

# FISHWAY STATUS REPORT

**Date:** 3/16/2014  
**Inspection Period:** 3/9 thru 3/15/2014

All JD Fishways are inspected twice per day during fish season, March. 1 - Nov. 31  
 Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

	<b>JOHN DAY DAM</b>	
	JD/WC Project-Fisheries P.O. Box 823 Rufus, Oregon 97050 Phone: 541-506-7860	

<b>John Day Dam</b>	<b>Inspections</b>	<b>Criteria</b>	<b>Total Number of Inspections:</b> 14	<b>Temperature:</b> 41.4 F
	<b>Out of Criteria</b>	<b>Limit</b>		<b>Secchi:</b> 2.9 Ft.
<b>NORTH FISHWAY</b>			In regular service and meeting the optimal FPP criteria	
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 1.3	
<b>SOUTH FISHWAY</b>			In regular service with two AWS turbines since 3/1/14, with all three since 3/11/14.	
Exit differential	0	≤ 0.5'		
Exit Control weirs	0	MID setting	MID 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 1.3	
Entrance weir SE1	0	depth (≥ 8')	AVG 9.4	
Collection channel velocity	0	1.5 - 4 fps	AVG 3.1	
Bay 1 differential	0	1.0' - 2.0'	AVG 1.6	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.5	
Entrance weir NE1	0	depth (≥ 8')	AVG 11.6	
Entrance weir NE2	0	depth (≥ 8')	AVG 11.5	
<b>JUVENILE PASSAGE</b>			OOS for winter maintenance since 12/20. RTS is 25 March 2014.	
Forebay/bypass conduit differential	N/A	4.0' - 5.0'	AVG 0.0	
Submersible traveling screens	N/A	visual inspect		
Turbine trashrack drawdown	N/A	<1.5', wkly		
Vert barrier screen drawdown	N/A	<1.5', wkly		
Spill volume	N/A	n/a		
Spill pattern	N/A	n/a		
Turbine Unit Priority	N/A	per FPP		
Turbine 1% Efficiency	N/A	per FPP		

## SMOLT MONITORING FACILITY

**Operation:** SMF OOS since 12/17/13. RTS is 25 March 2014

**Debris:** N/A

### **Maintenance:**

SMF fully winterized, annual maintenance underway. Leaking gasket in the Switch Gate area was replaced by JD Mechanical crew on 2/27.

SMF SCADA PLC is undergoing the necessary maintenance/ improvements. ETR is late March.

SMF CCTV replacement has been completed by JD electricians. The picture quality is significantly better with the new cameras, consoles, monitors.

### **Research:**

Battelle setting up for collections, tagging and holding of juvenile salmonids at JD SMF. The first collection/tagging is expected in late April.

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

## OTHER ISSUES:

### **JOHN DAY**

**Birds:**       See Avian tabs.

122 primary avian lines are properly installed. Three primary and two filler lines are missing; one attaching to Navlock broke on 1/10/14. JD Maintenance had attempted to create a plan for re-installation of all missing lines, but it isn't possible due to the lack of O&M manual. District has been informed.

JD Engineering is attempting to contract out the re-installation of three missing primary lines before 10 April deadline.

### **Operations:**

JD North Fishway is in regular service and meeting the optimal FPP criteria.

JD South Fishway returned to service with two AWS turbines on 3/1/14; two out of four floating orifices were activated for this configuration.

All required STSs will be installed the week of 3/24/14; JBS and SMF will be in regular service by 1 April as required by FPP.

JBS collection channel is scheduled to return to service in mid March.

### **Maintenance:**

JD South Fishway returned to service with two AWS turbines on 3/1 and the third, # 2 returned on 3/11. Two out of four floating orifices were activated by 3/1; the two others will be activated soon. **Kudos to JD Electrical for fast repair of AWS turbine 2 !**

Calibration: 3/7/2014 NE1, NE2 were off by more than 0.3' ; a trouble report was written. All other water sensors were within the criteria of 0.3' .

### **Research:**

JD Fisheries coordinating with research groups for the upcoming 2014 studies:

U of I Adult Salmonids Radiotelemetry Antennas repairs were all completed in February; U of I is ready to track/monitor fish passage anytime.

U of I Testing of JD North LPS (Lamprey Passage System) preparing for their passage season's work starting in June 2014.

Battelle's Monitoring of Juvenile Salmonids with Hydroacoustic Tags completed installation of all JD Powerhouse and Spillway hydrophones in February.

Four Battelle's office trailers were installed on the forebay deck in February as well. Testing and fine tuning of receivers underway.

Winter Fish Passage's Video counting by Normandeau (contractor) continues. Regular/ direct counting is starting on 1 April as required by FPP.

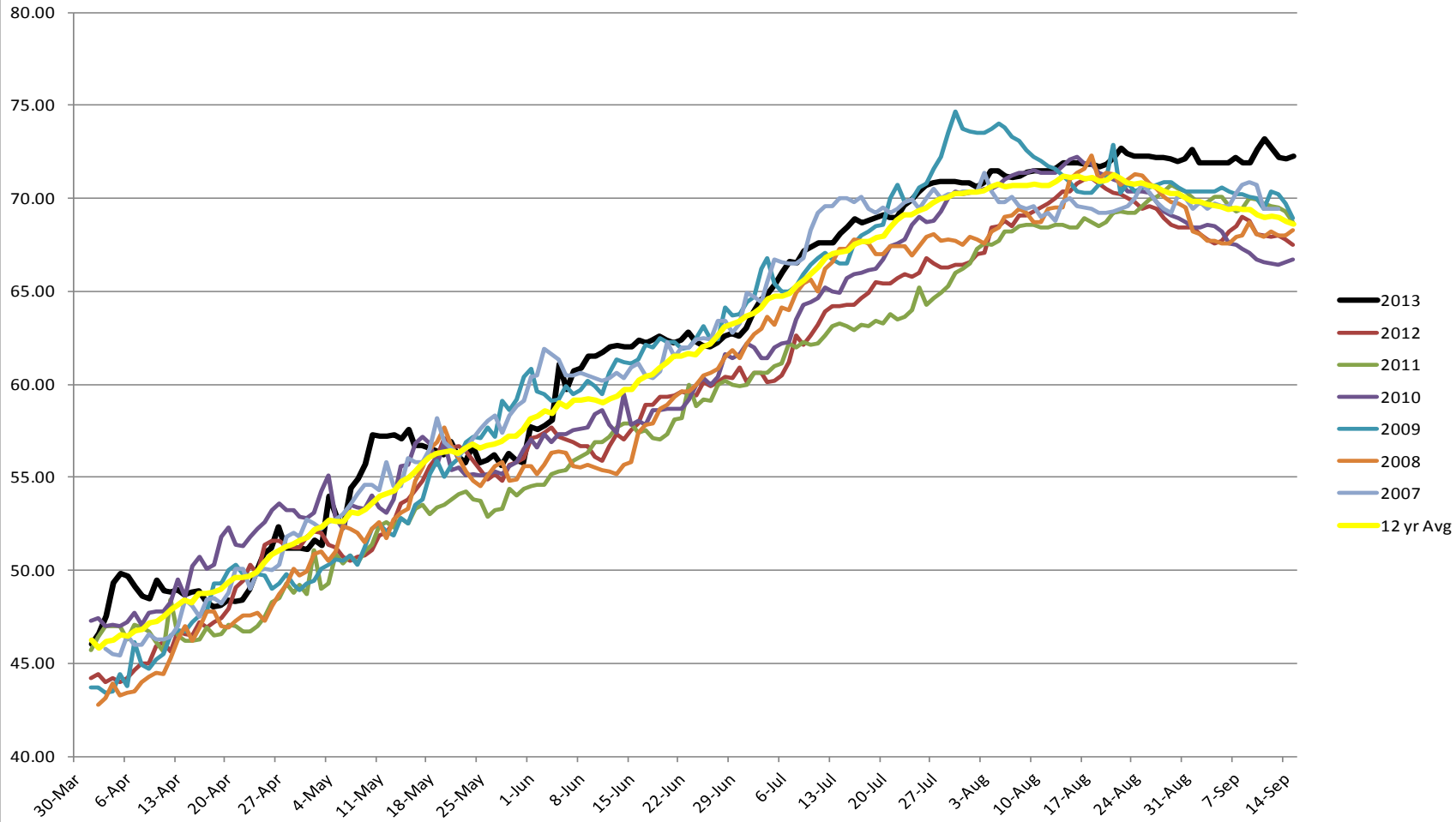
Adult Salmonids Radio telemetry evaluations are ongoing at both JD adult fishway. University of Idaho crew is in charge of detecting of all adult adult salmonids, which were first tagged at Bonneville Dam.

Glen A. Smith PE

Date: \_\_\_ 25-Mar-14

OPM John Day/Willow Creek Project

### 2007-2013 Water Temps JDA w/ 12yr avg



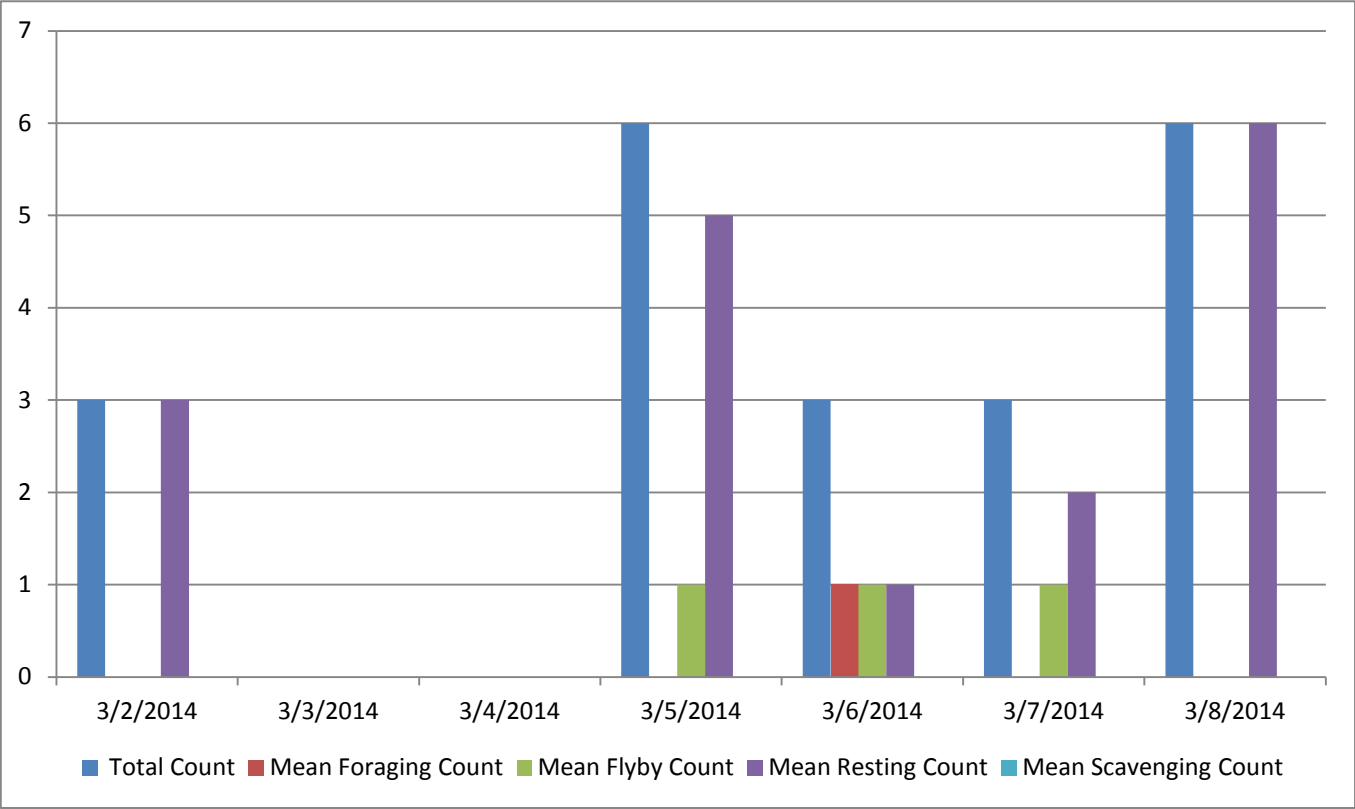
## JDA COLLECTION CHANNEL VELOCITY

Date 21-Dec-13  
By: pk

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:01:23	83	2.17
2 - 4	0:02:20	140	3.16
4 - 6	0:03:16	196	3.21
6 - 8	0:04:14	254	3.10
8 - 10	0:05:10	310	3.21
10 - 12	0:06:10	370	3.00
12 - 14	0:07:17	437	2.69
14 - 16	0:08:13	493	3.21
16 - 18	0:08:55	535	4.29

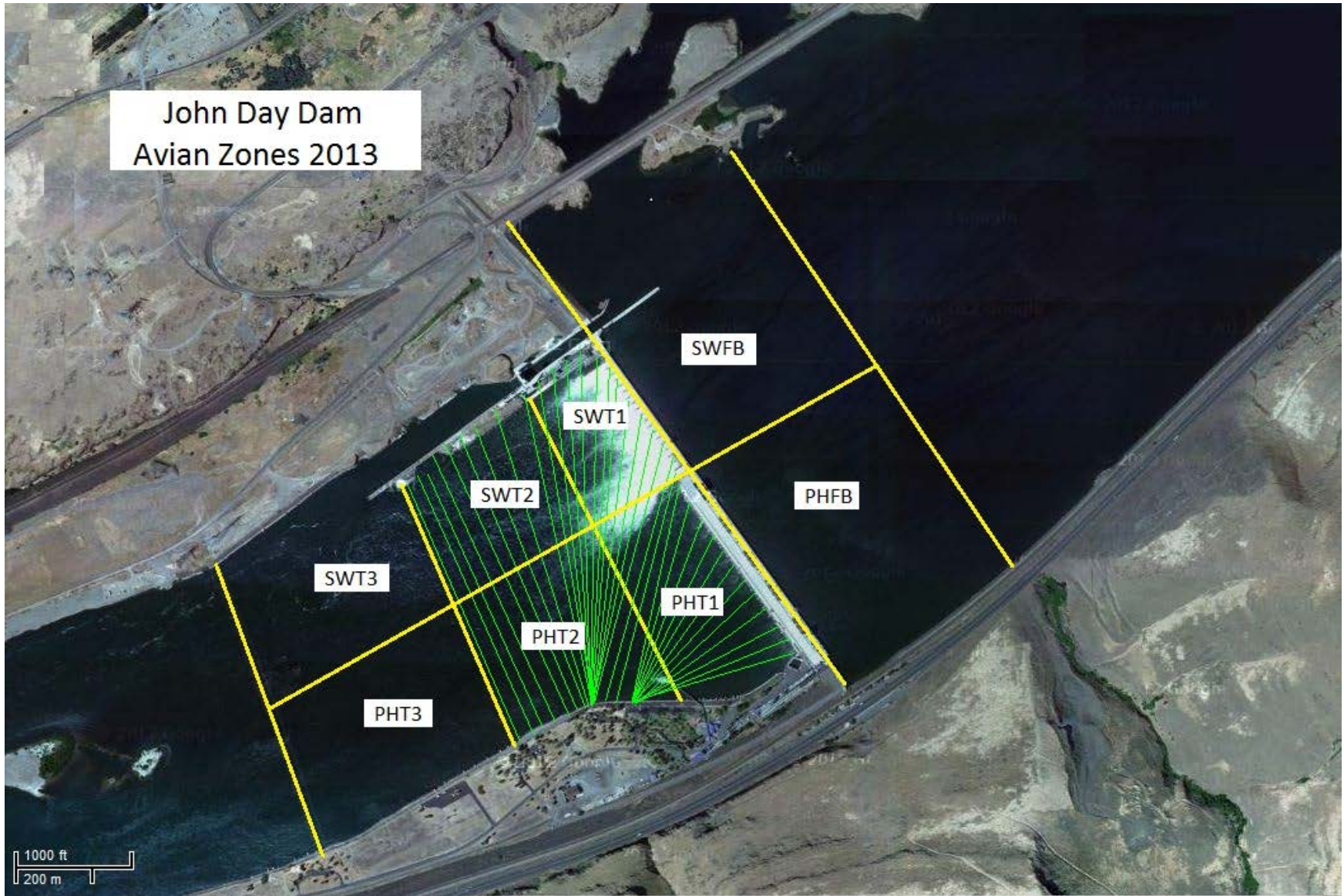
**3.12**

# Bird Count by Activity



Date	Total Count	Mean Foraging Count	Mean Flyby Count	Mean Resting Count	Mean Scavenging Count
3/2/2014	3	0		3	
3/3/2014	0	0			
3/4/2014	0	0	0		
3/5/2014	6		1	5	
3/6/2014	3	1	1	1	
3/7/2014	3	0	1	2	
3/8/2014	6	0		6	

John Day Dam  
Avian Zones 2013



**John Day:**

	Temp:	Secchi:	Fallbacks
Sun	40	3.5	0
Mon	41	4.0	
Tues	41	4.0	
Wed	42	3.0	
Thur	41	2.0	
Fri	42	2.0	
Sat	43	2.0	
AVG:	<b>41</b>	AVG: <b>2.9</b>	AVG <b>0</b>
			MAX <b>0</b>
			MIN <b>0</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	10.2	10.2	1.6	9.7	1.4	0.0	1.9	1.3
Sun	10.4	10.4	1.0	10.4	1.6		1.3	1.1
Mon	10.8	10.7	1.0	10.5	1.6		1.4	1.2
Mon	10.9	10.9	1.0	10.6	1.5		1.3	1.2
Tues	10.2	10.3	1.1	8.7	1.2		1.4	1.4
Tues	12.3	11.7	1.3	8.6	1.1		1.5	1.6
Wed	12.8	12.8	1.1	8.8	1.1		1.4	1.4
Wed	13.1	13.0	1.3	10.9	1.1		1.6	1.7
Thur	11.9	11.8	1.5	8.5	1.1		1.8	1.9
Thur	11.6	11.6	1.5	8.4	1.0		1.9	1.7
Fri	12.3	12.1	1.3	9.2	1.1		1.7	1.8
Fri	11.8	11.8	1.3	9.2	1.5		1.5	1.5
Sat	12.0	11.8	1.4	8.9	1.5		1.7	1.8
Sat	12.0	11.9	1.5	8.9	1.4		1.7	1.7
AVG:	<b>11.6</b>	<b>11.5</b>	<b>1.3</b>	<b>9.4</b>	<b>1.3</b>	<b>0.0</b>	<b>1.6</b>	<b>1.5</b>