## FISHWAY STATUS REPORT

**Date:** 3/23/2014

Inspection Period: 3/16 thru 3/22/2014



## 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 fish season, March. 1 - Nov. 31 Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspections	Criteria	Total Nur	nber of I	nspections	:	13	Temperature:		<b>42.9</b> F
•	Out of Criteria	Limit			•			Secchi:	<b>2.0</b> Ft.	
NORTH FISHWAY			In regular	service a	ind meeting	the op	timal Fl	PP criteria		
Exit differential	0	≤ 0.5′								
Exit Control weirs	0	High setting	High settii	ng is norr	nal for JDN					
Count station differential	0	≤ 0.3′								
Weir crest depth	0	1.0' ± 0.1'							`	
Defuser Sluice Gate (D2.1-D2.8)	0	per PLC								
Entrance differential	0	1.0' - 2.0'	AVG	1.5						
SOUTH FISHWAY			In regular	service v	vith all three	AWS	turbines	s since 3/11.		
Exit differential	0	≤ 0.5′								
Exit Control weirs	0	MID setting	MID is no	rmal for J	DS					
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	3.1						
Bay 1 differential	0	1.0' - 2.0'	AVG	1.7						
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.6						
Entrance weir NE1	0	depth (≥ 8')	AVG	11.7						
Entrance weir NE2	0	depth (≥ 8')	AVG	11.6						
JUVENILE PASSAGE										
Forebay/bypass conduit differential	N/A	4.0' - 5.0'	AVG	4.7						
Submersible traveling screens	N/A	visual inspect								
Turbine trashrack drawdown	N/A	<1.5', wkly								
Vert barrier screen drawdown	N/A	<1.5', wkly								
Spill volume	N/A	n/a								
Spill pattern	N/A	n/a								
Turbine Unit Priority	N/A	per FPP								
Turbine 1% Efficiency	N/A	per FPP								

#### SMOLT MONITORING FACILITY

Operation: SMF OOS for winter maintenance since 12/17/13. RTS is 25 March 2014

Debris: N/A Maintenance:

Leaking gasket in the Switch Gate area was replaced by JD Mechanical crew on 2/27.

SMF SCADA PLC is undergoing the necessary maintenance/ improvements. ETR is late March.

SMF CCTV replacement has been completed by JD electricians. The picture quality is significantly better with the new cameras, consoles, monitors.

Research:

Battelle setting up for collections, tagging and holding of juvenile salmonids at JD SMF. The first collection/tagging is expected in late April.

Fallbacks: AVG: 0 MAX: 0 MIN: 0

### **OTHER ISSUES:**

#### JOHN DAY

Birds: See Avian tabs.

122 primary avian lines are properly installed. Three primary and two filler lines are missing; one attaching to Navlock broke on 1/10/14. JD Maintenance had attempted to create a plan for re-installation of all missing lines, but it isn't possible due to the lack of O&M manual. District has been informed.

JD Engineering is attempting to contract out the re-installation of three missing primary lines before 10 April deadline.

#### Operations:

JD North Fishway is in regular service and meeting the optimal FPP criteria.

JD South Fishway returned to service with two AWS turbines on 3/1/14; two out of four floating orifices were activated for this configuration.

JD South AWS turbine # 2 returned to service on 3/11 and the fishway has been with full AWS capacity since then.

All required STSs will be installed the week of 3/24/14; JBS and SMF will be in regular service by 1 April as required by FPP.

JBS collection channel is scheduled to return to service in mid March.

#### Maintenance:

JD South Fishway returned to service with two AWS turbines on 3/1 and the third, # 2 returned on 3/11. Two out of four floating orifices were activated by 3/1; the two others will be activated soon. Kudos to JD Electrical for fast repair of AWS turbine 2!

JD North Entrance weir's minor repair (missing skin plate needs to be re-attached to its frame) was scheduled/coordinated for 3/14, but it wasn't accomplished due to windy conditions. JD Maintenance planning to fit this work into their busy schedule within the next two weeks.

Calibration: 3/7/2014 NE1, NE2 were off by more than 0.3; a trouble report was written. All other water sensors were within the criteria of 0.3.

#### Research:

JD Fisheries coordinating with research groups for the upcoming 2014 studies:

PSMFC/WDFW dam angling for the pikeminnow will occur from the JD tailrace deck same as in the last few years.

Oregon DFW pikeminnow crew will survey JD Forebay BRZ (Oregon side) with electroshocking boat in May. BRZ entry permit is pending.

U of I Adult Salmonids Radiotelemetry Antennas repairs were all completed in February.

U of I Testing of JD North LPS (Lamprey Passage System) preparing for their passage season's work starting in June 2014.

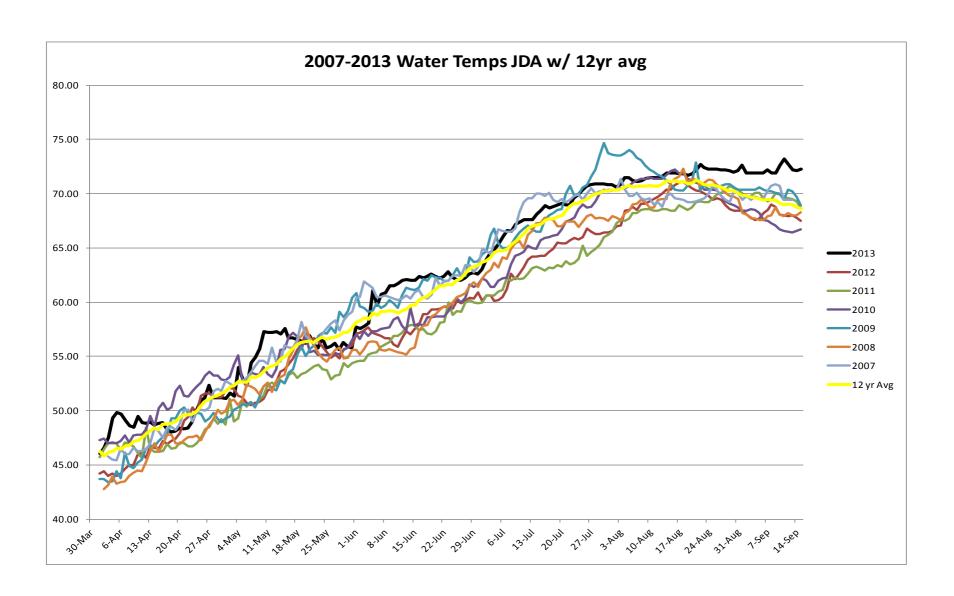
Battelle's Monitoring of Juvenile Salmonids with Hydroacoustic Tags completed installation of all JD Powerhouse and Spillway hydrophones in February.

Four Battelle's office trailers were installed on the forebay deck in February as well. Testing and fine tuning of receivers underway.

Winter Fish Passage's Video counting by Normandeau (contractor) continues. Regular/ direct counting is starting on 1 April as required by FPP. 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 Date:\_\_\_\_ 25-Mar-14



# JDA COLLECTION CHANNEL VELOCITY

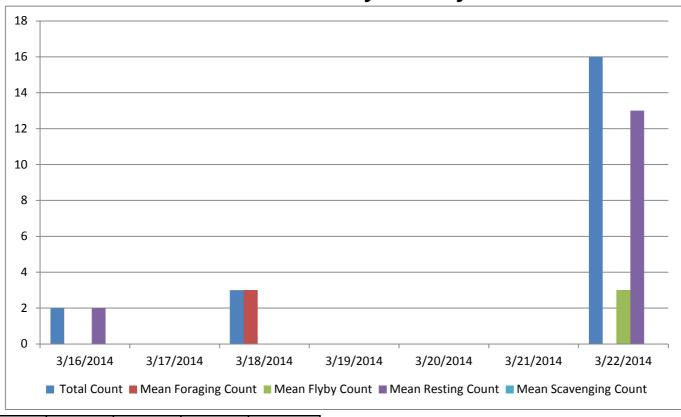
 Date
 21-Dec-13

 By:
 pkr

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:01:23	83	2.17
2 - 4	0:02:20	140	3.16
4 - 6	0:03:16	196	3.21
6 - 8	0:04:14	254	3.10
8 - 10	0:05:10	310	3.21
10 - 12	0:06:10	370	3.00
12 - 14	0:07:17	437	2.69
14 - 16	0:08:13	493	3.21
16 - 18	0:08:55	535	4.29

3.12

## **Bird Count by Activity**



		Mean		Mean	Mean
	Total	Foraging	Mean Flyby	Resting	Scavenging
Date	Count	Count	Count	Count	Count
3/16/2014	2	0		2	
3/17/2014	0	0			
3/18/2014	3	3	0		
3/19/2014	0		0	0	
3/20/2014	0	0	0	0	
3/21/2014	0	0	0	0	
3/22/2014	16	0	3	13	
				•	•



### John Day:

	Temp:		Secchi:		Fallbacks
Sun	43		2.0		0
Mon	43		2.0		
Tues	43		2.0		
Wed	42		2.0		
Thur	42		2.0		
Fri	44		2.0		
Sat	43		2.0		
AVG:	43	AVG:	2.0	AVG	0
				MAX	0
				MIN	0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	12.5	12.3	1.6	9.3	1.3		1.8	1.7
Sun	11.6	11.5	1.6	8.5	1.5		1.7	1.7
Mon	11.6	11.4	1.5	8.4	1.5		2.0	1.9
Mon	11.4	11.2	1.2	8.1	1.5		1.8	1.7
Tues	11.0	11.0	1.3	8.5	1.6		1.6	1.6
Tues	11.3	11.3	1.3	8.7	1.5		1.6	1.5
Wed	11.9	11.9	1.2	9.2	1.4		1.5	1.4
Wed								
Thur	11.6	11.6	1.3	8.9	1.4	4.8	1.6	1.5
Thur	11.9	11.9	1.4	8.9	1.4	4.6	1.7	1.3
Fri	11.8	11.6	1.5	8.6	1.5	4.6	1.8	1.8
Fri	12.2	12.1	1.4	9.1	1.4	4.8	1.7	1.7
Sat	12.0	11.8	1.3	9.0	1.6	4.6	1.8	1.8
Sat	10.8	10.8	1.4	8.8	1.4	4.5	1.7	1.8
AVG:	11.7	11.6	1.4	8.8	1.5	4.7	1.7	1.6