## FISHWAY STATUS REPORT

**Date:** 12/14/2013

**Inspection Period:** 12/08 thru 12/14/13

# JOHN DAY DAM



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

Rufus, Oregon 97050 Phone: 541-506-7860

All JD Fishways are inspected once per day during winter season; frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspections	Criteria	Total Number of Inspections: 7 Temperature: 42.6 F
	Out of Criteria	Limit	Secchi: 5.4 Ft.
NORTH FISHWAY			OOS for winter maintenance since 11/29 night; upper successfully dewatered on 12/5
Exit differential	N/A	≤ 0.5′	
Exit Control weirs	N/A	High setting	High setting is normal for JDN
Count station differential	N/A	≤ 0.3′	
Weir crest depth	N/A	1.0' ± 0.1'	,
Entrance differential	N/A	1.0' - 2.0'	AVG 0.0
SOUTH FISHWAY			In regular service with all three AWS turbines working properly
Exit differential	0	≤ 0.5′	
Exit Control weirs	0	MID setting	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 1.4
Entrance weir SE1	0	depth (≥ 8')	AVG 8.8
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 8.8
Entrance weir NE2	0	depth (≥ 8')	AVG 8.8
JUVENILE PASSAGE			JBS with all 48 STS continues in service through 12/15 for kelt downstream passage
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.5
Submersible traveling screens	0	visual inspect	
Turbine trashrack drawdown	0	<1.5', wkly	
Vert barrier screen drawdown	0	<1.5', wkly	
Spill volume	0	n/a	Spill for fish passage ended on 9/1, TSWs removed for contract mods
Spill pattern	0	n/a	
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 continues in bypass for the full flow PIT tags detections.

JD Mechanics continue fixing of the Crest Gate. The end of season SMF dewatering possibly the week of 12/16, Tuesday or Wednesday.

**Debris:** N/A **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.

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. Four 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 OOS for winter maintenance since 11/29 late PM. Upper fishway was successfully dewatered on 12/5. Its entrance and lower fishway diffuser gratings were ROVed in house by JD Structural / Fisheries team on 12/10. All grating segments were found in place properly attached with no issues. Planned return to service is 12/19.

JD South Fishway in service, meeting the optimal FPP criteria with all three AWS turbines. Its dewatering scheduled for 7 January '14.

JBS continues in regular service with all 48 STS installed for kelts fallback protection through 12/15 as required by FPP. JD Structural crew will pull all STSs during the week of 12/16.

#### 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 12/8/13. All units were within established limits, with less than 1.0' differential

Calibration: 12/8/2013 All JD Fishways' PLCs/ water level sensors were within 0.3' margin of error.

#### Research:

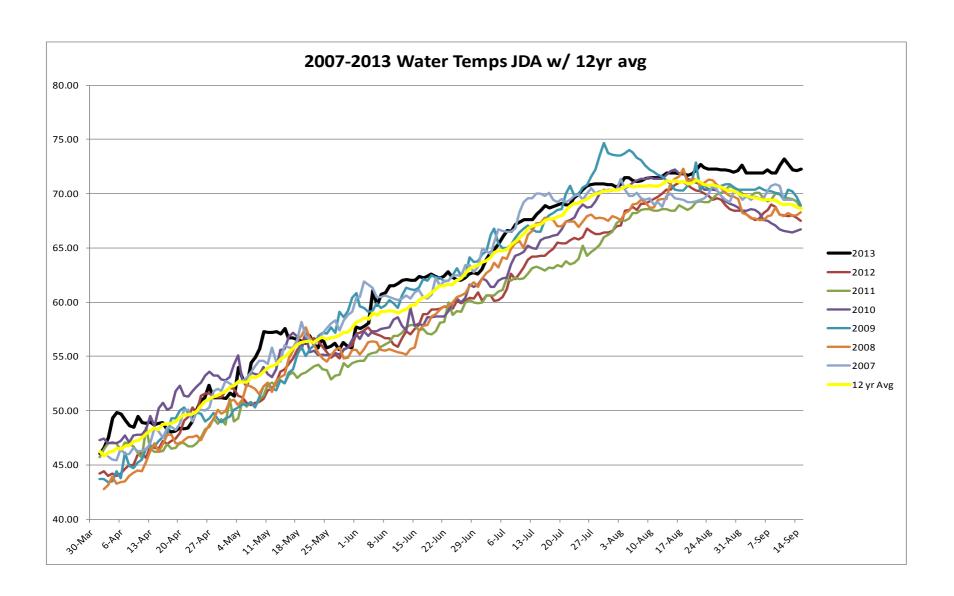
Fish counting at both JD Fishways ended 10/31. Video counting began 11/1 and will continue through the winter.

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 adult salmonids, which were first tagged at Bonneville Dam.

Glen A. Smith PE

OPM John Day/Willow Creek Project

Date:\_\_\_\_ 16-Dec-13



# JDA COLLECTION CHANNEL VELOCITY

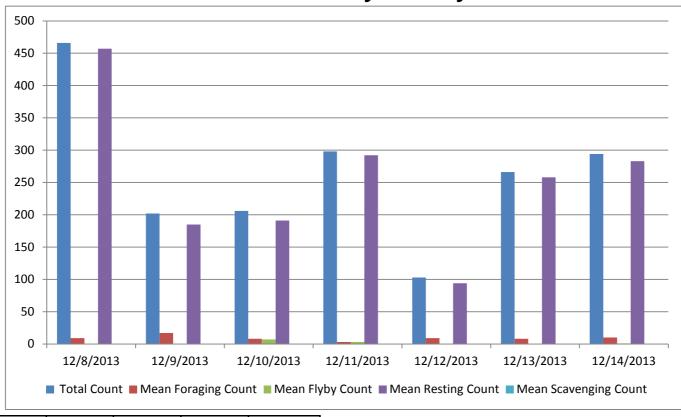
Date dec. 10

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
12/8/2013	466	9		457	
12/9/2013	202	17		185	
12/10/2013	206	8	7	191	
12/11/2013	298	3	3	292	
12/12/2013	103	9	0	94	
12/13/2013	266	8	0	258	
12/14/2013	294	10	1	283	

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



### John Day:

	Temp:	_	Secchi:	_	Fallbacks
Sun	46		6.0		
Mon	43		5.0		
Tues	45		5.0		
Wed	41		5.0		
Thur	41		5.5		
Fri	41		5.5		
Sat	41		5.5		
AVG:	42.6	AVG:	5.4	AVG	
				MAX	
				MIN	
				· ·	

Sun Sun Mon Tues Tues Wed Wed Thur Thur Fri Fri Sat Sat AVG:

NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
9.1	9.1	1.3	8.1	oos	4.5	1.9	1.1
8.9	8.9	1.4	8.5	oos	4.6	1.8	1.5
8.9	8.9	1.3	8.5	oos	4.5	1.8	1.4
9.0	9.0	1.4	8.6	oos	4.6	1.8	1.4
9.1	9.1	1.5	10.0	oos	4.6	1.9	1.1
8.4	8.4	1.2	9.1	oos	4.4	1.7	1.1
8.1	8.1	1.4	8.9	008	4.6	1.8	1.2
8.8	8.8	1.4	8.8		4.5	1.8	1.3