:12	312	2.28
8 - 10	6:31	391	2.28
10 - 12	7:51	471	2.25
12 - 14	9:12	552	2.22
14 - 16	10:29	629	2.34
16 - 18	11:33	693	2.81
			<b>2.35</b>

<b>Bay 19 TW:</b>	161.5
<b>Turbine 1&amp;2:</b>	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	63	5.0	13	Bypass
Mon	64	5.0	86	Sample
Tue	64	5.0	8	Bypass
Wed	64	4.5	120	Sample
Thur	64	4.5	14	Bypass
Fri	64	4.5	83	Sample
Sat	64	4.5	26	Bypass
<b>AVG:</b>	<b>64</b>	<b>AVG: 4.7</b>	<b>AVG/Sample 50</b>	
			<b>MAX 120</b>	
			<b>MIN 8</b>	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.5	8.9	1.1	9.8	1.3	4.6	2.0
Sun	9.5	8.9	1.3	8.9	1.4	4.6	2.0
Mon	9.2	8.6	1.3	9.3	1.4	4.6	1.8
Mon	9.2	8.6	1.3	9.4	1.5	4.6	1.9
Tues	9.1	8.4	1.4	8.3	1.5	4.6	1.8
Tues							
Wed	8.7	8.1	1.3	8.3	1.5	4.6	1.8
Wed	10.0	9.5	1.2	8.6	1.4	4.5	1.7
Thur	9.1	8.5	1.4	8.9	1.6	4.5	1.8
Thur	9.2	8.7	1.5	8.0	1.5	4.5	1.9
Fri	9.4	8.8	1.3	9.3	1.5	4.6	1.6
Fri	10.2	9.6	1.5	8.5	1.5	4.6	1.7
Sat	9.4	8.9	1.5	8.2	1.5	4.5	1.9
Sat	9.2	8.7	1.5	8.7	1.5	4.6	1.7
<b>AVG:</b>	<b>9.4</b>	<b>8.8</b>	<b>1.4</b>	<b>8.8</b>	<b>1.5</b>	<b>4.6</b>	<b>1.8</b>



**JDA Bird Counts: 6/16/19 to 6/22/19**

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)	
16-Jun	PHFB	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	7	7	7	7	30
16-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
16-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	47	0	0	0	0	0	0	0	47
16-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	14
16-Jun	SW3	0	20	0	0	0	0	0	0	0	0	0	0	55	9	0	0	0	0	0	0	84
Avg/Survey		10		1		0		0		0		0		64		0		7		7		177
17-Jun	PHFB	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	7	10	6	9	35
17-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jun	SW1	0	1	0	0	0	0	0	0	0	0	0	0	54	29	0	0	0	0	0	0	84
17-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
17-Jun	SW3	0	0	0	0	0	0	0	0	0	0	0	0	8	19	0	0	0	0	0	0	27
Avg/Survey		1		1		0		0		0		0		58		0		9		8		150
18-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	7	0	15
18-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jun	SW1	4	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	40
18-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jun	SW3	0	0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	32
Avg/Survey		2		0		0		0		0		0		34		0		4		4		87
19-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	17	0	0	27
19-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jun	PH1	4	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	21
19-Jun	PH2	0	3	0	0	0	0	0	0	0	0	0	0	7	4	0	0	0	0	0	0	14
19-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
19-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Jun	SW2	5	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	14
19-Jun	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		6		0		0		0		0		0		21		0		14		0		81

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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-Jun	PHFB	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	9	11	0	0	24
20-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Jun	PH1	0	1	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	13
20-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	11	7	0	0	0	0	0	0	18
20-Jun	PH3	3	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	6
20-Jun	SW1	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5
20-Jun	SW2	3	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5
20-Jun	SW3	1	0	0	0	0	0	0	0	0	0	0	0	13	2	0	0	0	0	0	0	16
Avg/Survey		7		1		0		0		0		0		26		0		10		0		87
21-Jun	PHFB	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8	14	0	0	23
21-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Jun	PH1	8	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	14
21-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	0	6
21-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Jun	SW2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21-Jun	SW3	3	0	0	0	0	0	0	0	0	0	0	0	5	3	0	0	0	0	0	0	11
Avg/Survey		8		1		0		0		0		0		9		0		11		0		55
22-Jun	PHFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	11	0	0	22
22-Jun	SWFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22-Jun	PH1	5	2	0	0	0	0	0	0	0	0	0	0	12	7	0	0	0	0	0	0	26
22-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	11	3	0	0	0	0	0	0	14
22-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
22-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3
22-Jun	SW3	0	1	0	0	0	0	0	0	0	0	0	0	15	12	0	0	0	0	0	0	28
Avg/Survey		4		1		0		0		0		0		35		0		11		0		100
<b>Totals</b>		<b>Gulls</b>				<b>Cormorant</b>				<b>Caspian tern</b>				<b>White Pelican</b>				<b>Grebe</b>				<b>Total</b>
		F		NF		F		NF		F		NF		F		NF		F		NF		
<b>Weekly Total</b>		74		7		0		0		0		0		491		0		129		36		737
<b>Avg/Survey</b>		5		1		0		0		0		0		35		0		9		3		53



John Day Dam  
Avian Zones

