

## FISHWAY STATUS REPORT

**Date:** 7/13/2019  
**Inspection Period:** 7/7/2019 thru 7/13/2019

### 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:	Temperature:
			<b>14</b>	<b>67 F</b>
				<b>Secchi: 5.7 Ft.</b>
<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>	0		Turbine 3 oos. 2 turbine operation as of 1200 on 22 May.	
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 8.5	
Collection channel velocity	0	1.5 - 4 fps	AVG 2.35	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.7	
Entrance weir NE1	0	depth (≥ 8')	AVG 8.9	
Entrance weir NE2	0	depth (≥ 8')	AVG 9.0	
<b>JUVENILE PASSAGE</b>	0			
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		

## 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'.

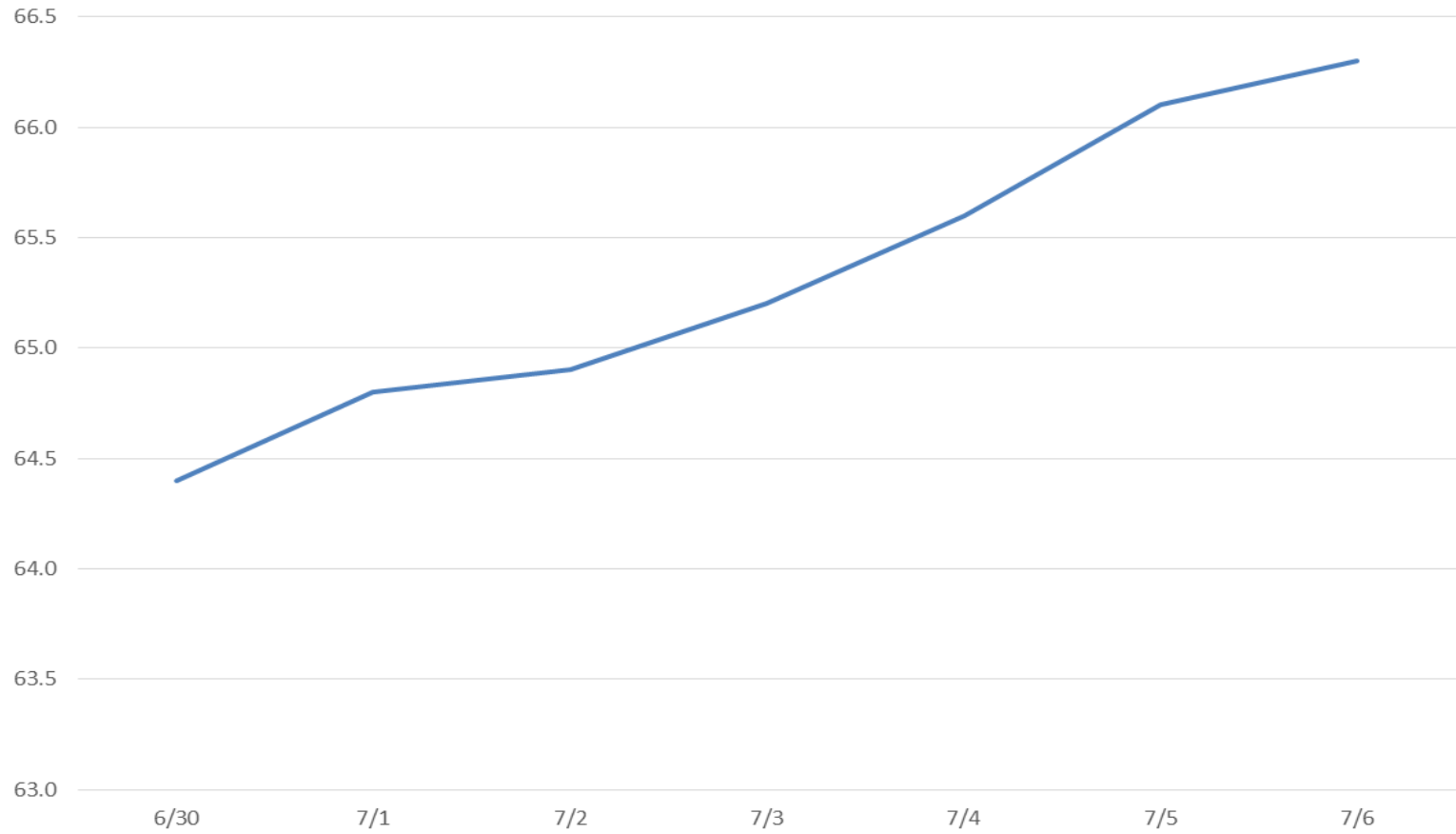
### Research:

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 (6/30/19 - 7/6/19)



## 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	66	5.0	78	Sample
Mon	66	5.0	23	Bypass
Tue	67	6.0	88	Sample
Wed	67	6.0	113	Bypass
Thur	67	6.0	75	Sample
Fri	67	6.0	75	Bypass
Sat	68	6.0	92	Sample
<b>AVG:</b>	<b>67</b>	<b>AVG:</b> style="border: 1px solid black; text-align: center;"> <b>5.7</b>	<b>AVG/Sample</b> style="border: 1px solid black; text-align: center;"> <b>78</b>	
			<b>MAX</b> style="border: 1px solid black; text-align: center;"> <b>113</b>	
			<b>MIN</b> style="border: 1px solid black; text-align: center;"> <b>23</b>	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.8	8.9	1.8	8.3	1.5	4.6	2.0
Sun	8.7	8.8	1.0	8.4	1.5	4.6	1.5
Mon	9.2	9.2	1.3	8.4	1.5	4.6	1.6
Mon	9.3	9.3	1.4	8.2	1.5	4.5	1.7
Tues	8.9	8.9	1.4	9.0	1.5	4.5	1.7
Tues	8.5	8.6	1.1	8.6	1.5	4.6	1.8
Wed	8.7	8.7	1.4	8.3	1.6	4.6	1.8
Wed	8.7	8.7	1.2	8.1	1.5	4.6	1.5
Thur	9.9	9.9	1.5	8.1	1.5	4.6	1.6
Thur	8.9	8.9	1.3	8.3	1.6	4.5	1.6
Fri	8.7	8.7	1.4	9.2	1.5	4.6	1.6
Fri	9.0	9.1	1.3	9.0	1.5	4.5	1.7
Sat	8.7	8.8	1.6	8.6	1.5	4.6	1.8
Sat	9.2	9.2	1.3	9.1	1.6	4.6	1.7
<b>AVG:</b>	<b>8.9</b>	<b>9.0</b>	<b>1.4</b>	<b>8.5</b>	<b>1.5</b>	<b>4.6</b>	<b>1.7</b>



**JDA Bird Counts: 6/30/19 to 7/6/19**

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)	
7-Jul	PHFB	12	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	24	11	0	10	87
7-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
7-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jul	SW1	10	5	0	0	0	0	0	0	0	0	0	20	1	0	0	0	0	0	0	0	36
7-Jul	SW2	0	4	0	0	0	0	0	0	0	0	0	125	10	0	0	0	0	0	0	0	139
7-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	101	0	0	0	0	0	0	0	0	101
Avg/Survey		16		15		0		0		0		0	131		0		18		5			368
8-Jul	PHFB	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	29	24	0	0	72
8-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	11	19	0	0	0	0	0	0	0	30
8-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	7	38	0	0	0	0	0	0	0	45
8-Jul	SW1	0	8	0	0	0	0	0	0	0	0	0	49	16	0	0	0	0	0	0	0	73
8-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	89	44	0	0	0	0	0	0	0	133
8-Jul	SW3	22	0	0	0	0	0	0	0	0	0	0	106	52	0	0	0	0	0	0	0	180
Avg/Survey		15		10		0		0		0		0	216		0		27		0			533
9-Jul	PHFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	14	3	0	3		21
9-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	16
9-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	61	0	0	0	0	0	0	0	0	61
9-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	37	1	0	0	0	0	0	0	0	38
9-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	150	25	0	0	0	0	0	0	0	175
9-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	87	79	0	0	0	0	0	0	0	166
Avg/Survey		0		1		0		0		0		0	228		0		9		2			477
10-Jul	PHFB	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	9	8	0	8		26
10-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	11
10-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	22
10-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6
10-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	57	25	0	0	0	0	0	0	0	82
10-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	164	50	0	0	0	0	0	0	0	214
10-Jul	SW3	6	0	0	0	0	0	0	0	0	0	0	89	53	0	0	0	0	0	0	0	148
Avg/Survey		3		0		0		0		0		0	239		0		9		4			509

**JDA Bird Counts: 6/30/19 to 7/6/19**

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)	
11-Jul	PHFB	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	10	7	9	7	44
11-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	35	3	0	0	0	0	0	0	38
11-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	55	21	0	0	0	0	0	0	76
11-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	110	23	0	0	0	0	0	0	133
Avg/Survey		0		6		0		0		0		0		124		0		9		8		291
12-Jul	PHFB	0	0	0	3	0	0	0	0	0	0	0	0	4	0	0	0	10	9	10	8	44
12-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
12-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	75	25	0	0	0	0	0	0	100
12-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	90	40	0	0	0	0	0	0	130
Avg/Survey		0		2		0		0		0		0		120		0		10		9		279
13-Jul	PHFB	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	12	9	12	8	43
13-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jul	SW1	0	3	0	0	0	0	0	0	0	0	0	0	105	0	0	0	0	0	0	0	108
13-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	101	20	0	0	0	0	0	0	121
13-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	103	55	0	0	0	0	0	0	158
Avg/Survey		2		1		0		0		0		0		192		0		11		10		430
<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>		70		66		0		0		0		0		2497		0		179		75		2887
<b>Avg/Survey</b>		5		5		0		0		0		0		178		0		13		5		206



John Day Dam  
Avian Zones

