


# FISHWAY STATUS REPORT

**Date:** 3/17/2018  
**Inspection Period:** 3/11/2018 thru 3/17/2018



**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: 41 F
	Out of Criteria	Limit		Secchi: 6.0 Ft.
<b>NORTH FISHWAY</b>			5 out of 6 AWS pumps available since 2/7 when pump 1 was found binding up/resisting to turn.	
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 1.6	
<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 8.6	
Collection channel velocity	0	1.5 - 4 fps	AVG 2.46	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.7	
Entrance weir NE1	0	depth (≥ 8')	AVG 9.0	
Entrance weir NE2	0	depth (≥ 8')	AVG 8.7	
<b>JUVENILE PASSAGE</b>	0		In service since 2/28, with STS screens in units 1,3,4,8 and 9.	
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		
Vert barrier screen drawdown	0	<1.5', wkly		
Spill volume	0	per FPP	Unplanned spill underway since early February.	
Spill pattern	0	per FPP		
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. First 2018 sample was collected/processed on 1 March.

**Maintenance:**

All winter repairs/ PMs of SMF equipment were completed by 1 March. No issues of any kind at this time.

SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway.

**Research:** None

**Birds :**

Only a few birds, mostly cormorants are present at JD at this time. See the Avian Numbers tab for details.

Avian lines' contractor is making fantastic progress due to mild and non-windy winter and is expected to complete all work early, by 4/1/18.

The Spillway section's new tensioning winches are currently installed.

**Operations:**

MU1 OOS since 3/14 due to broken head cover bolt and excessive water leakage. MU 2 returned to service on 3/16 PM.

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. 5 out of 6 AWS pumps are available due to pump 1 failure on 2/27/18.

JBS RTS 2/28/18.

MU Gatewell Drawdowns: none due to winter maintenance season. Will commence in early March 2018.

**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 ?)

JD North AWS pump 1 OOS since 2/7 when it was found binding up/ resisting to turn. Mechanical bearing issues have been excluded by 2/15 which is great news.

JD Electrical crew troubleshooting and hopefully will fix it soon. 5 AWS pumps available out of 6 total is more than sufficient for all TW elevations.

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

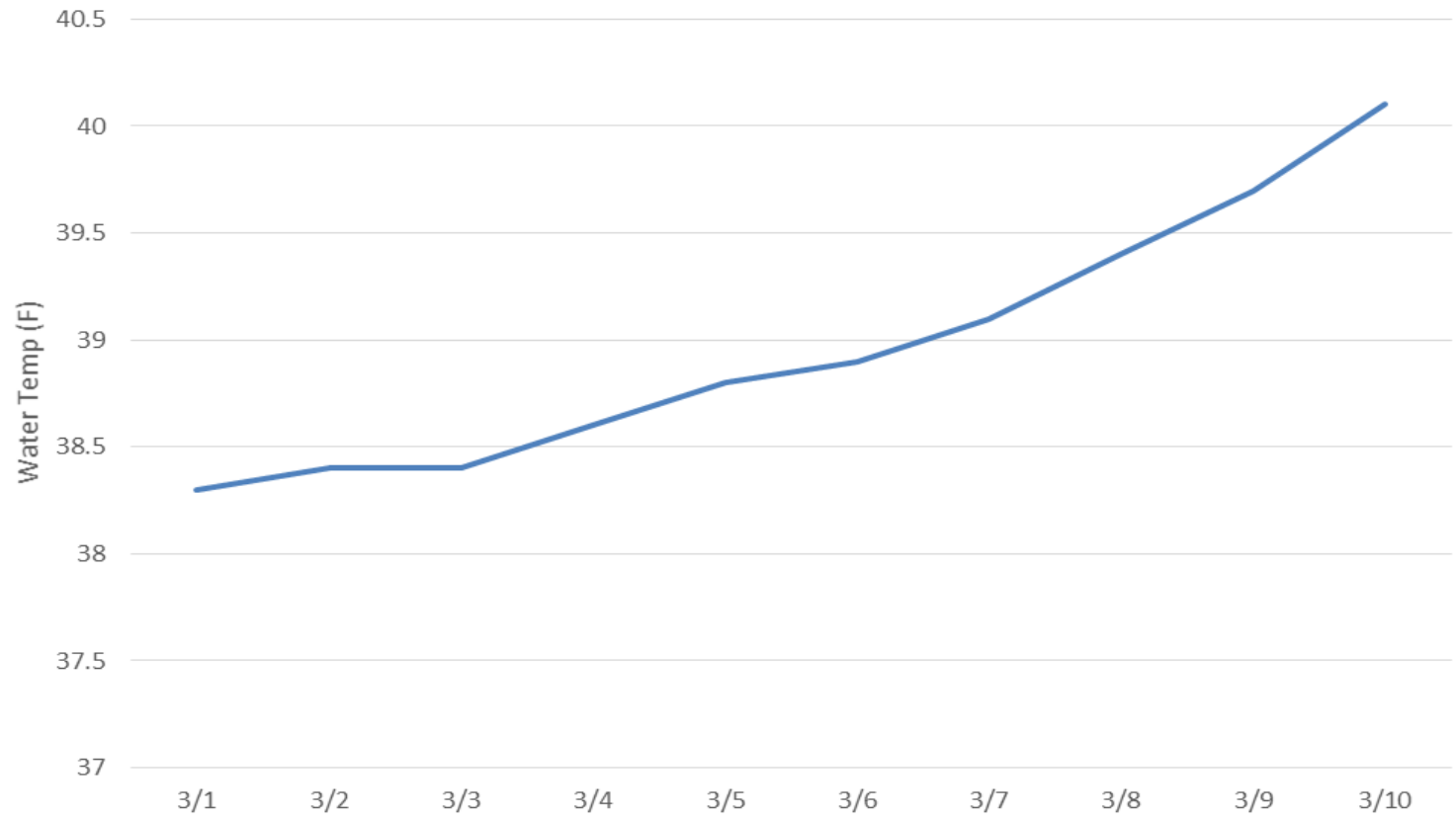
**Research:**

Adult PIT tag detection computer hardware - PSMFC crew completed all installations on 2/15. Both JDS and JDN systems are in service and detecting PIT tags.

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

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

JDA Water Temps 03/01- 03/10/2018



## JDA Collection Channel Velocity

Date 12-Mar-18

By: pete

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:15	75	2.40
2 - 4	2:33	153	2.31
4 - 6	3:45	225	2.50
6 - 8	5:01	301	2.37
8 - 10	6:27	387	2.09
10 - 12	7:30	450	2.86
12 - 14	8:46	526	2.37
14 - 16	9:55	595	2.61
16 - 18	11:04	664	2.61
			<b>2.46</b>

TW=160.8  
turbine 2,3=68rpm

John Day Dam  
Avian Zones



## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	40	6.0	0
Mon	41	6.0	0
Tue	41	6.0	18
Wed	41	6.0	0
Thur	42	6.0	7
Fri	42	6.0	0
Sat		6.0	12
<b>AVG:</b>	<b>41</b>	<b>AVG: 6.0</b>	<b>AVG 11</b>
			<b>MAX 12</b>
			<b>MIN 11</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.1	8.7	1.4	8.4	1.6	4.6	1.6
Sun	9.2	8.9	1.3	8.7	1.6	4.6	1.7
Mon	8.6	8.2	1.4	8.1	1.8	4.6	1.9
Mon	8.9	8.5	1.3	8.4	1.6	4.6	1.6
Tues	9.3	8.9	1.4	8.7	1.7	4.6	1.6
Tues	9.7	9.3	1.2	8.9	1.6	4.6	1.4
Wed	9.7	9.3	1.3	9.1	1.6	4.6	1.5
Wed	8.4	9.0	1.4	8.6	1.6	4.6	1.7
Thur	8.5	8.1	1.4	8.0	1.6	4.5	1.7
Thur	8.5	8.2	1.4	8.0	1.6	4.6	1.8
Fri	8.6	8.3	1.4	8.0	1.5	4.6	1.9
Fri	8.5	8.2	1.4	8.0	1.5	4.5	1.9
Sat	9.5	9.1	1.3	9.3	1.5	4.5	1.5
Sat	9.4	8.9	1.4	9.5	1.5	4.5	1.8
<b>AVG:</b>	<b>9.0</b>	<b>8.7</b>	<b>1.4</b>	<b>8.6</b>	<b>1.6</b>	<b>4.6</b>	<b>1.7</b>

**JDA Bird Counts: 3/11/18 to 3/17/18**

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)	
11-Mar	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar	PH1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11-Mar	PH2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12-Mar	PHFB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Mar	PH1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Mar	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
13-Mar	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Mar	PH1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Mar	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
14-Mar	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Mar	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Mar	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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)	
15-Mar	PHFB	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
15-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Mar	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Mar	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0		0		0		2		0		0		0		0		0		0		3
16-Mar	PHFB	0	0	0	0	0	0	7	14	0	0	0	0	0	0	0	0	0	0	0	0	21
16-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Mar	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Mar	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Mar	SW3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Avg/Survey		1		0		0		11		0		0		0		0		0		0		23
17-Mar	PHFB	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Mar	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Mar	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Mar	SW3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Avg/Survey		1		0		1		0		0		0		0		0		0		0		3
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		4		0		5		26		0		0		0		0		0		0		35
Avg/Survey		0		0		0		2		0		0		0		0		0		0		3