

# FISHWAY STATUS REPORT

Date: 9/13/2014  
 Inspection Period: 9/7 thru 9/13/2014

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.



**US Army Corps  
of Engineers**  
Portland District

**JOHN DAY DAM**  
 JD/WC Project-Fisheries  
 P.O. Box 823  
 Rufus, Oregon 97050  
 Phone: 541-506-7860

John Day Dam	Inspections	Criteria	Total Number of Inspections: 14	Temperature: 70 F
	Out of Criteria	Limit		Secchi: 5.2 Ft.
<b>NORTH FISHWAY</b>			In regular service. Five AWS pumps available since 4/11	
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 (DS gauge)	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	
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 (US gauge)	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 3.31	
Bay 1 differential	0	1.0' - 2.0'	AVG 1.8	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.5	
Entrance weir NE1	0	depth (≥ 8')	AVG 8.6	
Entrance weir NE2	0	depth (≥ 8')	AVG 8.6	
<b>JUVENILE PASSAGE</b>			Limited sampling from 7/31 through 9/12. Returned to 24/7 sampling on 9/13.	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect	Next monthly STS camera inspection scheduled for the 3rd week of September	
Turbine trashrack drawdown	0	<1.5', wkly	Next raking is scheduled for the last week of September.	
Vert barrier screen drawdown	0	<1.5', wkly	Gatewell drawdown performed twice a week or more frequently if high river debris loads	
Spill volume	0	1.6 kcfs	2014 Fish Spill ended on 8/31, 2400 hrs. 1.6 kcfs, Bay 2 daylight only through November	
Spill pattern	0	per FPP	Bay 2 at 1.6kcfs to provide additional attraction to JD North Entrance.	
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

## SMOLT MONITORING FACILITY

**Operations:** PSMFC sampling was limited to twice a week due to river temp above 70 F, from 7/31 through 9/12. Regular 24/7 sampling was restarted on 9/13 when the river temp dropped down to 69.5 F. JD Fisheries works regular 24/7 swing shift schedule as required by FPP; it will continue this until the end of sampling season on 9/15.

**Debris:** Moderate to light; primarily tumbleweeds with some sticks, branches, and wooden debris.

**Maintenance:** None

### Research:

US Fish and Wildlife Service's pilot tagging of adult lamprey started at JD SMF on 7/14 and will continue as long as the fish are available. The tagged fish are transported and released at Ice Harbor for the Snake River dams passage research.

**Fallbacks:** AVG: 27                      MAX: 43                      MIN: 9                      (6 hr. condition sampling twice weekly at temps over 70 F.)

## OTHER ISSUES:

### JOHN DAY

**BIRDS :** see the Avian Numbers tab. We report all species and locations, but in reality only gulls in the tailrace BRZ are relevant at JD.

Avian line # 26 was found failed/its end in the water on 9/1. This is shore- to-shore line and immediately adjacent to the previously missing # 27.

JD Engineering preparing SOW for a contract, which is expected in March '15; funded by special CRFM \$.

### Operations:

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

JD South Fishway in regular service and meeting the FPP criteria.

Bay 2, 1.6 kcfs daylight spill from Bay 2 continues daily, September through November to provide additional attraction to JD North Entrance.

### Maintenance:

JD North AWS pumps - five out of total six are available for service since 4/11. AWS pump # 4 continues in OOS status due to its lower bearing issues.

JD Engineering/contractor continue with its repairs.

Calibration: 9/4/2014 All sensors were within the criteria of 0.3' .

JD South Fishway's bay 19 tailrace sensor was determined erratic/failed on 7/22 and TR'd immediately. JD Electrical found it clogged up by debris and cleaned it up on 7/30. Awaiting for a new sensor to replace it. JD Fisheries takes frequent manual measurements to keep the fishway in criteria.

Gatewell Drawdown: 9/3/2014. No units measured greater then 1.3 ft of differential for this reporting week debris loading is light..

### Research:

JD Fisheries continues coordinating with research groups performing 2014 studies:

PSMFC/WDFW dam angling from the JD PH tailrace deck for pikeminnow continues; total YTD JD catch is 4,025 as of 8/31 which is a great result!

U of I Testing of JD North LPS (Lamprey Passage System) started in late June and continues very successful with a high diversion of adult lampreys.

2014 Adult Salmonids counting by Normandeau Ass. continues through October 31 as required by FPP.

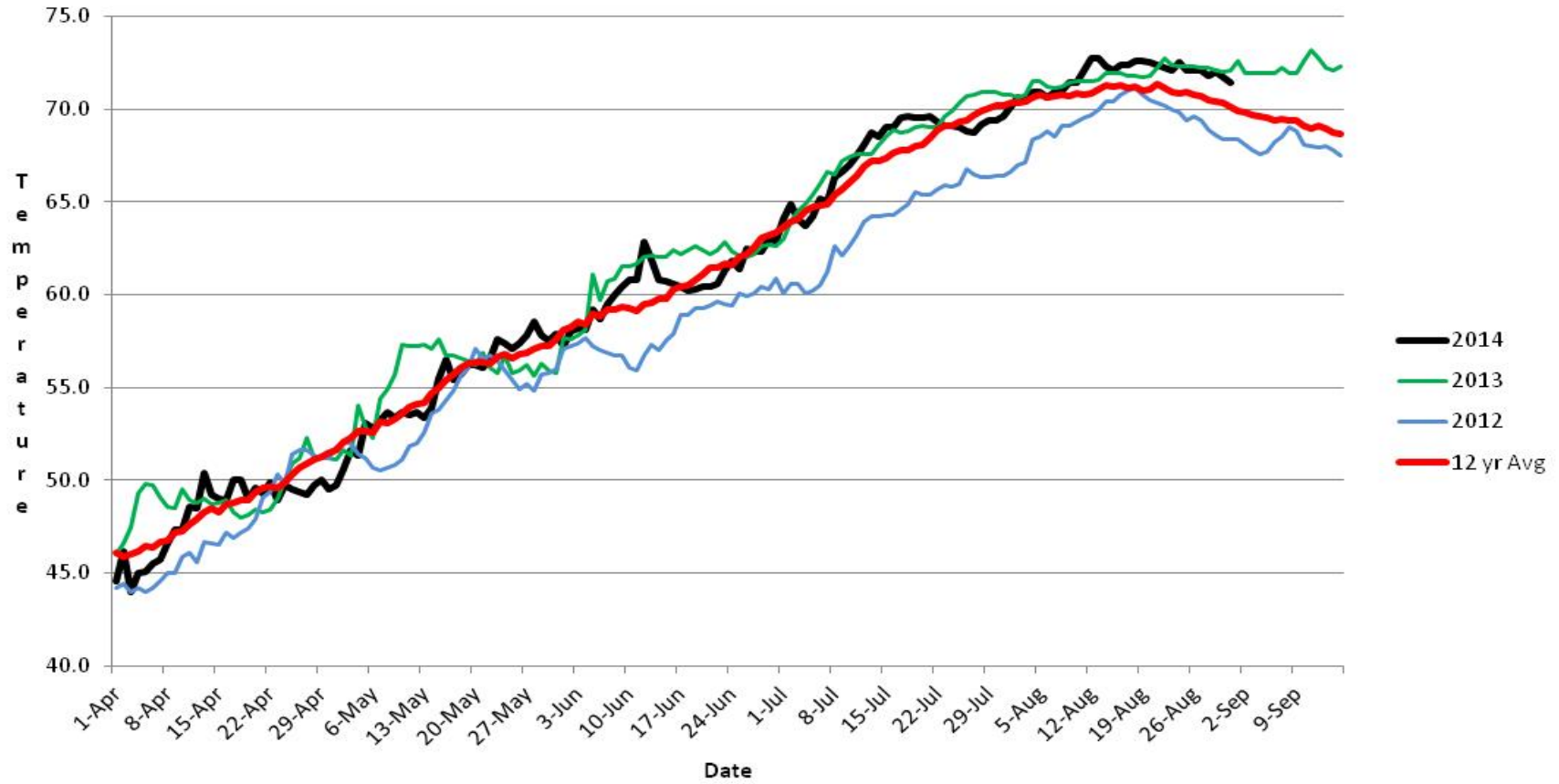
Adult Salmonids Radio telemetry evaluations are ongoing at both JD adult fishway. University of Idaho crew is in charge of detecting of all adult salmonids, which were tagged and released at Bonneville Dam.

Glen A. Smith PE

Date: \_\_\_ 16-Sep-14

OPM John Day/Willow Creek Project

### JDA SMF Water Temp



## JDA COLLECTION CHANNEL VELOCITY

Date 16-Sep-14

By: pete

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	01:16.0	76	2.37
2 - 4	0:02:10	130	3.33
4 - 6	0:03:00	180	3.60
6 - 8	0:03:59	239	3.05
8 - 10	0:04:59	299	3.00
10 - 12	0:05:54	354	3.27
12 - 14	0:06:49	409	3.27
14 - 16	0:07:40	460	3.53
16 - 18	0:08:21	501	4.39

**3.31**

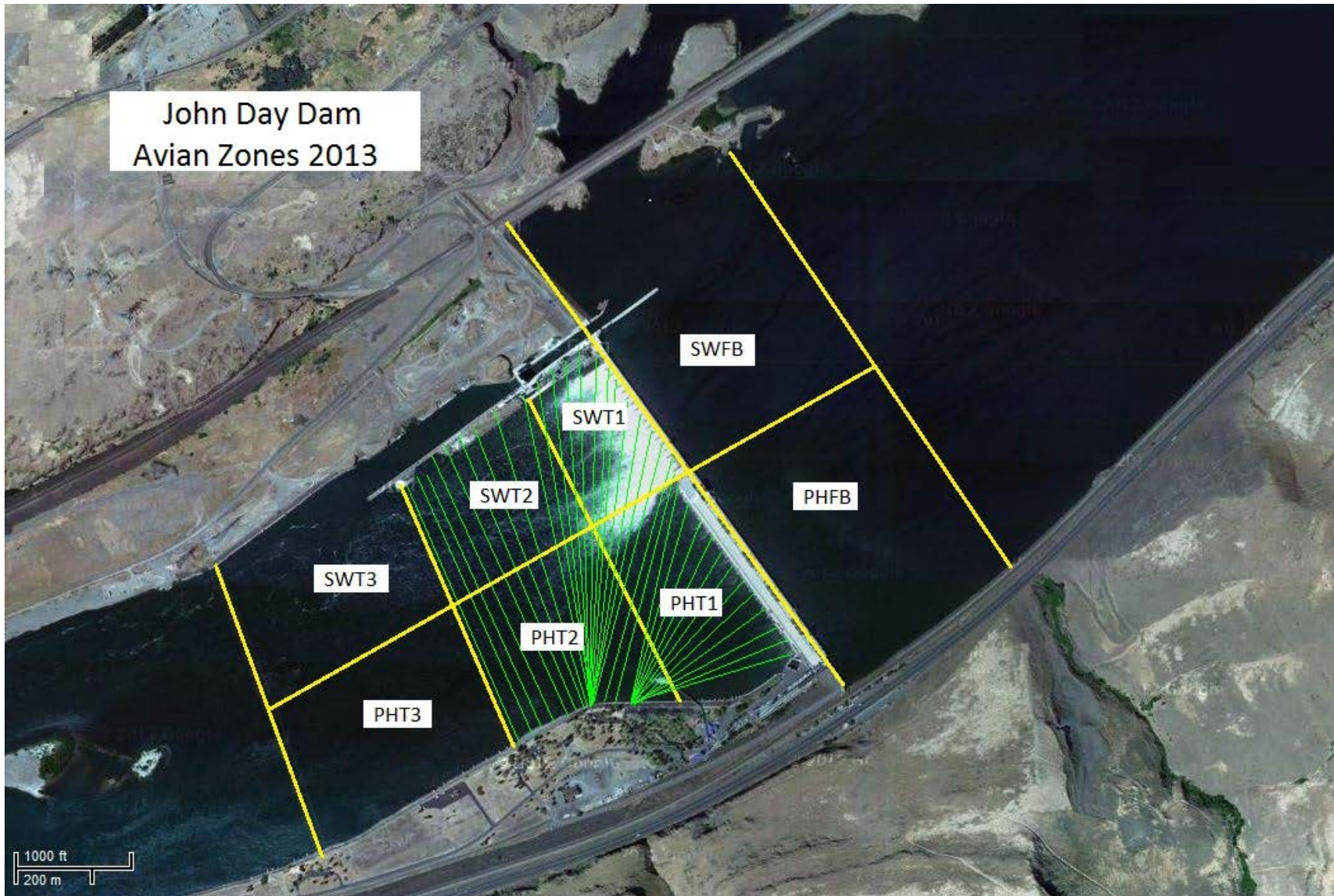








John Day Dam  
Avian Zones 2013





**John Day:**

	Temp:	Secchi:	Fallbacks:	
Sun	70	5.5		
Mon	70	5.5	9	
Tues	70	5.5		
Wed	70	5.0		
Thur	70	5.0	14	6 hr condition sample
Fri	69	5.0	42	
Sat	69	5.0	43	
AVG:	<b>70</b>	AVG: <b>5.2</b>	AVG <b>27</b>	
			MAX <b>43</b>	
			MIN <b>9</b>	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	8.2	8.2	1.0	8.0	1.7	4.6	1.3	1.6
Sun	8.0	8.0	1.8	8.1	1.6	4.6	2.0	1.5
Mon	8.3	8.3	1.7	8.3	1.4	4.6	1.9	1.7
Mon	8.6	8.6	1.6	8.7	1.4	4.6	1.8	1.3
Tues	8.8	8.8	1.6	8.7	1.6	4.5	1.9	1.5
Tues	8.5	8.5	1.5	8.4	1.6	4.6	1.8	1.6
Wed	8.8	8.8	1.5	8.3	1.6	4.5	1.7	1.4
Wed	8.5	8.5	1.5	8.3	1.5	4.5	1.7	1.5
Thur	8.3	8.3	1.6	8.2	1.5	4.5	1.8	1.7
Thur	8.8	8.8	1.5	9.0	1.5	4.6	1.7	1.7
Fri	8.9	8.9	1.5	8.9	1.4	4.6	2.0	1.6
Fri	9.5	9.5	1.5	9.5	1.6	4.6	1.9	1.5
Sat	9.2	9.2	1.5	9.2	1.5	4.5	1.8	1.4
Sat	8.5	8.5	1.5	8.5	1.6	4.5	1.9	1.5
AVG:	<b>8.6</b>	<b>8.6</b>	<b>1.5</b>	<b>8.6</b>	<b>1.5</b>	<b>4.6</b>	<b>1.8</b>	<b>1.5</b>