### FISHWAY STATUS REPORT

**Date:** 11/26/2013

**Inspection Period:** 11/17 thru 11/23/13

# 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: 51.6 F
	Out of Criteria	Limit	Secchi: 5.5 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 1.6
SOUTH FISHWAY			In regular service with all three AWS turbines working properly
Exit differential	0	≤ 0.5′	
Exit Control weirs	0		MID 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 8.6
Collection channel velocity	0	1.5 - 4 fps	AVG 3.21
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 8.6
Entrance weir NE2	0	depth (≥ 8')	AVG 8.6
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	Some river debris (minor amount) showed up in the PH forebay and MU 1 gatewells this
Vert barrier screen drawdown	0	<1.5', wkly	past week.
Spill volume	0		Spill for fish passage ended on 9/1, TSWs removed /stored on deck.
Spill pattern	0		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.

JD Fisheries Team continues preparing for the end of season dewatering of entire SMF on 25 November.

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.

122 avian lines are properly installed. Three 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 4 out of 6 AWS pumps operational; # 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:

Monthly (November) STS inspection by JD Structural crew completed on 11/21; only one screen had mesh issues and was replaced with working spare. Gatewell draw down: Measurements made on 11/17. All units were within established limits, with less than 1.0' differential

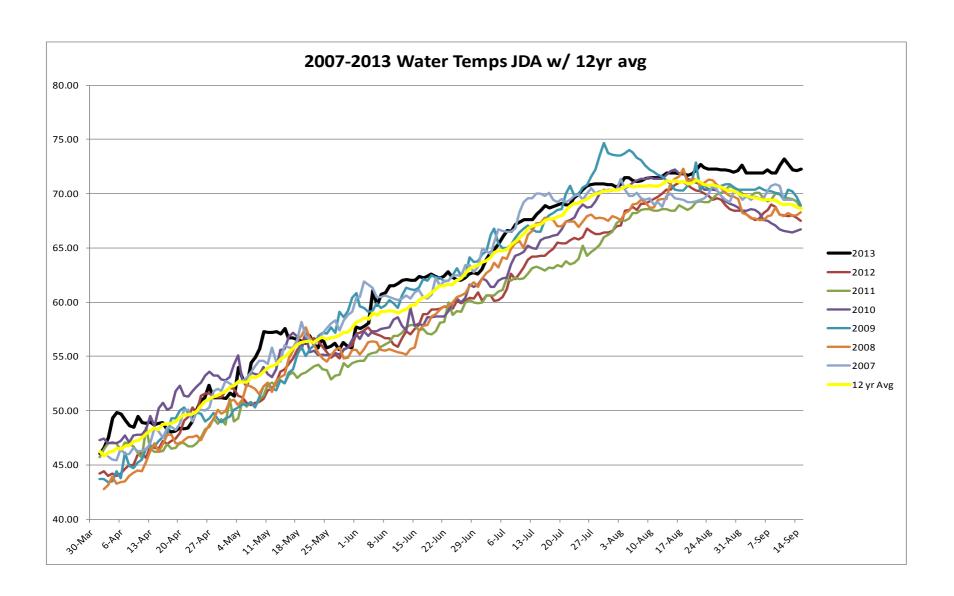
Calibration: 11/14/2013 All JD Fishways' PLCs/ water level sensors were within 0.3' margin of error.

#### Research:

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:\_\_\_\_ 18-Nov-13



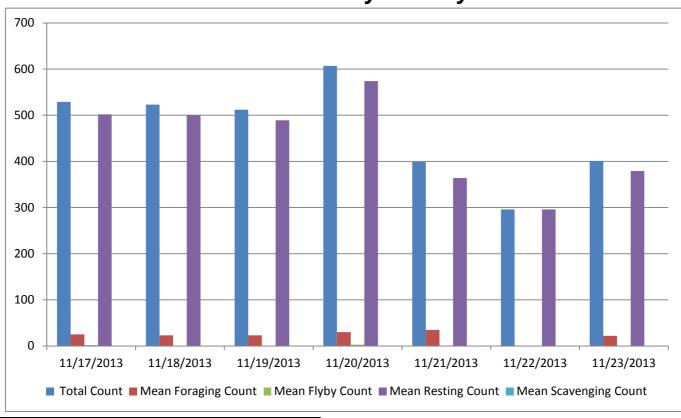
## JDA COLLECTION CHANNEL VELOCITY

Date nov. 10
By: pkr,dek

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:01:33	93	1.94
2 - 4	0:02:24	144	3.53
4 - 6	0:03:23	203	3.05
6 - 8	0:04:16	256	3.40
8 - 10	0:05:11	311	3.27
10 - 12	0:06:07	367	3.21
12 - 14	0:07:11	431	2.81
14 - 16	0:08:07	487	3.21
16 - 18	0:08:47	527	4.50

3.21

## **Bird Count by Activity**



		Mean		Mean	Mean
	Total	Foraging	Mean Flyby	Resting	Scavenging
Date	Count	Count	Count	Count	Count
11/17/2013	529	25	2	502	
11/18/2013	523	23		500	
11/19/2013	512	23		489	
11/20/2013	607	30	3	574	
11/21/2013	399	35		364	
11/22/2013	296	0	0	296	
11/23/2013	401	22		379	

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



### John Day:

	Temp:		Secchi:		Fallbacks
Sun	53		5.5		
Mon	53		6.0		
Tues	52		5.5		
Wed	51		5.5		
Thur	51		5.5		
Fri	51		5.5		
Sat	50		5.0		
AVG:	51.6	AVG:	5.5	AVG	
				MAX	
				MIN	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	8.1	8.1	1.4	8.2	1.6	4.7	1.8	1.3
Sun	8.0	8.0	1.4	8.2	1.8	4.6	1.8	1.3
Mon	8.5	8.6	1.6	8.4	1.5	4.5	1.8	1.2
Mon	8.3	8.2	1.6	8.3	1.7	4.7	1.9	1.4
Tues	8.9	8.9	1.7	8.2	1.7	4.8	2.0	1.4
Tues	8.2	8.3	1.7	8.2	1.7	4.7	2.0	1.4
Wed	8.2	8.3	1.3	8.2	1.4	4.5	2.0	1.3
Wed	8.6	8.7	1.5	8.7	1.5	4.6	1.8	1.3
Thur	8.6	8.8	1.5	8.7	1.6	4.6	1.8	1.3
Thur	8.7	8.8	1.4	8.3	1.6	4.5	1.8	1.2
Fri	8.8	8.9	1.5	9.1	1.5	4.6	1.8	1.4
Fri	9.4	9.2	1.2	9.6	1.5	4.6	1.7	1.5
Sat	9.0	8.9	1.4	9.3	1.4	4.7	1.7	1.3
Sat	8.4	8.3	1.4	8.5	1.5	4.6	1.9	1.5
AVG:	8.6	8.6	1.5	8.6	1.6	4.6	1.8	1.3