

# FISHWAY STATUS REPORT

Date: 9/17/2016  
 Inspection Period: 9/11/2016 thru 9/17/2016



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:	68 F
	Out of Criteria	Limit			Secchi:	6.0 Ft.
<b>NORTH FISHWAY</b>			In service; 6 AWS pumps 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	1.5		
<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	1.4		
Entrance weir SE1	0	depth (≥ 8')	AVG	8.6		
Collection channel velocity	0	1.5 - 4 fps	AVG	3.42		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.4		
Entrance weir NE1	2	depth (≥ 8')	AVG	8.1		
Entrance weir NE2	1	depth (≥ 8')	AVG	8.1		
<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	STS camera insp. completed on 8/25. Three bad screens replaced with working spares.			
Turbine trashrack drawdown	0	<1.5', wkly	Monthly raking completed by 9/01; very light river debris loads.			
Vert barrier screen drawdown	0	<1.5', wkly				
Spill volume	0	N/A	2016 Spill season ended 9/1. Bay 2 continues open 1.6 Kcfs for N ladder attraction water			
Spill pattern	0	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

## SMOLT MONITORING FACILITY

### Operation:

Sampling season ended on 9/15; SMF will continue in bypass for the full flow PIT tags detections until 24 November.

### 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: MAX: 0 MIN: 0

### Birds :

see the Avian Numbers tab. No major avian presence/predation at JD since late August.

12 Navlock, 7 Spillway (#77 broke on 8/31), 6 Tower-to-Tower (three new broke on 8/28,) 1 PH (broke on 8/1) lines are missing out of 125 grid's total.

PDT will reinstall up to 15 critical, missing lines before May 2017; JD Fisheries believes that this will be sufficient for the Avian Grid to remain effective.

All missing lines will be reinstalled in Phase 2, in the fall of 2017.

### Operations:

SMF in bypass on 15 September

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: weekly or more frequently as necessary.

### Maintenance:

JD South Fishway AWS turbine 1 OOS long term due to failed pump's lower bearing.

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

### Research:

Washington F&W dam angling / NPM (pikeminnow) removal from JD PH tailrace continues since 5/10/16. 3,002 fish removed by 8/28/16.

Dam angling has been suspended since late August due to funding issues. Please, support this very well run and effective program to continue in September!

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

Adult Fish Counting by Normandeau Associates continues since 1 April 2016.

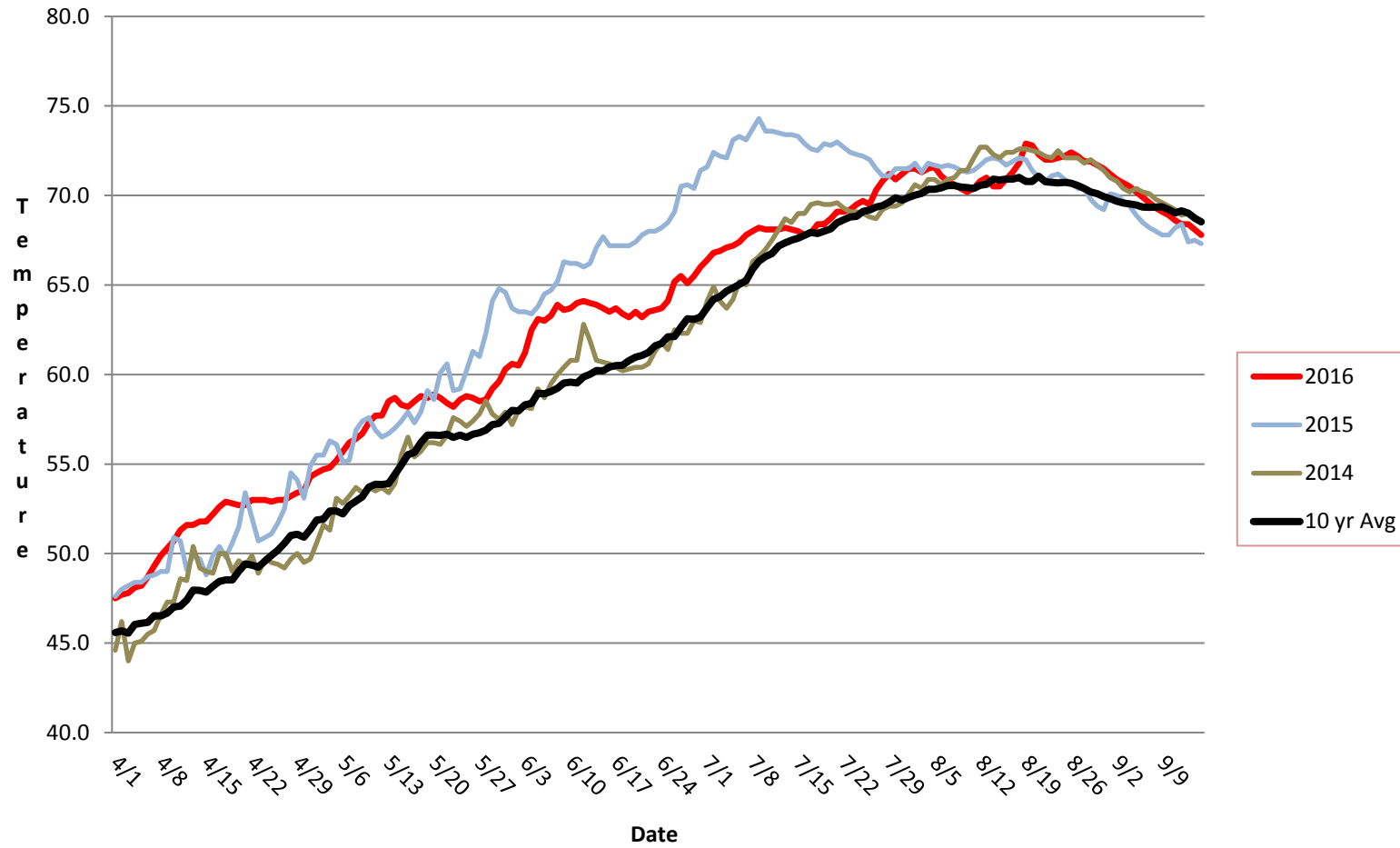
Adult PIT antennas PDT continues developing designs for the next winter outage's installation at both JD Fishways.

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>10-Sep-16</i>
<b>By:</b>	<i>MDL</i>

<b>Bay(s)</b>	<b>Time</b>	<b>Sec.</b>	<b>Velocity (f/s)</b>
<i>0-2</i>	<i>1:05</i>	<i>65</i>	<i>2.77</i>
<i>2 - 4</i>	<i>1:57</i>	<i>117</i>	<i>3.46</i>
<i>4 - 6</i>	<i>2:51</i>	<i>171</i>	<i>3.33</i>
<i>6 - 8</i>	<i>3:43</i>	<i>223</i>	<i>3.46</i>
<i>8 - 10</i>	<i>4:34</i>	<i>274</i>	<i>3.53</i>
<i>10 - 12</i>	<i>5:25</i>	<i>325</i>	<i>3.53</i>
<i>12 - 14</i>	<i>6:17</i>	<i>377</i>	<i>3.46</i>
<i>14 - 16</i>	<i>7:10</i>	<i>430</i>	<i>3.40</i>
<i>16 - 18</i>	<i>7:57</i>	<i>477</i>	<i>3.83</i>
			<b>3.42</b>

TW	159.3
#2 RPM	60
#3 RPM	60

**JDA Bird Counts: 9/11/16 to 9/17/16**

F(1): Forage AM survey F(2): Forage PM Survey NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

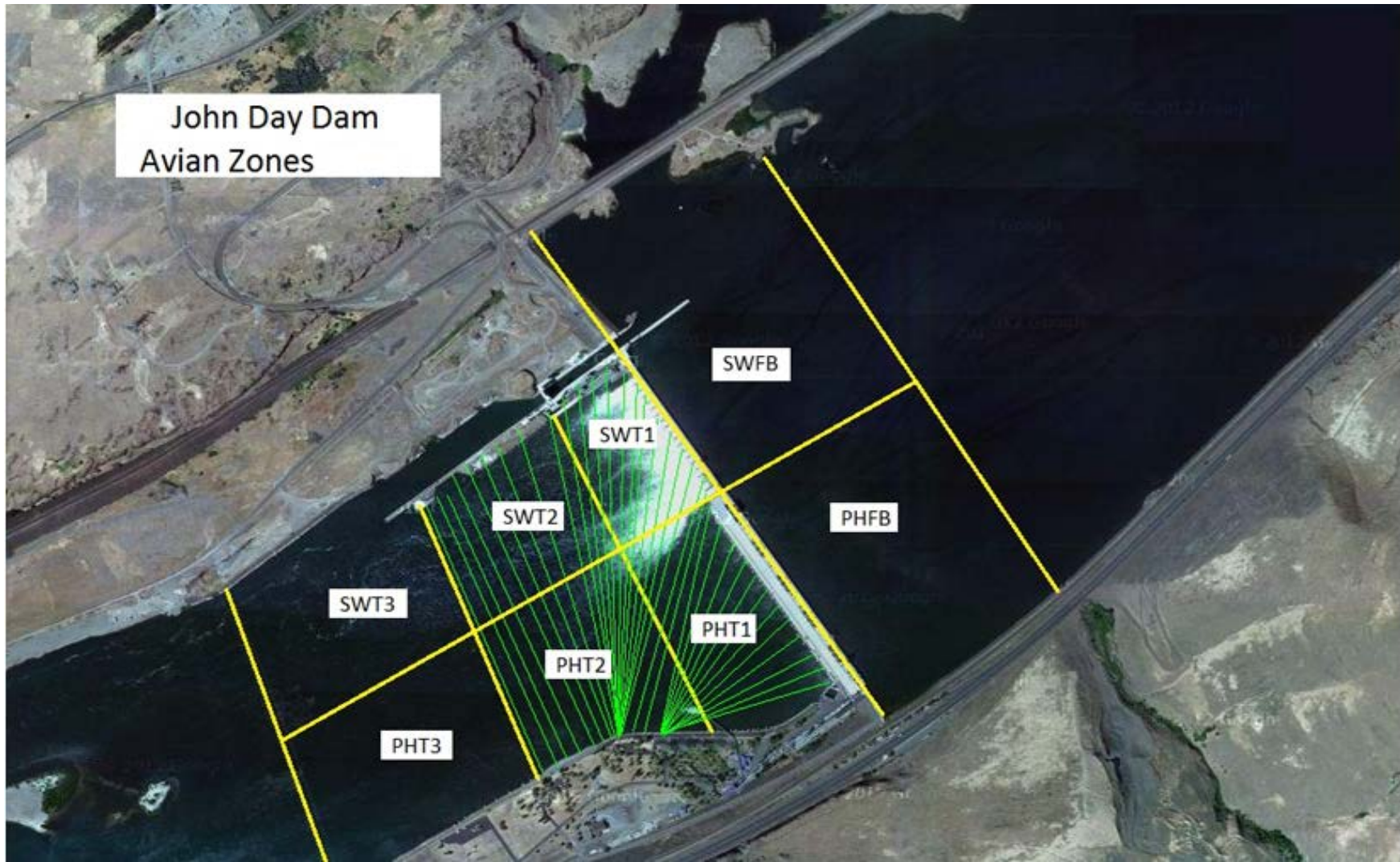
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
11-Sep	PHFB	0	0	2	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	29
11-Sep	SWFB	0	0	38	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
11-Sep	PH1	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Sep	PH3	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Sep	SW3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Avg/Survey		2		39		0		3		0		0		0		0		0		4		93
12-Sep	PHFB	0	0	0	0	0	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	12
12-Sep	SWFB	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
12-Sep	PH1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Sep	PH3	0	13	0	0	0	11	11	14	0	0	0	0	0	0	0	2	0	0	0	0	51
12-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Sep	SW3	0	14	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
Avg/Survey		14		30		6		19		0		0		0		1		0		0		138
13-Sep	PHFB	0	0	0	31	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	43
13-Sep	SWFB	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
13-Sep	PH1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
13-Sep	PH2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
13-Sep	PH3	9	3	0	0	0	0	12	17	0	0	0	0	0	0	0	0	0	0	0	0	41
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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13-Sep	SW3	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Avg/Survey		8		37		0		21		0		0		0		0		0		0		131
14-Sep	PHFB	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Sep	PH3	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
14-Sep	SW1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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		7		0		1		1		0		0		0		0		0		0		16

**JDA Bird Counts: 9/11/16 to 9/17/16**

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)	
15-Sep	PHFB	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
15-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Sep	PH3	8	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
15-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	25	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
<b>Avg/Survey</b>		<b>29</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>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>59</b>	
16-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Sep	PH3	12	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
16-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
16-Sep	SW2	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	16
16-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>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</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>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34</b>	
17-Sep	PHFB	0	0	0	0	0	0	13	11	0	0	0	0	0	0	0	0	0	0	0	23	47
17-Sep	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Sep	PH2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
17-Sep	PH3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
17-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
17-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>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</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>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>62</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>F</b>	<b>NF</b>	<b>NF</b>	<b>F</b>	<b>F</b>	<b>NF</b>	<b>NF</b>	<b>F</b>	<b>F</b>	<b>NF</b>	<b>NF</b>	<b>F</b>	<b>F</b>	<b>NF</b>	<b>NF</b>	<b>F</b>	<b>F</b>	<b>NF</b>	<b>NF</b>	
<b>Weekly Total</b>		<b>146</b>	<b>210</b>	<b>13</b>	<b>128</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>533</b>					
<b>Avg/Survey</b>		<b>10</b>	<b>15</b>	<b>1</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>0</b>	<b>0</b>	<b>2</b>	<b>38</b>						

John Day Dam  
Avian Zones



## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	69	6.0	
Mon	68	6.0	
Tue	68	6.0	
Wed	68	6.0	
Thur	68	6.0	
Fri	68	6.0	
Sat	67	6.0	
<b>AVG:</b>	<b>68</b>	<b>6.0</b>	<b>AVG</b>
			<b>MAX</b>
			<b>MIN</b>
			<b>0</b>
			<b>0</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.3	8.3	1.4	8.3	1.6	4.6	1.1
Sun	8.1	8.2	1.4	8.2	1.4	4.5	1.2
Mon	8.0	8.0	1.3	8.6	1.5	4.6	1.3
Mon	8.0	8.0	1.5	8.1	1.4	4.6	1.4
Tues	8.0	8.0	1.8	8.5	1.6	4.7	1.5
Tues	7.9	8.0	1.5	8.9	1.5	4.6	1.3
Wed	8.1	8.1	1.3	8.8	1.5	4.5	1.6
Wed	8.4	8.4	1.3	9.2	1.6	4.6	1.6
Thur	8.0	8.1	1.4	8.9	1.5	4.5	1.4
Thur	8.1	8.2	1.4	8.9	1.5	4.5	1.4
Fri	7.8	7.7	1.3	8.3	1.6	4.6	1.5
Fri	8.0	8.2	1.3	9.3	1.5	4.6	1.5
Sat	8.0	8.0	1.4	8.3	1.6	4.5	1.4
Sat	8.1	8.1	1.4	8.2	1.5	4.6	1.3
<b>AVG:</b>	<b>8.1</b>	<b>8.1</b>	<b>1.4</b>	<b>8.6</b>	<b>1.5</b>	<b>4.6</b>	<b>1.4</b>