### FISHWAY STATUS REPORT

**Date:** 4/28/2013

**Inspection Period:** 4/21 thru 4/27/2013

### JOHN DAY DAM



JD/WC Project-Fisheries

P.O. Box 564

Rufus, Oregon 97050 Phone: 541-506-7860

Fishway 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: 50.0 F
· ·	Out of Criteria	Limit	Secchi: 3.4 Ft.
NORTH FISHWAY			In regular service, with three AWS pumps since 4/3/13. Five operational since 4/09/13
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'	X
Entrance differential	0	1.0' - 2.0'	AVG 1.4
SOUTH FISHWAY			In regular service with all three AWS turbines since 2/12/13
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 9.8
Collection channel velocity	0	1.5 - 4 fps	ft/sec 3.30
Bay 1 differential	0	1.0' - 2.0'	AVG 1.9
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.4
Entrance weir NE1	0	depth (≥ 8')	AVG 8.6
Entrance weir NE2	0	depth (≥ 8')	AVG 8.7
JUVENILE PASSAGE			JBS placed in Sampling mode at 07:00hrs on 3/31/2013.
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6
Submersible traveling screens	0	visual inspect	STSs camera inspection complete on 4/18.
Turbine trashrack drawdown	0	<1.5', wkly	Monthly MU intake trashracks raking scheduled for week of 4/29
Vert barrier screen drawdown	0	<1.5', wkly	
Spill volume	0	per FPP	Spill for fish passage started on 4/10
Spill pattern	0	per FPP	Bay 13 returned to regular on 4/24; all bays in service since
Turbine Unit Priority	0	per FPP	MU Priority with two TSWs 4/10 through 8/31
Turbine 1% Efficiency	0	per FPP	

#### SMOLT MONITORING FACILITY

Operation: SMF in regular sampling mode since 3/31/13. Manned 24/7 thru 9/15 by COE personnel. PSMFC biologists performing daily sampling.

All necessary STSs were installed by 3/28.

PDS screen cleaner was returned to service as planned on 4/1, after JD Electrical verified its settings under flow conditions.

**Debris:** Light with mostly small beaver-generated sticks and tumbleweeds.

Maintenance: No issues. All winter maintenance/PM activities successfully completed by 4/1/13.

SMF CCTV replacement is in planning stage; the original system installed in 1998 is barely usable and its components have been failing frequently.

**Research:** None. No fish collections are planned for 2013.

Fallbacks: AVG: 42 MAX: 58 MIN: 26

#### OTHER ISSUES:

#### JOHN DAY

Birds: See Avian tabs.

123 avian lines are properly installed. Two lines are currently missing; a spillway/TSW line broke on 4/12/13. JD Management preparing a plan for the missing lines' replacement before 2014 passage season.

Daily, 8 hrs gull hazing shifts by USDA boat crew started at JD tailrace on 4/17; ongoing and effective so far.

#### **Operations:**

JD North Fishway in regular service with three AWS pumps operational since 4/2. Five pumps operational since 4/9; JDN is meeting the optimal entrance/FPP criteria of 1.5'. Pump 6 tripped due to high RTD 3 alarm and PLC immediately started pump 3 as its replacement on 4/26 early AM. JD South Fishway in regular service with all three AWS turbines; it is meeting the optimal entrances' criteria of 1.5'.

JD Structural crew completed the STSs' camera inspections on 4/18. Two bad screens were found, removed and replaced with working spares.

JD spillway bay 13 to service on 4/24; all bays in regular service since.

#### New construction:

The last of six JD North AWS pumps, # 5's completion is delayed by contractor/Construction Office; this pumps is non-critical/ always spare.

#### Maintenance:

JD Electrical completed work on spillway bay 13, which returned to service on 4/23.

Gatewell draw down: Measurements made on 4/24. All units were within established limits.

Calibration: 4/18/2013 All JD Fishways' PLCs/ water level sensors were within 0.3' margin of error.

#### Research:

Fish counting began at both adult ladders on 4/1 under contract with Normandeau Associates; there were no problems with the startup.

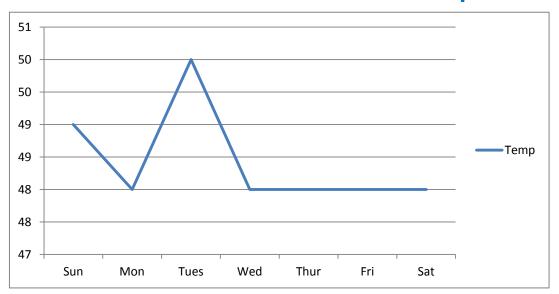
JD South Counting Station' automated lamprey trap in-water installation complete on 2/12; the trap's hoist will be installed outside of fishway in April.

JD North prototype Lamprey Passage System's (LPS) installation was successfully completed by University of Idaho crews by 3/12/13.

JD Fisheries coordinating with U of I crews for the Adult Salmonids Radio telemetry's equipment set up, ETR is late April '13.

Glen A. Smith PE	Date:
OPM John Day/Willow Creek Project	

# **River Temperature**



Day	Temp		
Sun	49		
Mon	48		
Tues	50		
Wed	48		
Thur	48		
Fri	48		
Sat	48		

## JDA COLLECTION CHANNEL VELOCITY

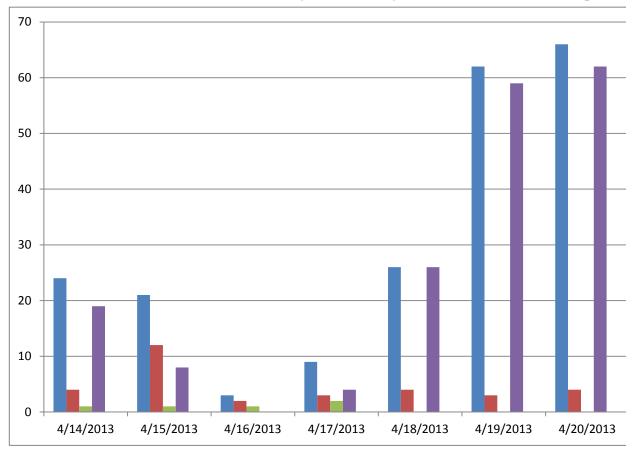
 Date
 27-Apr-13

 By:
 pete

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:01:11	71	2.54
2 - 4	0:02:02	122	3.53
4 - 6	0:03:01	181	3.05
6 - 8	0:03:55	235	3.33
8 - 10	0:04:49	289	3.33
10 - 12	0:05:49	349	3.00
12 - 14	0:06:54	414	2.77
14 - 16	0:07:54	474	3.00
16 - 18	0:08:35	515	4.39

3.30

# Bird Count by Activity for week ending 4/2



		Mean		Mean	Mean
	Total	Foraging	Mean Flyby	Resting	Scavenging
Date	Count	Count	Count	Count	Count
4/14/2013	24	4	1	19	0
4/15/2013	21	12	1	8	0
4/16/2013	3	2	1	0	0
4/17/2013	9	3	2	4	0
4/18/2013	26	4	0	26	0
4/19/2013	62	3	0	59	0
4/20/2013	66	4	0	62	0

## 20/2013

Total Count

Mean Foraging Count

Mean Flyby Count

Mean Resting Count

Mean Scavenging Count





### John Day:

_ Temp:			Secchi:	Fallbacks	
Sun	48		3.0		26
Mon	48		3.5		33
Tues	49		3.5		30
Wed	50		3.5		48
Thur	52		3.5		58
Fri	51		3.5		51
Sat	52		3.5		48
AVG:	50.0	AVG:	3.4	AVG	42
				MAX	58
				MIN	26
				•	

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

NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
8.6	8.7	1.6	9.7	1.6	4.6	2.0	1.4
8.7	8.8	1.5	10.1	1.4	4.5	1.9	1.3
9.3	9.4	1.2	9.8	1.4	4.6	1.9	1.4
8.6	8.4	1.6	10.0	1.6	4.6	2.0	1.3
9.0	9.1	1.4	9.9	1.4	4.6	1.9	1.3
8.2	8.1	1.2	9.7	1.2	4.5	1.8	1.3
8.6	8.7	1.4	9.7	1.4	4.5	1.9	1.4
8.3	8.4	1.4	9.6	1.4	4.5	2.0	1.4
8.3	8.6	1.3	10.0	1.3	4.6	2.0	1.5
8.4	8.5	1.5	9.8	1.5	4.6	2.0	1.3
8.5	8.7	1.5	9.6	1.5	4.6	1.9	1.5
8.8	8.9	1.6	9.7	1.6	4.6	2.0	1.2
8.4	8.6	1.2	9.7	1.2	4.6	1.7	1.2
8.8	9.0	1.5	9.6	1.5	4.5	2.0	1.4
8.6	8.7	1.4	9.8	1.4	4.6	1.9	1.4