# FISHWAY STATUS REPORT

**Date:** 6/8/2013 **Inspection Period:** 6/2 thru 6/8/2013

# JOHN DAY DAM



JD/WC Project-Fisheries P.O. Box 564

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All JD Fishways are inspected twice per day during walk throughs; frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspections	Criteria	Total Number of Inspections: 14 Temperature: 59.9 F
-	Out of Criteria	Limit	Secchi: 4.6 Ft.
NORTH FISHWAY			In regular service with three AWS pumps since 4/3/13. Six operational since 5/20/13
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	1.3' ± 0.1'	Shad passage criterion of 1.3 ' commenced on 5/22
Entrance differential	0	1.0' - 2.0'	AVG 1.5
SOUTH FISHWAY			In regular service with all three AWS turbines since 2/12/13
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	0	1.3' ± 0.1'	Shad passage criterion of 1.3 ' commenced on 5/22
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	ft/sec 3.32
Bay 1 differential	0	1.0' - 2.0'	AVG 1.8
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.4
Entrance weir NE1	0	depth (≥ 8')	AVG 9.1
Entrance weir NE2	0	depth (≥ 8')	AVG 9.2
JUVENILE PASSAGE			JBS/SMF continues in regular service, in sampling mode
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6
Submersible traveling screens	0	visual inspect	STSs camera inspection complete 5/22, 1 minor mesh damage found and repaired
Turbine trashrack drawdown	0	<1.5', wkly	MU intake trashracks raking complete on 5/30; modest amount of small wood debris
Vert barrier screen drawdown	0	<1.5', wkly	
Spill volume	0	per FPP	Spill for fish passage started on 4/10; alternating 30/40 % levels same as 2012
Spill pattern	0	per FPP	
Turbine Unit Priority	0	per FPP	MU Priority with two TSWs 4/10 through 8/31
Turbine 1% Efficiency	0	per FPP	

## SMOLT MONITORING FACILITY

**Operation:** SMF in regular sampling mode since 3/31/13. Manned 24/7 thru 9/15 by COE personnel. PSMFC biologists performing daily sampling. PDS screen rake continues in regular service without any issues.

**Debris:** Light with mostly small beaver-generated sticks and tumbleweeds.

Maintenance: No issues. All winter maintenance/PM activities successfully completed by 4/1/13.

SMF CCTV replacement is in planning stage; the original system installed in 1998 is barely usable and its components have been failing frequently.

**Research:** None. No fish collections are planned for 2013.

Fallbacks: AVG: 22 MAX: 28 MIN: 18

## **OTHER ISSUES:**

## **JOHN DAY**

Birds: See Avian tabs.

123 avian lines are properly installed. Two 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.

Daily, 8 hrs gull hazing shifts by USDA boat crew started at JD tailrace on 4/17; ongoing and effective so far.

Overall, the JD gull abundance / predation is small and under control.

### Operations:

JD North Fishway in regular service with three AWS pumps operational since 4/2. Six pumps operational since 5/20; JDN is meeting the optimal entrance/FPP criteria of 1.5. One adult chinook trapped between CS picketed leads reported on 5/22; JD Fisheries immediately closed/ eliminated netting gaps and verified proper fit of picketed leads. Attempting to net the trapped fish with dip nets.

JD South Fishway in regular service with all three AWS turbines; it is meeting the optimal entrances' criteria of 1.5'.

All JD Spillway bays are in regular service per FPP pattern requirement.

#### New construction:

The last of six JD North AWS pumps, # 5,was completed and returned to regular service on 5/20.

#### Maintenance:

There were no major maintenance issues during this report period.

Gatewell draw down: Measurements made on 6/2 and 6/5. All units were within established limits.

Calibration: 6/8/2013 All JD Fishways' PLCs/ water level sensors were within 0.3' margin of error.

#### Research:

WDFW dam angling crew commenced NPM removal from JD PH tailrace on 5/1. Fishing has picked up; averaging 100 fish a day. Will continue through the end of August.

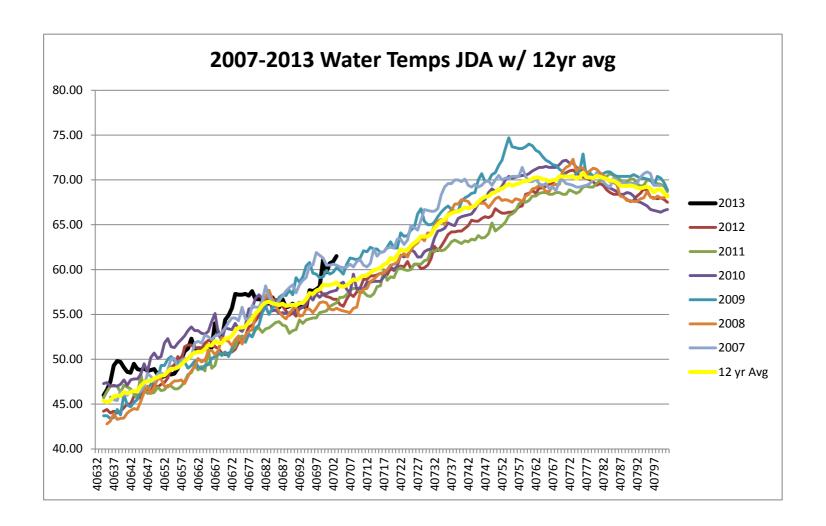
Fish counting at both JD Fishways ongoing as required by FPP.

JD South Counting Station' automated lamprey trap in-water installation complete on 2/12; the trap's hoist will be installed outside of fishway in June.

JD North prototype Lamprey Passage System's (LPS) installation was successfully completed by University of Idaho crews by 3/12/13.

Adult Salmonids Radio telemetry equipment/antennas' set up completed at both JD fishways, by University of Idaho crew by early May; detecting adult spring chinook which were tagged at Bonneville Dam.

Glen A. Smith PE	Date:
OPM John Day/Willow Creek Project	



# JDA COLLECTION CHANNEL VELOCITY

463

503

	Date		
	By:		
Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:01:20	80	2.25
2 - 4	0:02:16	136	3.21
4 - 6	0:03:05	185	3.67
6 - 8	0:03:58	238	3.40
8 - 10	0:04:52	292	3.33
10 - 12	0:05:46	346	3.33
12 - 14	0:06:46	406	3.00

0:07:43

0:08:23

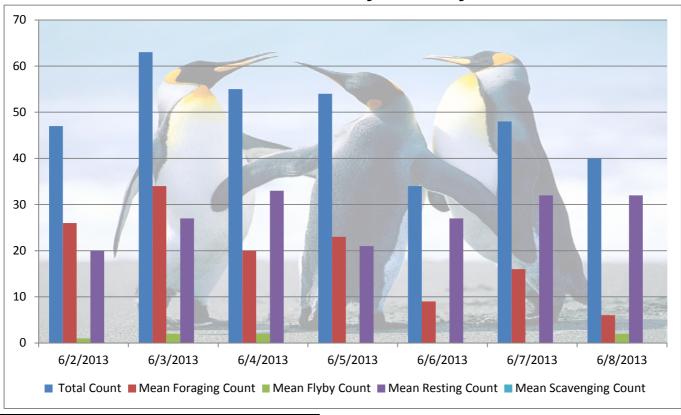
14 - 16

16 - 18

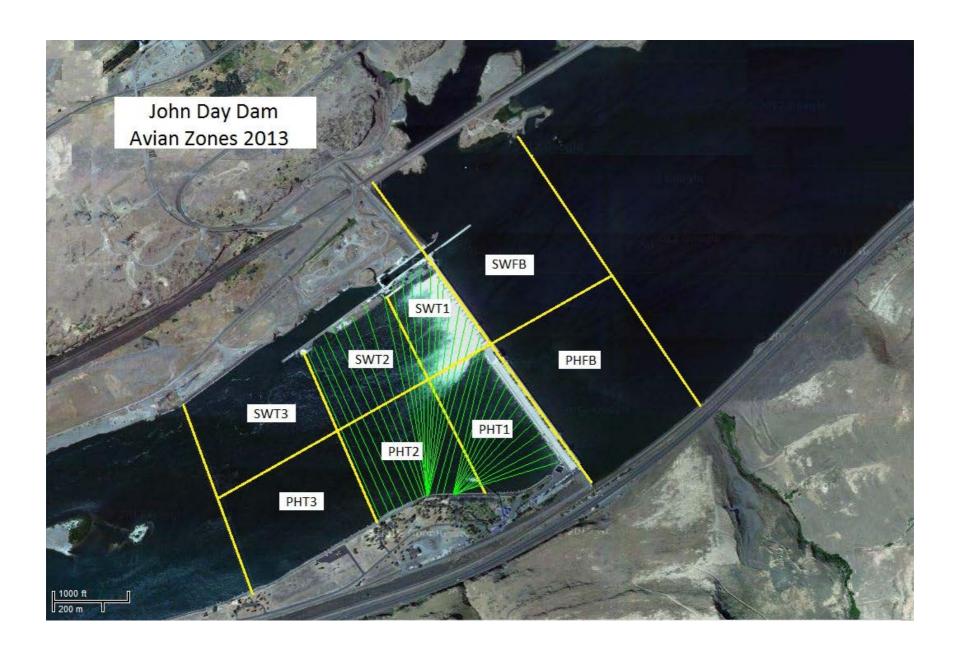
4.50 **3.32** 

3.16

# **Bird Count by Activity**



		Mean		Mean	Mean
	Total	Foraging	Mean Flyby	Resting	Scavenging
Date	Count	Count	Count	Count	Count
6/2/2013	47	26	1	20	
6/3/2013	63	34	2	27	
6/4/2013	55	20	2	33	
6/5/2013	54	23	0	21	
6/6/2013	34	9	0	27	
6/7/2013	48	16	0	32	
6/8/2013	40	6	2	32	



# John Day:

_	Temp:	Secchi:			Fallbacks
Sun	58		5.0		18
Mon	57		5.0		28
Tues	58		5.0		24
Wed	61		4.0		18
Thur	62		4.0		20
Fri	63		5.0		26
Sat	60		4.0		21
AVG:	59.9	AVG:	4.6	AVG	22
•				MAX	28
				MIN	18

Sun
Sun
Mon
Mon
Tues
Tues
Wed
Wed
Thur
Thur
Fri
Fri
Sat
Sat
AVG:

NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
8.4	8.4	1.3	9.1	1.6	4.5	1.7	1.3
8.7	8.7	1.3	10.1	1.5	4.6	1.7	1.3
9.0	9.0	1.4	10.0	1.6	4.5	1.9	1.3
9.5	9.5	1.4	10.0	1.4	4.5	1.9	1.4
8.8	8.8	1.5	9.9	1.5	4.6	1.9	1.3
9.1	9.1	1.4	9.9	1.4	4.5	1.9	1.3
9.4	9.4	1.5	9.8	1.5	4.6	1.9	1.5
9.0	9.2	1.4	10.0	1.4	4.5	1.8	1.6
9.2	9.3	1.4	9.1	1.4	4.5	1.9	1.6
9.5	9.7	1.4	9.9	1.5	4.6	1.8	1.5
9.1	9.4	1.4	9.8	1.5	4.6	1.8	1.6
9.0	9.2	1.5	9.8	1.4	4.6	1.8	1.5
9.4	9.2	1.4	10.1	1.5	4.6	1.7	1.4
9.3	9.5	1.6	9.8	1.5	4.5	2.0	1.6
9.1	9.2	1.4	9.8	1.5	4.6	1.8	1.4