### FISHWAY STATUS REPORT

**Date:** 7/14/2013

**Inspection Period:** 07/08 thru 07/13/13

## JOHN DAY DAM



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

Rufus, Oregon 97050 Phone: 541-506-7860

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: 67.1 F
	Out of Criteria	Limit	Secchi: 5.0 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	Mid Setting	Setting changed to mid on 25 June
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 9.4
Collection channel velocity	0	1.5 - 4 fps	ft/sec 2.92
Bay 1 differential	0	1.0' - 2.0'	AVG 1.7
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.3
Entrance weir NE1	0	depth (≥ 8')	AVG 8.5
Entrance weir NE2	0	depth (≥ 8')	AVG 8.4
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 completed by 6/20; one "bad" screen replaced with spare.
Turbine trashrack drawdown	0	<1.5', wkly	MU intake trashracks raking scheduled for week of 6/24
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:** Very light

**Maintenance:** All winter maintenance/PM activities successfully completed by 4/1/13.

PSMFC crew installed new wiring for the full flow PIT tag detectors by 7/11.

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

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

**Fallbacks:** AVG: 259 MAX: 295 MIN: 217

### **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. Attempts to net the fish unsuccessful so far.

JD South Fishway changed to two fish turbine operation after turbine 2 failed on 7/10 AM; able to maintain the FPP criteria so far. ETR for the third turbine is late July (see Maintenance below.)

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

#### Maintenance:

JD South AWS turbine # 2 OOS on 7/10 due to failed motor of its thrust bearing pump. Maintenance procured spare motor and ETR is week of 7/22. Gatewell draw down: Measurements made on 7/10. All units were within established limits.

Calibration: 7/13/2013 All JD Fishways' PLCs/ water level sensors were within 0.3' margin of error.

#### Research:

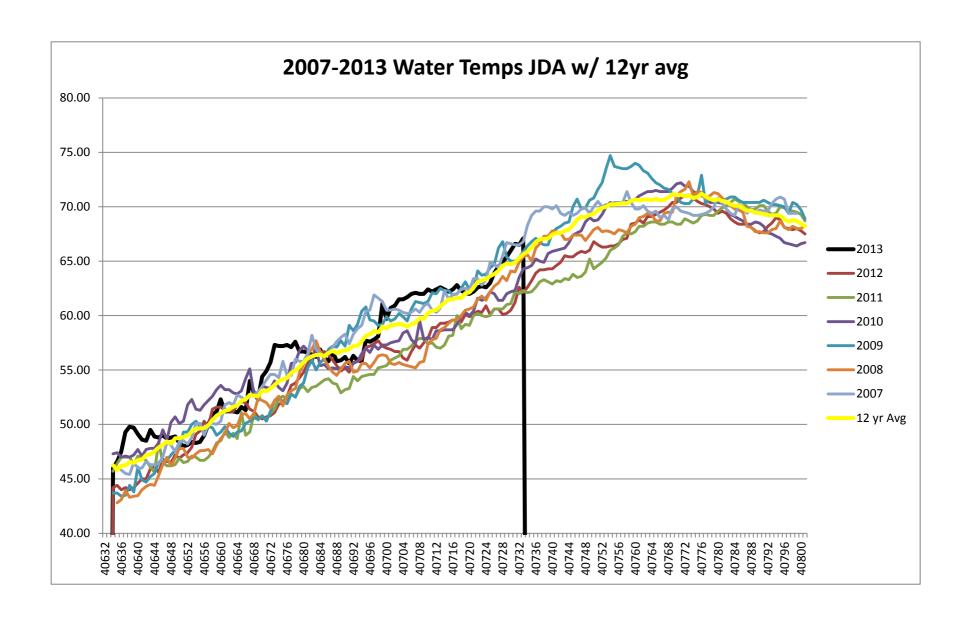
WDFW dam angling ongoing; weekly catch ending 7/14 was 264 NPM with 1,653 total since 5/1. Fishing is expected to continue through August. Fish counting at both JD Fishways ongoing as required by FPP.

JD South automated lamprey trap was activated on 6/23. JD Structural crew provides mobile crane support daily during work week, Monday - Thursday. The Umatilla tribe off loads and monitors collected lamprey daily at 0930 hrs.

JD North Lamprey Passage System's (LPS) test start up occurred on 6/20. JD electrician assisted U of I engineer; some wiring deficiencies were noted and will be corrected before the season's start in early July.

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. S	Smith PE		
OPM John	Day/Willow	Creek	Projec <sup>-</sup>



# JDA COLLECTION CHANNEL VELOCITY

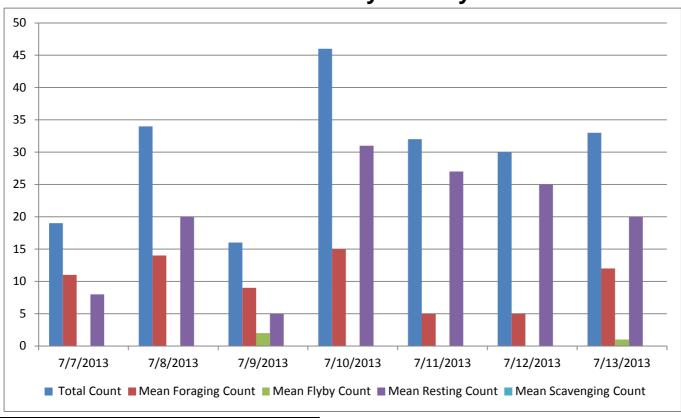
 Date
 20-Jul-13

 By:
 maz,pkr

Bay(s)	Time	Sec.	Velocity (f/s)	
0-2	0:01:26	86	2.09	
2 - 4	0:02:27	147	2.95	
4 - 6	0:03:31	211	2.81	
6 - 8	0:04:29	269	3.10	
8 - 10	0:05:29	329	3.00	
10 - 12	0:06:28	388	3.05	
12 - 14	0:07:38	458	2.57	
14 - 16	0:08:44	524	2.73	
16 - 18	0:09:29	569	4.00	

2.92

## **Bird Count by Activity**



		Mean		Mean	Mean
	Total	Foraging	Mean Flyby	Resting	Scavenging
Date	Count	Count	Count	Count	Count
7/7/2013	19	11	0	8	0
7/8/2013	34	14	0	20	0
7/9/2013	16	9	2	5	0
7/10/2013	46	15	0	31	0
7/11/2013	32	5	0	27	0
7/12/2013	30	5	0	25	0
7/13/2013	33	12	1	20	0



### John Day:

	Temp:		Secchi:
Sun	66		5.0
Mon	66		5.0
Tues	67		5.0
Wed	67		5.0
Thur	68		5.0
Fri	68		5.0
Sat	68		5.0
AVG:	67.1	AVG:	5.0

	295
	289
	271
	217
	221
	251
AVG	259
MAX	295
MIN	217
-1	N Ent

Fallbacks 269

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
9.2	9.0	1.4	9.1	1.5	4.6	1.8	1.5
8.9	9.0	1.3	10.1	1.5	4.6	1.9	1.4
8.5	8.3	1.4	8.9	1.5	4.6	1.9	1.5
9.0	9.1	1.4	10.2	1.5	4.5	1.7	1.3
8.5	8.3	1.4	9.3	1.6	4.6	1.7	1.4
8.4	8.6	1.4	9.8	1.5	4.6	1.8	1.6
8.3	8.5	1.2	9.0	1.6	4.7	1.6	1.1
8.3	8.3	1.4	9.3	1.5	4.6	1.7	1.3
8.3	8.2	1.5	9.4	1.6	4.5	1.6	1.2
8.2	8.0	1.3	9.8	1.5	4.6	1.5	1.3
8.4	8.1	1.7	8.6	1.7	4.6	1.6	1.1
8.3	8.4	1.1	9.2	1.5	4.5	1.4	1.0
8.2	8.4	1.2	9.1	1.6	4.6	1.6	1.2
8.1	8.0	1.3	10.1	1.5	4.6	1.6	1.4
8.5	8.4	1.4	9.4	1.5	4.6	1.7	1.3