


# FISHWAY STATUS REPORT

Date: 7/9/2016  
 Inspection Period: 7/3/2016 thru 7/9/2016



**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:	67 F
	Out of Criteria	Limit				
<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	Mid setting since 6/15 necessary to reduce sockeye fall back through CS			
Count station differential	0	≤ 0.3'				
Weir crest depth (DS gauge)	0	1.3' ± 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	1.3' ± 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	8.9		
Collection channel velocity	0	1.5 - 4 fps	AVG	3.39		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.3		
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	Torn VBS MU 16 was repaired on 6/20 and the unit returned to service on 6/21			
Turbine trashrack drawdown	0	<1.5', wkly	Monthly raking per FPP requirements during the week of 6/23, light 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:   62                   MAX:   86                   MIN:   51

### Birds :

see the Avian Numbers tab. Until this year, our internal focus had been on gulls in the tailrace BRZ, but the white pelicans are catching up quickly. Up to 50 white pelicans per inspection observed deep inside of the tailrace BRZ floating/feeding on the south edge of TWS flow. USDA has no permission to haze them. They appeared in the tailrace BRZ much earlier and in higher abundance this year and it seems their local population has been expanding rapidly in the last few years. FPOM needs to determine if they are a serious concern for juvenile salmonids(?)

12 Navlock, 3 Spillway, 3 Tower-to-Tower (# 12 broke on 6/15/16) lines are missing out of 125 grid's total; no funding is available to reinstall for 2016 season.

UFR for \$ 250K is pending. No increase in gull predation due to the missing lines/large gaps in the tailrace Avian Array so far.

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 continues since 4/29/16.

### 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 11 dewatering: scroll case on 6/22- 1 crappie & draft tube on 6/22- 2 small sturgeon and 8 cats; all released in excellent condition.

MU 3 emergency dewatering: scroll case on 6/24- no fish found & draft tube on 6/27- 1 small sturgeon and 60 cats, mid size, all in excellent condition.

MU16 torn VBS repaired on 6/20 and the turbine returned to service on 6/21. No evidence of injured fish or mortalities found.

JD North Fishway 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's NPM (pikeminnow) removal from JD PH tailrace continues since 5/10/16. 1,098 fish removed by 6/19/16.

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

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

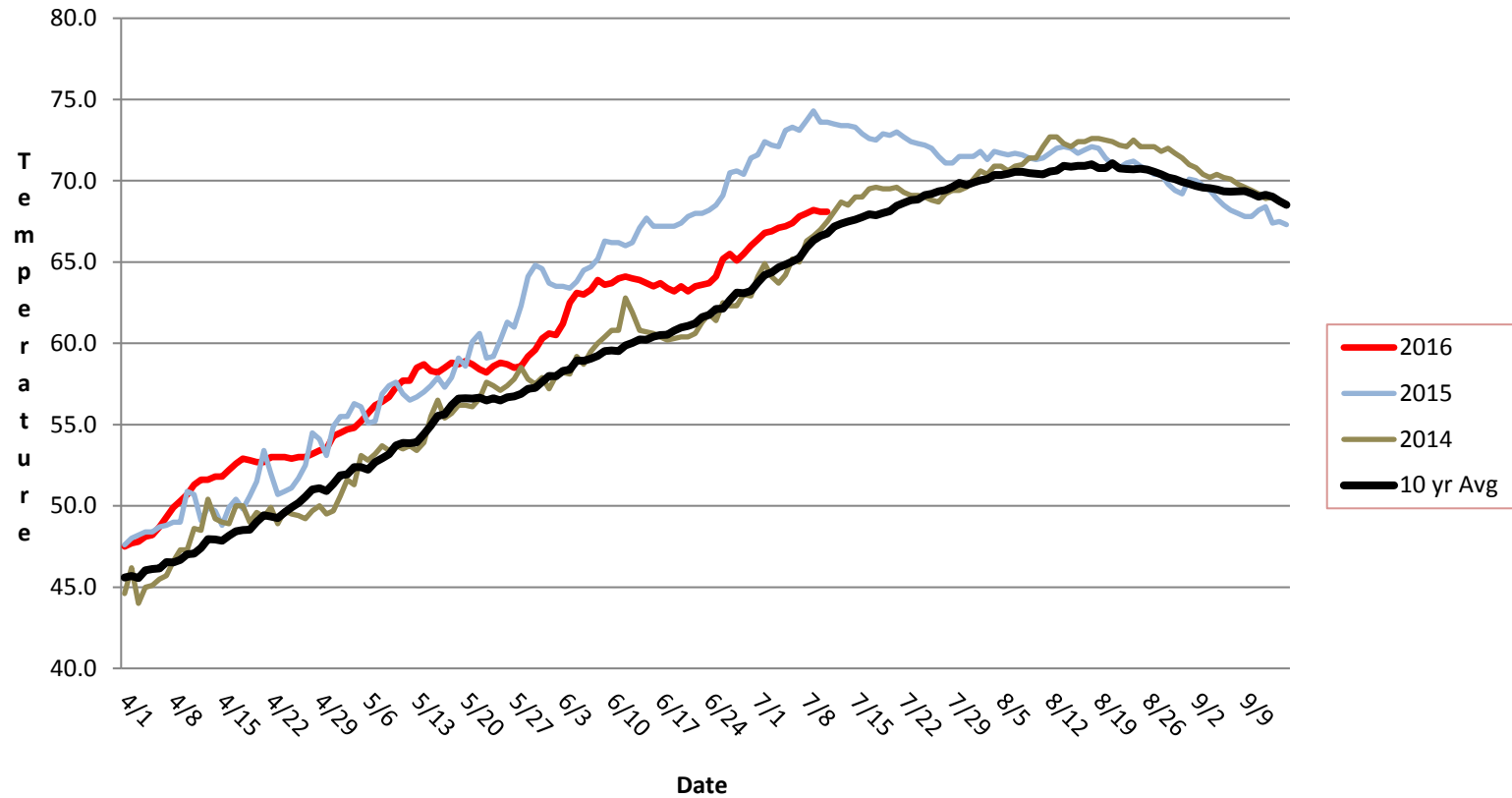
Adult PIT antennas PDT developing designs for the next winter outage's installation.

Kevin Moynahan

OPM John Day/Willow Creek Project

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

### JDA SMF Water Temp



## JDA Collection Channel Velocity

Date	9-Jul-16
By:	pr

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:01	61	2.95
2 - 4	1:50	110	3.67
4 - 6	2:42	162	3.46
6 - 8	3:33	213	3.53
8 - 10	4:32	272	3.05
10 - 12	5:23	323	3.53
12 - 14	6:17	377	3.33
14 - 16	7:07	427	3.60
16 - 18	8:00	480	3.40
			<b>3.39</b>

TW            161.1  
#2 RPM       59  
#3 RPM       60

**JDA Bird Counts: 7/3/16 to 7/9/16**

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

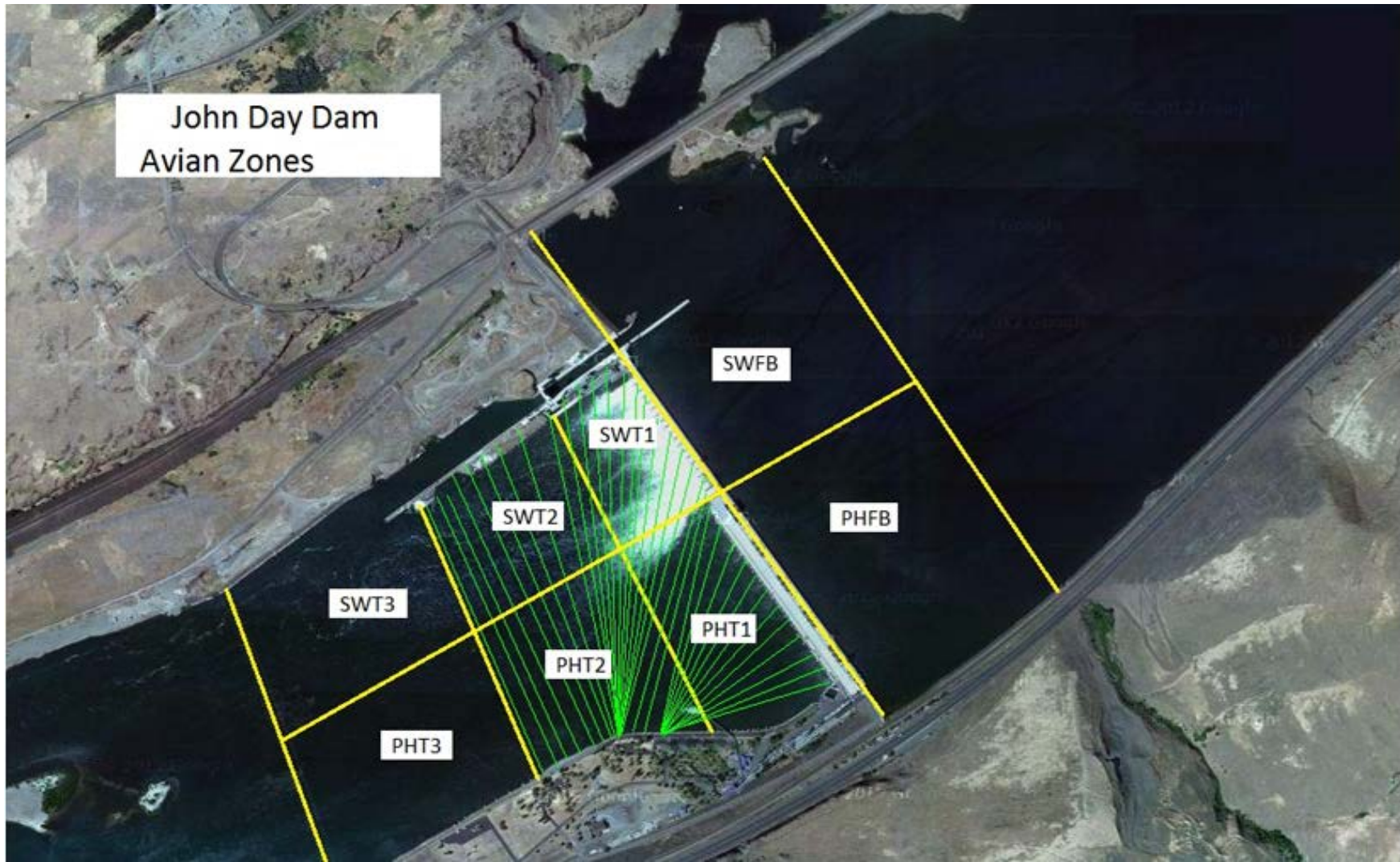
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
3-Jul	PHFB	0	0	3	11	0	0	0	0	0	0	0	0	3	0	0	0	3	3	0	0	23 0 0 0 0 69 44 10
3-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3-Jul	SW1	7	11	0	0	0	0	0	0	0	0	0	0	25	26	0	0	0	0	0	0	
3-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	22	22	0	0	0	0	0	0	
3-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	
Avg/Survey		9		7		0		0		0		0		54		0		3		0		146
4-Jul	PHFB	0	0	2	4	0	0	0	0	0	0	0	0	9	5	0	0	7	9	0	0	36 5 0 0 0 95 29 26
4-Jul	SWFB	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
4-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4-Jul	SW1	15	9	0	0	0	0	0	0	0	0	0	0	40	31	0	0	0	0	0	0	
4-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	0	
4-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	
Avg/Survey		12		5		0		0		0		0		71		0		8		0		191
5-Jul	PHFB	0	0	1	17	0	0	0	0	0	0	0	0	5	1	0	0	10	10	0	0	44 6 0 0 0 116 40 45
5-Jul	SWFB	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5-Jul	SW1	7	7	0	0	0	0	0	0	0	0	0	0	70	32	0	0	0	0	0	0	
5-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	
5-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	45	0	0	0	0	0	0	0	
Avg/Survey		7		12		0		0		0		0		97		0		10		0		251
6-Jul	PHFB	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	16	12	0	0	32 0 0 0 0 93 30 78
6-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6-Jul	SW1	0	2	0	0	0	0	0	0	0	0	0	0	54	37	0	0	0	0	0	0	
6-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	
6-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	54	24	0	0	0	0	0	0	
Avg/Survey		1		2		0		0		0		0		100		0		14		0		233

**JDA Bird Counts: 7/3/16 to 7/9/16**

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)	
7-Jul	PHFB	0	0	4	1	0	0	0	0	0	0	0	0	5	2	0	0	7	6	0	0	25
7-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jul	SW1	2	2	0	0	0	0	0	0	0	0	0	0	32	32	0	0	0	0	0	0	68
7-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	52	0	0	0	0	0	0	0	52
7-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10
<b>Avg/Survey</b>		<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>67</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>155</b>	
8-Jul	PHFB	0	0	1	17	0	0	0	0	0	0	0	0	4	0	0	0	9	9	0	0	40
8-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Jul	SW1	0	7	0	0	0	0	0	0	0	0	0	0	38	22	0	0	0	0	0	0	67
8-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	12	35	0	0	0	0	0	0	47
8-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	12	7	0	0	0	0	0	0	19
<b>Avg/Survey</b>		<b>4</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>65</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>173</b>	
9-Jul	PHFB	0	0	2	5	0	0	0	0	0	0	0	0	2	2	0	0	8	5	0	0	24
9-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Jul	SW1	0	14	0	0	0	0	0	0	0	0	0	0	24	20	0	0	0	0	0	0	58
9-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	60	11	0	0	0	0	0	0	71
9-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	20	7	0	0	0	0	0	0	27
<b>Avg/Survey</b>		<b>7</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>73</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>180</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>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>83</b>	<b>81</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1051</b>	<b>0</b>	<b>114</b>	<b>0</b>	<b>114</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>1329</b>		
<b>Avg/Survey</b>		<b>6</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>75</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>95</b>		

John Day Dam  
Avian Zones



## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	67	6.0	56
Mon	67	6.0	
Tue	67	6.0	56
Wed	67	6.0	
Thur	67	6.0	86
Fri	68	6.0	
Sat	68	6.0	51
<b>AVG:</b>	<b>67</b>	<b>AVG: 6.0</b>	<b>AVG 62</b>
			<b>MAX 86</b>
			<b>MIN 51</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.2	8.4	1.3	9.3	1.4	4.6	1.3
Sun	8.0	8.0	1.3	9.1	1.5	4.6	1.0
Mon	8.3	8.5	1.2	9.2	1.5	4.6	1.3
Mon	8.1	8.3	1.4	9.5	1.5	4.6	1.1
Tues	8.1	8.0	1.4	8.2	1.5	4.5	1.3
Tues	8.1	8.1	1.3	8.5	1.4	4.6	1.3
Wed	8.2	8.1	1.3	8.7	1.4	4.6	
Wed	8.1	8.0	1.3	8.6	1.5	4.5	1.4
Thur	8.3	8.5	1.4	8.7	1.6	4.5	1.5
Thur	8.4	8.6	1.2	9.3	1.5	4.5	1.1
Fri	8.2	8.2	1.0	9.0	1.5	4.6	1.1
Fri	8.1	8.3	1.3	8.5	1.4	4.5	1.2
Sat	8.3	8.6	1.2	9.6	1.4	4.6	1.5
Sat	8.2	8.1	1.3	8.5	1.5	4.6	1.2
<b>AVG:</b>	<b>8.2</b>	<b>8.3</b>	<b>1.3</b>	<b>8.9</b>	<b>1.5</b>	<b>4.6</b>	<b>1.3</b>