

# FISHWAY STATUS REPORT

**Date:** 2/22/2014  
**Inspection Period:** 2/16 thru 2/22/2014

All JD Fishways are inspected once per day during winter season, Dec. 1 - Feb. 28  
 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

<b>John Day Dam</b>	<b>Inspections</b>	<b>Criteria</b>	<b>Total Number of Inspections:</b> 7	<b>Temperature:</b> 36.4 F
	<b>Out of Criteria</b>	<b>Limit</b>		<b>Secchi:</b> 2.8 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	0	1.0' ± 0.1'		
Entrance differential	0	1.0' - 2.0'	AVG 1.5	
<b>SOUTH FISHWAY</b>			OOS for the annual maintenance outage since 1/4/14 . RTS is 1 March.	
Exit differential	N/A	≤ 0.5'		
Exit Control weirs	N/A	MID setting	MID is normal for JDS	
Count station differential	N/A	≤ 0.3'		
Weir crest depth	N/A	1.0' ± 0.1'		
South entrance differential	N/A	1.0' - 2.0'	AVG oos	
Entrance weir SE1	N/A	depth (≥ 8')	AVG oos	
Collection channel velocity	N/A	1.5 - 4 fps	AVG oos	
Bay 1 differential	N/A	1.0' - 2.0'	AVG oos	
N. Entrance PH(Bay 19)differential	N/A	1.0' - 2.0'	AVG oos	
Entrance weir NE1	N/A	depth (≥ 8')	AVG oos	
Entrance weir NE2	N/A	depth (≥ 8')	AVG oos	
<b>JUVENILE PASSAGE</b>			OOS for winter maintenance since 12/20. RTS is 24 March 2014.	
Forebay/bypass conduit differential	N/A	4.0' - 5.0'	AVG oos	
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 will be replaced by JD Mechanical crew soon.

SMF SCADA PLC is currently 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:** None

**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 since.

JD South Fishway dewatered/OOS since 1/07/14. Collection channel dewatered since 1/09. Annual PMs and maintenance underway; RTS is 1 March.

All STSs were removed from MU gatewells for winter maintenance by 19 December. They will be reinstalled the week of 3/24/14

JBS collection channel was successfully dewatered/ inspected by JD Fisheries on 4 February 2014. RTS is in mid March.

**Maintenance:**

JD South Fishway - AWS diffuser sluice gates PM underway by JD Mechanical. 10 Walleye and 8 SMB were salvaged from AWS conduit and released into the tailrace in excellent condition on 2/12 by JD Fisheries and JD Mechanical personnel.

JD Structural crew completed fixing the leaking expansion joints at JD South Adult Fishway by 2/22.

Calibration: 1/5/2014 All JD Fishways' PLCs/ water level sensors were within 0.3' margin of error.

**Research:**

JD Fisheries coordinating with Battelle and U of I for the upcoming 2014 studies. U of I fixed their radio telemetry antennas at JD South SE1 entrance on 2/11. Battelle crew will start the PH and Spillway hydrophones installation the week of 2/24. Four office trailers will be delivered and set up at JD Forebay Deck as well. Preparation for their juvenile fish collection and tagging at JD SMF to commence in March.

Fish counting at both JD Fishways ended 10/31/13. Video counting began 11/1 and will continue through the winter.

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: \_\_\_ 23-Feb-14

OPM John Day/Willow Creek Project

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



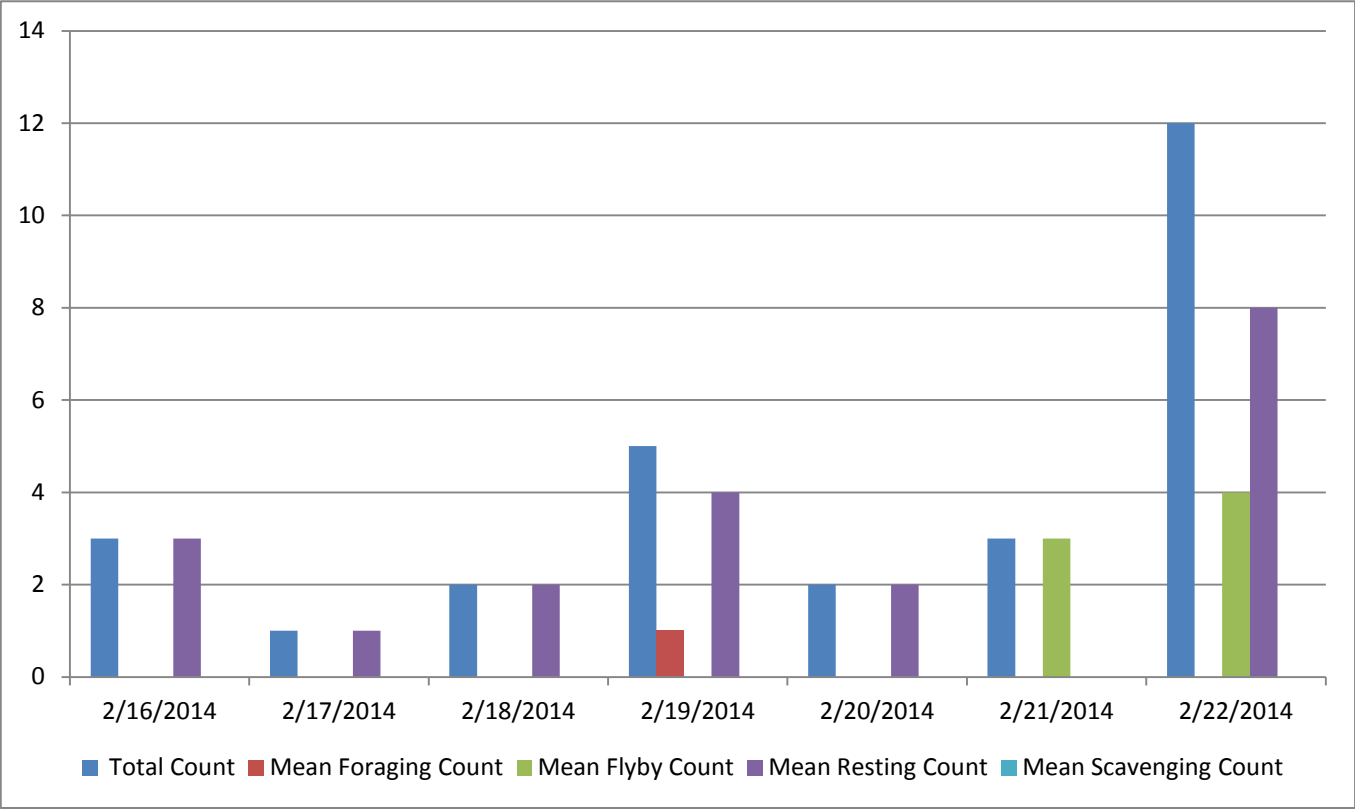
## JDA COLLECTION CHANNEL VELOCITY

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

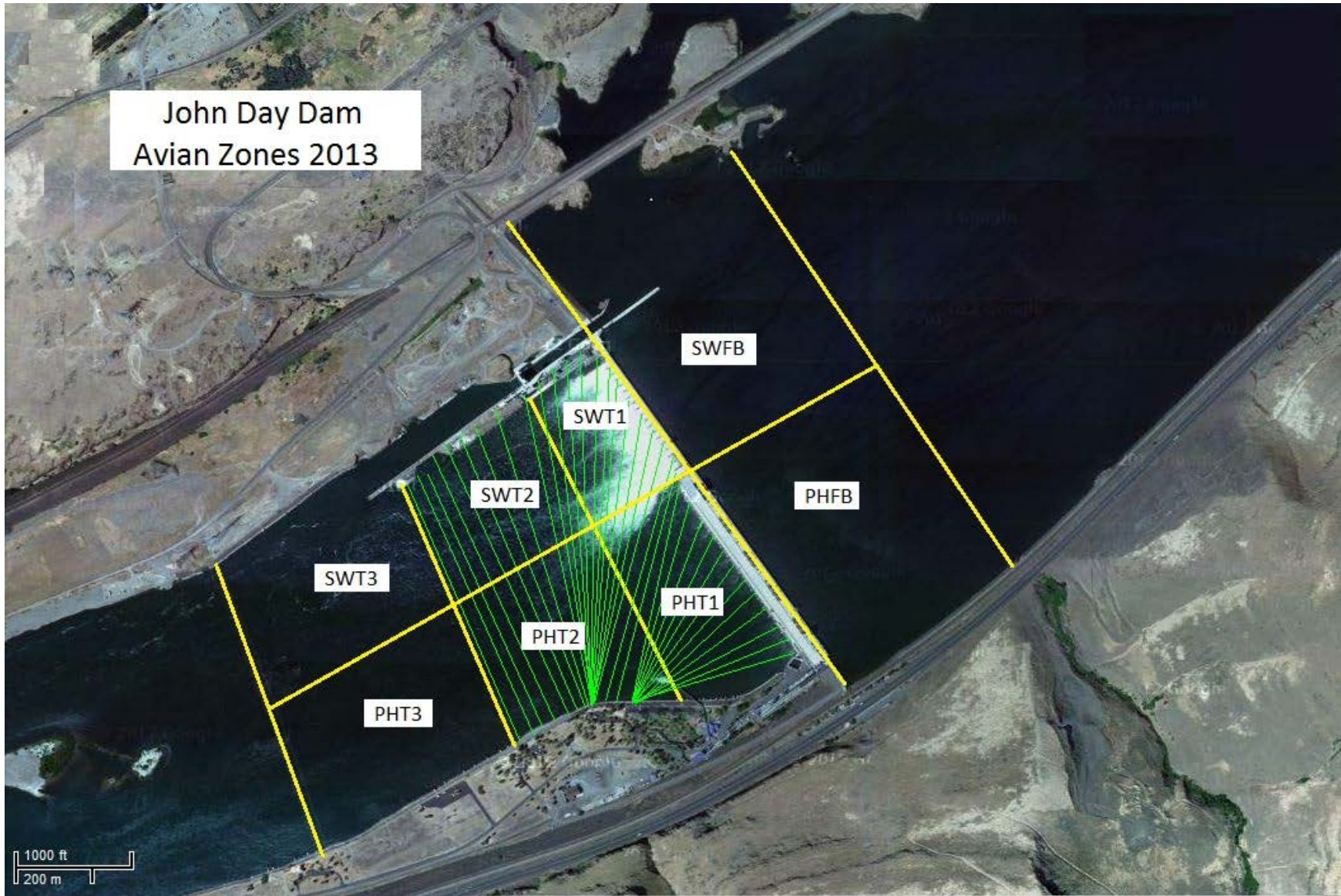
**3.12**

# Bird Count by Activity



Date	Total Count	Mean Foraging Count	Mean Flyby Count	Mean Resting Count	Mean Scavenging Count
2/16/2014	3	0	0	3	0
2/17/2014	1	0	0	1	0
2/18/2014	2	0	0	2	0
2/19/2014	5	1	0	4	0
2/20/2014	2	0	0	2	0
2/21/2014	3	0	3	0	0
2/22/2014	12	0	4	8	0

John Day Dam  
Avian Zones 2013



**John Day:**

	Temp:	Secchi:		Fallbacks
Sun	37	2.5	oos	
Mon	37	2.5	oos	
Tues	36	2.5	oos	
Wed	37	2.5	oos	
Thur	36	3.0	oos	
Fri	36	3.0	oos	
Sat	36	3.5	oos	
AVG:	36.4	AVG: 2.8	AVG	
			MAX	
			MIN	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	oos	oos	oos	oos	1.5	oos	oos	oos
Sun								
Mon	oos	oos	oos	oos	1.5	oos	oos	oos
Mon								
Tues	oos	oos	oos	oos	1.5	oos	oos	oos
Tues								
Wed	oos	oos	oos	oos	1.5	oos	oos	oos
Wed								
Thur	oos	oos	oos	oos	1.5	oos	oos	oos
Thur								
Fri	oos	oos	oos	oos	1.5	oos	oos	oos
Fri								
Sat	oos	oos	oos	oos	1.5	oos	oos	oos
Sat								
AVG:	oos	oos	oos	oos	1.5	oos	oos	oos