


# FISHWAY STATUS REPORT

**Date:** 5/19/2018  
**Inspection Period:** 5/13/2018 thru 5/19/2018



**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: 55 F
	Out of Criteria	Limit		Secchi: 3.3 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 1.5	
<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 8.5	
Collection channel velocity	0	1.5 - 4 fps	AVG 2.54	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.6	
Entrance weir NE1	0	depth (≥ 8')	AVG 11.0	
Entrance weir NE2	0	depth (≥ 8')	AVG 11.0	
<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 camera inspection completed 5/14. All STS screens are in good working order.	
Turbine trashrack drawdown	0	<1.5', wkly	MU intake trashracks raking scheduled for the week of 5/21. Heavy forebay debris at this time.	
Vert barrier screen drawdown	0	<1.5', wkly		
Spill volume	0	per FPP	Fish Spill at Gas Cap continues since 4/10/18.	
Spill pattern	0	per FPP	Two TSWs, bays 18 & 19 open since 4/10/18 AM.	
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

## SMOLT MONITORING FACILITY

**Operation:**

SMF in service since 2/28 with every other day, 24 hrs condition sampling.

**Maintenance:**

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 :**

Gulls and white pelican numbers are increasing in an immediate vicinity of JD. See Avian Numbers tab for details.

All 125 avian lines in place without any deficiencies. USDA boat hazing commenced on 4/16 and will continue 7 days a week thru 7/31.

A high number of gulls attempting to feed in the JD Tailrace BRZ but are successfully repelled by a combination of avian lines and USDA boat hazing.

**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.

Coordinating with CRITFC and Tribes for the upcoming adult lamprey collection season starting in late May.

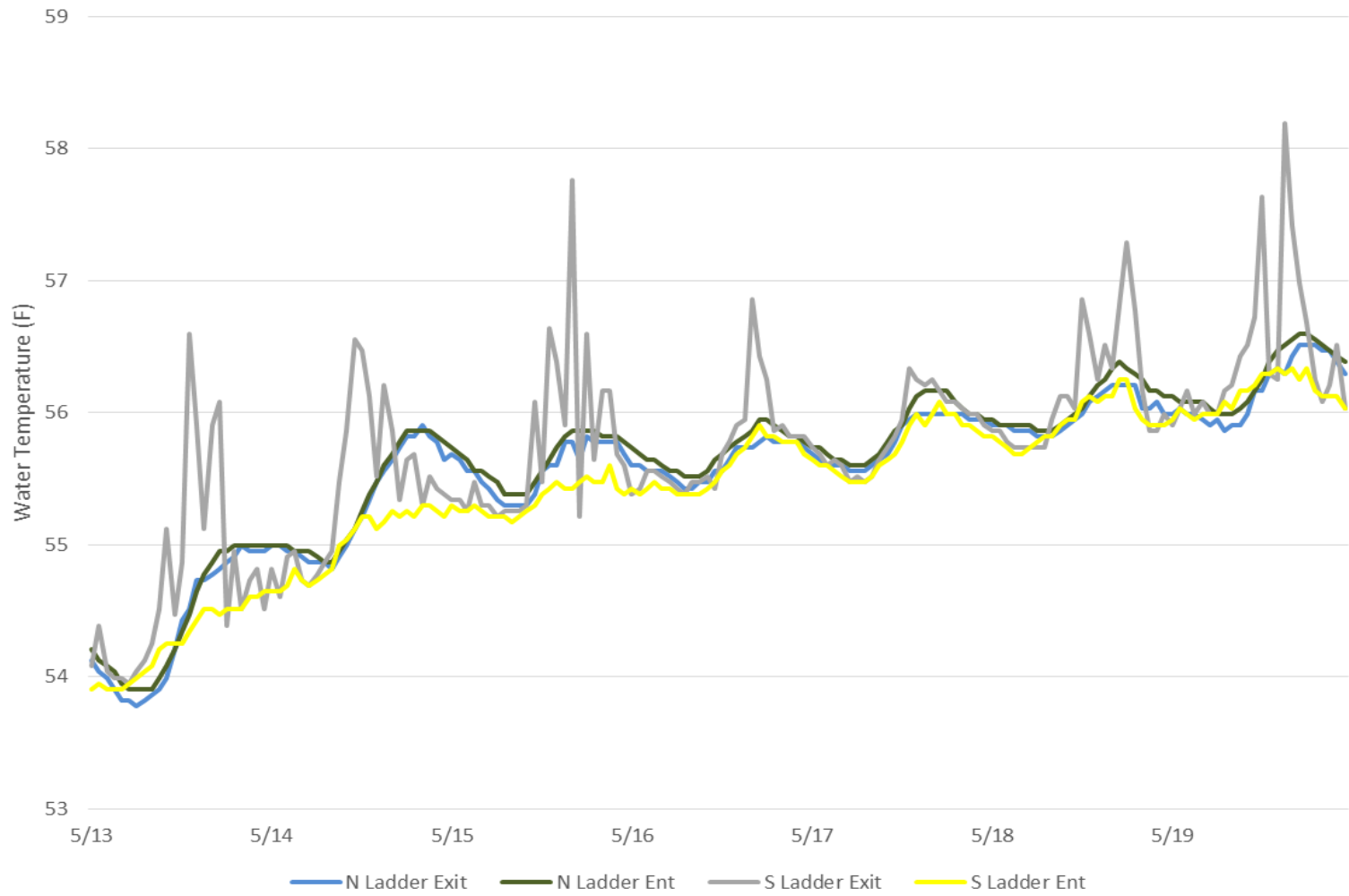
JD Mechanical continues planning for the JD North LPS water supply pumps installation. To be completed by 6/1.

WDFW NPM angling from JD PH Tailrace deck started on 5/1. Low catches so far with 47 total NPM removed by 5/6. On hold due to high river flows.

Coordinating with Uof I crew for their JD Adult Lamprey RT installation/ monitoring at both adult fishways in 2018.

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

JDA Fishladder Fishladder Water Temperatures 05/13/18 - 05/19/18



## JDA Collection Channel Velocity

Date 19-May-18

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:08	68	2.65
2 - 4	2:07	127	3.05
4 - 6	3:17	197	2.57
6 - 8	4:28	268	2.54
8 - 10	5:31	331	2.86
10 - 12	6:37	397	2.73
12 - 14	7:47	467	2.57
14 - 16	8:55	535	2.65
16 - 18	10:00	600	2.77
			<b>2.71</b>

Bay 19 TW: 167.3  
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	54	4.0	43
Mon	55	3.5	-
Tue	55	3.5	37
Wed	56	3.0	-
Thur	56	3.0	35
Fri	56	3.0	-
Sat	56	3.0	35
<b>AVG:</b>	<b>55</b>	<b>AVG: 3.3</b>	<b>AVG/Sample 38</b>
			<b>MAX 43</b>
			<b>MIN 35</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.5	9.5	1.3	9.0	1.4	4.7	1.7
Sun	9.2	9.2	1.3	8.8	1.4	4.5	1.5
Mon	9.7	9.7	1.2	8.6	1.5	4.5	1.5
Mon	12.4	12.4	1.1	8.3	1.4	4.4	1.5
Tues	11.1	11.1	1.4	9.1	1.4	4.5	1.5
Tues	10.9	10.9	1.5	8.3	1.6	4.6	1.6
Wed	12.5	12.5	1.5	8.0	1.6	4.6	1.6
Wed	11.5	11.5	1.1	9.2	1.6	5.0	1.6
Thur	11.4	11.4	1.3	8.6	1.5	4.9	1.6
Thur	11.0	11.0	1.7	8.2	1.6	4.5	1.8
Fri	11.6	11.6	1.5	8.7	1.6	4.7	1.7
Fri	11.3	11.3	1.4	8.3	1.5	4.6	1.7
Sat	11.3	11.3	1.5	8.3	1.5	4.7	1.7
Sat	11.2	11.2	1.5	8.1	1.6	4.5	1.8
<b>AVG:</b>	<b>11.0</b>	<b>11.0</b>	<b>1.4</b>	<b>8.5</b>	<b>1.5</b>	<b>4.6</b>	<b>1.6</b>

**JDA Bird Counts: 5/13/18 to 5/19/18**

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)	
13-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	3	0	0	24
13-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-May	PH3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
13-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-May	SW3	114	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	216
Avg/Survey		110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	243
14-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	7
14-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-May	PH2	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
14-May	PH3	7	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
14-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-May	SW2	6	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
14-May	SW3	88	0	0	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160
Avg/Survey		51	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	235
15-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11	0	0	22
15-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-May	PH3	8	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
15-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-May	SW3	112	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	193
Avg/Survey		124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	270
16-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	23	0	0	48
16-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-May	PH3	15	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100
16-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-May	SW3	22	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Avg/Survey		65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	178

**JDA Bird Counts: 5/13/18 to 5/19/18**

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)		
17-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	28	0	0	<b>66</b>	
17-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
17-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
17-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
17-May	PH3	16	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>82</b>
17-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
17-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
17-May	SW3	26	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>48</b>
<b>Avg/Survey</b>		<b>65</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>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>196</b>		
18-May	PHFB	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	39	0	0	<b>40</b>	
18-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	0	0	0		<b>42</b>
18-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
18-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
18-May	PH3	103	77	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0		<b>182</b>
18-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
18-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
18-May	SW3	11	2	0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0		<b>25</b>
<b>Avg/Survey</b>		<b>97</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>289</b>		
19-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	52	38	0	0	<b>95</b>		
19-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	<b>0</b>
19-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	<b>0</b>
19-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	<b>0</b>
19-May	PH3	42	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	<b>74</b>
19-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	<b>0</b>
19-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	<b>0</b>
19-May	SW3	4	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	<b>41</b>
<b>Avg/Survey</b>		<b>58</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>0</b>	<b>3</b>	<b>45</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>210</b>		

Totals	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF			
<b>Weekly Total</b>	<b>1136</b>	<b>127</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19</b>	<b>338</b>	<b>0</b>	<b>0</b>								
<b>Avg/Survey</b>	<b>81</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>24</b>	<b>0</b>	<b>0</b>									