

# FISHWAY STATUS REPORT

Date: 4/13/2013  
 Inspection Period: 4/7 thru 4/13/13

## JOHN DAY DAM



**US Army Corps  
of Engineers**  
Portland District

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:	Temperature:
	Out of Criteria	Limit	14	48.4 F
				Secchi: 3.6 Ft.
<b>NORTH FISHWAY</b>			In regular service, with three AWS pumps since 4/3/13. <b>Five operational since 4/09/13</b>	
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 1.5	
<b>SOUTH FISHWAY</b>			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 1.5	
Entrance weir SE1	0	depth (≥ 8')	AVG 9.6	
Collection channel velocity	0	1.5 - 4 fps	ft/sec 3.27	
Bay 1 differential	0	1.0' - 2.0'	AVG 1.9	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.5	
Entrance weir NE1	0	depth (≥ 8')	AVG 8.8	
Entrance weir NE2	0	depth (≥ 8')	AVG 8.7	
<b>JUVENILE PASSAGE</b>			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 scheduled for week of 4/15	
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	Spill pattern with two TSWs in bays 18 & 19 started on 4/10, as per FPP requirement	
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: 53 MAX: 69 MIN: 21

## **OTHER ISSUES:**

### **JOHN DAY**

**Birds:** See Avian tabs.

123 avian lines out of 125 total are properly installed; second line down was found on 4/12. Both are considered non-critical with minimal overall impact. JD Project has no O&M manual/ no proper tools/ no training necessary for their re-installation at this time; working with District to assure that the grid is all complete for the next, 2014 season.

Gull hazing by USDA boat crews is scheduled to commence at JD tailrace the week of 4/15/13.

### **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'.

JD South Fishway in regular service with all three AWS turbines; it is meeting the optimal entrances' criteria of 1.5' .

JD Structural crew removed floating/ wooden debris from a few MU gatewells on 4/4 ; all MU gatewells were clean before the weekend of 4/5.

### **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.

Two permanent JD TSWs were completed by a contractor on time; both are in regular service since 4/10 AM as required by FPP.

Kudos to JD Structural crew for their last minute assistance/mods to the closure gate !

JD South automated lamprey trap installation completed on 2/12/13. 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 the University of Idaho crews by 3/12/13.

### **Maintenance:**

JD North count station's crowder repaired and operable since 4/08. JD South CS window completed; new limit switches were installed by JD Electrical.

STS winter maintenance by JD Maintenance crews has been completed and STS's installed prior to 3/31.

Gatewell draw down: Measurements made on 4/5 and 4/10. All units were within established limits.

Calibration: 4/4/2013 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.

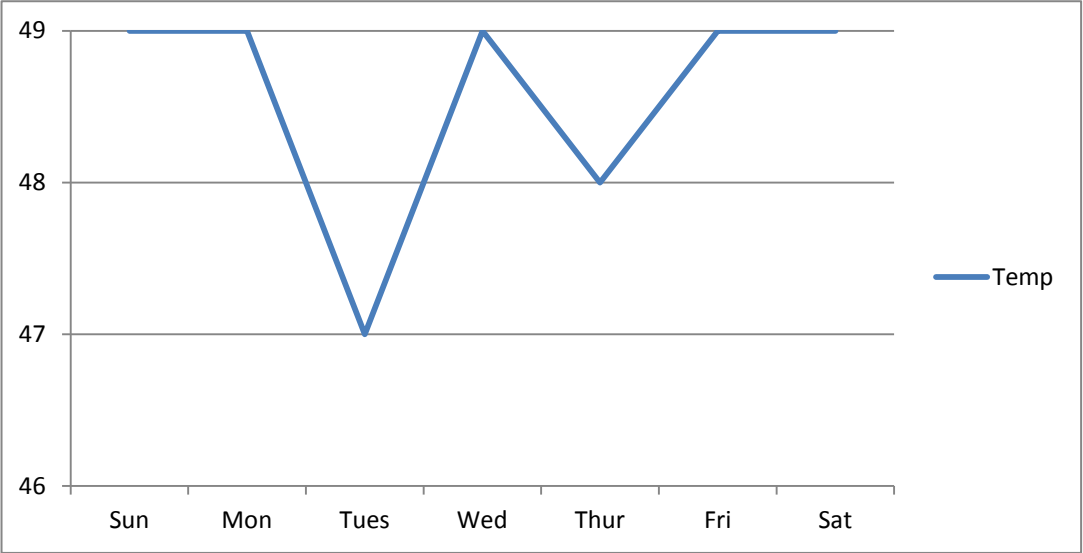
JD North prototype Lamprey Passage System's (LPS) installation was successfully completed by University of Idaho crews by 3/12/13.

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  
OPM John Day/Willow Creek Project

Date: \_\_\_\_\_

# River Temperature



Temp

Sun	49
Mon	49
Tues	47
Wed	49
Thur	48
Fri	49
Sat	49

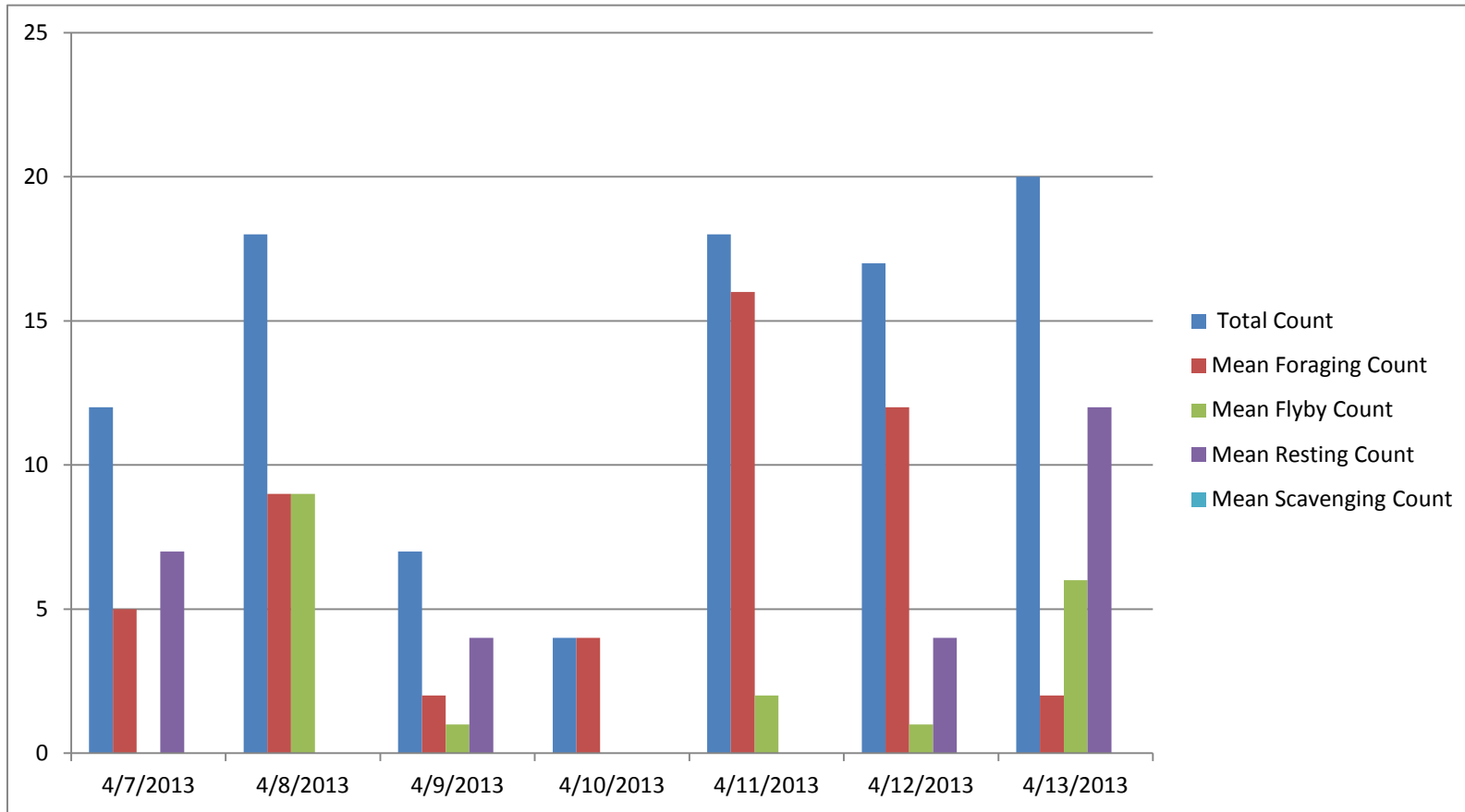
# JDA COLLECTION CHANNEL VELOCITY

Date 12-Apr-13  
By: Eric

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:01:13	73	2.47
2 - 4	0:02:10	130	3.16
4 - 6	0:03:06	186	3.21
6 - 8	0:04:00	240	3.33
8 - 10	0:05:05	305	2.77
10 - 12	0:06:00	360	3.27
12 - 14	0:07:01	421	2.95
14 - 16	0:08:01	481	3.00
16 - 18	0:08:41	521	4.50

**3.27**

## Bird Activity for April 7-13



Date	Total Count	Mean Foraging Count	Mean Flyby Count	Mean Resting Count	Mean Scavenging Count
4/7/2013	12	5	0	7	0
4/8/2013	18	9	9	0	0
4/9/2013	7	2	1	4	0
4/10/2013	4	4	0	0	0
4/11/2013	18	16	2	0	0
4/12/2013	17	12	1	4	0
4/13/2013	20	2	6	12	0

John Day Dam  
Avian Zones 2013



**John Day:**

	Temp:	Secchi:	Fallbacks
Sun	49	4.0	69
Mon	49	4.5	67
Tues	48	4.5	49
Wed	47	3.0	58
Thur	48	3.0	21
Fri	49	3.0	52
Sat	49	3.0	57
AVG:	48.4	3.6	53
			MAX 69
			MIN 21

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	9.1	9.1	1.5	10.0	1.4	4.5	2.0	1.3
Sun	8.7	8.7	1.5	10.0	1.6	4.6	1.9	1.4
Mon	8.5	8.1	1.7	10.0	1.4	4.5	1.9	1.5
Mon	8.3	8.3	1.5	9.9	1.5	4.5	1.9	1.4
Tues	9.0	9.0	1.5	9.6	1.6	4.6	1.9	1.4
Tues	8.4	8.4	1.5	9.4	1.6	4.6	1.9	1.5
Wed	9.2	9.1	1.3	8.5	1.5	4.6	1.8	1.3
Wed	8.4	8.6	1.4	9.6	1.5	4.5	1.8	1.6
Thur	9.7	9.6	1.5	9.6	1.5	4.6	1.8	1.5
Thur	8.9	9.0	1.4	9.4	1.5	4.6	1.8	1.6
Fri	8.6	8.8	1.4	9.2	1.6	4.6	1.8	1.5
Fri	8.8	8.8	1.5	10.1	1.5	4.5	1.8	1.6
Sat	8.5	8.3	1.5	9.7	1.6	4.6	1.9	1.6
Sat	8.5	8.4	1.4	9.2	1.5	4.6	1.8	1.4
AVG:	8.8	8.7	1.5	9.6	1.5	4.6	1.9	1.5