## FISHWAY STATUS REPORT

**Date:** 8/17/2013

**Inspection Period:** 8/11 thru 8/17/2013

# US Army Corps of Engineers

Portland District

## JOHN DAY DAM

JD/WC Project-Fisheries P.O. Box 823

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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 Criteria Total Number of Inspections: 71.6 F 14 Temperature: Inspections Limit Secchi: 4.5 Ft. **Out of Criteria** 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 **SOUTH FISHWAY** AWS turbine 2 returned to service on 8/1; three turbines ops since Exit differential ≤ 0.5′ 0 **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 AVG 0 1.0' - 2.0' 1.5 Entrance weir SE1 AVG 8.8 0 depth (≥ 8') 2.99 Collection channel velocity 0 1.5 - 4 fps ft/sec Bay 1 differential 1.0' - 2.0' AVG 1.9 0 N. Entrance PH(Bay 19)differential 0 1.0' - 2.0' **AVG** 1.2 Entrance weir NE1 AVG 8.2 0 depth (≥ 8') Entrance weir NE2 AVG 8.3 0 depth (≥ 8') 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 monthly video STSs inspection is scheduled for the week of 8/26 -29 Submersible traveling screens 0 visual inspect very low river debris loads and low drawdown measurements (see below) Turbine trashrack drawdown 0 <1.5', wkly 0 <1.5', wkly Vert barrier screen drawdown per FPP Spill for fish passage started on 4/10; alternating 30/40 % levels same as 2012 Spill volume 0 per FPP 0 Spill pattern **Turbine Unit Priority** 0 per FPP Turbine 1% Efficiency 0 per FPP

#### SMOLT MONITORING FACILITY

Operation: SMF switched to bypass mode at switch gate on 7/25 due to > 70 F 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: 12 MAX: 14 MIN: 10

### 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 FPP optimal criteria with 4 out of 6 AWS pumps operational; # 2 & # 4 OOS due to continuing technical issues.

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 and is meeting the optimal FPP criteria.

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

#### Maintenance:

Five juvenile lamprey morts were found inside strainer of MU13's, when it was opened for maintenance on 8/13. One live lamprey found in MU 11 strainer was released into JD tailrace in excellent condition, the same day. Annual total morts found at JD MU strainers much lower than at Snake River dams. 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.

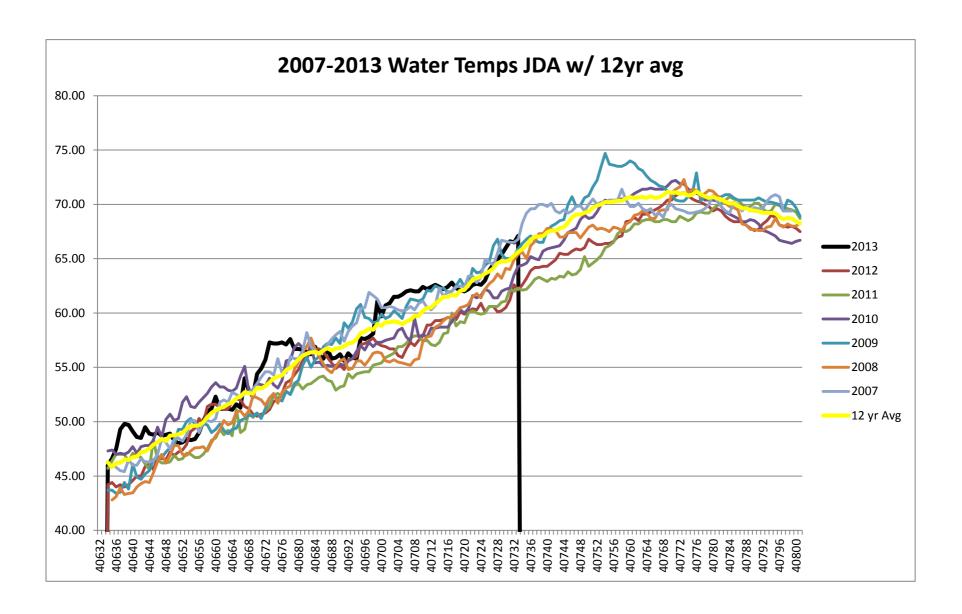
JD South new, automated lamprey trap's operation continues since 6/23. JD Structural crew provides mobile crane support daily during work week, Monday -Thursday. Umatilla, Yakama and Nez Perce tribes reached their target JD collections by mid August.

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:\_\_\_\_ 23 August '13



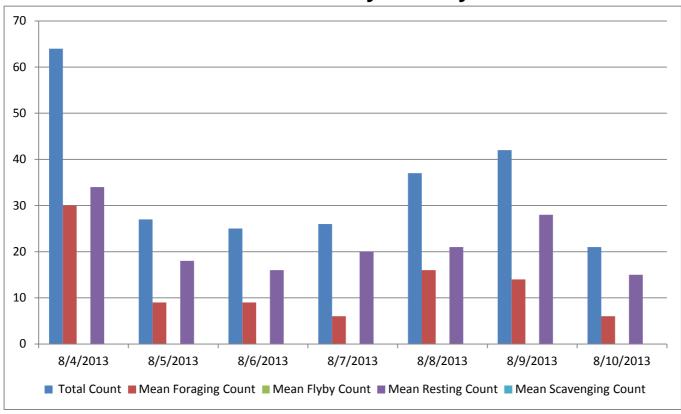
# JDA COLLECTION CHANNEL VELOCITY

Date	16-Aug-13
Ву:	pete

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Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:01:44	104	1.73
2 - 4	0:02:38	158	3.33
4 - 6	0:03:37	217	3.05
6 - 8	0:04:35	275	3.10
8 - 10	0:05:35	335	3.00
10 - 12	0:06:38	398	2.86
12 - 14	0:07:44	464	2.73
14 - 16	0:08:46	526	2.90
16 - 18	0:09:29	569	4.19

2.99

# **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	71		4.5			
Mon	71		4.5		14	
Tues	71		4.5			
Wed	72		4.5			
Thur	72		4.5		10	Primary Bypass 13:15
Fri	72		4.5			
Sat	72		4.5			
AVG:	71.6	AVG:	4.5	AVG	12	
				MAX	14	
				MIN	10	
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	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	8.4	8.5	1.8	8.4	1.6	4.6	2.0	1.0
Sun	8.3	8.4	1.4	8.5	1.5	4.6	1.9	1.2
Mon	8.2	8.2	1.2	8.5	1.5	4.6	1.9	1.3
Mon	8.3	8.6	1.4	10.5	1.4	4.6	1.8	1.3
Tues	8.2	8.0	1.7	8.2	1.8	4.5	1.9	1.2
Tues	8.3	8.3	1.5	9.1	1.4	4.5	1.9	1.4
Wed	8.1	8.2	1.5	8.2	1.6	4.6	1.8	1.2
Wed	8.5	8.3	1.6	9.2	1.4	4.6	1.9	1.3
Thur	8.2	8.2	1.6	8.6	1.5	4.6	1.9	1.2
Thur	8.0	8.3	1.7	8.4	1.5	4.6	2.0	1.3
Fri	8.3	8.2	1.5	9.3	1.4	4.5	1.8	1.2
Fri	8.0	8.1	1.6	9.0	1.4	4.6	1.9	1.3
Sat	8.3	8.3	1.5	8.4	1.6	4.6	1.8	1.1
Sat	8.3	8.3	1.5	9.3	1.4	4.6	1.8	1.3
AVG:	8.2	8.3	1.5	8.8	1.5	4.6	1.9	1.2