

# FISHWAY STATUS REPORT

Date: 10/7/2017  
 Inspection Period: 10/1/2017 thru 10/7/2017



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:	64 F
	Out of Criteria	Limit			Secchi:	6.0 Ft.
<b>NORTH FISHWAY</b>			In service with all 6 AWS pumps available since 1/19/17.			
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 since 3/3/17 with 2 out of 3 AWS turbines available.			
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	1.5		
Entrance weir SE1	0	depth (≥ 8')	AVG	8.5		
Collection channel velocity	0	1.5 - 4 fps	AVG	2.23		
N. Entrance PH(Bay 19)differential	1	1.0' - 2.0'	AVG	1.6	very minor OOC at 2.1 on 10/13	
Entrance weir NE1	0	depth (≥ 8')	AVG	8.7		
Entrance weir NE2	0	depth (≥ 8')	AVG	8.8		
<b>JUVENILE PASSAGE</b>			JBS in service since 3/30/17.			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.6		
Submersible traveling screens	0	visual inspect	STS camera inspection is scheduled for the next week, 17 OCT			
Turbine trashrack drawdown	0	<1.5', wkly	Trashrack Crane in service since 6/01.			
Vert barrier screen drawdown	0	<1.5', wkly				
Spill volume	0	per FPP	Bay 2 at 1.6 cfs for adult attraction to the North Fishway entrance 1 Sept. thru 30 Nov.			
Spill pattern	0	per FPP	Bay 2 only.			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

## SMOLT MONITORING FACILITY

**Operation:**

SMF sampling concluded for the 2017 season on 15 September. SMF continues in bypass at Switch Gate for PIT detections through 30 November.

**Maintenance:**

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

**Research:** None

**Birds :**

see the Avian Numbers tab.

6 Tower-to-Tower, 6 spillway (1 failed 23 August,) 4 Navlock and 4 PH lines are missing out of 125 grid's total. They will be reinstalled for the 2018 passage season.

**Operations:**

Bay 2 at 1.6 cfs for adult attraction to the North Fishway entrance 1 Sept. thru 30 Nov.

JD South Fishway in service with two AWS Turbines and meeting all FPP criteria since 3/3/17.

JD North Fishway in service with all 6 AWS pumps available and meeting all FPP criteria since 1/19/17.

MU Gatewell Drawdowns: weekly or more frequently as necessary.

**Maintenance:**

JD STS crane's emergency repairs were all completed in February with the minor glitches/ adjustments continuing. The crane remains in a risky operational condition until it's replaced with a brand new machine. However, the \$ 5 million for its replacement is not yet available.

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

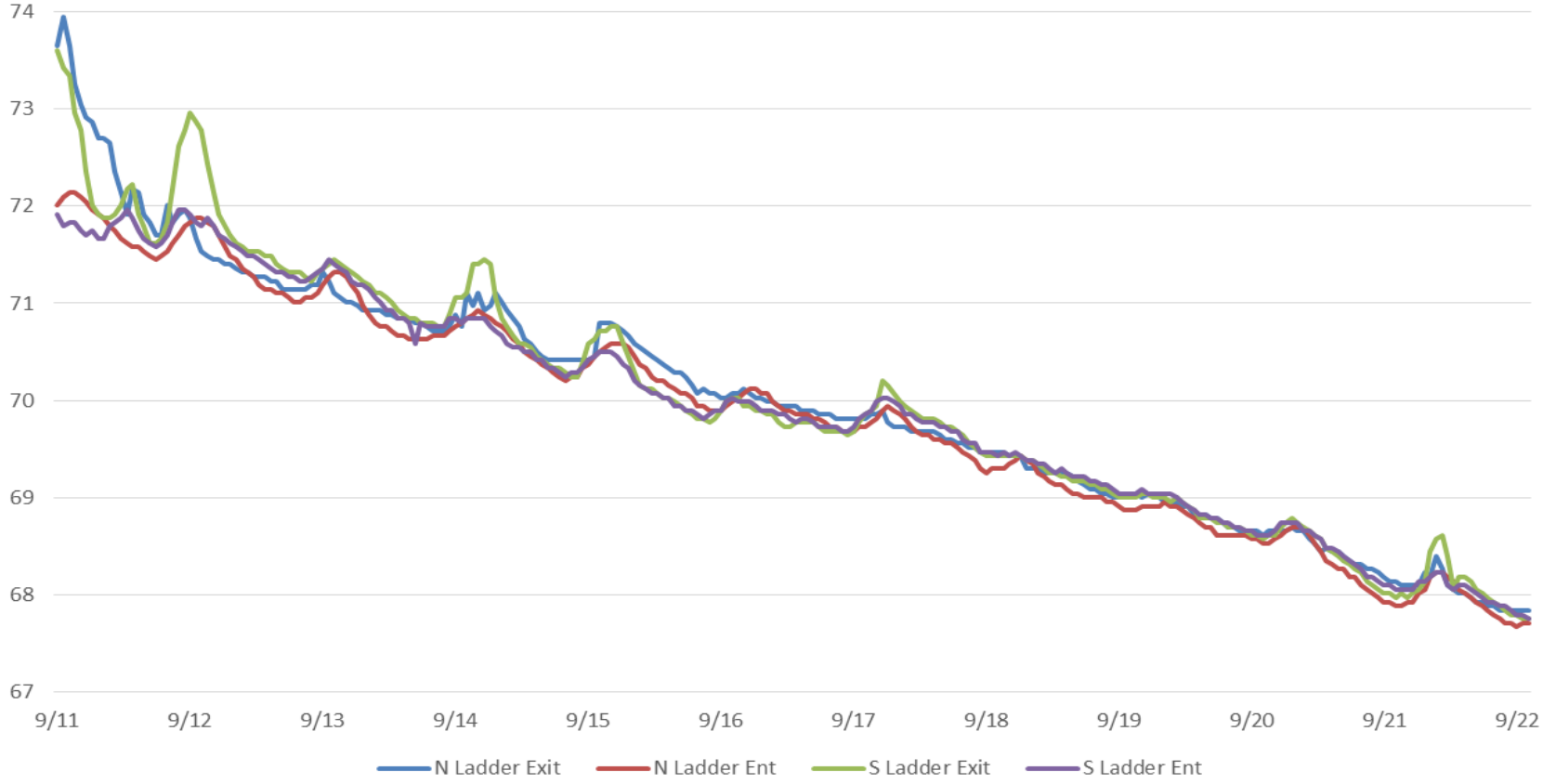
**Research:**

WDFW angling crew continues the pikeminnow removal from JD PH tailrace since 5/15. **Fall catches slow since August, with 3,375 NPM total by 9/3/17.**

Adult PIT antennas' installation at JD South Fishway finished on 23 Feb. Both ladders' antennas in service with temporary power sources. Phase 2 support contract to install building/ office spaces plus electrical and Gorgenet hookups underway since 7 August.

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 21-Sep-17

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:17	77	2.34
2 - 4	2:42	162	2.12
4 - 6	4:09	249	2.07
6 - 8	5:31	331	2.20
8 - 10	6:54	414	2.17
10 - 12	8:15	495	2.22
12 - 14	9:36	576	2.22
14 - 16	10:58	658	2.20
16 - 18	12:09	729	2.54
			<b>2.23</b>

TW Bay19 = 159.9

RPMs 68/68 (2&3) (1 @ 0)

John Day Dam  
Avian Zones



## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	65	6.0	NA
Mon	65	6.0	NA
Tue	65	6.0	NA
Wed	64	6.0	NA
Thur	64	6.0	NA
Fri	64	6.0	NA
Sat	63	6.0	NA
<b>AVG:</b>	<b>64</b>	<b>6.0</b>	<b>NA</b>
			<b>MAX</b>
			<b>NA</b>
			<b>MIN</b>
			<b>NA</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.7	8.7	1.6	8.1	1.6	4.5	1.5
Sun	8.8	8.8	1.4	8.2	1.6	4.6	1.5
Mon	9.1	9.9	1.5	8.4	1.5	4.6	1.4
Mon	8.9	8.9	1.6	8.2	1.5	4.5	1.5
Tues	9.4	9.4	1.4	8.7	1.5	4.6	1.5
Tues	8.4	8.4	1.3	8.7	1.5	4.6	1.7
Wed	8.6	8.6	1.3	9.0	1.6	4.6	1.8
Wed	8.5	8.6	1.5	8.3	1.6	4.6	1.5
Thur	8.9	9.0	1.4	8.9	1.4	4.7	1.8
Thur	8.9	9.0	1.3	8.7	1.5	4.6	1.3
Fri	8.2	8.3	1.4	8.1	1.5	4.6	1.9
Fri	8.9	9.0	1.6	8.1	1.5	4.5	2.1
Sat	8.3	8.4	1.7	8.7	1.6	4.5	1.3
Sat	8.4	8.3	1.5	8.6	1.6	4.5	1.7
<b>AVG:</b>	<b>8.7</b>	<b>8.8</b>	<b>1.5</b>	<b>8.5</b>	<b>1.5</b>	<b>4.6</b>	<b>1.6</b>

**JDA Bird Counts: 9/24/17 to 9/30/17**

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)	
24-Sep	PHFB	0	0	41	4	0	0	43	0	0	0	0	0	0	0	0	0	0	6	34	6	134
24-Sep	SWFB	0	0	0	11	0	0	7	1	0	0	0	0	0	0	0	0	0	2	0	3	24
24-Sep	PH1	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
24-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Sep	PH3	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
24-Sep	SW1	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
24-Sep	SW2	0	1	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	7
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>5</b>	<b>29</b>	<b>2</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>22</b>					<b>185</b>			
25-Sep	PHFB	0	0	12	85	0	0	0	0	0	0	0	0	0	0	0	0	22	22	22	22	185
25-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Sep	PH1	15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
25-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Sep	SW1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
25-Sep	SW2	0	0	0	0	0	0	17	1	0	0	0	0	0	0	0	0	0	0	0	0	18
25-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>8</b>	<b>49</b>	<b>2</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>22</b>					<b>221</b>			
26-Sep	PHFB	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	22	18	22	19	86
26-Sep	SWFB	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
26-Sep	PH1	3	1	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
26-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Sep	PH3	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
26-Sep	SW1	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
26-Sep	SW2	0	0	0	0	0	0	11	27	0	0	0	0	0	0	0	0	0	0	0	0	38
26-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>7</b>	<b>4</b>	<b>3</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>21</b>					<b>147</b>			
27-Sep	PHFB	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	22	14	45
27-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Sep	PH1	15	2	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
27-Sep	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
27-Sep	PH3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
27-Sep	SW1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
27-Sep	SW2	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
27-Sep	SW3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
<b>Avg/Survey</b>		<b>15</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>0</b>	<b>0</b>	<b>18</b>					<b>84</b>			

**JDA Bird Counts: 9/24/17 to 9/30/17**  
 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)	
28-Sep	PHFB	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	46	28	92
28-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Sep	PH1	6	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
28-Sep	PH2	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
28-Sep	PH3	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
28-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Sep	SW2	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
28-Sep	SW3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
<b>Avg/Survey</b>		<b>17</b>		<b>0</b>		<b>2</b>		<b>14</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>37</b>		<b>139</b>

29-Sep	PHFB	0	0	0	0	0	0	33	3	0	0	0	0	0	0	0	0	0	0	24	26	86
29-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Sep	PH1	21	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
29-Sep	PH2	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
29-Sep	PH3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
29-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Sep	SW2	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	25
29-Sep	SW3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
<b>Avg/Survey</b>		<b>21</b>		<b>0</b>		<b>4</b>		<b>31</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>25</b>		<b>159</b>

30-Sep	PHFB	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	41	40	109
30-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Sep	PH1	2	4	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
30-Sep	PH2	11	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
30-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Sep	SW3	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
<b>Avg/Survey</b>		<b>9</b>		<b>0</b>		<b>5</b>		<b>18</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>41</b>		<b>143</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					
<b>Weekly Total</b>	<b>160</b>	<b>163</b>	<b>37</b>	<b>257</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>92</b>	<b>369</b>	<b>1078</b>								
<b>Avg/Survey</b>	<b>11</b>	<b>12</b>	<b>3</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>26</b>	<b>77</b>								