


# FISHWAY STATUS REPORT

**Date:** 11/10/2018  
**Inspection Period:** 11/4/2018 thru 11/10/2018



**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: 56 F
	Out of Criteria	Limit		Secchi: 6.0 Ft.
<b>NORTH FISHWAY</b>			In service with all 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 1.4	
<b>SOUTH FISHWAY</b>	0		In service 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 8.3	
Collection channel velocity	0	1.5 - 4 fps	AVG 2.69	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.6	
Entrance weir NE1	0	depth (≥ 8')	AVG 9.4	
Entrance weir NE2	0	depth (≥ 8')	AVG 9.4	
<b>JUVENILE PASSAGE</b>	0		In service since 2/28.	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect	Monthly STS inspection was completed 10/18. All STSs found in good working order.	
Turbine trashrack drawdown	0	<1.5', wkly	Monthly trashrack raking complete on 10/25. A small amount of wooden debris' removed.	
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:**

2018 SMF Sampling Season ended on 9/15. Bypass at Switch Gate for full flow PIT detections will continue thru 29 November.  
SMF SCADA update/mods' planning by JD Electrical/ Portland District Engineers is underway. Implementation during this coming winter's outage season.

**Research:** None

**Fallbacks:**           AVG:    0                    MAX:    0                    MIN:    0

**Birds :**

Typical fall water birds feeding on the abundant juvenile shad. 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:**

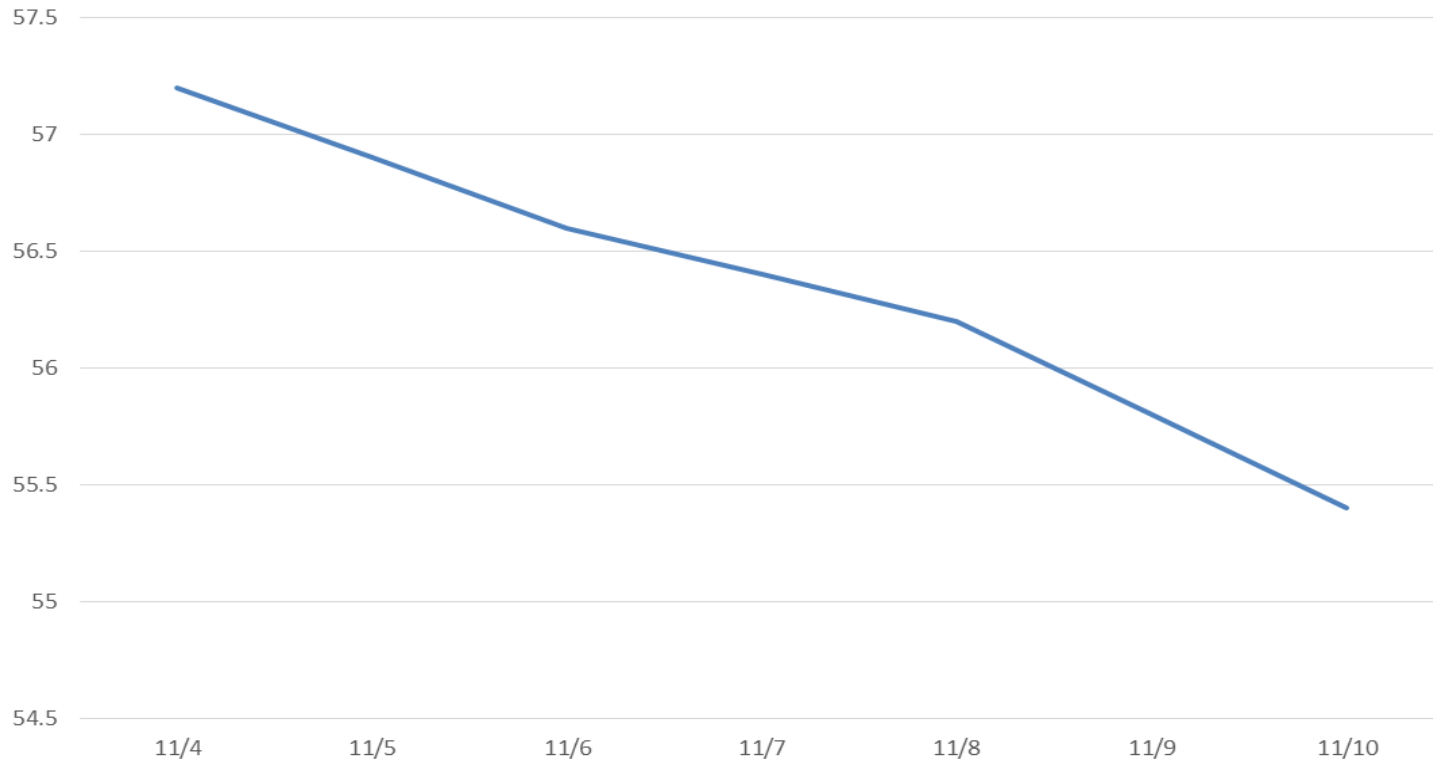
MU3 OOS on 10/31, 0035 due to STS trip. Faulty STS was replaced with a working spare and the unit returned to service on 11/2.  
JD South AWS turbine 1 is OOS, in poor condition and urgently awaiting its overhaul as soon as \$ 3 million becomes available (hopefully in a year or two ?)  
Calibration: 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.  
WDFW NPM angling concluded on 10/7/18 with a respectable seasonal total of 3,089 NPM removed.  
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

JDA Tailwater Temperature (F) (11/4/18 - 11/10/18)



## JDA Collection Channel Velocity

Date 8-Nov-18

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:04	64	2.81
2 - 4	2:14	134	2.57
4 - 6	3:20	200	2.73
6 - 8	4:27	267	2.69
8 - 10	5:36	336	2.61
10 - 12	6:45	405	2.61
12 - 14	7:54	474	2.61
14 - 16	9:03	543	2.61
16 - 18	10:06	606	2.86
			<b>2.68</b>

Bay 19 TW:	160.5
Turbine 2-3:	68 RPM

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

## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	57	6.0	NA
Mon	57	6.0	NA
Tue	57	6.0	NA
Wed	56	6.0	NA
Thur	56	6.0	NA
Fri	56	6.0	NA
Sat	56	6.0	NA
<b>AVG:</b>	<b>56</b>	<b>AVG:</b> <span style="border: 1px solid black; padding: 2px 10px;">6.0</span>	<b>AVG/Sample</b> <span style="border: 1px solid black; padding: 2px 10px;">#DIV/0!</span>
			<b>MAX</b> <span style="border: 1px solid black; padding: 2px 10px;">0</span>
			<b>MIN</b> <span style="border: 1px solid black; padding: 2px 10px;">0</span>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.5	9.5	1.4	8.2	1.5	4.6	1.5
Sun	9.6	9.6	1.4	8.4	1.5	4.7	1.8
Mon	9.1	9.1	1.4	8.4	1.5	4.6	1.6
Mon	9.4	9.4	1.4	8.2	1.5	4.6	1.6
Tues	9.3	9.3	1.5	8.0	1.5	4.6	1.7
Tues	9.3	9.3	1.5	8.3	1.5	4.6	1.6
Wed	9.4	9.4	1.4	9.1	1.3	4.6	1.5
Wed	8.8	8.8	1.3	8.1	1.4	4.6	1.4
Thur	9.7	9.7	1.4	8.3	1.3	4.5	1.4
Thur	9.2	9.2	1.4	8.1	1.4	4.6	1.5
Fri	10.2	10.2	1.4	8.7	1.3	4.6	1.6
Fri	9.5	9.5	1.4	8.0	1.4	4.6	1.5
Sat	9.9	9.9	1.5	8.4	1.3	4.6	1.7
Sat	9.0	9.0	1.6	8.2	1.7	4.6	1.8
<b>AVG:</b>	<b>9.4</b>	<b>9.4</b>	<b>1.4</b>	<b>8.3</b>	<b>1.4</b>	<b>4.6</b>	<b>1.6</b>

**JDA Bird Counts: 11/4/18 to 11/10/18**

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)	
4-Nov	PHFB	0	0	577	744	0	0	1	0	0	0	0	0	0	0	0	0	73	73	72	72	1612
4-Nov	SWFB	0	0	495	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	530
4-Nov	PH1	2	35	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
4-Nov	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Nov	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		19		926		2		1		0		0		0		0		73		72		2182
5-Nov	PHFB	0	0	455	750	0	0	0	0	0	0	0	0	0	0	0	0	73	73	72	72	1495
5-Nov	SWFB	0	0	511	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	531
5-Nov	PH1	0	65	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
5-Nov	PH2	49	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
5-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Nov	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		69		868		4		0		0		0		0		0		73		72		2170
6-Nov	PHFB	0	0	0	733	0	0	0	0	0	0	0	0	0	0	0	0	0	87	0	0	820
6-Nov	SWFB	0	0	855	159	1	0	0	0	0	0	0	0	0	0	0	0	0	0	145	0	1160
6-Nov	PH1	44	51	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97
6-Nov	PH2	19	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
6-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Nov	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		84		874		2		0		0		0		0		0		44		73		2149
7-Nov	PHFB	11	0	0	105	0	0	18	9	0	0	0	0	0	0	0	0	123	181	0	0	447
7-Nov	SWFB	0	0	244	231	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	475
7-Nov	PH1	34	14	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	52
7-Nov	PH2	11	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
7-Nov	PH3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7-Nov	SW1	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
7-Nov	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Nov	SW3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Avg/Survey		56		290		1		15		0		0		0		0		152		0		1026

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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)	
8-Nov	PHFB	0	0	46	110	0	0	19	4	0	0	0	0	0	0	0	0	0	6	61	0	246
8-Nov	SWFB	0	0	442	343	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	785
8-Nov	PH1	13	18	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
8-Nov	PH2	23	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
8-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Nov	SW2	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
8-Nov	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Avg/Survey</b>		<b>35</b>		<b>471</b>		<b>2</b>		<b>19</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>3</b>		<b>31</b>		<b>1120</b>
9-Nov	PHFB	0	0	21	4	0	0	0	0	0	0	0	0	0	0	0	0	93	64	0	0	182
9-Nov	SWFB	0	0	209	329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	538
9-Nov	PH1	17	3	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
9-Nov	PH2	33	19	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56
9-Nov	PH3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
9-Nov	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Nov	SW2	3	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	22
9-Nov	SW3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
<b>Avg/Survey</b>		<b>44</b>		<b>282</b>		<b>6</b>		<b>10</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>79</b>		<b>0</b>		<b>838</b>
10-Nov	PHFB	0	0	209	106	0	0	19	0	0	0	0	0	0	0	0	0	92	88	0	0	514
10-Nov	SWFB	0	0	203	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	445
10-Nov	PH1	34	17	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
10-Nov	PH2	18	21	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
10-Nov	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Nov	SW1	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
10-Nov	SW2	3	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	21
10-Nov	SW3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>Avg/Survey</b>		<b>55</b>		<b>380</b>		<b>7</b>		<b>19</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>90</b>		<b>0</b>		<b>1101</b>
<b>Totals</b>		<b>Gulls</b>				<b>Cormorant</b>				<b>Caspian tern</b>				<b>White Pelican</b>				<b>Grebe</b>				<b>Total</b>
		<b>F</b>		<b>NF</b>		<b>F</b>		<b>NF</b>		<b>F</b>		<b>NF</b>		<b>F</b>		<b>NF</b>		<b>F</b>		<b>NF</b>		
<b>Weekly Total</b>		<b>719</b>		<b>8178</b>		<b>45</b>		<b>124</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>1026</b>		<b>494</b>		<b>10586</b>
<b>Avg/Survey</b>		<b>51</b>		<b>584</b>		<b>3</b>		<b>9</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>73</b>		<b>35</b>		<b>756</b>

John Day Dam  
Avian Zones

