## FISHWAY STATUS REPORT

**Date:** 11/2/2013

Inspection Period: 10/27 thru 11/02/2013

# 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: 56.9 F
•	Out of Criteria	Limit	Secchi: 5.0 Ft.
NORTH FISHWAY			Three AWS pumps operational, three others OOS as of 11/1/13
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	1.0' ± 0.1'	
Entrance differential	0	1.0' - 2.0'	AVG 1.4
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	AVG 2.95
Bay 1 differential	0	1.0' - 2.0'	AVG 1.9
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.2
Entrance weir NE1	0	depth (≥ 8')	AVG 8.4
Entrance weir NE2	0	depth (≥ 8')	AVG 8.5
JUVENILE PASSAGE			SMF sampling season ended on 9/15, full flow PIT tags detections through 25 November
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, 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 will continue in bypass for the full flow PIT tags detections until 25 November.

JD Fisheries crew coverage/ monitoring is 16 hrs/7 days since 9/15.

PDS screen rake continues in regular service without any issues.

**Debris:** Very light

Maintenance:

SMF building / wet lab OOS and winterized by JD Fisheries. Kudos to Mr. Greg Kovalchuk, JD PSMFC Sampling Biologist for his significant assistance and cleanup work!

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.

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.

#### Operations:

JD North Fishway in service, meeting the FPP optimal criteria with 3 out of 6 AWS pumps operational; #1, 2 & 4 OOS due to continuing technical issues. 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:

JD North entrance TW sensor failed on 11/1, but the AWS pumps have been operating in manual mode so no real impact. The failed sensor was re-calibrated by JD Electrical on 11/4, Monday and is working properly.

Monthly (October) STS inspection by JD Structural crew completed on 10/23; only one screen had mesh issues and was replaced with working spare.

Gatewell draw down: Measurements made on 10/14. All units were within established limits.

Calibration: 11/1/2013 All JD Fishways' PLCs/ water level sensors were within 0.3' margin of error.

#### Research:

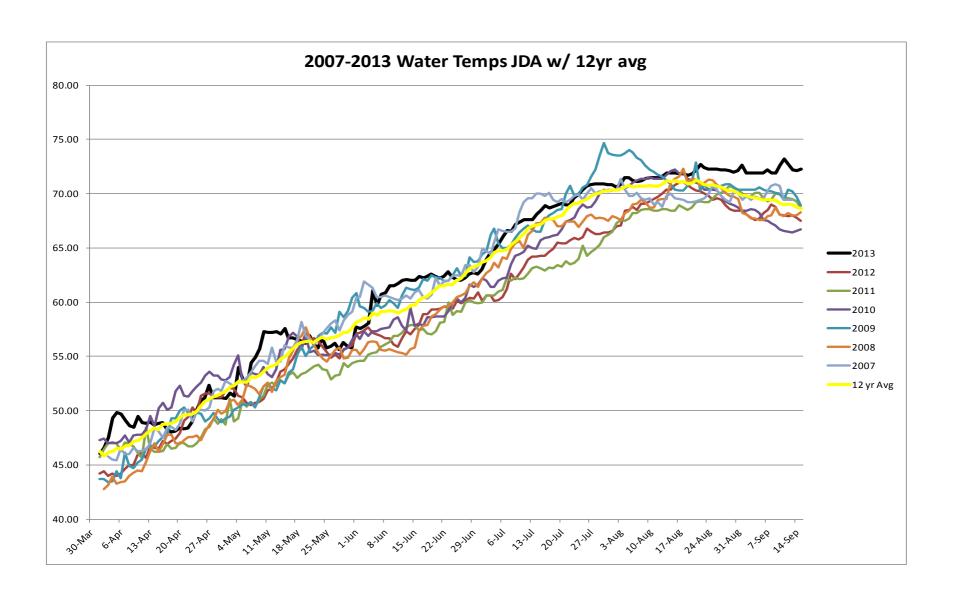
WDFW dam angling completed in late October; the total annual catch ending 10/6 was 2,365 fish.

Fish counting at both JD Fishways ended 10/31 as required by FPP. 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	:	4-Nov-13



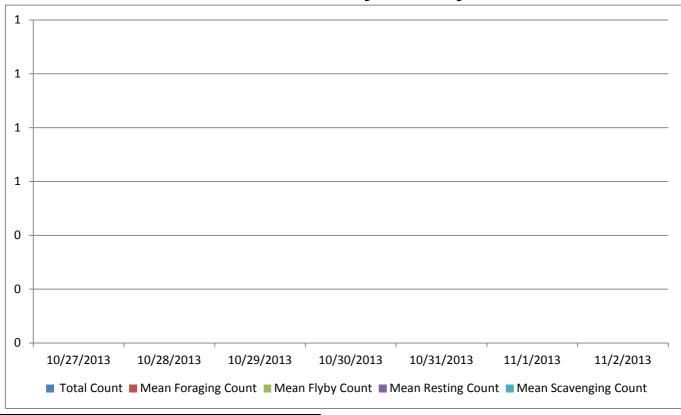
# JDA COLLECTION CHANNEL VELOCITY

Date	27-Oct-13			
By:	egg, pkr			

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:01:30	90	2.00
2 - 4	0:02:30	150	3.00
4 - 6	0:03:30	210	3.00
6 - 8	0:04:30	270	3.00
8 - 10	0:05:30	330	3.00
10 - 12	0:06:32	392	2.90
12 - 14	0:07:38	458	2.73
14 - 16	0:08:41	521	2.86
16 - 18	0:09:25	565	4.09

2.95

# **Bird Count by Activity**



		Mean		Mean	Mean
	Total	Foraging	Mean Flyby	Resting	Scavenging
Date	Count	Count	Count	Count	Count
10/27/2013					
10/28/2013					
10/29/2013					
10/30/2013					
10/31/2013					
11/1/2013					
11/2/2013					

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



### John Day:

	Temp:		Secchi:		Fallbacks
Sun	57		5.0		
Mon	57		5.0		
Tues	56		5.0		
Wed	57		5.0		
Thur	57		5.0		
Fri	57		5.0		
Sat	57		5.0		
AVG:	56.9	AVG:	5.0	AVG	
		·		MAX	
				MIN	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	8.0	8.1	1.2	9.4	1.4	4.6	1.9	1.5
Sun	8.1	8.2	1.2	9.7	1.4	4.6	1.9	1.2
Mon	8.4	8.5	1.2	9.2	1.3	4.6	1.8	1.3
Mon	8.7	8.9	1.2	9.0	1.2	4.7	1.7	1.1
Tues	8.1	8.1	1.5	8.5	1.4	4.6	1.8	1.6
Tues	8.0	8.0	1.6	8.3	1.6	4.5	2.0	1.2
Wed	8.8	8.8	1.7	8.8	1.3	4.6	2.0	1.1
Wed	8.5	8.6	1.6	8.4	1.4	4.5	1.9	1.0
Thur	8.8	8.7	1.9	8.9	1.5	4.6	1.9	1.0
Thur	8.4	8.5	1.7	8.3	1.5	4.6	2.0	1.0
Fri	8.4	8.4	1.6	8.3	1.3	4.6	1.9	1.0
Fri	8.1	8.1	1.6	8.2	1.5	4.6	1.9	1.1
Sat	8.7	8.7	1.5	8.7	1.2	4.6	1.8	1.0
Sat	9.2	9.3	1.4	9.2	1.1	4.6	1.6	1.0
AVG:	8.4	8.5	1.5	8.8	1.4	4.6	1.9	1.2