## FISHWAY STATUS REPORT

**Date:** 9/14/2013 **Inspection Period:** 9/08 thru 9/14/13

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

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: 72.0 F
•	Out of Criteria	Limit	Secchi: 6.0 Ft.
NORTH FISHWAY			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
SOUTH FISHWAY			In regular service with all three AWS turbines working properly
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	1.0' ± 0.1'	
South entrance differential	0	1.0' - 2.0'	AVG 1.5
Entrance weir SE1	0	depth (≥ 8')	AVG 8.8
Collection channel velocity	0	1.5 - 4 fps	ft/sec 3.07
Bay 1 differential	0	1.0' - 2.0'	AVG 1.9
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.1
Entrance weir NE1	0	depth (≥ 8')	AVG 8.6
Entrance weir NE2	0	depth (≥ 8')	AVG 8.5
JUVENILE PASSAGE			SMF sampling season ending on 9/15, full flow PIT tags detections through 30 Nov.
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6
Submersible traveling screens	0	visual inspect	
Turbine trashrack drawdown	0	<1.5', wkly	Very low river debris loads and low drawdown measurements
Vert barrier screen drawdown	0	<1.5', wkly	
Spill volume	0	Bay 2 only	Spill for fish passage ended on 9/1; two TSWs were shut down on 8/29
Spill pattern	0	Bay 2 only	
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:** SMF continues in bypass mode at switch gate due to > 70 F water temperature. Sampling season ending on 9/15; SMF will continue in bypass mode for the full flow PIT tag detections until 30 November; JD Fisheries crew schedule will change to 18 /7.

PDS screen rake continues in regular service without any issues.

**Debris:** Very light

Maintenance:

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: 23 MAX: 37 MIN: 9

### **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.

Gull hazing by USDA boat crew completed for 2013 season on 7/29. Very few gulls are observed around JD at this time of year.

#### Operations:

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

JD South Fishway in service with all three AWS turbines and is meeting the optimal FPP criteria. Two deck covers of JD South AWS turbines discharge closing bulkheads' slots were discovered dislodged on 9/2; a cause is mysterious and unknown? JD Fisheries proposing to ROV the JDS diffuser gratings to assure that they are intact; planned date for this work is Oct. 1 at night.

One small adult chinook mortality was found on the ground, underneath of JD South ladder on 9/14. It is normal to see one or two similar morts per year JD Spillway has only bay 2 open at 1.5K, during daylight hours only since 9/1. This is providing additional attraction to JD North entrance.

#### Maintenance:

Monthly STS inspection by JD Structural crew is scheduled for the week of 23 September.

Gatewell draw down: Measurements made on 9/08. All units were within established limits.

Calibration: 9/1/2013 All JD Fishways' PLCs/ water level sensors were within 0.3' margin of error.

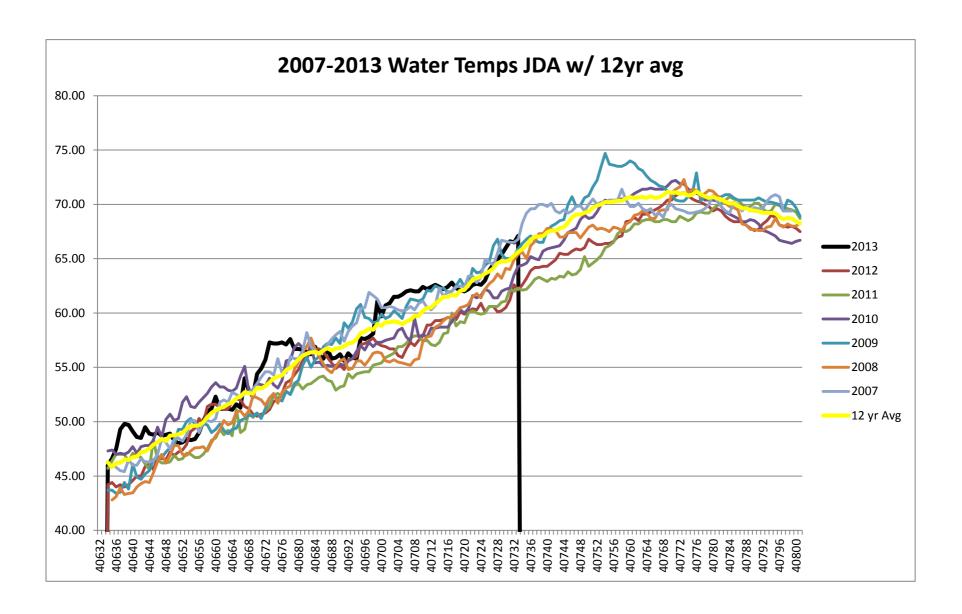
#### Research:

WDFW dam angling ongoing; weekly catch ending 8/25 was 2 NPM with 2,171 total since 5/1. Fishing is expected to continue through August. Fish counting at both JD Fishways ongoing as required by FPP.

JD North Lamprey Passage System's (LPS) 2013 experimental operation completed on 9/9. U of I crew will return the next year.

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:\_\_\_\_ 27-Aug-13



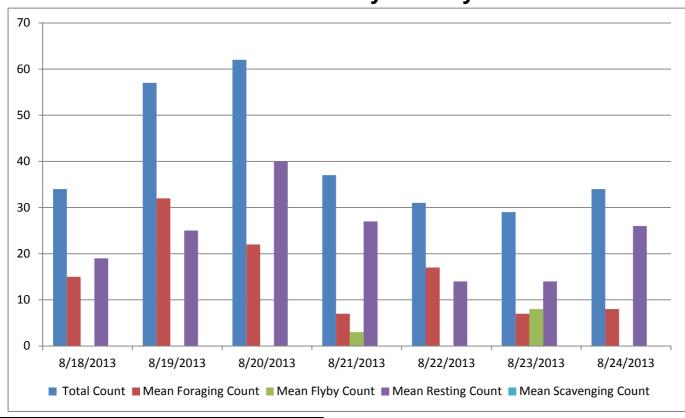
# JDA COLLECTION CHANNEL VELOCITY

Date	12-Sep-13
Ву:	pete

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:01:31	91	1.98
2 - 4	0:02:26	146	3.27
4 - 6	0:03:23	203	3.16
6 - 8	0:04:21	261	3.10
8 - 10	0:05:18	318	3.16
10 - 12	0:06:38	398	2.25
12 - 14	0:07:31	451	3.40
14 - 16	0:08:36	516	2.77
16 - 18	0:09:16	556	4.50

3.07

# **Bird Count by Activity**



		Mean		Mean	Mean
	Total	Foraging	Mean Flyby	Resting	Scavenging
Date	Count	Count	Count	Count	Count
8/18/2013	34	15		19	0
8/19/2013	57	32		25	0
8/20/2013	62	22		40	0
8/21/2013	37	7	3	27	0
8/22/2013	31	17		14	0
8/23/2013	29	7	8	14	0
8/24/2013	34	8		26	0



### John Day:

	Temp:		Secchi:		Fallbacks	
Sun	72		6.0			
Mon	72		6.0		9	
Tues	72		6.0			
Wed	72		6.0			
Thur	72		6.0		37	Primary Bypass 13:45
Fri	72		6.0			
Sat	72		6.0			
AVG:	72.0	AVG:	6.0	AVG	23	
!				MAX	37	
				MIN	9	
				•		

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	8.0	8.0	1.5	8.3	1.6	4.5	1.9	1.0
Sun	8.0	8.0	1.3	8.2	1.6	4.5	2.0	1.2
Mon	8.2	8.1	1.4	8.6	1.6	4.6	1.8	1.1
Mon	8.4	8.6	1.3	8.9	1.5	4.5	1.7	1.2
Tues	9.1	9.0	1.7	8.8	1.3	4.6	2.0	1.0
Tues	9.2	9.1	1.7	8.7	1.4	4.6	1.9	1.0
Wed	9.1	9.0	1.5	9.3	1.3	4.5	2.0	1.0
Wed	9.2	9.1	1.5	9.4	1.4	4.6	1.9	1.1
Thur	8.7	8.6	1.5	8.9	1.3	4.6	1.8	1.0
Thur	8.5	8.4	1.5	8.9	1.5	4.5	1.8	1.2
Fri	8.2	8.1	1.5	8.6	1.6	4.5	1.8	1.2
Fri	8.9	8.8	1.6	9.2	1.5	4.6	1.9	1.1
Sat	8.0	8.0	1.5	8.4	1.5	4.6	1.9	1.2
Sat	8.6	8.5	1.4	9.0	1.6	4.6	1.7	1.1
AVG:	8.6	8.5	1.5	8.8	1.5	4.6	1.9	1.1