


# FISHWAY STATUS REPORT

**Date:** 5/7/2016  
**Inspection Period:** 5/1/2016 thru 5/7/2016



**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:	55 F
	Out of Criteria	Limit			Secchi:	4.8 Ft.
<b>NORTH FISHWAY</b>			In service; 4 AWS pumps available, # 4 & 5 OOS			
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>			AWS turbine 2 returned to service/NE 2 gate opened on 3/31. 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	1.5		
Entrance weir SE1	0	depth (≥ 8')	AVG	8.9		
Collection channel velocity	0	1.5 - 4 fps	AVG	3.79		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.5		
Entrance weir NE1	0	depth (≥ 8')	AVG	10.1		
Entrance weir NE2	0	depth (≥ 8')	AVG	10.1		
<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	MU s intakes raked the week of 4/26, per FPP requirement.			
Turbine trashrack drawdown	0	<1.5', wkly	Moderate volume of debris raked from MUs intakes the previous week			
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 major 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:   51                   MAX:   66                   MIN:   44

## 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 Spillway 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 ETR the next week! 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. Awaiting special funding for its overhaul/replacement.

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

### Research:

Adult Fish Counting by Normandeau Associ

Proposal by PSMFC to install Adult PIT antennas at both JD Fishways is at the design/PDT level.

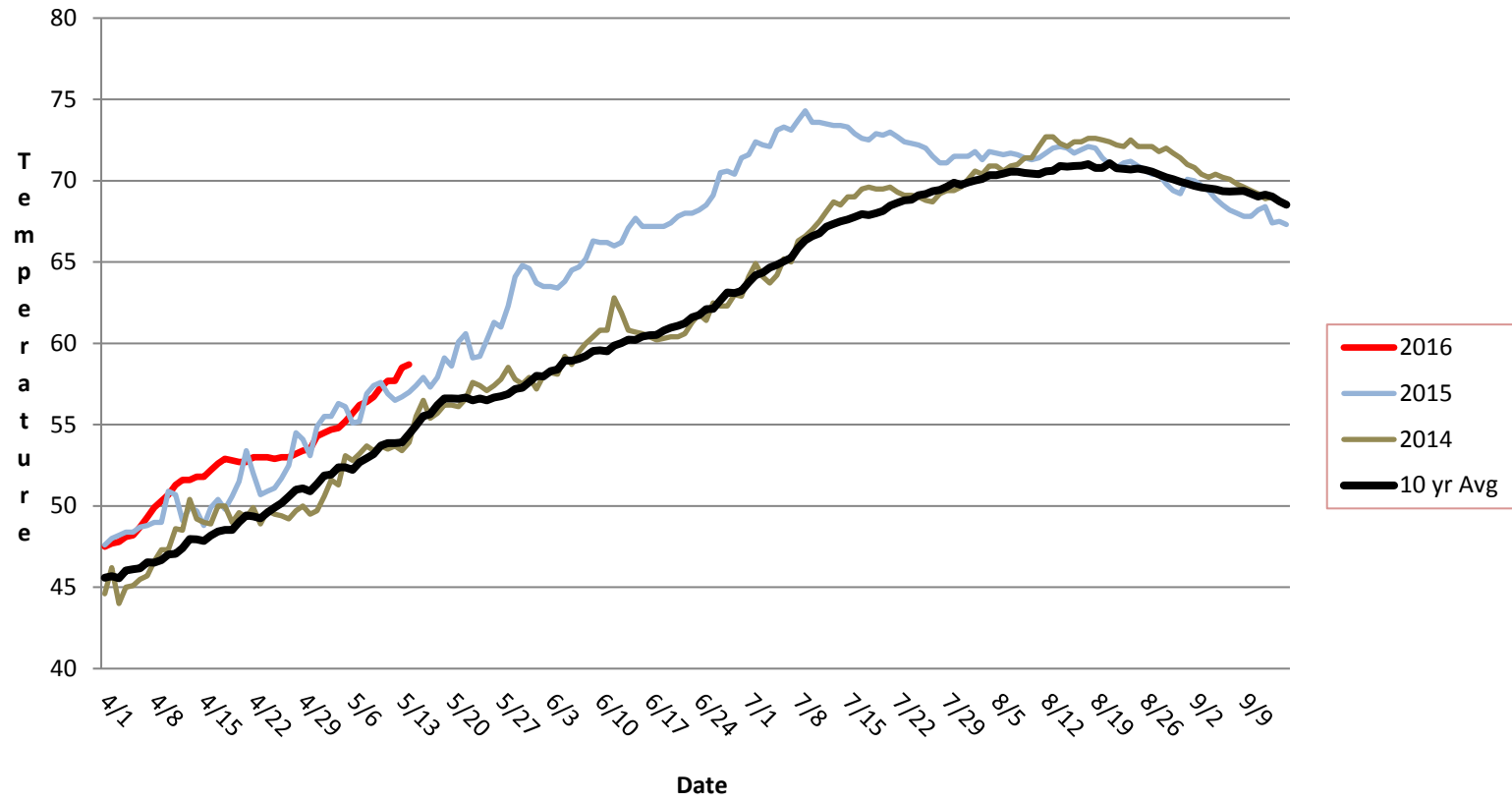
MOYNAHAN, KEVIN, PATRICK, 1393959157

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

Kevin Moynahan

OPM John Day/Willow Creek Project

# JDA SMF Water Temp



## JDA Collection Channel Velocity

Date 6-May-16

By: pr

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:53	53	3.40
2 - 4	1:35	95	4.29
4 - 6	2:24	144	3.67
6 - 8	3:11	191	3.83
8 - 10	4:02	242	3.53
10 - 12	4:48	288	3.91
12 - 14	5:36	336	3.75
14 - 16	6:24	384	3.75
16 - 18	7:09	429	4.00
			<b>3.79</b>

NE TW 163.2  
#2 RPM 62  
#3 RPM 62

**JDA Bird Counts: 5/1/16 to 5/7/16**

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)	
1-May	PHFB	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	37	33	0	0	77 0 0 5 4 0 1 31
1-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1-May	PH2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1-May	PH3	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1-May	SW2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1-May	SW3	14	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avg/Survey		21		4		0		0		0		0		0		0		35		0		118
2-May	PHFB	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	34	34	0	0	71 0 0 1 9 0 5 35
2-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-May	PH2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-May	PH3	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-May	SW2	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2-May	SW3	12	21	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
Avg/Survey		24		2		1		0		0		0		1		0		34		0		121
3-May	PHFB	0	0	3	6	0	0	0	0	0	0	0	0	0	0	0	0	34	27	0	0	70 0 0 0 6 0 0 13
3-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3-May	PH3	0	5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
3-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3-May	SW3	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avg/Survey		9		5		0		0		0		0		1		0		31		0		89
4-May	PHFB	0	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	42	29	0	0	78 1 0 4 4 0 4 10
4-May	SWFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4-May	PH2	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4-May	PH3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4-May	SW2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4-May	SW3	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Avg/Survey		8		7		0		0		0		0		0		0		36		0		101

**JDA Bird Counts: 5/1/16 to 5/7/16**  
 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)	
5-May	PHFB	4	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	41	31	0	0	81
5-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-May	SW3	0	0	8	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
<b>Avg/Survey</b>		<b>2</b>		<b>19</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>36</b>		<b>0</b>		<b>114</b>

6-May	PHFB	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	41	40	0	0	87
6-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-May	SW2	0	10	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
6-May	SW3	0	40	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43

<b>Avg/Survey</b>		<b>25</b>		<b>7</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>41</b>		<b>0</b>		<b>145</b>
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7-May	PHFB	0	0	1	3	0	1	0	0	0	0	0	0	0	0	0	0	30	28	0	0	63
7-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-May	SW3	0	55	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76

<b>Avg/Survey</b>		<b>28</b>		<b>13</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>29</b>		<b>0</b>		<b>139</b>
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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>232</b>	<b>110</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>2</b>	<b>0</b>	<b>481</b>	<b>0</b>	<b>827</b>						
<b>Avg/Survey</b>	<b>17</b>	<b>8</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>34</b>	<b>0</b>	<b>59</b>								

John Day Dam  
Avian Zones



## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
<b>Sun</b>	53	4.5	48
<b>Mon</b>	54	4.0	
<b>Tue</b>	54	4.0	44
<b>Wed</b>	55	5.0	
<b>Thur</b>	55	5.0	45
<b>Fri</b>	56	5.5	
<b>Sat</b>	56	5.5	66
<b>AVG:</b>	55	4.8	51
			MAX 66
			MIN 44

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
<b>Sun</b>	9.9	9.9	1.2	9.4	1.5	4.5	1.6
<b>Sun</b>	10.2	10.2	1.3	9.8	1.5	4.6	1.6
<b>Mon</b>	10.0	10.0	1.4	9.5	1.6	4.6	1.5
<b>Mon</b>	9.9	9.9	1.3	9.0	1.4	4.6	1.6
<b>Tues</b>	9.6	9.6	1.4	9.2	1.5	4.5	1.6
<b>Tues</b>	10.9	10.9	1.4	8.9	1.4	4.6	1.5
<b>Wed</b>	10.4	10.5	1.7	8.3	1.4	4.6	1.2
<b>Wed</b>	10.3	10.3	1.4	8.1	1.5	4.7	1.2
<b>Thur</b>	11.1	11.1	1.3	9.1	1.4	4.6	1.1
<b>Thur</b>	11.3	11.3	1.4	8.3	1.5	4.5	1.1
<b>Fri</b>	9.7	9.8	1.7	8.7	1.4	4.6	1.7
<b>Fri</b>	9.7	9.8	1.5	8.8	1.5	4.5	1.7
<b>Sat</b>	8.6	8.7	1.9	8.2	1.6	4.6	1.8
<b>Sat</b>	9.5	9.6	1.7	9.0	1.3	4.6	1.5
<b>AVG:</b>	<b>10.1</b>	<b>10.1</b>	<b>1.5</b>	<b>8.9</b>	<b>1.5</b>	<b>4.6</b>	<b>1.5</b>