


# FISHWAY STATUS REPORT

**Date:** 9/24/2016  
**Inspection Period:** 9/18/2016 thru 9/24/2016



**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 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: 67 F
	Out of Criteria	Limit		Secchi: 6.0 Ft.
<b>NORTH FISHWAY</b>			In service; 6 AWS pumps 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>			In service with two AWS turbines; FOGs # 18 & 19 continue closed	
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 8.6	
Collection channel velocity	0	1.5 - 4 fps	AVG 3.67	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.3	
Entrance weir NE1	0	depth (≥ 8')	AVG 8.1	
Entrance weir NE2	0	depth (≥ 8')	AVG 8.1	
<b>JUVENILE PASSAGE</b>			In service with STSs installed since 4/1	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect	STS camera insp. completed by 9/22. Two bad STSs (MU1& 4) replaced with working spares	
Turbine trashrack drawdown	0	<1.5', wkly	Monthly raking scheduled for the week of 9/26; very light river debris loads	
Vert barrier screen drawdown	0	<1.5', wkly		
Spill volume	0	N/A	2016 Spill season ended 9/1. Bay 2 continues open 1.6 Kcfs for N ladder attraction water	
Spill pattern	0	per FPP		
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

## SMOLT MONITORING FACILITY

**Operation:**

Sampling season ended on 9/15; SMF will continue in bypass for the full flow PIT tags detections until 27 November.

**Maintenance:**

No maintenance issues to report. PDS screen cleaners have been working well.

SMF SCADA's investigation by JD Electrical underway. There is a current UFR of \$ 150 K, for the SCADA update's P&S.

**Research:**

None

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

**Birds :**

see the Avian Numbers tab. Various bird species feeding on the abundant juvenile shad.

12 Navlock, 7 Spillway (#77 broke on 8/31), 6 Tower-to-Tower (three new broke on 8/28,) 1 PH (broke on 8/1) lines are missing out of 125 grid's total.

PDT will reinstall up to 15 critical, missing lines before May 2017; JD Fisheries believes that this will be sufficient for the Avian Grid to remain effective.

All missing lines will be reinstalled in Phase 2, in the fall of 2017.

**Operations:**

SMF in bypass for PIT tags detection since 15 September.

JD North fishway has been meeting all FPP criteria since 1/5/16.

JD South Fishway in service with two out of three AWS turbines; FOGs 18 & 19 continue closed due to insufficient AWS.

MU Gatewell Drawdowns: weekly or more frequently as necessary.

**Maintenance:**

JD South Fishway AWS turbine 1 OOS long term due to failed pump's lower bearing.

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

**Research:**

Washington F&W dam angling/NPM (pikeminnow) removal from JD PH tailrace completed in late August due to lack of funding. 3,002 NPM removed by 8/28/16

JD Fisheries supporting/ coordinating with NW Tribes for adult lamprey trapping and other lamprey research.

Adult Fish Counting by Normandeau Associates continues since 1 April 2016.

Adult PIT antennas PDT continues developing designs for the next winter outage's installation at both JD Fishways.

Kevin Moynahan

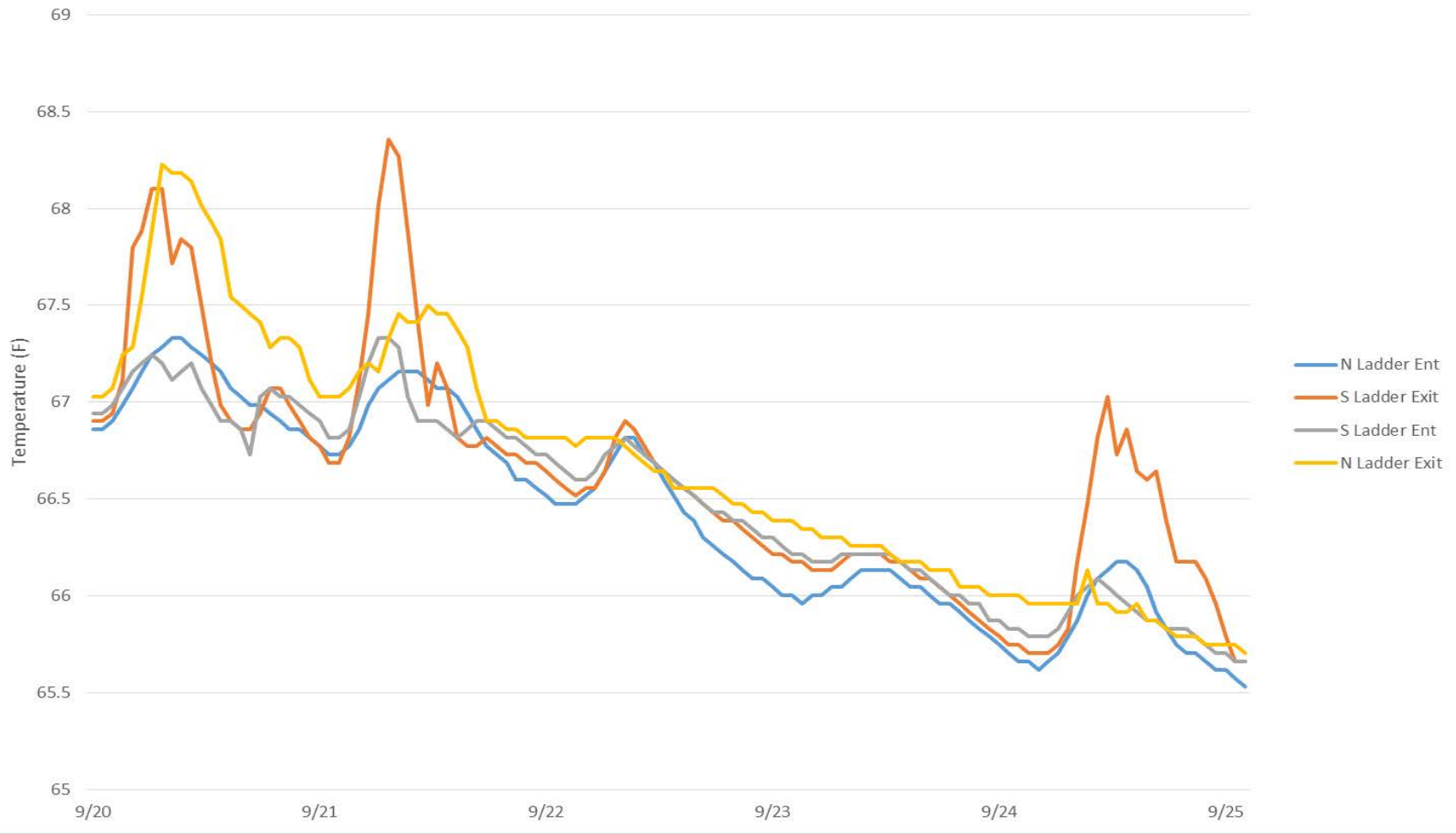
OPM John Day/Willow Creek Project

MOYNAHAN, KEVIN, PATRICK, 1393959157

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



John Day Dam Fishladder Temperatures (9/25/2016)



## JDA Collection Channel Velocity

Date 23-Sep-16

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:07	67	2.69
2 - 4	1:54	114	3.83
4 - 6	2:42	162	3.75
6 - 8	3:31	211	3.67
8 - 10	4:18	258	3.83
10 - 12	5:05	305	3.83
12 - 14	5:54	354	3.67
14 - 16	6:42	402	3.75
16 - 18	7:27	447	4.00
			<b>3.67</b>

TW 159.4  
#2 RPM 60  
#3 RPM 60

**JDA Bird Counts: 9/18/16 to 9/24/16**

F(1): Forage AM survey F(2): Forage PM Survey 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)	
18-Sep	PHFB	0	0	64	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	43	40	159
18-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Sep	PH2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18-Sep	PH3	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4
18-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Sep	SW2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
18-Sep	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>2</b>	<b>34</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42</b>	<b>0</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>168</b>
19-Sep	PHFB	0	0	0	0	0	0	4	7	0	0	0	0	0	0	0	0	0	0	59	47	117
19-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Sep	PH1	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
19-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Sep	PH3	0	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	8
19-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Sep	SW3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>Avg/Survey</b>		<b>13</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>53</b>	<b>0</b>	<b>53</b>	<b>0</b>	<b>0</b>	<b>144</b>
20-Sep	PHFB	0	0	13	31	0	0	6	0	0	0	0	0	0	0	0	0	0	0	64	49	163
20-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Sep	PH1	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
20-Sep	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
20-Sep	PH3	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
20-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Sep	SW2	0	0	0	0	0	0	8	16	0	0	0	0	0	0	0	0	0	0	0	0	24
20-Sep	SW3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
<b>Avg/Survey</b>		<b>18</b>	<b>22</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>57</b>	<b>0</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>222</b>
21-Sep	PHFB	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	65	0	84
21-Sep	SWFB	0	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
21-Sep	PH1	28	2	0	0	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
21-Sep	PH2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
21-Sep	PH3	148	0	4	0	0	0	5	14	0	0	0	0	4	0	4	0	0	0	0	0	179
21-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Sep	SW2	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	17
21-Sep	SW3	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
<b>Avg/Survey</b>		<b>92</b>	<b>30</b>	<b>5</b>	<b>28</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>0</b>	<b>33</b>	<b>0</b>	<b>0</b>	<b>380</b>

**JDA Bird Counts: 9/18/16 to 9/24/16**

F(1): Forage AM survey F(2): Forage PM Survey 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)	
22-Sep	PHFB	0	0	23	28	0	0	10	0	0	0	0	0	0	0	0	0	0	5	64	23	153
22-Sep	SWFB	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
22-Sep	PH1	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
22-Sep	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22-Sep	PH3	8	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	13
22-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Sep	SW3	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
<b>Avg/Survey</b>		<b>13</b>		<b>38</b>		<b>1</b>		<b>8</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>3</b>		<b>44</b>		<b>209</b>
23-Sep	PHFB	0	0	2	77	0	0	10	1	0	0	0	0	0	0	0	0	0	0	52	3	145
23-Sep	SWFB	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
23-Sep	PH1	25	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
23-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Sep	PH3	5	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	18
23-Sep	SW1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Sep	SW3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>Avg/Survey</b>		<b>16</b>		<b>48</b>		<b>3</b>		<b>12</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>28</b>		<b>211</b>
24-Sep	PHFB	0	0	50	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	49	0	119
24-Sep	SWFB	0	0	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
24-Sep	PH1	34	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36
24-Sep	PH2	0	15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
24-Sep	PH3	19	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
24-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Sep	SW2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
24-Sep	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>34</b>		<b>54</b>		<b>2</b>		<b>10</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>25</b>		<b>249</b>
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
<b>Weekly Total</b>		<b>373</b>		<b>449</b>		<b>20</b>		<b>167</b>		<b>0</b>		<b>0</b>		<b>7</b>		<b>4</b>		<b>5</b>		<b>558</b>		<b>1583</b>
<b>Avg/Survey</b>		<b>27</b>		<b>32</b>		<b>1</b>		<b>12</b>		<b>0</b>		<b>0</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>40</b>		<b>113</b>

John Day Dam  
Avian Zones



## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	67	6.0	
Mon	67	6.0	
Tue	67	6.0	
Wed	67	6.0	
Thur	66	6.0	
Fri	66	6.0	
Sat	66	6.0	
<b>AVG:</b>	<b>67</b>	<b>6.0</b>	<b>AVG</b>
			<b>0</b>
			<b>MAX</b>
			<b>0</b>
			<b>MIN</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.0	8.0	1.4	8.4	1.6	4.5	1.4
Sun	8.1	8.1	1.4	8.4	1.7	4.6	1.4
Mon	8.0	8.1	1.4	8.5	1.4	4.6	1.4
Mon	8.1	8.1	1.4	8.2	1.5	4.6	1.4
Tues	8.2	8.2	1.4	8.3	1.4	4.5	1.3
Tues	8.2	8.2	1.4	8.4	1.4	4.6	1.7
Wed	8.0	8.0	1.3	8.9	1.5	4.6	1.4
Wed	8.0	8.1	1.5	8.2	1.4	4.6	1.3
Thur	8.2	8.2	1.4	8.3	1.5	4.5	1.2
Thur	8.2	8.1	1.7	8.4	1.5	4.5	1.3
Fri	8.0	8.1	1.4	8.6	1.5	4.6	1.2
Fri	8.2	8.3	1.4	9.3	1.4	4.6	1.3
Sat	8.2	8.2	1.4	8.6	1.6	4.6	1.3
Sat	8.1	8.3	1.6	9.6	1.5	4.5	1.2
<b>AVG:</b>	<b>8.1</b>	<b>8.1</b>	<b>1.4</b>	<b>8.6</b>	<b>1.5</b>	<b>4.6</b>	<b>1.3</b>