

# FISHWAY STATUS REPORT

Date: 5/28/2016  
 Inspection Period: 5/22/2016 thru 5/28/2016



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 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:	58 F
	Out of Criteria	Limit			Secchi:	5.9 Ft.
<b>NORTH FISHWAY</b>			In service; 5 AWS pumps available; # 5 OOS due to oil leak			
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 with two AWS turbines; FOGs # 18 & 19 continue closed.			
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	1.3		
Entrance weir SE1	0	depth (≥ 8')	AVG	9.8		
Collection channel velocity	0	1.5 - 4 fps	AVG	3.38		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.5		
Entrance weir NE1	1	depth (≥ 8')	AVG	8.2	OOC at 7.8' on 5/29 - immediate manual adjustment	
Entrance weir NE2	1	depth (≥ 8')	AVG	8.2	OOC at 7.7' on 5/29 - immediate manual adjustment	
<b>JUVENILE PASSAGE</b>			In service with STSs installed since 4/1			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.6		
Submersible traveling screens	0	visual inspect	Monthly STS camera inspection during the week of 5/23; all STS working properly			
Turbine trashrack drawdown	0	<1.5', wkly	Monthly raking per FPP requirements during the week of 5/23, moderate debris loads			
Vert barrier screen drawdown	0	<1.5', wkly				
Spill volume	0	N/A	2016 Spill season started on 4/10/16 at 0001; TSWs in bays 18 & 19 in service.			
Spill pattern	0	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

## SMOLT MONITORING FACILITY

**Operation:**

In service since 1 April. Every other day sampling by PSMFC biologists in 2016; JD Fisheries crew moves the Switch Gate between sample-bypass modes daily AM.

**Maintenance:**

No maintenance issues to report. PDS screen cleaners have been working well.

SMF SCADA's investigation by JD Electrical underway. There is a current UFR of \$ 150 K, for the SCADA update's P&S.

**Research:**

None

**Fallbacks:**           AVG:   29                   MAX:   34                   MIN:   25

### OTHER JOHN DAY ISSUES:

**Birds :**

see the Avian Numbers tab. We report all species and locations, but in reality only gulls in the tailrace BRZ are relevant at JD.

13 Navlock and 3 Spillway (# 70 lost on 5/16) lines are missing out of 125 grid's total; no funding is available to reinstall for 2016 season. UFR for \$ 250K is pending.

New in April 2016, the JD Avian Lines Improvements' PDT will assess their reliability and design a better/ cheaper methods for their maintenance.

USDA boat avian hazing downstream of JD Tailrace BRZ commenced on 4/29; light gull presence so far.

**Operations:**

JBS and SMF in regular operation since 1 April as required by FPP.

JD North fishway has been meeting all FPP criteria since 1/5/16.

JD South Fishway in service with two out of three AWS turbines; FOGs 18 & 19 continue closed due to insufficient AWS.

MU Gatewell Drawdowns: Twice a week or more frequently as necessary.

**Maintenance:**

JD North Fishway AWS Pump# 4 install complete on 5/12/16! Pump # 5 OOS due to gearbox's oil leak; it will be repaired soon

JD South Fishway AWS turbine 1 OOS long term due to failed pump's lower bearing. Received \$100K UFR for AWS pumps' repair on 5/18.

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

**Research:**

Washington F&W dam angling crew commenced NPM (pikeminnow) removal from JD PH tailrace on 5/10/16. 233 fish removed by 5/22.

JD Fisheries coordinating with NW Tribes for adult lamprey trapping and other lamprey research.

Adult Fish Counting by Normandeau Associates commenced on 1 April 2016 and is ongoing.

Adult PIT antennas PDT developing designs for the next winter outage's installation.

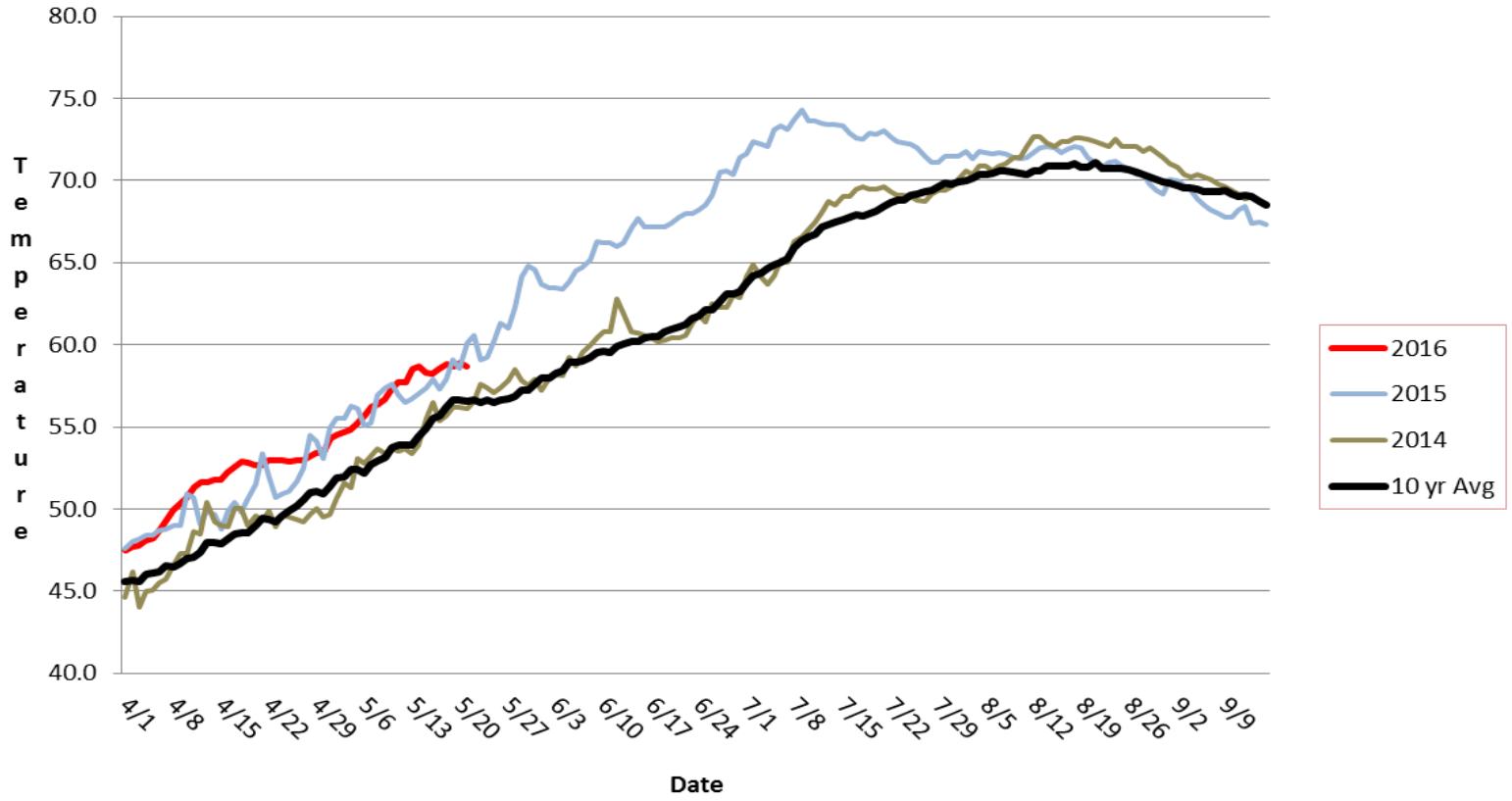
**Kevin Moynahan**  
**OPM John Day/Willow Creek Project**

MOYNAHAN, KEVIN, PATRICK, 1393959157

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



# JDA SMF Water Temp



## JDA Collection Channel Velocity

Date 21-May-16

By: pr

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:18	78	2.31
2 - 4	2:03	123	4.00
4 - 6	3:03	183	3.00
6 - 8	4:00	240	3.16
8 - 10	4:52	292	3.46
10 - 12	5:35	335	4.19
12 - 14	6:39	399	2.81
14 - 16	7:35	455	3.21
16 - 18	8:17	497	4.29
			<b>3.38</b>

NE TW            161.7  
 #2 RPM         60  
 #3 RPM         62

**JDA Bird Counts: 5/22/16 to 5/28/16**

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)	
22-May	PHFB	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	20	19	41	20	105
22-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May	SW1	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
22-May	SW2	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
22-May	SW3	16	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Avg/Survey		30		3		0		0		0		0		0		0		20		31		164
23-May	PHFB	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	20	20	26	28	99
23-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-May	SW1	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
23-May	SW2	0	4	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	9
23-May	SW3	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Avg/Survey		9		6		0		0		0		0		1		0		20		27		123
24-May	PHFB	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	20	22	34	30	108
24-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	SW1	6	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
24-May	SW2	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
24-May	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		12		1		0		0		0		0		1		0		21		32		132
25-May	PHFB	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	38	39	0	0	80
25-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	PH1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
25-May	PH2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
25-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	SW2	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
25-May	SW3	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Avg/Survey		11		1		0		0		0		0		0		0		39		0		99

**JDA Bird Counts: 5/22/16 to 5/28/16**  
 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)	
26-May	PHFB	0	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	41	0	0	31	81
26-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-May	PH1	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
26-May	PH2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
26-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-May	SW3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
<b>Avg/Survey</b>		<b>9</b>		<b>5</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>21</b>		<b>16</b>	<b>99</b>	

27-May	PHFB	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	33	42	0	0	77
27-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-May	PH1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
27-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-May	SW1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
27-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-May	SW3	1	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	7
<b>Avg/Survey</b>		<b>7</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>1</b>		<b>0</b>		<b>38</b>		<b>0</b>	<b>91</b>	

28-May	PHFB	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	37	37	0	0	76
28-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-May	PH1	4	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
28-May	PH2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
28-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
28-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-May	SW2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
28-May	SW3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
<b>Avg/Survey</b>		<b>13</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>1</b>		<b>0</b>		<b>37</b>		<b>0</b>	<b>102</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>177</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>388</b>	<b>210</b>	<b>810</b>							
<b>Avg/Survey</b>	<b>13</b>	<b>2</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>28</b>	<b>15</b>	<b>58</b>							

John Day Dam  
Avian Zones



## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	59	5.0	
Mon	59	6.0	34
Tue	58	6.0	
Wed	58	6.0	27
Thur	58	6.0	
Fri	58	6.0	25
Sat	58	6.0	
<b>AVG:</b>	<b>58</b>	<b>AVG: 5.9</b>	<b>AVG 29</b>
			<b>MAX 34</b>
			<b>MIN 25</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.1	8.0	1.4	9.7	1.6	4.6	1.4
Sun	8.3	8.1	1.3	9.8	1.5	4.5	1.4
Mon	8.0	8.6	1.3	9.7	1.5	4.6	1.2
Mon	8.2	8.2	1.3	10.0	1.5	4.5	1.4
Tues	8.2	8.3	1.3	10.1	1.4	5.0	1.2
Tues	8.3	8.2	1.1	9.9	1.5	4.3	1.4
Wed	8.5	8.6	1.3	10.4	1.4	4.6	1.6
Wed	8.0	8.1	1.3	9.4	1.6	4.5	1.6
Thur	7.8	7.7	1.3	9.6	1.6	4.6	1.6
Thur	8.0	8.0	1.3	10.1	1.4	4.5	1.7
Fri	8.2	8.3	1.3	9.3	1.5	4.5	1.7
Fri	8.2	8.0	1.4	9.2	1.5	4.5	1.5
Sat	8.3	8.4	1.3	10.0	1.5	4.5	1.5
Sat	8.0	8.1	1.3	10.1	1.4	4.5	1.6
<b>AVG:</b>	<b>8.2</b>	<b>8.2</b>	<b>1.3</b>	<b>9.8</b>	<b>1.5</b>	<b>4.6</b>	<b>1.5</b>