


# FISHWAY STATUS REPORT

**Date:** 6/4/2016  
**Inspection Period:** 5/29/2016 thru 6/4/2016



**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:	60 F
	Out of Criteria	Limit			Secchi:	6.0 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'	Changed to SHAD passage criterion of 1.3' on 6/01 PM			
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'	Changed to SHAD passage criterion of 1.3' on 6/01 AM			
South entrance differential	0	1.0' - 2.0'	AVG	1.3		
Entrance weir SE1	0	depth (≥ 8')	AVG	9.5		
Collection channel velocity	0	1.5 - 4 fps	AVG	3.49		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.5		
Entrance weir NE1	0	depth (≥ 8')	AVG	8.2		
Entrance weir NE2	0	depth (≥ 8')	AVG	8.3		
<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:   25                   MAX:   39                   MIN:   13

## 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:

**MU 15 STS OOS due to failed motor on 5/29; repaired and RTS by 5/31 AM.**

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. 344 fish removed by 5/29.

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

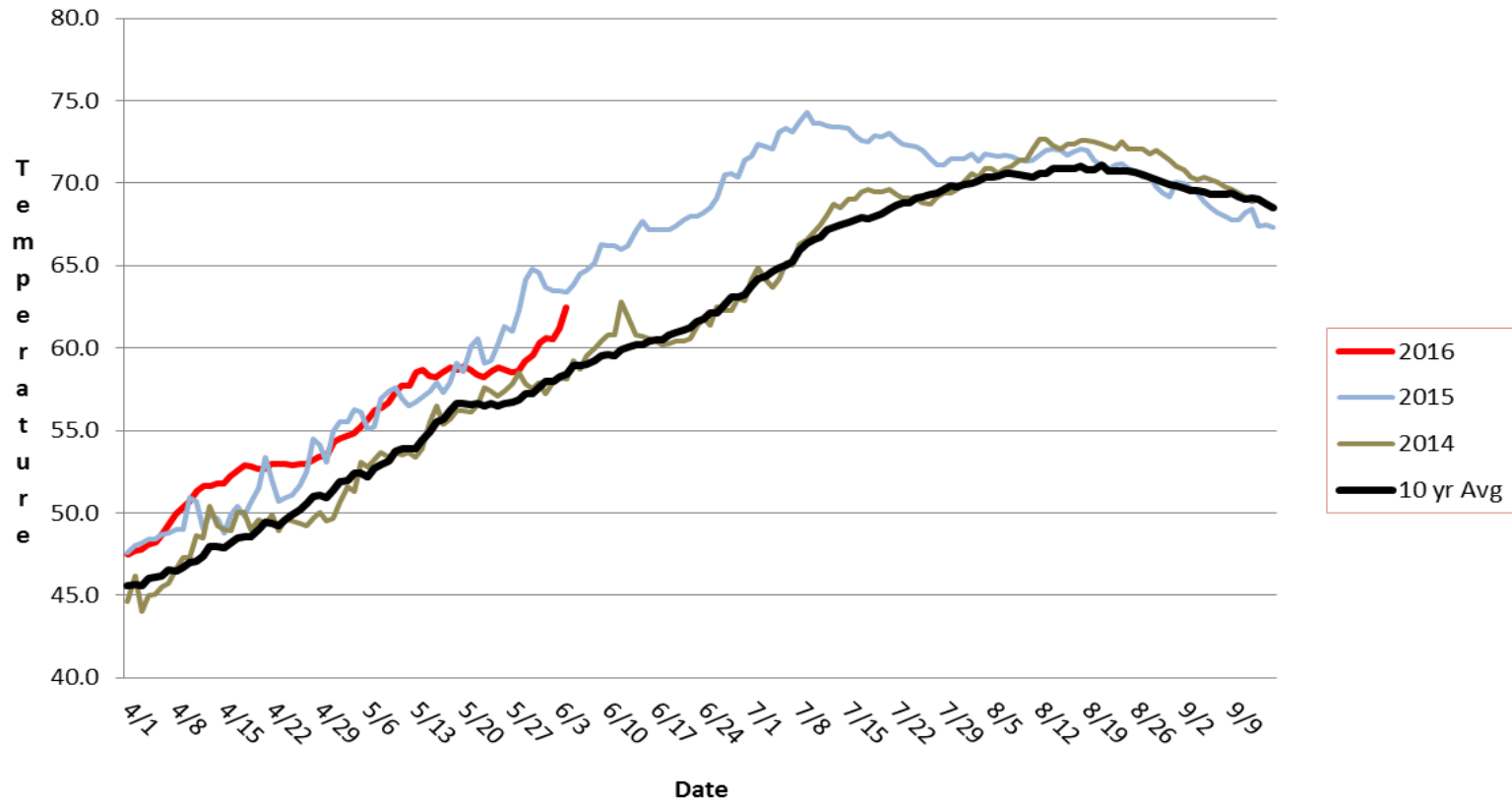
Adult Fish Counting by Normandeau Associates commenced on 1 April 2016.

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

<b>Date</b>	<i>4-Jun-16</i>
<b>By:</b>	<i>peet</i>

<b>Bay(s)</b>	<b>Time</b>	<b>Sec.</b>	<b>Velocity (f/s)</b>
<i>0-2</i>	<i>1:12</i>	<i>72</i>	<i>2.50</i>
<i>2 - 4</i>	<i>2:05</i>	<i>125</i>	<i>3.40</i>
<i>4 - 6</i>	<i>2:53</i>	<i>173</i>	<i>3.75</i>
<i>6 - 8</i>	<i>3:42</i>	<i>222</i>	<i>3.67</i>
<i>8 - 10</i>	<i>4:38</i>	<i>278</i>	<i>3.21</i>
<i>10 - 12</i>	<i>5:26</i>	<i>326</i>	<i>3.75</i>
<i>12 - 14</i>	<i>6:15</i>	<i>375</i>	<i>3.67</i>
<i>14 - 16</i>	<i>7:07</i>	<i>427</i>	<i>3.46</i>
<i>16 - 18</i>	<i>7:52</i>	<i>472</i>	<i>4.00</i>
			<b>3.49</b>

<b>TW</b>	<b>161.5</b>
<b>#1 RPM</b>	<b>59</b>
<b>#2 RPM</b>	<b>60</b>

**JDA Bird Counts: 5/29/16 to 6/4/16**

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)		
29-May	PHFB	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	33	39	0	0	<b>78</b>	
29-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
29-May	PH1	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>8</b>
29-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
29-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
29-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
29-May	SW2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>1</b>
29-May	SW3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>6</b>
<b>Avg/Survey</b>		<b>8</b>	<b>3</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>0</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>93</b>		
30-May	PHFB	0	0	3	2	0	0	0	0	0	0	0	0	1	0	0	0	43	38	0	0	<b>87</b>	
30-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
30-May	PH1	6	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0		<b>13</b>
30-May	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0		<b>4</b>
30-May	PH3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>2</b>
30-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
30-May	SW2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>1</b>
30-May	SW3	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>7</b>
<b>Avg/Survey</b>		<b>10</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>114</b>		
31-May	PHFB	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	41	40	0	0	<b>84</b>	
31-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
31-May	PH1	5	4	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	0		<b>15</b>
31-May	PH2	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0		<b>3</b>
31-May	PH3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>1</b>
31-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
31-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0		<b>1</b>
31-May	SW3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0		<b>1</b>
<b>Avg/Survey</b>		<b>6</b>	<b>2</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>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>105</b>		
1-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	20	0	0	<b>45</b>	
1-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
1-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
1-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
1-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
1-Jun	SW1	5	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>15</b>
1-Jun	SW2	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0		<b>4</b>
1-Jun	SW3	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>5</b>
<b>Avg/Survey</b>		<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>69</b>		

**JDA Bird Counts: 5/29/16 to 6/4/16**

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)		
2-Jun	PHFB	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20	27	0	0	<b>49</b>	
2-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
2-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
2-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
2-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
2-Jun	SW1	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>22</b>
2-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
2-Jun	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
<b>Avg/Survey</b>		<b>6</b>		<b>7</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>24</b>		<b>0</b>		<b>71</b>	
3-Jun	PHFB	0	0	2	11	0	0	0	0	0	0	0	0	0	0	0	0	28	11	0	0	<b>52</b>	
3-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
3-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
3-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
3-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
3-Jun	SW1	10	11	0	0	0	0	0	0	0	0	0	0	4	5	0	0	0	0	0	0		<b>30</b>
3-Jun	SW2	0	5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0		<b>6</b>
3-Jun	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
<b>Avg/Survey</b>		<b>13</b>		<b>7</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>5</b>		<b>0</b>		<b>20</b>		<b>0</b>		<b>88</b>	
4-Jun	PHFB	0	0	8	16	0	0	0	0	0	0	0	0	0	0	0	0	17	16	0	0	<b>57</b>	
4-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
4-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
4-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
4-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		<b>0</b>
4-Jun	SW1	8	8	0	0	0	0	0	0	0	0	0	0	6	4	0	0	0	0	0	0		<b>26</b>
4-Jun	SW2	0	5	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0		<b>7</b>
4-Jun	SW3	0	1	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	0		<b>10</b>
<b>Avg/Survey</b>		<b>11</b>		<b>12</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>11</b>		<b>0</b>		<b>17</b>		<b>0</b>		<b>100</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>127</b>		<b>64</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>51</b>		<b>0</b>		<b>398</b>		<b>0</b>			<b>640</b>
<b>Avg/Survey</b>		<b>9</b>		<b>5</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>4</b>		<b>0</b>		<b>28</b>		<b>0</b>		<b>46</b>	

John Day Dam  
Avian Zones



## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	59	6.0	21
Mon	59	6.0	
Tue	60	6.0	39
Wed	60	6.0	
Thur	61	6.0	13
Fri	61	6.0	
Sat	62	6.0	28
<b>AVG:</b>	<b>60</b>	<b>AVG: 6.0</b>	<b>AVG 25</b>
			<b>MAX 39</b>
			<b>MIN 13</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.1	8.1	1.3	9.9	1.6	4.5	1.6
Sun	8.0	8.2	1.2	9.8	1.6	4.6	1.6
Mon	8.2	8.2	1.3	10.0	1.6	4.6	1.5
Mon	8.0	8.2	1.4	10.0	1.5	4.6	1.7
Tues	8.0	8.0	1.3	9.9	1.6	4.5	1.7
Tues	8.4	8.4	1.3	10.0	1.5	4.6	1.6
Wed	8.2	8.2	1.1	9.9	1.6	4.6	1.5
Wed	8.2	8.4	1.5	9.5	1.5	4.6	1.5
Thur	8.1	8.2	1.3	8.4	1.6	4.6	1.3
Thur	8.3	8.2	1.5	9.5	1.4	4.5	1.4
Fri	8.2	8.3	1.1	8.6	1.4	4.7	1.5
Fri	8.9	8.8	1.4	8.9	1.4	4.6	1.3
Sat	8.4	8.3	1.5	8.5	1.4	4.6	1.4
Sat	8.4	8.4	1.2	10.3	1.5	4.7	1.4
<b>AVG:</b>	<b>8.2</b>	<b>8.3</b>	<b>1.3</b>	<b>9.5</b>	<b>1.5</b>	<b>4.6</b>	<b>1.5</b>