

# FISHWAY STATUS REPORT

**Date:** 12/1/2013  
**Inspection Period:** 11/24 thru 11/30/13

All JD Fishways are inspected twice per day during walk throughs;  
 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> 49.1 F
	<b>Out of Criteria</b>	<b>Limit</b>		<b>Secchi:</b> 5.4 Ft.
<b>NORTH FISHWAY</b>			Four AWS pumps operational, two others OOS	
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>			In regular service with all three AWS turbines working properly	
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	0	1.0' ± 0.1'		
South entrance differential	0	1.0' - 2.0'	AVG 1.4	
Entrance weir SE1	0	depth (≥ 8')	AVG 9.0	
Collection channel velocity	0	1.5 - 4 fps	AVG 3.21	
Bay 1 differential	0	1.0' - 2.0'	AVG 1.8	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.3	
Entrance weir NE1	0	depth (≥ 8')	AVG 8.4	
Entrance weir NE2	0	depth (≥ 8')	AVG 8.4	
<b>JUVENILE PASSAGE</b>			SMF sampling season ended on 9/15, full flow PIT tags detections through 30 November	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.5	
Submersible traveling screens	0	visual inspect		
Turbine trashrack drawdown	0	<1.5', wkly		
Vert barrier screen drawdown	0	<1.5', wkly		
Spill volume	0	Bay 2 only	Spill for fish passage ended on 9/1, TSWs removed /stored on deck.	
Spill pattern	0	Bay 2 only	Bay 2 at 1.5 K for additional attraction to JD North entrance, during daylight hours	
Turbine Unit Priority	0	per FPP	MU priority without TSWs requires only units 1-4 in service	
Turbine 1% Efficiency	0	per FPP		

## SMOLT MONITORING FACILITY

**Operation:** Sampling season ended on 9/15; SMF continues in bypass for the full flow PIT tags detections until 30 November.

The planned, end-of-season dewatering of SMF on 11/25 had to be delayed due to the Crest Gate's failure. JD Mechanical crew is making progress on its repairs and the dewatering will occur ASAP.

SMF flushing water distribution system (pipes and valves) temporarily winterized on 11/25 due to the freezing weather forecast.

**Debris:** Very light

### Maintenance:

SMF building / wet lab OOS and winterized by JD Fisheries.

JD Fisheries Team continues preparing for the end of season dewatering of entire SMF the week of 9 December.

SMF CCTV replacement is in planning stage; on hold due to lack of funding. Likely implementation in FY 2014 :)

**Research:** None. No fish collections in 2013

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

## OTHER ISSUES:

### JOHN DAY

**Birds:** See Avian tabs.

122 avian lines are properly installed. Four lines are currently missing; spillway/TSW line broke on 4/12/13. JD Management preparing a plan for the missing lines' replacement before 2014 passage season.

### Operations:

JD North Fishway in service, meeting the FPP optimal criteria with 4 out of 6 AWS pumps operational; # 2 & 4 OOS due to continuing technical issues.

Planned dewatering of JD North is on 2 December.

JD South Fishway in service, meeting the optimal FPP criteria with all three AWS turbines.

JD Spillway has only bay 2 open at 1.5K, during daylight hours only since 9/1. This is providing additional adult attraction to JD North entrance.

### Maintenance:

Monthly (November) STS inspection by JD Structural crew completed on 11/21; only one screen had mesh issues and was replaced with working spare.

Gatewell draw down: Measurements made on 11/24. All units were within established limits, with less than 1.0' differential

Calibration: 11/30/2013 All JD Fishways' PLCs/ water level sensors were within 0.3' margin of error.

### Research:

Fish counting at both JD Fishways ended 10/31. 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  
OPM John Day/Willow Creek Project

Date: \_\_\_ 5-Dec-13

2007-2013 Water Temps JDA w/ 12yr avg



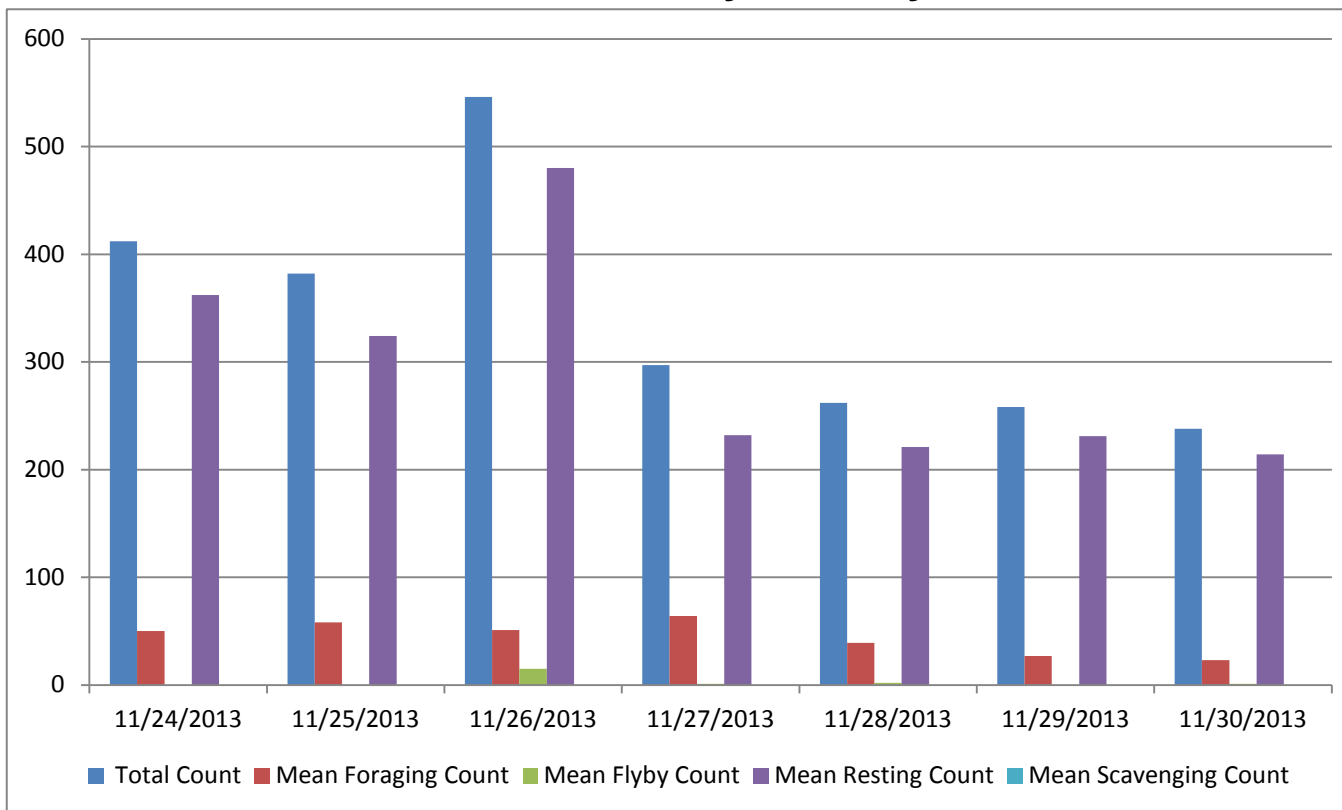
## JDA COLLECTION CHANNEL VELOCITY

Date nov. 10  
By: pkp,dek

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:01:33	93	1.94
2 - 4	0:02:24	144	3.53
4 - 6	0:03:23	203	3.05
6 - 8	0:04:16	256	3.40
8 - 10	0:05:11	311	3.27
10 - 12	0:06:07	367	3.21
12 - 14	0:07:11	431	2.81
14 - 16	0:08:07	487	3.21
16 - 18	0:08:47	527	4.50

**3.21**

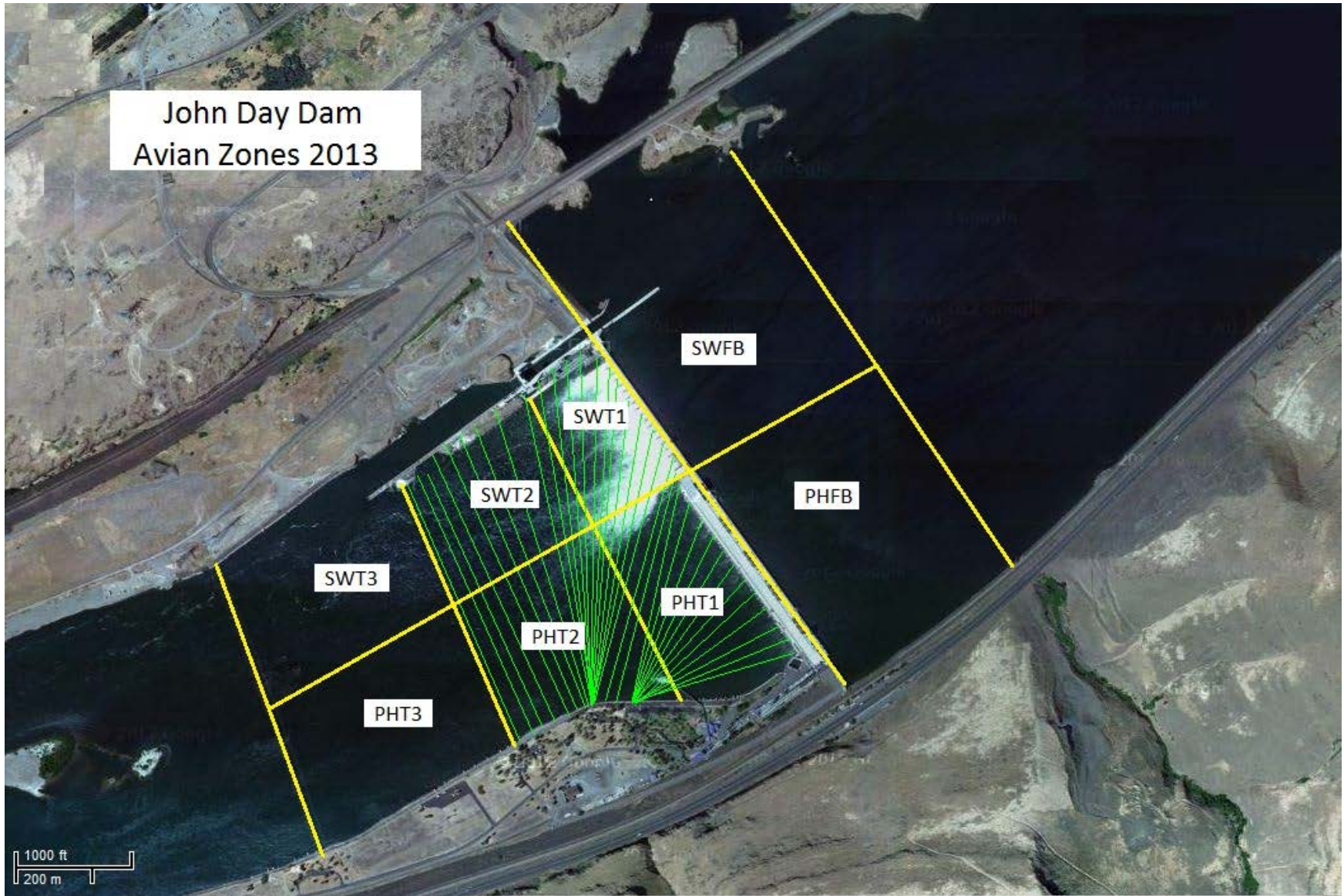
## Bird Count by Activity



Date	Total Count	Mean Foraging Count	Mean Flyby Count	Mean Resting Count	Mean Scavenging Count
11/24/2013	412	50		362	
11/25/2013	382	58		324	
11/26/2013	546	51	15	480	
11/27/2013	297	64	1	232	
11/28/2013	262	39	2	221	
11/29/2013	258	27	0	231	
11/30/2013	238	23	1	214	

**Seasonal High numbers of GULLS  
in the Forebay and on the WING WALL.**

John Day Dam  
Avian Zones 2013



**John Day:**

	Temp:	Secchi:	Fallbacks
Sun	51	5.0	
Mon	51	5.5	
Tues	49	5.5	
Wed	49	5.5	
Thur	49	5.5	
Fri	48	5.5	
Sat	47	5.5	
AVG:	49.1	5.4	AVG
			MAX
			MIN

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	8.6	8.5	1.5	8.7	1.5	4.6	1.8	1.3
Sun	8.5	8.4	1.4	8.5	1.5	4.6	1.8	1.4
Mon	8.7	8.7	1.5	10.8	1.5	4.6	2.0	1.4
Mon	8.4	8.4	1.4	9.1	1.6	4.0	1.8	1.5
Tues	8.3	8.3	1.4	10.0	1.5	4.6	1.4	1.4
Tues	8.3	8.3	1.5	8.5	1.5	4.6	1.9	1.2
Wed	8.6	8.6	1.2	8.8	1.4	4.6	1.7	1.3
Wed	8.0	8.0	1.4	8.3	1.8	4.5	1.8	1.4
Thur	8.5	8.5	1.5	8.6	1.4	4.6	1.9	1.3
Thur	8.3	8.3	1.5	8.4	1.5	4.6	1.9	1.3
Fri	8.7	8.7	1.4	8.9	1.4	4.6	1.8	1.2
Fri	8.1	8.1	1.5	8.6	1.4	4.5	1.9	1.6
Sat	8.5	8.5	1.4	9.7	oos	4.6	1.8	1.2
Sat	8.3	8.3	1.6	9.0	oos	4.5	2.0	1.3
AVG:	8.4	8.4	1.4	9.0	1.5	4.5	1.8	1.3