

# FISHWAY STATUS REPORT

Date: 2/10/2018  
 Inspection Period: 2/4/2018 thru 2/10/2018



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 once per day during the winter maintenance season, Dec. 1 - Feb. 28.  
 Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspections	Criteria	Total Number of Inspections:	7	Temperature:	41 F
	Out of Criteria	Limit			Secchi:	5.4 Ft.
<b>NORTH FISHWAY</b>			In service since 12/22/17 with all 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	1	1.0' - 2.0'	AVG 1.4	OOC at 0.9' on 2/7 due to only 2 AWS pumps available for one day.		
<b>SOUTH FISHWAY</b>	OOS		OOS since dewatered on 1/08. RTS is the week of 2/20/18.			
Exit differential	OOS	≤ 0.5'				
Exit Control weirs	OOS	Mid setting	Mid setting is normal for JDS			
Count station differential	OOS	≤ 0.3'				
Weir crest depth (US gauge)	OOS	1.0' ± 0.1'				
South entrance differential	OOS	1.0' - 2.0'	AVG	#DIV/0!		
Entrance weir SE1	OOS	depth (≥ 8')	AVG	#DIV/0!		
Collection channel velocity	OOS	1.5 - 4 fps	AVG	2.64		
N. Entrance PH(Bay 19)differential	OOS	1.0' - 2.0'	AVG	#DIV/0!		
Entrance weir NE1	OOS	depth (≥ 8')	AVG	#DIV/0!		
Entrance weir NE2	OOS	depth (≥ 8')	AVG	#DIV/0!		
<b>JUVENILE PASSAGE</b>	OOS		JBS season completed on 12/15/17. It was dewatered on 1/23. RTS is week of 2/20.			
Forebay/bypass conduit differential	OOS	4.0' - 5.0'	AVG	#DIV/0!		
Submersible traveling screens	OOS	visual inspect	STs will be installed at MU1-4 starting on 2/26 and more will be installed shortly after.			
Turbine trashrack drawdown	OOS	<1.5', wkly				
Vert barrier screen drawdown	OOS	<1.5', wkly				
Spill volume	NA	per FPP	Spillway on seal since 8/31/17			
Spill pattern	NA	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

## SMOLT MONITORING FACILITY

**Operation:**

SMF OOS since 11/30/17. It will return to service on 1 March 2018 which is one month earlier than the normal starting date at JD, per FPOM request.

**Maintenance:**

Switch Gate's Lower Seals replacement/ improvements to reduce water leakage and risk to passing juvenile lamprey underway.

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.

The avian lines' contractor is making fantastic progress due to mild and non-windy winter and is expected to complete all work early, by 3/1/18.

**Operations:**

JD South Fishway OOS/ dewatered since 1/08. RTS is 2/22/18.

JD North Ladder in service since 12/21/17. Entrance differential was OOC at 0.9' on 2/7 due to only 2 AWS pumps available out of total 6 for one day.

JBS OOS/ dewatered since 1/23. RTS is the week of 2/20/18.

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

**Maintenance:**

JD North Ladder's Entrance differential was OOC at 0.9' on 2/7 due to only 2 AWS pumps available out of total 6 for one day. The problem started with pump 2 greaser's alarm and escalated to other pumps having minor technical/operational issues as well. Most were fixed immediately the same day and at least 5 AWS pumps have been available since.

Maintenance of JBS Tainter gate, orifices' hardware and one expansion joint repairs are underway.

JD South Fishway OOS/ dewatered since 1/08. Expansion joints and AWS turbine 3 oil leak's repairs by JD Maintenance underway.

ROV inspections of JDS CC and JDN entrance gratings were completed on 1/30. All gratings were found in place and properly attached.

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

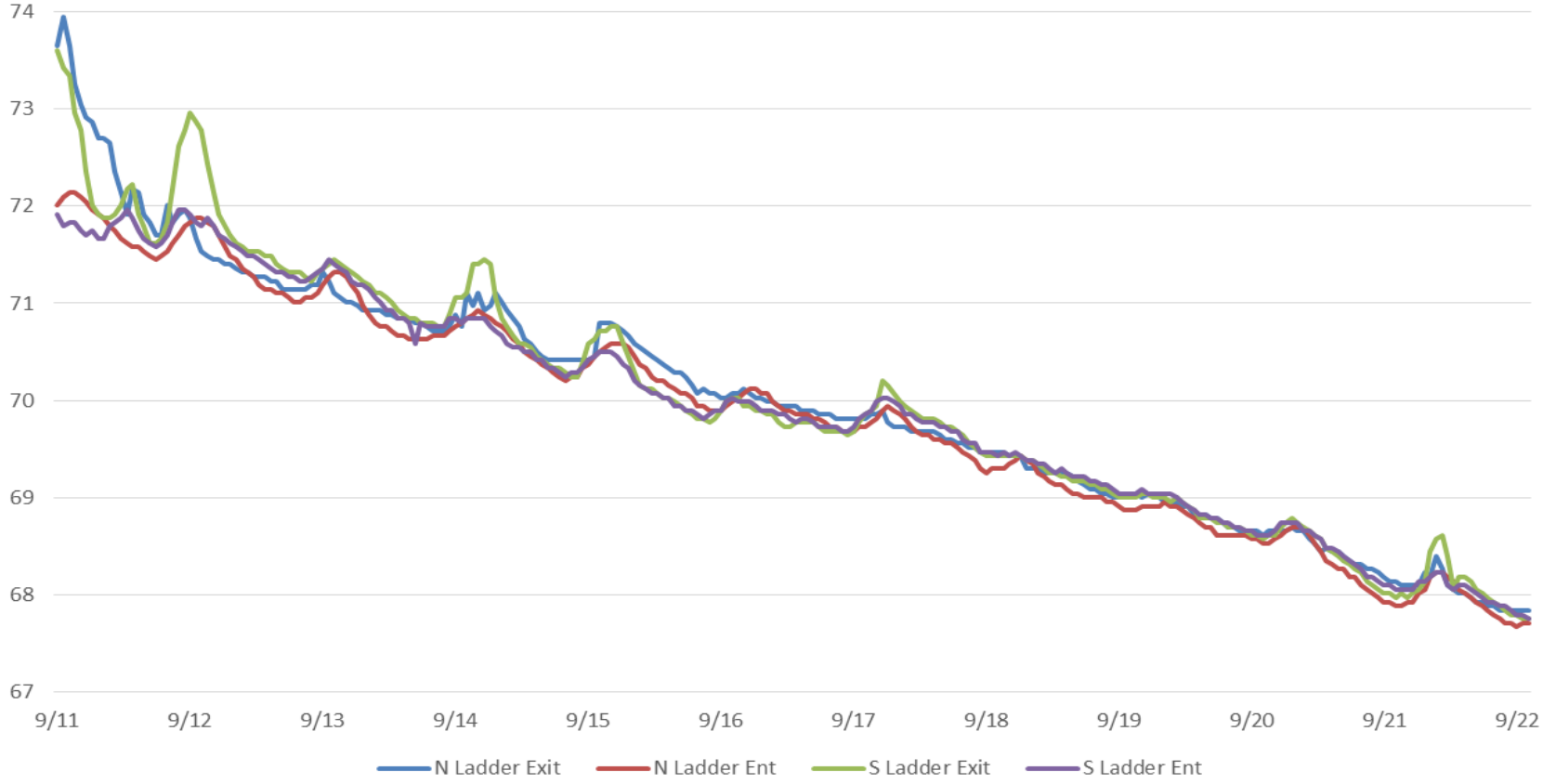
**Research:**

Adult PIT Support contract was completed on 2/1. PSMFC crew continues installing computer and communications hardware at both JD Adult Fishways.

Both systems will be ready to detect adult PITs by 1 March 2018.

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

Fishladder Water Temps JDA (9/11/17 - 9/22/17)



## JDA Collection Channel Velocity

**Date**    *13-Dec-17*

**By:**        *MDL*

Bay(s)	Time	Sec.	Velocity (f/s)
<i>0-2</i>	<i>1:04</i>	<i>64</i>	<i>2.81</i>
<i>2 - 4</i>	<i>2:11</i>	<i>131</i>	<i>2.69</i>
<i>4 - 6</i>	<i>3:19</i>	<i>199</i>	<i>2.65</i>
<i>6 - 8</i>	<i>4:28</i>	<i>268</i>	<i>2.61</i>
<i>8 - 10</i>	<i>5:39</i>	<i>339</i>	<i>2.54</i>
<i>10 - 12</i>	<i>6:50</i>	<i>410</i>	<i>2.54</i>
<i>12 - 14</i>	<i>8:03</i>	<i>483</i>	<i>2.47</i>
<i>14 - 16</i>	<i>9:08</i>	<i>548</i>	<i>2.77</i>
<i>16 - 18</i>	<i>10:14</i>	<i>614</i>	<i>2.73</i>
			<b>2.64</b>

TW Bay19 = 161.2

RPMs:            68/68 (2&3) (1 @ 0)

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	41	6.0	NA
Mon	41	6.0	NA
Tue	41	6.0	NA
Wed	41	6.0	NA
Thur	42	6.0	NA
Fri	42	4.0	NA
Sat	42	4.0	NA
<b>AVG:</b>	<b>41</b>	<b>AVG: 5.4</b>	<b>AVG</b> NA
			<b>MAX</b> NA
			<b>MIN</b> NA

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	oos	oos	oos	oos	1.4	oos	oos
Sun							
Mon	oos	oos	oos	oos	1.5	oos	oos
Mon							
Tues	oos	oos	oos	oos	1.5	oos	oos
Tues							
Wed	oos	oos	oos	oos	0.9	oos	oos
Wed							
Thur	oos	oos	oos	oos	1.4	oos	oos
Thur							
Fri	oos	oos	oos	oos	1.6	oos	oos
Fri							
Sat	oos	oos	oos	oos	1.6	oos	oos
Sat							
<b>AVG:</b>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.4	#DIV/0!	#DIV/0!

**JDA Bird Counts: 1/28/18 to 2/3/18**

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)	
28-Jan	PHFB	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
28-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jan	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jan	SW1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
28-Jan	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Jan	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	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
29-Jan	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Jan	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Jan	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Jan	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
30-Jan	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Jan	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Jan	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Jan	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
31-Jan	PHFB	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	31
31-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Jan	PH1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
31-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Jan	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Jan	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	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33

**JDA Bird Counts: 1/28/18 to 2/3/18**

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)	
1-Feb	PHFB	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	27
1-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Feb	PH1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Feb	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Feb	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>1</b>		<b>0</b>		<b>1</b>		<b>14</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>30</b>
2-Feb	PHFB	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	25
2-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Feb	PH1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Feb	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Feb	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>1</b>		<b>0</b>		<b>1</b>		<b>13</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>27</b>
3-Feb	PHFB	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Feb	PH1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Feb	SW2	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
3-Feb	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>0</b>		<b>0</b>		<b>3</b>		<b>7</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>19</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>3</b>		<b>0</b>		<b>14</b>		<b>102</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>119</b>
<b>Avg/Survey</b>		<b>0</b>		<b>0</b>		<b>1</b>		<b>7</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>9</b>