


# FISHWAY STATUS REPORT

**Date:** 1/2/2016  
**Inspection Period:** 12/27/2015 thru 1/2/2016



**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

One inspection per day during the winter maintenance season, 1 December - 28 February.  
Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspections	Criteria	Total Number of Inspections:	7	Temperature:	46 F
	Out of Criteria	Limit	Secchi: 6.0 Ft.			
<b>NORTH FISHWAY</b>			OOS for winter maintenance since 12/1. ETR is the week of 12/28/15.			
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	oos		
<b>SOUTH FISHWAY</b>			3 AWS Turbines in regular service			
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	9.8		
Collection channel velocity	0	1.5 - 4 fps	AVG	3.04		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.3		
Entrance weir NE1	0	depth (≥ 8')	AVG	8.1		
Entrance weir NE2	0	depth (≥ 8')	AVG	8.0		
<b>JUVENILE PASSAGE</b>			SMF OOS since 11/24. JBS in service until 12/16 & all STSs are removed.			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.6		
Submersible traveling screens	0	visual inspect	All STSs had been removed by 12/30/15; their winter maintenance is underway			
Turbine trashrack drawdown	0	<1.5', wkly	MU trashracks' raking as necessary per the differentials			
Vert barrier screen drawdown	0	<1.5', wkly				
Spill volume	0	per FPP	Spill season ended on 9/1.			
Spill pattern	0	per FPP	Spillway on seal since 11/30			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

## SMOLT MONITORING FACILITY

**Operation:**

End of season dewatering completed on 11/24.

SMF will be OOS/ undergoing maintenance until mid March'15. JBS continues in service in its pre-SMF configuration (bypass at Crest Gate.)

**Maintenance:**

SMF has been winterized by JD Fisheries on 11/15. Only regular PMs will be performed this coming winter as all SMF hardware appears to be in good working order overall. The elevated chute's expansion joints appear to be in good condition, but need the surface epoxy coating.

**Research:**

None

**Fallbacks:**                      AVG:    MAX:    0    MIN:    0

## 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.

10 Navlock and Spillway lines are missing out of 125 total; JD attempting to contract their reinstallation before May 2016; need \$...

Lines 25 and 26 have been reinstalled by a contractor by 11/21; the remaining lines have been retensioned under the same contract.

**Operations:**

JD North fishway upper was successfully dewatered on 12/1.

JD North entrance was dewatered/ inspected on 12/7; the gratings there continue in mint condition/ are rock solid. ETR for JDN is the week of 12/28.

JD South Fishway in regular service with 3 AWS Turbines; it is meeting the optimal FPP criteria. Its annual dewatering is scheduled for 1/11/16.

MU Gatewell Drawdowns: Complete for 2015 passage season.

**Maintenance:**

JD North Fishway's winter maintenance underway since 12/2. AWS pumps' contractor continues testing and repairing all six units.

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

**Research:**

2015 Adult Fish Counting by Normandeau Associates was completed on 10/31. The counting will commence again on 1 April 2016.

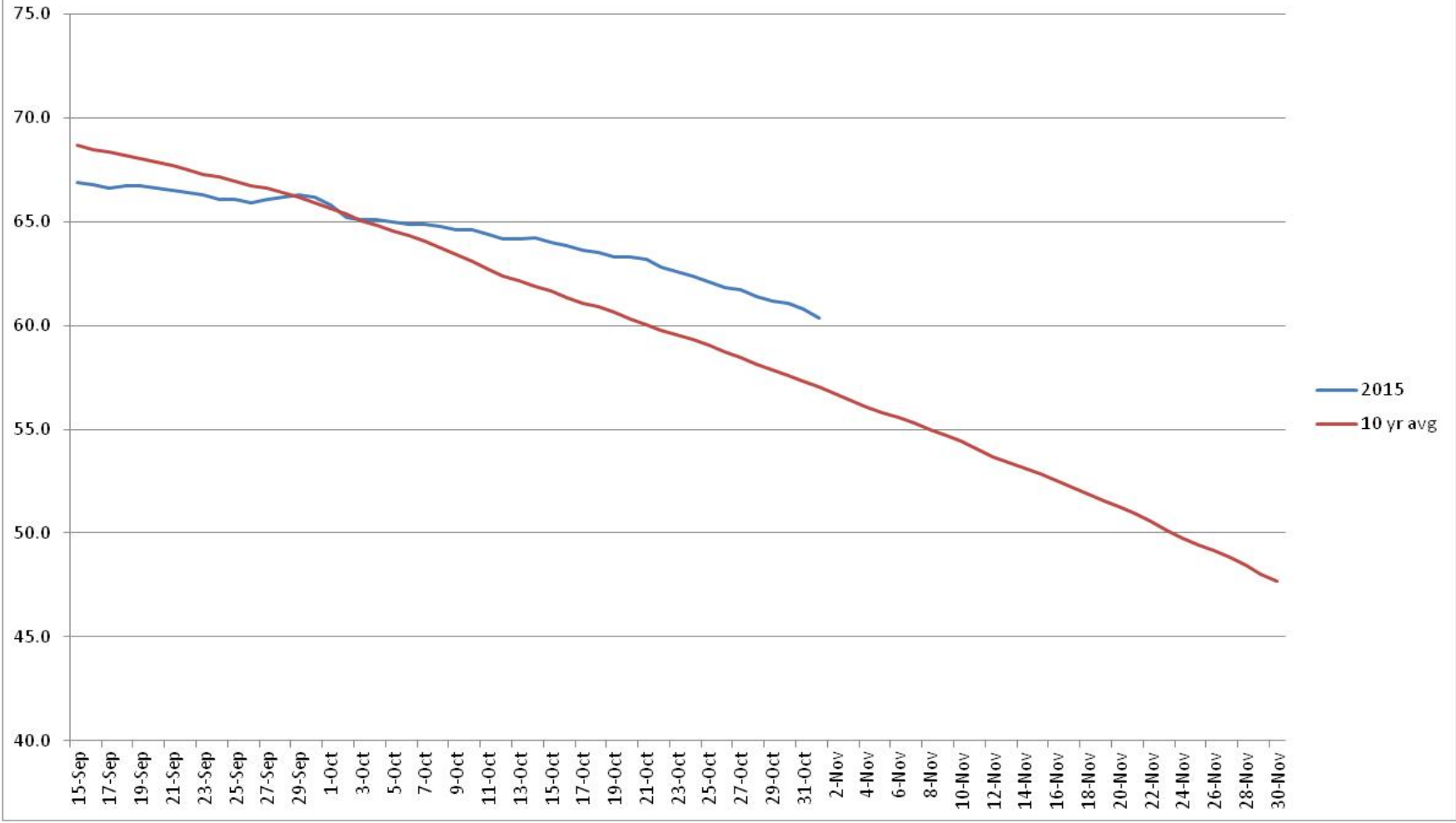
Proposal by PSMFC to install Adult PIT antennas at both JD Fishways is at the design/PDT level.

Kevin Moynahan  
OPM John Day/Willow Creek Project

**Date:**            January 2, 2016

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

### John Day TW Temperature



## JDA Collection Channel Velocity

Date 24-Dec-15

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:29	89	2.02
2 - 4	2:31	151	2.90
4 - 6	3:35	215	2.81
6 - 8	4:37	277	2.90
8 - 10	5:45	345	2.65
10 - 12	6:48	408	2.86
12 - 14	7:52	472	2.81
14 - 16	8:56	536	2.81
16 - 18	9:40	580	4.09
			<b>2.87</b>

**JDA Bird Counts: 12/27/15 to 1/2/16**

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)	
27-Dec	PHFB	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
27-Dec	SWFB	0	0	176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	176
27-Dec	PH1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
27-Dec	PH2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
27-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Dec	SW2	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
27-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		5		95		0		3		0		0		0		0		0		0		205
28-Dec	PHFB	0	0	31	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	33
28-Dec	SWFB	0	0	423	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	423
28-Dec	PH1	30	0	29	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87
28-Dec	PH2	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
28-Dec	PH3	16	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17
28-Dec	SW1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
28-Dec	SW2	9	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	24
28-Dec	SW3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Avg/Survey		28		244		14		11		0		0		0		0		0		0		591
29-Dec	PHFB	0	0	201	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	204
29-Dec	SWFB	0	0	312	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	312
29-Dec	PH1	21	0	14	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
29-Dec	PH2	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
29-Dec	PH3	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
29-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Dec	SW2	0	0	0	0	0	0	92	0	0	0	0	0	0	0	0	0	0	0	0	0	92
29-Dec	SW3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Avg/Survey		18		266		3		48		0		0		0		0		0		0		669
30-Dec	PHFB	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
30-Dec	SWFB	0	0	577	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	577
30-Dec	PH1	12	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
30-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Dec	SW1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
30-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		6		305		3		0		0		0		0		0		0		0		628

**JDA Bird Counts: 12/27/15 to 1/2/16**

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)	
31-Dec	PHFB	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
31-Dec	SWFB	0	0	517	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	517
31-Dec	PH1	28	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
31-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Dec	SW3	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Avg/Survey		14		261		7		8		0		0		0		0		0		0		578
1-Jan	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jan	SWFB	0	0	125	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	126
1-Jan	PH1	25	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
1-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jan	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jan	SW3	0	0	0	0	6	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	39
Avg/Survey		13		63		6		17		0		0		0		0		0		0		195
2-Jan	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jan	SWFB	0	0	111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111
2-Jan	PH1	25	0	24	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
2-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jan	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jan	SW3	0	0	0	0	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	45
Avg/Survey		13		68		1		23		0		0		0		0		0		0		207
<b>Totals</b>		<b>Gulls</b>				<b>Cormorant</b>				<b>Caspian tern</b>				<b>White Pelican</b>				<b>Grebe</b>				<b>Total</b>
		F		NF		F		NF		F		NF		F		NF		F		NF		
<b>Weekly Total</b>		191		2600		66		216		0		0		0		0		0		0		3073
<b>Avg/Survey</b>		14		186		5		15		0		0		0		0		0		0		220

John Day Dam  
Avian Zones



## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	43	6.0	
Mon	43	6.0	
Tue	43	6.0	
Wed	43	6.0	
Thur	43	6.0	
Fri	42	6.0	
Sat	42	6.0	
<b>AVG:</b>	<b>43</b>	<b>AVG: 6.0</b>	<b>AVG</b>
			<b>0</b>
			<b>MIN</b>
			<b>0</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.2	8.3	1.5	9.0	oos	4.5	1.2
Sun					oos		
Mon	8.1	8.3	1.6	9.5	oos	4.6	1.3
Mon					oos		
Tues	8.1	8.0	1.6	8.9	1.6	4.5	1.2
Tues							
Wed	8.1	8.0	1.5	8.9	1.6	4.4	1.3
Wed							
Thur	8.2	8.0	1.4	9.6	1.5	4.6	1.3
Thur							
Fri	8.2	8.1	1.4	9.9	1.5	4.6	1.3
Fri							
Sat	8.1	8.1	1.3	10.1	1.5	4.6	1.3
Sat							
<b>AVG:</b>	<b>8.1</b>	<b>8.1</b>	<b>1.5</b>	<b>9.4</b>	<b>1.5</b>	<b>4.5</b>	<b>1.3</b>