## FISHWAY STATUS REPORT

**Date:** 8/16/2014

**Inspection Period:** 8/10 thru 8/16/2014

# 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

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 Number of Inspections: 14 Temperature: 72 F
-	Out of Criteria	Limit	Secchi: 5.2 Ft.
NORTH FISHWAY			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
SOUTH FISHWAY			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 8.9
Collection channel velocity	0	1.5 - 4 fps	AVG 2.94
Bay 1 differential	0	1.0' - 2.0'	AVG 1.8
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.6
Entrance weir NE1	0	depth (≥ 8')	
Entrance weir NE2	0	depth (≥ 8')	AVG 8.8
JUVENILE PASSAGE			JBS/SMF changed to bypass at switch gate due to water temp of 70 F on 7/31
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6
Submersible traveling screens	0	visual inspect	Next monthly underwater camera inspection scheduled for the 3 rd week of August
Turbine trashrack drawdown	0	<1.5', wkly	Next monthly MU intake trashracks raking scheduled for the 4 th week of August
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	30/40 %	Per the PNNL experimental block design, changing every two days.
Spill pattern	0	per FPP	
Turbine Unit Priority	0	per FPP	
Turbine 1% Efficiency	0	per FPP	

#### SMOLT MONITORING FACILITY

**Operation:** SMF went into bypass at switch gate due to water temp of 70 F. PSMFC sampling twice a week until the temp drops below 69.5 F; it is 72 F as of 8/11. 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:

All PNNL 2014 activities at JD completed on 7/31. Equipment dismantling and cleanup underway.

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: 10 MAX: 13 MIN: 6 (6 hr. conditioning samples 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.

USDA boat crew completed 2014 hazing season on 7/29 for 2014. Gull predation continues light to minimal.

#### Operations:

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

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

#### Maintenance:

Mid-season ROV grating inspections were performed by District Safety Office's crew on 8/5. JD South Collection Channel was done at 0800 to 1000 hrs.

JD North entrance through the first inclining weir was done at 1100 to 1200 hrs. All grating segments were found in place and properly attached.

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: 8/8/2014 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.

Gatewell Drawdown: 8/3 and 8/7. No units measured greater then 1.3 ft of differential for this reporting week.

Condition of smolts sampled at SMF was normal for this time of year, with no signs of elevated descaling during the entire week.

#### Research:

JD Fisheries continues coordinating with research groups performing 2014 studies:

All Tribal collection of adult lamprey completed by 8/6 for 2014 passage season.

PSMFC/WDFW dam angling from the JD PH tailrace deck for pikeminnow underway; total YTD JD catch is 3,848 as of 8/03 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.

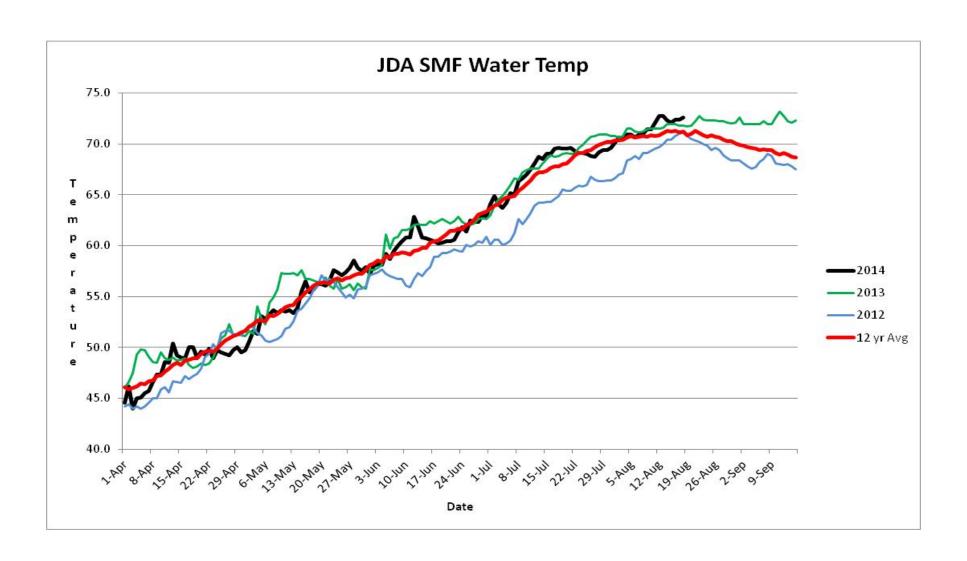
PNNL Summer collection and tagging of fish at JD SMF completed by 7/13. Monitoring of marked fish with hydrophones completed on 7/31.

Dismantling of gear and removal of office trailers from forebay deck is scheduled for 8/4-8/11.

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:\_\_\_\_ 12-Aug-14



JD	A COL	LECTION	ON CHA	ANNEL V	ELOCI	ITY	
		Date	3-Aug-14	_			
		Ву:	pkr,cg				
	Bay(s)	Time	Sec.	Velocity (f/s)			
	0-2	01:15.0	75	2.40			
	2 - 4	0:02:19	139	2.81			
	4 - 6	0:03:16	196	3.16			
	6 - 8	0:04:18	258	2.90			
	8 - 10	0:05:22	322	2.81			
	10 - 12	0:06:34	394	2.50			
	12 - 14	0:07:38	458	2.81			
	14 - 16	0:08:41	521	2.86			
	16 - 18	0:09:24	564	4.19			
				2.94			

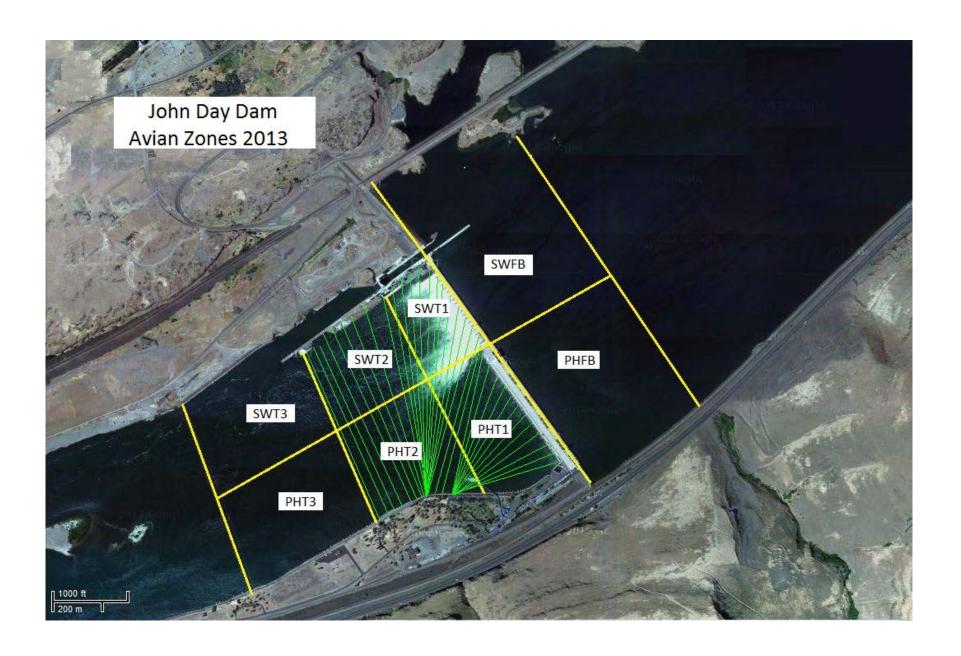
# **2014 JDA Piscivorous Bird Counts**

F=foraging, NF=non-foraging

				Gı	ıll	Cormo	orant	Caspia		AWF		Gre	be	Total	
		Time												birds in	
Date	Session	(24 hr)	Zone	F	NF	F	NF	F	NF	F	NF	F	NF	zone	Observer
3-Aug-14	1		PHFB	0	3	0	0		0	0	0	0	0	3	pkr
3-Aug-14	1		SWFB	0	0	0	6	_	0	0	0	0	0	6	pkr
3-Aug-14	1		PH1	0	0	0	0		0	0	0	0	0	0	pkr
3-Aug-14	1		PH2	0	0	0	0	0	0	0	0	0	0	0	pkr
3-Aug-14	1		PH3	0	0	0	0	0	0	0	0	0	0	0	pkr
3-Aug-14	1		SW1	0	0	0	0	0	0	0	0	0	0	0	pkr
3-Aug-14	1		SW2	0	0	0	0		0	0	0	0	0	0	pkr
3-Aug-14	1		SW3	0	0	0	0	0	0	2	0	0	0	2	pkr
3-Aug-14	2		PHFB	0	0	0	0	0	0	0	0	0	0	0	pkr
3-Aug-14	2		SWFB	0	5	0	6	0	0	0	0	3	0	14	pkr
3-Aug-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pkr
3-Aug-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pkr
3-Aug-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pkr
3-Aug-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pkr
3-Aug-14	2		SW2	0	0	0	0	0	0	0	0	0	0	0	pkr
3-Aug-14	2		SW3	0	0	0	0	0	0	0	0	0	0	0	pkr
4-Aug-14	1		PHFB	0	0	0	0	0	0	0	0	0	0	0	pkr
4-Aug-14	1		SWFB	0	0	0	0	0	0	0	0	0	0	0	pkr
4-Aug-14	1		PH1	0	0	0	0	0	0	0	0	0	0	0	pkr
4-Aug-14	1		PH2	0	0	0	0	0	0	0	0	0	0	0	pkr
4-Aug-14	1		PH3	0	0	0	0	0	0	0	0	0	0	0	pkr
4-Aug-14	1		SW1	0	0	0	0	0	0	0	0	0	0	0	pkr
4-Aug-14	1		SW2	0	0	0	0	0	0	0	0	0	0	0	pkr
4-Aug-14	1		SW3	0	0	0	0	0	0	4	0	0	0	4	pkr
4-Aug-14	2		PHFB	0	1	0	0	_	0	0	0	1	0	2	pkr
4-Aug-14	2		SWFB	0	0	0	0	-	0	0	0	0	0	0	pkr
4-Aug-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pkr
4-Aug-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pkr
4-Aug-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pkr
4-Aug-14	2		SW1	0	0	0	0	0	0	0	0	0	0	0	pkr
4-Aug-14	2		SW2	0	0	0	0	_	0	0	0	0	0	0	pkr
4-Aug-14	2		SW3	0	0	0	0		0	0	0	0	0	0	pkr
5-Aug-14	1		PHFB	0	0	0	0		0	0	0	3	3	6	pkr
5-Aug-14	1	7:30	SWFB	0	0	0	0	0	0	0	0	0	0	0	pkr

5-Aug-14	1	7:30	PH1	0	o	0	o	0	ol	0	0	0	0	0	pkr
5-Aug-14	1	7:30		0	0	0	0	0	0	0	0	0	0	0	pkr
5-Aug-14	1		PH3	0	Ö	0	ő	0	0	0	0	0	0	0	pkr
5-Aug-14	1		SW1	0	Ö	0	ő	0	0	0	Ö	0	0	0	pkr
5-Aug-14	1		SW2	0	0	0	ő	0	0	0	o o	0	0	0	pkr
5-Aug-14	1		SW3	0	0	0	Ö	0	0	7	ő	0	0	7	pkr
5-Aug-14	2		PHFB	0	1	0	0	0	0	0	0	4	5	10	pkr
5-Aug-14	2		SWFB	0	Ó	0	Ö	0	0	0	0	0	0	0	pkr
5-Aug-14	2	14:00		0	0	0	Ö	0	0	0	0	0	0	Ö	pkr
5-Aug-14	2	14:00		0	0	0	Ö	0	0	0	ő	0	0	0	pkr
5-Aug-14	2	14:00		0	0	0	Ö	0	ő	0	ő	0	0	0	pkr
5-Aug-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pkr
5-Aug-14	2	14:00		0	0	0	Ö	0	0	0	ő	0	0	Ö	pkr
5-Aug-14	2	14:00		0	Ö	0	Ö	0	0	0	ő	0	0	Ö	pkr
6-Aug-14	1		PHFB	0	0	0	0	0	0	0	0	7	0	7	egg
6-Aug-14	1		SWFB	0	0	0	0	0	0	0	0	0	0	0	egg
6-Aug-14	1	7:30		2	0	0	0	0	o	0	0	0	0	2	egg
6-Aug-14	1	7:30		0	0	0	0	0	o	0	0	0	0	0	egg
6-Aug-14	1		PH3	0	0	0	0	0	0	3	0	0	0	3	egg
6-Aug-14	1	7:30	SW1	0	0	0	0	0	0	0	0	0	0	0	egg
6-Aug-14	1	7:30	SW2	0	0	0	0	0	0	0	0	0	0	0	egg
6-Aug-14	1	7:30	SW3	0	0	0	0	0	0	16	0	0	0	16	egg
6-Aug-14	2	14:00	PHFB	0	0	0	0	0	0	0	0	0	0	0	egg
6-Aug-14	2	14:00	SWFB	0	0	0	0	0	0	0	0	0	0	0	egg
6-Aug-14	2	14:00	PH1	0	0	0	0	0	0	0	0	0	0	0	egg
6-Aug-14	2	14:00	PH2	0	0	0	0	0	0	0	0	0	0	0	egg
6-Aug-14	2	14:00	PH3	0	0	0	0	0	0	0	0	0	0	0	egg
6-Aug-14	2	14:00	SW1	0	0	0	0	0	0	0	0	0	0	0	egg
6-Aug-14	2	14:00	SW2	0	0	0	0	0	0	0	0	0	0	0	egg
6-Aug-14	2	14:00	SW3	0	0	0	0	0	0	0	0	0	0	0	egg
7-Aug-14	1		PHFB	0	0	0	0	0	0	0	0	0	0	0	Jim
7-Aug-14	1		SWFB	0	0	0	0	0	0	0	0	0	8	8	Jim
7-Aug-14	1	7:30		0	0	0	0	0	0	0	0	0	0	0	Jim
7-Aug-14	1	7:30		0	0	0	0	0	0	0	2	0	0	2	Jim
7-Aug-14	1	7:30	PH3	0	0	0	0	0	0	0	3	0	0	3	Jim
7-Aug-14	1		SW1	0	0	0	0	0	0	0	0	0	0	0	Jim
7-Aug-14	1	7:30	SW2	0	0	0	0	0	0	0	23	0	0	23	Jim
7-Aug-14	1		SW3	0	0	0	0	0	0	0	16	0	0	16	Jim
7-Aug-14	2		PHFB	0	1	0	0	0	0	0	0	0	8	9	Jim
7-Aug-14	2	14:00	SWFB	0	0	0	0	0	0	0	0	0	0	0	Jim

7-Aug-14	2	14:00 PH1	l o	ol	0	ol	0	0	0	ol	0	ol	ol	Jim
7-Aug-14	2	14:00 PH2	0	0	0	0	0	ő	0	0	0	0	0	Jim
7-Aug-14	2	14:00 PH3	0	0	0	0	0	ő	0	0	Ö	0	0	Jim
7-Aug-14	2	14:00 SW1	0	0	0	0	0	ő	0	0	0	0	0	Jim
7-Aug-14	2	14:00 SW2	0	0	0	0	0	ő	Ö	0	0	0	0	Jim
7-Aug-14	2	14:00 SW3	0	0	0	0	0	ő	Ö	0	Ö	0	0	Jim
8-Aug-14	1	7:30 PHFB	0	0	0	0	0	0	0	0	0	7	7	Jim
8-Aug-14	1	7:30 SWFB	0	o	0	o	0	o	0	0	0	0	0	Jim
8-Aug-14	1	7:30 PH1	0	o	0	o	0	o	0	0	0	0	0	Jim
8-Aug-14	1	7:30 PH2	0	0	0	0	0	0	0	0	0	0	0	Jim
8-Aug-14	1	7:30 PH3	0	0	0	0	0	0	0	3	0	0	3	Jim
8-Aug-14	1	7:30 SW1	0	0	0	0	0	0	0	0	0	0	0	Jim
8-Aug-14	1	7:30 SW2	0	0	0	0	0	0	0	33	0	0	33	Jim
8-Aug-14	1	7:30 SW3	0	0	0	0	0	0	0	26	0	0	26	Jim
8-Aug-14	2	14:00 PHFB	0	0	0	0	0	0	0	0	0	9	9	Jim
8-Aug-14	2	14:00 SWFB	0	0	0	0	0	0	0	0	0	0	0	Jim
8-Aug-14	2	14:00 PH1	0	0	0	0	0	0	0	0	0	0	0	Jim
8-Aug-14	2	14:00 PH2	0	0	0	0	0	0	0	0	0	0	0	Jim
8-Aug-14	2	14:00 PH3	0	0	0	0	0	0	0	0	0	0	0	Jim
8-Aug-14	2	14:00 SW1	0	0	0	0	0	0	0	0	0	0	0	Jim
8-Aug-14	2	14:00 SW2	0	0	0	0	0	0	0	0	0	0	0	Jim
8-Aug-14	2	14:00 SW3	0	0	0	0	0	0	0	0	0	0	0	Jim
9-Aug-14	1	7:30 PHFB	0	2	0	0	0	0	0	0	2	6	10	Jim
9-Aug-14	1	7:30 SWFB	0	0	0	0	0	0	0	0	0	0	0	Jim
9-Aug-14	1	7:30 PH1	0	0	0	0	0	0	0	0	0	0	0	Jim
9-Aug-14	1	7:30 PH2	0	0	0	0	0	0	0	2	0	0	2	Jim
9-Aug-14	1	7:30 PH3	0	0	0	0	0	0	0	0	0	0	0	Jim
9-Aug-14	1	7:30 SW1	0	0	0	0	0	0	0	0	0	0	0	Jim
9-Aug-14	1	7:30 SW2	0	0	0	0	0	0	0	47	0	0	47	Jim
9-Aug-14	1	7:30 SW3	0	0	0	0	0	0	0	19	0	0	19	Jim
9-Aug-14	2	14:00 PHFB	0	0	0	0	0	0	0	0	2	0	6	Jim
9-Aug-14	2	14:00 SWFB	0	4	0	0	0	0	0	0	0	0	4	Jim
9-Aug-14	2	14:00 PH1	0	0	0	0	0	0	0	0	0	0	0	Jim 
9-Aug-14	2	14:00 PH2	0	0	0	0	0	0	0	0	0	0	0	Jim 
9-Aug-14	2	14:00 PH3	0	0	0	0	0	0	0	0	0	0	0	Jim 
9-Aug-14	2	14:00 SW1	0	0	0	0	0	0	0	0	0	0	0	Jim 
9-Aug-14	2	14:00 SW2	0	0	0	0	0	0	0	0	0	0	0	Jim
9-Aug-14	2	14:00 SW3	0	0	0	0	0	0	0	0	0	0	0	Jim



### John Day:

	Temp:	_	Secchi:		Fallbacks	_
Sun	71		5.5			
Mon	71		5.5		13	
Tues	72		5.5			
Wed	72		5.0			
Thur	72		5.0		6	6 hr condition sample
Fri	72		5.0			
Sat	72		5.0			
AVG:	72	AVG:	5.2	AVG	10	
		·		MAX	13	
				MIN	6	

S.Ent NE1 NE2 SE1 N.Ent JBS Diff Bay1 Bay19 Sun 8.0 8.0 1.7 8.0 1.6 4.6 2.0 1.6 Sun 8.4 1.4 8.7 4.6 1.7 1.5 8.4 1.4 1.6 1.3 Mon 8.5 8.5 9.0 1.4 4.6 1.9 8.7 8.7 1.6 9.5 1.5 4.5 1.9 1.9 Mon 1.6 ROV Tues 8.0 8.0 1.7 8.0 1.5 4.6 2.0 1.6 8.0 8.0 1.7 8.7 1.5 4.6 2.0 Tues Wed 8.1 8.1 1.4 8.4 1.6 4.5 2.0 1.8 1.5 Wed 9.7 9.8 1.4 9.5 1.5 4.6 1.6 1.6 Thur 9.8 10.0 1.3 9.1 1.5 4.5 1.9 1.4 10.3 1.7 4.6 1.8 1.7 Thur 10.5 10.5 Fri 9.5 9.6 1.4 9.3 4.6 1.8 1.7 1.6 1.6 Fri 8.7 8.7 1.4 9.3 1.6 4.6 1.7 Sat 8.9 8.8 1.5 8.5 1.6 4.6 1.6 1.4 Sat 8.5 8.6 1.4 8.6 1.5 4.5 1.8 1.8 AVG: 8.8 8.8 1.5 8.9 1.5 4.6 1.8 1.6