


# FISHWAY STATUS REPORT

Date: 9/15/2018  
 Inspection Period: 9/9/2018 thru 9/15/2018



**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:	12	Temperature:	68 F
	Out of Criteria	Limit				
<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	1.6		
<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	8.7		
Collection channel velocity	0	1.5 - 4 fps	AVG	2.17		
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	9.0		
<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 inspection is scheduled for the week of 24 Sept.			
Turbine trashrack drawdown	0	<1.5', wkly	Monthly trashrack raking scheduled at the end of September.			
Vert barrier screen drawdown	0	<1.5', wkly	Trashrack and VBS differentials are below the criterion of 1.5'.			
Spill volume	0	per FPP	Spill Season ended on 8/31. Bay 2 open at 1.6K for adult attraction to North Entrance on 9/1.			
Spill pattern	0	per FPP	Bay 2 open at 1.6K during daylight hours for adult attraction to North Entrance since 9/1.			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

## SMOLT MONITORING FACILITY

### Operation:

2018 SMF Sampling Season ended on 9/15 (last sample on 9/14.) Bypass at Switch Gate for full flow PIT detections will continue thru 30 November.

SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway. Awaiting for \$ 170 K UFR to complete in FY18.

Research: None

Fallbacks:           AVG:    0                    MAX:    0                    MIN:    0

### Birds :

Almost all White pelicans already gone to Lake Chaparral, Mexico for their winter vacation there. See Avian Numbers tab for details.

All 125 avian lines in place without any deficiencies.

### 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.

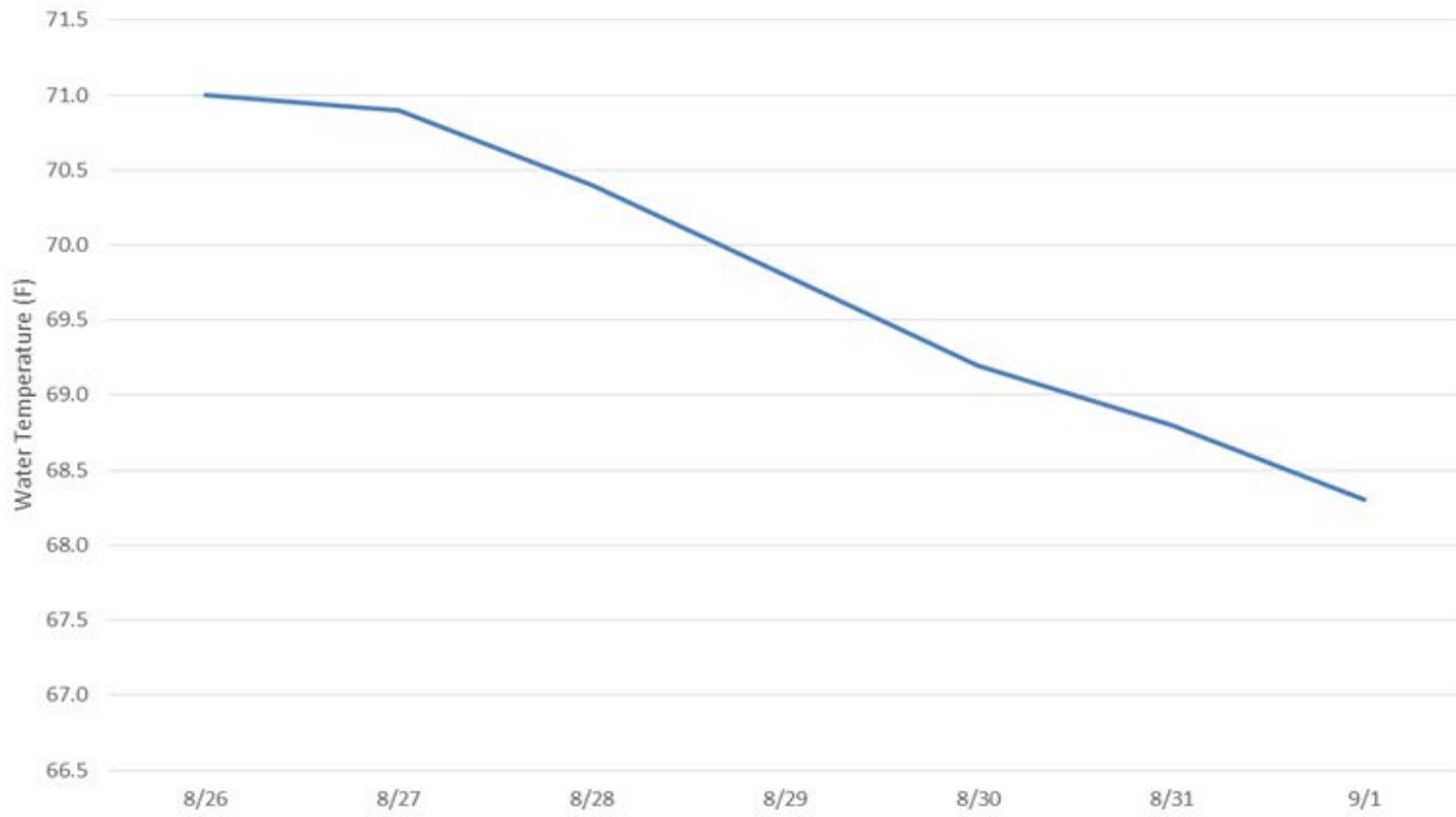
Lamprey trapping at JD S Trap and JD N LPS by CRITFC/ Tribes completed on 8/22.

WDFW NPM angling from JD PH Tailrace deck continues since 5/1. Catches improved in September, with a great seasonal total of 3,019 NPM thru 9/23.

Uof I crew continues monitoring the RT Adult Lamprey passage at both JD Adult Fishways.

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

Water Temperature (8/26/18 - 9/1/18)



## JDA Collection Channel Velocity

Date 24-Aug-18

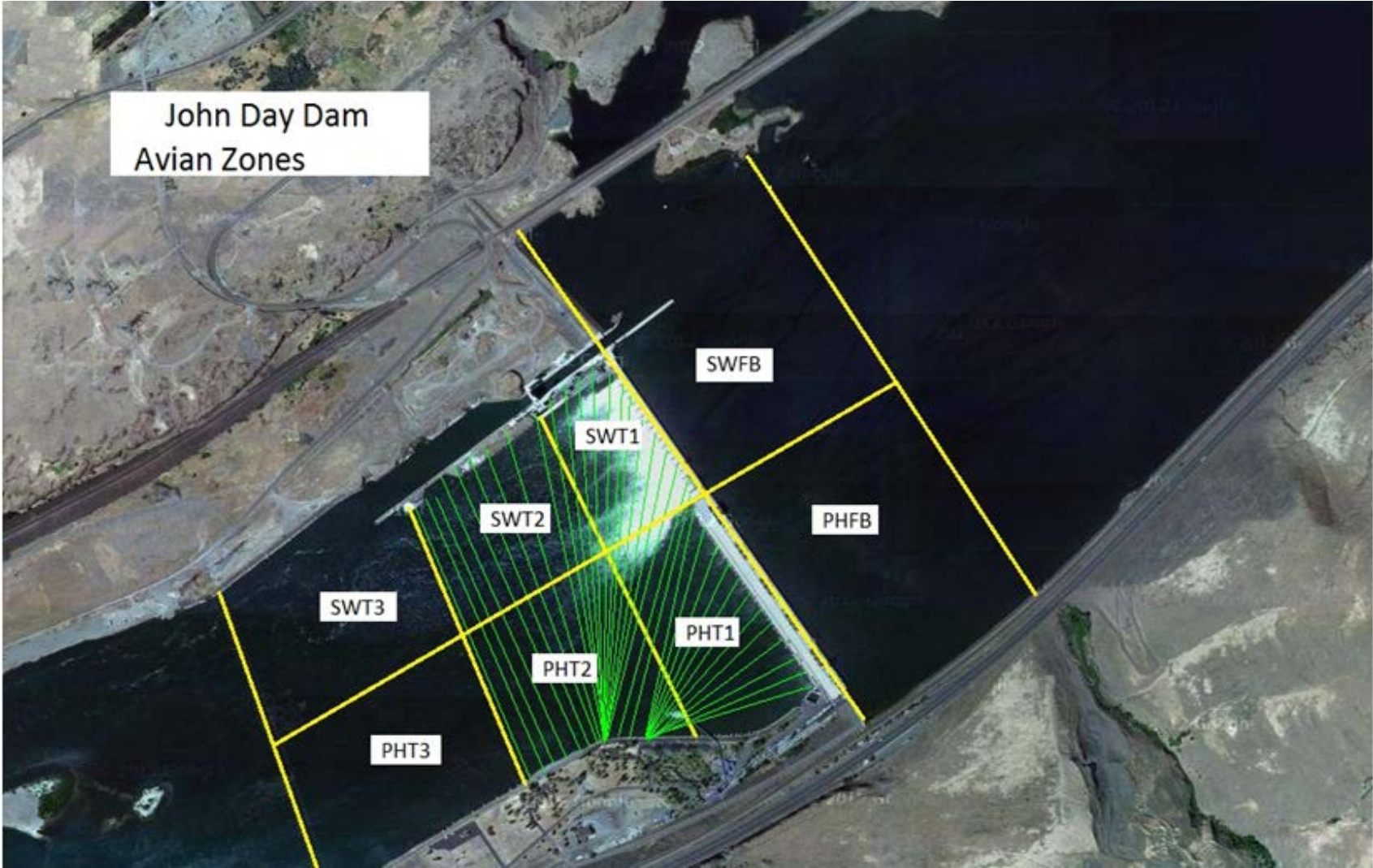
By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:19	79	2.28
2 - 4	2:33	153	2.43
4 - 6	3:56	236	2.17
6 - 8	5:19	319	2.17
8 - 10	6:35	395	2.37
10 - 12	7:48	468	2.47
12 - 14	9:12	552	2.14
14 - 16	10:24	624	2.50
16 - 18	11:22	682	3.10
			<b>2.40</b>

Bay 19 TW: 159.9  
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	68	6.0	
Mon	68	6.0	50
Tue	68	6.0	
Wed	68	6.0	55
Thur	68	6.0	
Fri	68	6.0	57
Sat	68	6.0	
<b>AVG:</b>	<b>68</b>	<b>AVG: 6.0</b>	<b>AVG/Sample #DIV/0!</b>
			<b>MAX 57</b>
			<b>MIN 0</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.6	8.6	1.5	8.0	1.6	4.6	1.8
Sun	9.2	9.2	1.4	9.0	1.5	4.6	1.6
Mon	8.7	8.7	1.4	8.4	1.6	4.6	1.6
Mon							
Tues	8.5	8.5	1.5	8.8	1.6	4.5	1.7
Tues							
Wed	8.8	8.8	1.5	8.7	1.5	4.5	1.7
Wed	9.2	9.2	1.3	9.2	1.6	4.6	1.6
Thur	8.7	8.7	1.4	8.3	1.7	4.6	1.6
Thur	8.8	8.8	1.6	8.2	1.6	4.5	1.8
Fri	9.3	9.3	1.3	8.9	1.5	4.6	1.6
Fri	9.1	9.1	1.4	8.8	1.6	4.6	1.6
Sat	9.3	9.3	1.5	8.9	1.4	4.6	1.7
Sat	9.5	9.5	1.4	8.7	1.5	4.6	1.5
AVG:	9.0	9.0	1.4	8.7	1.6	4.6	1.7



Avg/Survey	0	6	0	18	0	0	0	0	0	0	25	18	131
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**JDA Bird Counts: 9/9/18 to 9/15/18**  
 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-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	52	124
13-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Sep	PH1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
13-Sep	PH2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
13-Sep	PH3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
13-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	9
13-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		4		0		2		0		0		0		0		5		0		62		143

14-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	52	101
14-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Sep	PH2	7	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
14-Sep	PH3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
14-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		8		0		1		0		0		0		0		0		0		51		117

15-Sep	PHFB	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	54	50	113
15-Sep	SWFB	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
15-Sep	PH1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
15-Sep	PH2	3	8	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	14
15-Sep	PH3	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
15-Sep	SW1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
15-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		15		23		1		5		0		0		2		0		0		52		192

Totals	Gulls		Cormorant		Caspian tern		White Pelican		Grebe		Total
	F	NF	F	NF	F	NF	F	NF	F	NF	
<b>Weekly Total</b>	97	244	6	81	0	0	10	9	49	365	861
Avg/Survey	7	17	0	6	0	0	1	1	4	26	62