## FISHWAY STATUS REPORT

**Date:** 8/10/2013

Inspection Period: 08/04 thru 08/10/2013

## 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: 70.9 F
·	Out of Criteria	Limit	Secchi: 4.7 Ft.
NORTH FISHWAY			In regular service since 4/3/13. Technical issues with new AWS pumps continue.
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 AWS OOS for < one hour due to line 4 trip on 8/9, at night
SOUTH FISHWAY			AWS turbine 2 returned to service on 8/1; three turbines ops since
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 1.4
Entrance weir SE1	0	depth (≥ 8')	AVG 9.0
Collection channel velocity	0	1.5 - 4 fps	ft/sec 2.92
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 8.3
Entrance weir NE2	0	depth (≥ 8')	AVG 8.3
JUVENILE PASSAGE			SMF in bypass since 7/25; due to river temp over 70 F
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	MU intake trashracks raking scheduled for week of 8/5
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	Line 4 OOS due to 8/9, 2146 hrs and again on 8/10 evening; BPA line's fault
Turbine 1% Efficiency	0	per FPP	

#### SMOLT MONITORING FACILITY

Operation: SMF switched to primary bypass at 13:00hrs on 7/25 due to > 70 degree water temperature. Manned 24/7 thru 9/15 by COE personnel.

PSMFC biologists performing condition sampling twice weekly until water temp reaches 69.5 degrees, possibly through early September.

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 are planned for 2013.

Fallbacks: AVG: #DIV/0! MAX: #DIV/0! MIN: #DIV/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.

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:

Line 4 (MU 13 -16) tripped on 8/9 at 2141 hrs due to BPA equipment's fault; caused by severe weather/storm. The line returned to service at 2152 hrs, but it tripped again next day, 8/10 at 1757. Minor impact on JD unit priority due to MUs 13-16 OOS, but duration was very short,< than 30 minutes total.

JD North Fishway AWS pumps were OOS for less than one hour during the line 4 emergency on 8/9/13 at approx. 10 PM. Technical issues with the new AWS pumps continue; four are operational and three currently in service which provides sufficient flow to meet optimal FPP criteria.

JD N AWS pump 4 OOS due to failed lower bearing; its investigation continues. RTDs issue for all six pumps continues as well.

Installation of new internet switches for JDN AWS pumps unsuccessful/ delayed.

JD South Fishway in service with all three AWS turbines since 8/1; kudos to JD Maintenance for fixing the thrust bearing pump of turbine 2. All JD Spillway bays are in regular service per FPP pattern requirement.

#### Maintenance:

Gatewell draw down: Measurement made on 8/07. All units were within established limits.

Calibration: 8/9/2013 All JD Fishways' PLCs/ water level sensors were within 0.3' margin of error.

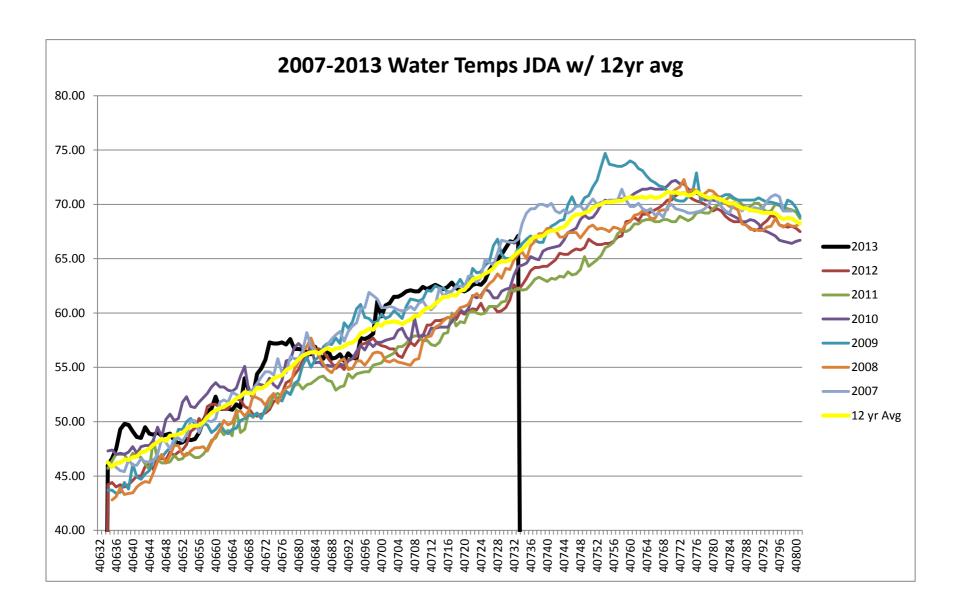
#### Research:

WDFW dam angling ongoing; weekly catch ending 8/11 was 100 NPM with 2,153 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. Umatilla and Yakama tribes have reached their JD collection quota of 270 fish each. Nez Perce tribe is starting their trapping effort on 8/12. JD North Lamprey Passage System's (LPS) continues experimental operation since mid July; U of I crew checking its collector box daily. 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: 30-Jul-13



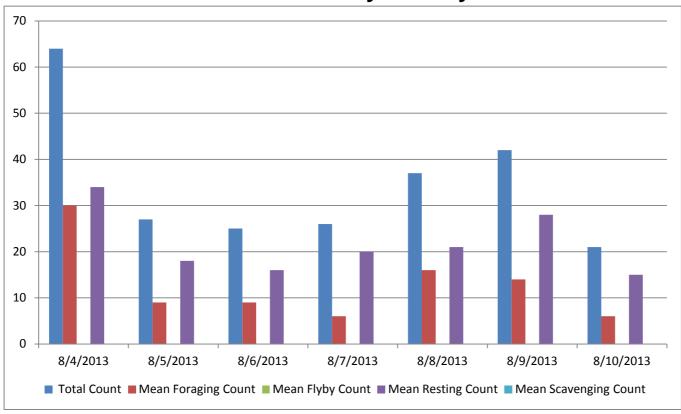
## JDA COLLECTION CHANNEL VELOCITY

Date	20-Jul-13
Ву:	pete

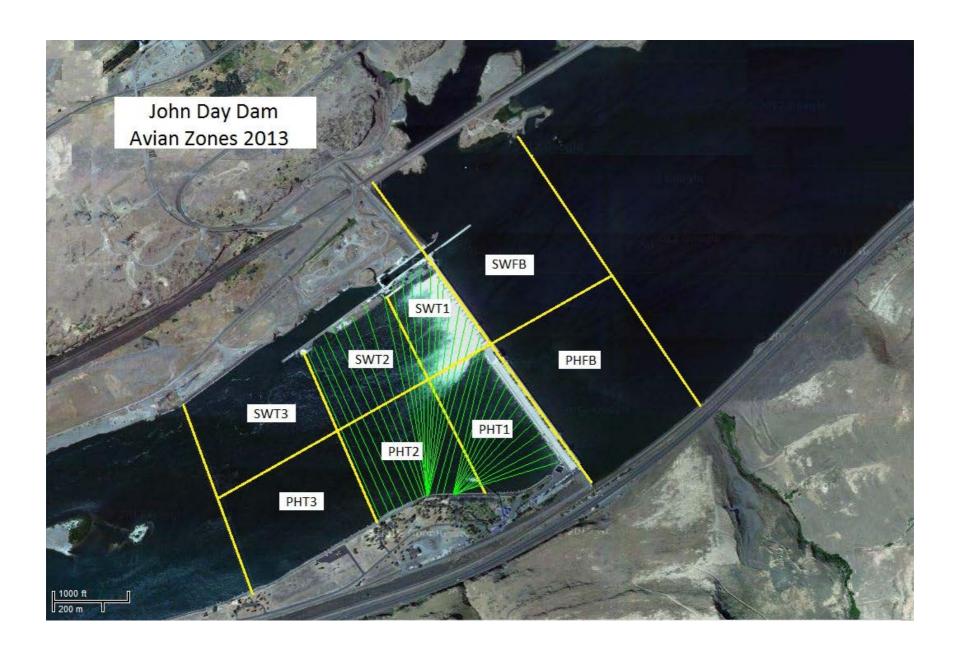
Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:01:26	86	2.09
2 - 4	0:02:27	147	2.95
4 - 6	0:03:31	211	2.81
6 - 8	0:04:29	269	3.10
8 - 10	0:05:29	329	3.00
10 - 12	0:06:28	388	3.05
12 - 14	0:07:38	458	2.57
14 - 16	0:08:44	524	2.73
16 - 18	0:09:29	569	4.00

2.92

# **Bird Count by Activity**



		Mean		Mean	Mean
	Total	Foraging	Mean Flyby	Resting	Scavenging
Date	Count	Count	Count	Count	Count
8/4/2013	64	30		34	0
8/5/2013	27	9		18	0
8/6/2013	25	9		16	0
8/7/2013	26	6		20	0
8/8/2013	37	16		21	0
8/9/2013	42	14		28	0
8/10/2013	21	6		15	0



### John Day:

	Temp:		Secchi:		Fallbacks	
Sun	70		5.0			
Mon	71		5.0			
Tues	71		5.0			
Wed	71		4.5			
Thur	71		4.5			Primary Bypass 13:15
Fri	71		4.5			
Sat	71		4.5			
AVG:	70.9	AVG:	4.7	AVG	#DIV/0!	
				MAX	#DIV/0!	
				MIN	#DIV/0!	
				•		-

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	8.4	8.4	1.4	9.7	1.4	4.6	1.7	1.2
Sun	8.2	8.3	1.3	10.2	1.6	4.5	1.6	1.3
Mon	8.2	8.4	1.4	8.5	1.6	4.6	1.8	1.2
Mon	8.3	8.4	1.4	8.6	1.5	4.6	1.8	1.4
Tues	8.3	8.6	1.3	9.3	1.5	4.6	1.8	1.8
Tues	8.3	8.3	1.4	8.8	1.5	4.5	1.8	1.4
Wed	8.3	8.2	1.4	8.5	1.6	4.6	1.8	1.2
Wed	8.1	8.1	1.3	8.5	1.5	4.6	1.7	1.4
Thur	8.1	8.0	1.8	8.6	1.6	4.6	1.8	1.3
Thur	8.1	8.1	1.4	9.6	1.6	4.7	1.7	1.4
Fri	8.2	8.2	1.4	8.1	1.5	4.6	2.0	1.3
Fri	8.6	8.6	1.4	9.9	1.5	4.6	1.8	1.2
Sat	8.2	8.3	1.5	8.4	1.4	4.6	1.8	1.2
Sat	8.2	8.5	1.2	8.9	1.5	4.6	1.8	1.1
AVG:	8.3	8.3	1.4	9.0	1.5	4.6	1.8	1.3