


# FISHWAY STATUS REPORT

**Date:** 9/1/2018  
**Inspection Period:** 8/26/2018 thru 9/1/2018



**US Army Corps  
of Engineers**  
Portland District

**JOHN DAY DAM**  
 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	Inspections	Criteria	Total Number of Inspections: 14	Temperature: 70 F
	Out of Criteria	Limit		Secchi: 6.0 Ft.
<b>NORTH FISHWAY</b>			6 out of 6 AWS pumps total available.	
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	
<b>SOUTH FISHWAY</b>	0		In service since 2/28 with two AWS turbines and two FOGs.	
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'		
South entrance differential	0	1.0' - 2.0'	AVG 1.4	
Entrance weir SE1	0	depth (≥ 8')	AVG 8.4	
Collection channel velocity	0	1.5 - 4 fps	AVG 2.40	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.7	
Entrance weir NE1	0	depth (≥ 8')	AVG 8.6	
Entrance weir NE2	0	depth (≥ 8')	AVG 8.6	
<b>JUVENILE PASSAGE</b>	0			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect	Monthly STS inspection was completed 8/21. All STSs found in good working order.	
Turbine trashrack drawdown	0	<1.5', wkly	Monthly trashrack raking completed on 8/29. Very little debris recovered.	
Vert barrier screen drawdown	0	<1.5', wkly	Trashrack and VBS differentials are below the criterion of 1.5'.	
Spill volume	0	per FPP	Spill Season ended on 8/31. Bay 2 open at 1.6K for adult attraction to North Entrance on 9/1.	
Spill pattern	0	per FPP	Bay 2 open at 1.6K during daylight hours for adult attraction to North Entrance since 9/1.	
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

## SMOLT MONITORING FACILITY

**Operation:**

SMF returned to regular, every other day, 24 hrs sampling on 9/1 after the river temperature dropped down below 69.5 F on 8/31.

SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway. Awaiting for \$ 170 K UFR to complete in FY18.

**Research:** None

**Birds :**

White pelicans continue their presence on the islands downstream of BRZ and are often feeding inside of the BRZ. See Avian Numbers tab for details.

All 125 avian lines in place without any deficiencies.

**Operations:**

JD South Fishway in service, with two AWS turbines and two FOGs since 2/28/18. Awaiting special funding to overhaul turbines 1 & 2 ( \$ 3 million each.)

JD North Ladder in service since 12/21/17. 6 out of 6 AWS pumps available again since 4/18/18.

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

**Maintenance:**

JD South AWS turbine 1 is OOS, in poor condition and urgently awaiting its overhaul as soon as \$ 3 million becomes available (hopefully in a year or two ?)

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.

Lamprey trapping at JD S Trap and JD N LPS by CRITFC/ Tribes completed on 8/22. Good season collection #s in spite of the lower lamprey passage in 2018.

WDFW NPM angling from JD PH Tailrace deck continues since 5/1. VERY Low # s in August, but still great total seasonal catch of 2,864 NPM thru 9/02.

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

MOYNAHAN, KEVIN, PATRICK, 1393959157  
E-Signed by MOYNAHAN, KEVIN, PATRICK, 1393959157  
VERIFY authenticity with ApproveIt

Water Temperature (8/26/18 - 9/1/18)



## JDA Collection Channel Velocity

Date 24-Aug-18

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:19	79	2.28
2 - 4	2:33	153	2.43
4 - 6	3:56	236	2.17
6 - 8	5:19	319	2.17
8 - 10	6:35	395	2.37
10 - 12	7:48	468	2.47
12 - 14	9:12	552	2.14
14 - 16	10:24	624	2.50
16 - 18	11:22	682	3.10
			<b>2.40</b>

Bay 19 TW: 159.9  
turbine 2-3=68rpm

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

John Day Dam  
Avian Zones



## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks	
Sun	71.0	6.0		
Mon	70.9	6.0	13	6 hour sample
Tue	70.4	6.0		
Wed	69.8	6.0		
Thur	69.2	6.0	11	6 hour sample
Fri	68.8	6.0		
Sat	68.3	6.0	37	24 hours sample
<b>AVG:</b>	<b>69.8</b>	<b>AVG:</b> style="border: 1px solid black; text-align: center;"> <b>6.0</b>	<b>AVG/Sample</b> style="border: 1px solid black; text-align: center;"> <b>6</b>	
			<b>MAX</b> style="border: 1px solid black; text-align: center;"> <b>37</b>	
			<b>MIN</b> style="border: 1px solid black; text-align: center;"> <b>4</b>	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.3	9.3	1.5	8.5	1.4	4.5	1.7
Sun	8.9	8.9	1.4	8.1	1.5	4.5	1.8
Mon	8.4	8.4	1.3	8.2	1.6	4.5	1.9
Mon	8.4	8.4	1.4	8.3	1.6	4.7	1.6
Tues	8.0	8.0	1.4	8.1	1.4	4.6	1.8
Tues	8.3	8.3	1.5	8.2	1.5	4.6	1.7
Wed	8.9	8.9	1.3	8.9	1.5	4.6	1.6
Wed	9.1	9.1	1.4	9.1	1.5	4.6	1.7
Thur	8.5	8.5	1.4	8.4	1.5	4.6	1.7
Thur	9.0	9.0	1.4	8.7	1.5	4.5	1.8
Fri	8.2	8.2	1.5	8.0	1.5	4.6	1.8
Fri	8.2	8.3	1.4	8.1	1.4	4.6	1.7
Sat	8.9	8.9	1.4	8.6	1.4	4.5	1.7
Sat	8.8	8.8	1.5	8.6	1.5	4.6	1.8
<b>AVG:</b>	<b>8.6</b>	<b>8.6</b>	<b>1.4</b>	<b>8.4</b>	<b>1.5</b>	<b>4.6</b>	<b>1.7</b>

**JDA Bird Counts: 8/26/18 to 9/1/18**

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)	
26-Aug	PHFB	0	0	21	90	0	0	0	0	0	0	0	0	0	0	0	0	8	6	8	5	138
26-Aug	SWFB	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
26-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
26-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	5
26-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
26-Aug	SW3	0	25	0	0	0	0	0	0	0	0	0	0	11	8	0	0	0	0	0	0	44
Avg/Survey		13		64		0		0		0		0		14		0		7		7		208
27-Aug	PHFB	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	6	8	54
27-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
27-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
27-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Aug	SW2	0	95	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	99
27-Aug	SW3	0	345	0	0	0	0	0	0	0	0	0	0	3	15	0	0	0	0	0	0	363
Avg/Survey		220		13		0		0		0		0		14		0		7		7		521
28-Aug	PHFB	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	7	0	36
28-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
28-Aug	PH3	0	30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	36
28-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
28-Aug	SW3	0	34	0	0	0	0	0	0	0	0	0	0	4	14	0	0	0	0	0	0	52
Avg/Survey		32		11		0		0		0		0		18		0		4		4		136
29-Aug	PHFB	0	0	20	0	0	0	11	11	0	0	0	0	0	0	0	0	9	0	0	0	51
29-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7
29-Aug	PH3	24	0	0	0	0	0	0	0	0	0	0	0	8	4	9	0	0	0	0	0	45
29-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0	0	0	0	0	0	7
29-Aug	SW3	16	0	0	0	0	0	0	0	0	0	0	0	24	6	0	0	0	0	0	0	46
Avg/Survey		20		10		0		11		0		0		28		5		5		0		156

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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)	
30-Aug	PHFB	0	0	46	0	0	0	9	0	0	0	0	0	0	0	0	0	9	0	0	0	64
30-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	2	4	13	0	0	0	0	0	19
30-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	0	7
Avg/Survey		0		23		0		5		0		0		7		7		5		0		90
31-Aug	PHFB	0	0	0	4	0	0	0	12	0	0	0	0	0	0	0	0	0	18	0	0	34
31-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
31-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	12	0	0	0	0	14
31-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
31-Aug	SW3	0	41	0	0	0	0	0	0	0	0	0	0	8	19	0	0	0	0	0	0	68
Avg/Survey		21		2		0		6		0		0		16		6		9		0		119
1-Sep	PHFB	0	0	84	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	139
1-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
1-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Sep	SW3	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Avg/Survey		6		70		0		0		0		0		2		0		0		0		153
<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>		621		384		0		43		0		0		195		34		72		34		1383
<b>Avg/Survey</b>		44		27		0		3		0		0		14		2		5		2		99