


# FISHWAY STATUS REPORT

**Date:** 5/17/2015  
**Inspection Period:** 5/10 thru 5/16/2015

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.



**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

John Day Dam	Inspections	Criteria	Total Number of Inspections:	Temperature:
	Out of Criteria	Limit	14	57 F
<b>NORTH FISHWAY</b>			5 out of 6 AWS pumps available since 12/23/14	
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 1.6	
<b>SOUTH FISHWAY</b>			3 AWS Turbines in regular service since 2/28/15	
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 8.6	
Collection channel velocity	0	1.5 - 4 fps	AVG 3.54	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.6	
Entrance weir NE1	0	depth (≥ 8')	AVG 8.9	
Entrance weir NE2	0	depth (≥ 8')	AVG 8.9	
<b>JUVENILE PASSAGE</b>			In regular service with all necessary STSs since 3/23	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect	Next monthly STS underwater camera inspection is scheduled for the third week of May	
Turbine trashrack drawdown	0	<1.5', wkly	Next monthly trashrack raking scheduled for the fourth week of May	
Vert barrier screen drawdown	0	<1.5', wkly		
Spill volume	0	30/40 %	Fish spill and TSWs started up on 4/10/15 per FOP	
Spill pattern	0	per FPP	Per 2015 FOP	
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

## SMOLT MONITORING FACILITY

### Operation:

SMF in sampling mode since 3/31 AM. 24 hrs/ 7 days a week sampling by PSMFC as required by FPP.

JD Fisheries crew continues 24/7 swing shift schedule as required by FPP; it will continue this until the end of sampling season on 9/15.

Debris load: almost nada/ zip :)

### Maintenance:

All devices working well without any issues at this time

### Research:

None

**Fallbacks:**           AVG:   27                   MAX:   33                   MIN:   17

## 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.

USADA avian hazing from a boat began 4/16. Typical hazing shifts are 06:00 - 14:30 and as there are almost no gulls inside or even near of BRZ during that time.

But their afternoon presence has been steadily increasing ; the number of gulls has reached up to 100, mostly on the edge of avian grid this week.

### Operations:

JD North Fishway in regular service; 5 out of 6 AWS pumps are available. Repair work on pump 4 continues; pump 3 has vibration issues and should be the last in service.

JBS in regular service since 3/27.

JD South Fishway in regular service with 3 AWS Turbines; it is meeting the optimal FPP criteria.

MU Gatewell Drawdowns: Differentials are checked Wednesdays and Sundays; all gatewells were in criteria.

### Maintenance:

JD North AWS pumps: five out of total six are available. Repair of AWS pump # 4 by a contractor started on 1/26 & is ongoing.

JD Maintenance has been investigating two failed AC units at JD N AWS Pumps' Substation. AC is expected to be restored in house, within a few days but a service contract might be necessary for a long term reliability. **One AC unit was repaired in-house by JD Maintenance and returned to service on 5/19 !**

Leaking air cylinder was replaced by JD Structural at orifice 11c on 5/13.

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

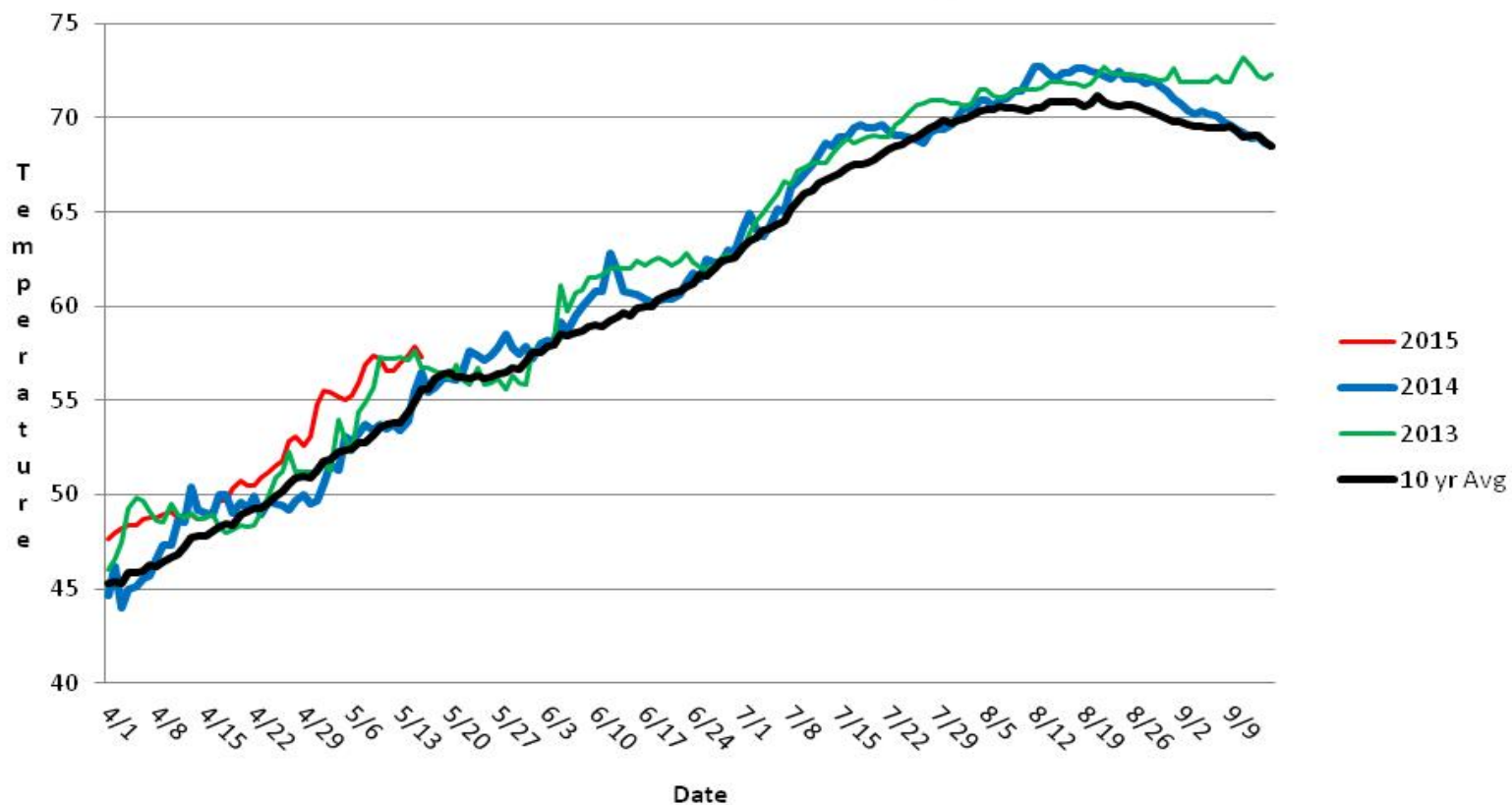
### Research:

2015 Adult Fish Counting by Normandeau Associates commenced on 1 April, 2015.

Proposal by PSMFC to install Adult PIT antennas at both JD Fishways is pending; possible installation during the next winter maintenance season 2015/16.

JD North LPS monitoring by FFU crew began Monday, 5/4. Collected lamprey will be released into forebay.

### JDA SMF Water Temp



## JDA Collection Channel Velocity

Date 7-May-15

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:05	65	2.77
2 - 4	1:55	115	3.60
4 - 6	2:45	165	3.60
6 - 8	3:37	217	3.46
8 - 10	4:29	269	3.46
10 - 12	5:20	320	3.53
12 - 14	6:16	376	3.21
14 - 16	7:09	429	3.40
16 - 18	7:46	466	4.86
			<b>3.54</b>

**JDA Bird Counts: 5/10/15 to 5/16/15**

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)	
10-May	PHFB	0	0	1	2	0	0	1	0	0	0	0	0	0	0	0	0	39	32	0	0	<b>75</b>
10-May	SWFB	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>3</b>
10-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
10-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>
10-May	PH3	0	36	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>42</b>
10-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>
10-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
10-May	SW3	9	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>13</b>
<b>Avg/Survey</b>		<b>25</b>	<b>6</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>36</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>133</b>	
11-May	PHFB	3	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	28	0	0	<b>42</b>
11-May	SWFB	2	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>14</b>
11-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
11-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>
11-May	PH3	8	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>15</b>
11-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>
11-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
11-May	SW3	2	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>11</b>
<b>Avg/Survey</b>		<b>25</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>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>82</b>	
12-May	PHFB	0	0	3	8	0	0	0	0	0	0	0	0	0	0	0	0	48	27	0	0	<b>86</b>
12-May	SWFB	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>6</b>
12-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
12-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>
12-May	PH3	0	16	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>28</b>
12-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>
12-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
12-May	SW3	0	3	4	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>13</b>	<b>14</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>38</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>127</b>	
13-May	PHFB	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7	6	49	50	<b>119</b>
13-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	<b>2</b>
13-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
13-May	PH2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>4</b>
13-May	PH3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>3</b>
13-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>
13-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
13-May	SW3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>2</b>
<b>Avg/Survey</b>		<b>5</b>	<b>4</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>8</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>130</b>	

**JDA Bird Counts: 5/10/15 to 5/16/15**

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)	
14-May	PHFB	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	12	2	42	4	67	
14-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-May	PH2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
14-May	PH3	8	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
14-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-May	SW3	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Avg/Survey		19		4		0		0		0		0		0		0		7		23		104
15-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	7	45	38	95	
15-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-May	PH2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
15-May	PH3	15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
15-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-May	SW3	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Avg/Survey		19		0		0		0		0		0		0		0		6		42		133
16-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	51	51	112	
16-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-May	PH1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16-May	PH2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
16-May	PH3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
16-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-May	SW2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
16-May	SW3	26	16	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	46
Avg/Survey		29		0		0		0		0		0		2		0		5		51		174
<b>Totals</b>		Gulls		Cormorant		Caspian tern		White Pelican		Grebe		Total										
		F	NF	F	NF	F	NF	F	NF	F	NF	F	NF									
<b>Weekly Total</b>		265	57	0	1	0	0	4	0	226	330	883										
<b>Avg/Survey</b>		19	4	0	0	0	0	0	0	16	24	63										

John Day Dam  
Avian Zones



## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	57	6.0	24
Mon	57	5.8	17
Tues	57	5.4	19
Wed	57	5.5	30
Thur	57	5.5	33
Fri	57	5.5	33
Sat	57	5.5	32
<b>AVG:</b>	<b>57</b>	<b>AVG: 5.6</b>	<b>AVG 27</b>
			<b>MAX 33</b>
			<b>MIN 17</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.2	9.0	1.6	8.3	1.6	4.6	1.3
Sun	8.5	8.4	1.7	8.4	1.6	4.6	1.6
Mon	8.9	8.9	1.4	9	1.4	4.6	1.5
Mon	9.0	8.8	1.7	8.2	1.6	4.6	1.8
Tues	9.4	9.2	1.6	8.6	1.5	4.5	1.6
Tues	9.4	9.3	1.6	8.1	1.6	4.5	1.8
Wed	8.1	8.1	1.4	8.5	1.6	4.6	1.5
Wed	8.4	8.4	1.5	8.4	1.6	4.5	1.7
Thur	9.5	9.5	1.4	9.5	1.4	4.6	1.6
Thur	10.2	10.2	1.3	8.4	1.6	4.5	1.7
Fri	8.5	8.5	1.6	8.5	1.6	4.5	1.8
Fri	8.6	8.6	1.6	9.1	1.5	4.5	1.7
Sat	8.8	8.7	1.7	8.8	1.5	4.6	1.7
Sat	8.3	8.3	1.3	8.8	1.6	4.6	1.7
<b>AVG:</b>	<b>8.9</b>	<b>8.9</b>	<b>1.5</b>	<b>8.6</b>	<b>1.6</b>	<b>4.6</b>	<b>1.6</b>