

# FISHWAY STATUS REPORT

**Date:** 2/9/2014  
**Inspection Period:** 2/2 thru 2/8/2014

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

John Day Dam	Inspections	Criteria	Total Number of Inspections:	7	Temperature:	38.7 F
	Out of Criteria	Limit			Secchi:	5.5 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 before mid 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 25 March 2014.			
Forebay/bypass conduit differential	N/A	4.0' - 5.0'	AVG	4.6		
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 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 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.

**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 on 1/09. Annual PMs and maintenance underway; RTS mid 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 - lamprey plating installation by McMillen, LLC was completed by 1/30/14. QC inspection occurred on 2/3/14; minor deficiencies were fixed immediately. All plates look good.

JD Structural crew has been fixing the leaking expansion joints at JD South Adult Fishways.

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. The JD Research Equipment Installation's plan will be created soon.

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: \_\_\_ 13-Feb-14

OPM John Day/Willow Creek Project

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



## JDA COLLECTION CHANNEL VELOCITY

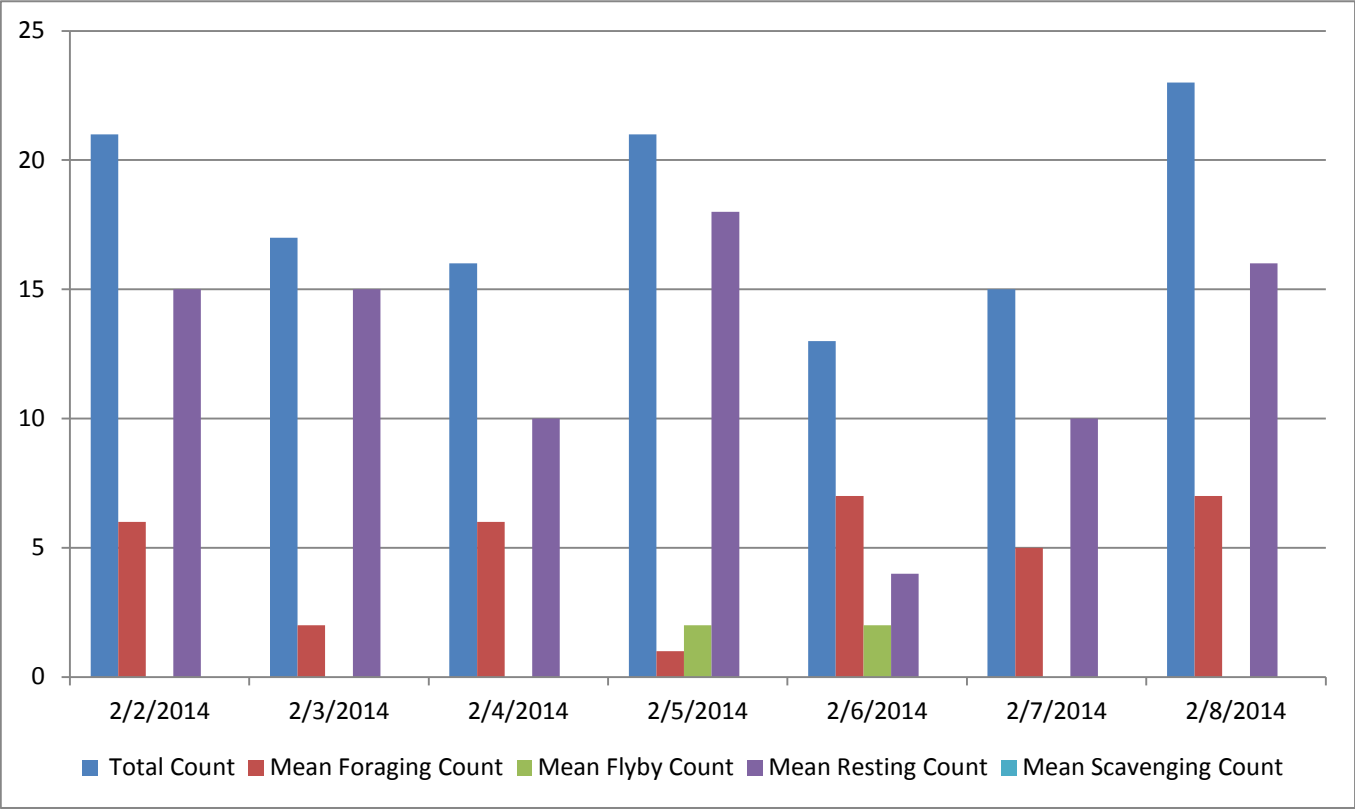
Date 21-Dec-13

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

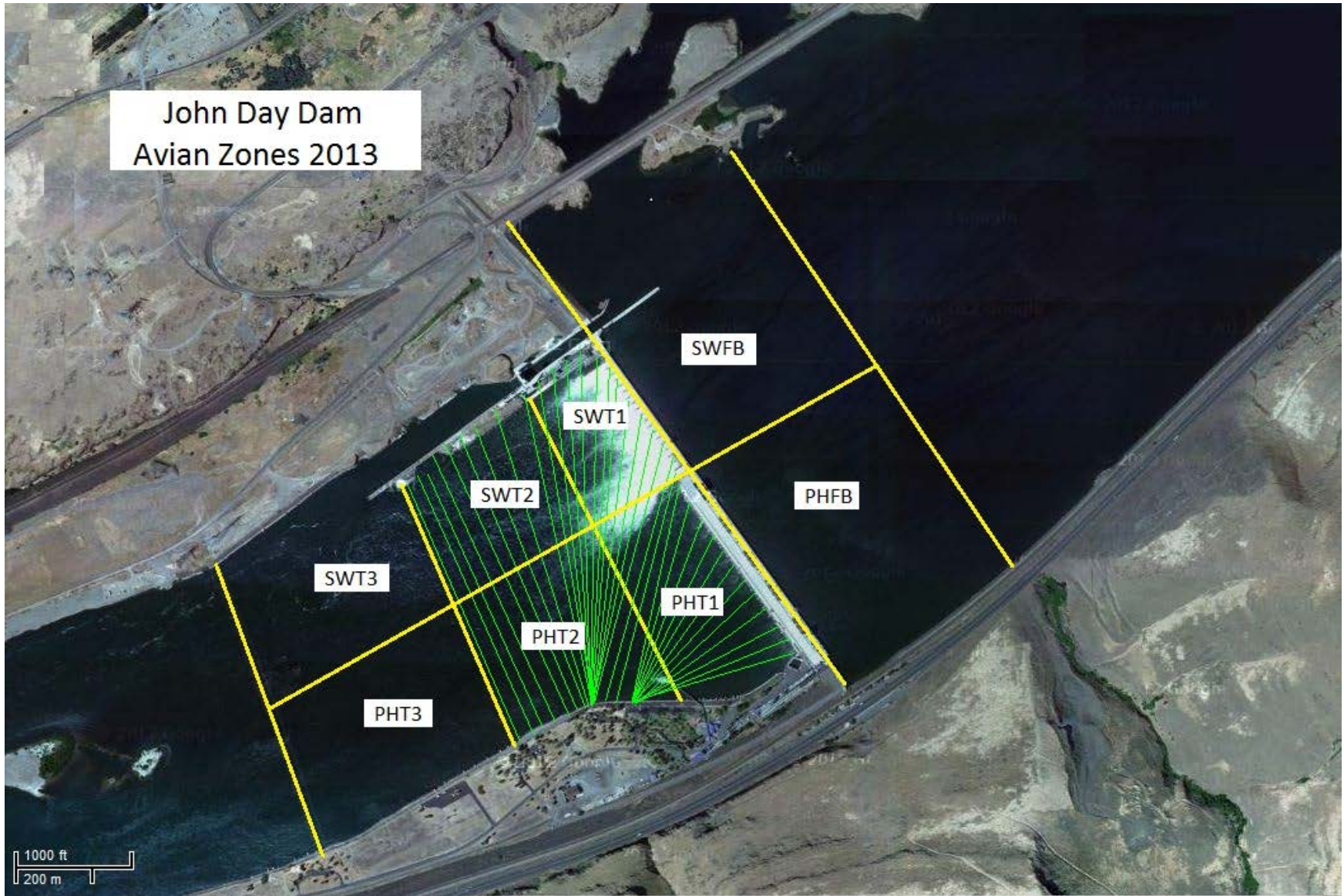
**3.12**

# Bird Count by Activity



Date	Total Count	Mean Foraging Count	Mean Flyby Count	Mean Resting Count	Mean Scavenging Count
2/2/2014	21	6	0	15	0
2/3/2014	17	2	0	15	0
2/4/2014	16	6	0	10	0
2/5/2014	21	1	2	18	0
2/6/2014	13	7	2	4	0
2/7/2014	15	5	0	10	0
2/8/2014	23	7	0	16	0

John Day Dam  
Avian Zones 2013



**John Day:**

	Temp:	Secchi:		Fallbacks
Sun	40	6.0	oos	
Mon	40	6.0	oos	
Tues	38	6.0	oos	
Wed	39	5.5	oos	
Thur	38	5.5	oos	
Fri	38	5.5	oos	
Sat	38	5.5	oos	
AVG:	38.7	AVG: 5.5	AVG	
			MAX	
			MIN	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	oos	oos	oos	oos	1.5	4.6	oos	oos
Sun								
Mon	oos	oos	oos	oos	1.5	oos	oos	oos
Mon								
Tues	oos	oos	oos	oos	1.6	oos	oos	oos
Tues								
Wed	oos	oos	oos	oos	1.3	oos	oos	oos
Wed								
Thur	oos	oos	oos	oos	1.5	oos	oos	oos
Thur								
Fri	oos	oos	oos	oos	1.2	oos	oos	oos
Fri								
Sat	oos	oos	oos	oos	1.3	oos	oos	oos
Sat								
AVG:	oos	oos	oos	oos	1.5	4.6	oos	oos