## FISHWAY STATUS REPORT

**Date:** 11/15/2014

**Inspection Period:** 11/09 thru 11/15/2014

## 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: 56 F
•	Out of Criteria	Limit	Secchi: 5.1 Ft.
NORTH FISHWAY			In regular service with four out of six AWS pumps available
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	High setting	HIGH since 11/1 to optimize the control section's flows for forebay > 265.0
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 9.1
Collection channel velocity	0	1.5 - 4 fps	AVG 3.21
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.4
Entrance weir NE1	0	depth (≥ 8')	AVG 9.0
Entrance weir NE2	0	depth (≥ 8')	AVG 9.1
JUVENILE PASSAGE			SMF continues in bypass for the full flow PIT tags detections through 24 November
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6
Submersible traveling screens	0	visual inspect	Next underwater camera inspection of STS/VBSs the third week of November
Turbine trashrack drawdown	0	<1.5', wkly	Next MUs intake trashracks raking scheduled for the last week of November
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	Bay 2 at 1.6 kcfs 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	Planned BPA Line 1 (MU1-4) outage started on 10/21. RTS is 12/5/14
Turbine 1% Efficiency	0	per FPP	

#### SMOLT MONITORING FACILITY

Operations: Sampling season ended on 9/15; SMF continues in bypass for the full flow PIT tags detections until 24 November.

JD Fisheries crew works an abbreviated 18 hrs/7 swing shift schedule as required by FPP.

**Debris:** N/A due to bypass / DA Separator OOS.

Maintenance: Annual winter maintenance activities are planned to commence in December. The Sampling Building's piping has been already winterized

by JD Fisheries crew, with Mr. Kovalchuk, PSMFC biologist assisting. Cleanup inside and outside of the Building underway.

Research: None

Fallbacks: AVG: #DIV/0! MAX: #DIV/0! MIN: #DIV/0! System in Primary By-pass

#### **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.

Very high number of gulls, cormorants and grebes ( > 500,) but it is apparent that they are primarily feeding on the abundant juvenile shad.

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 the re-installation contract, which is expected in March '15; funding 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:

BPA Line 1 (MU 1-4) planned/ replacement outage started on 10/21. RTS is 12/5/14.

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.

MU1 scroll case and draft tube were dewatered on 11/12. Two burbot (Lota lota) were found among 65 cats and 10 sturgeon in the draft tube.

All fish were successfully salvaged and released back into the river in excellent condition.

Calibration: 10/20/2014 All sensors were within the criteria of 0.3'.

JD South Fishway's bay 1 & 19 tailrace failed back in July, 2014 and were TR'd immediately. Waiting for the new sensors (on order) to replace them.

JD Fisheries crew takes frequent manual measurements/ makes adjustments, which is more than satisfactory to meet the criteria this time of year.

Gatewell Drawdown: 10/26 & 10/30/2014.

No units measured greater then 1.3 ft of differential, debris loading is increasing.

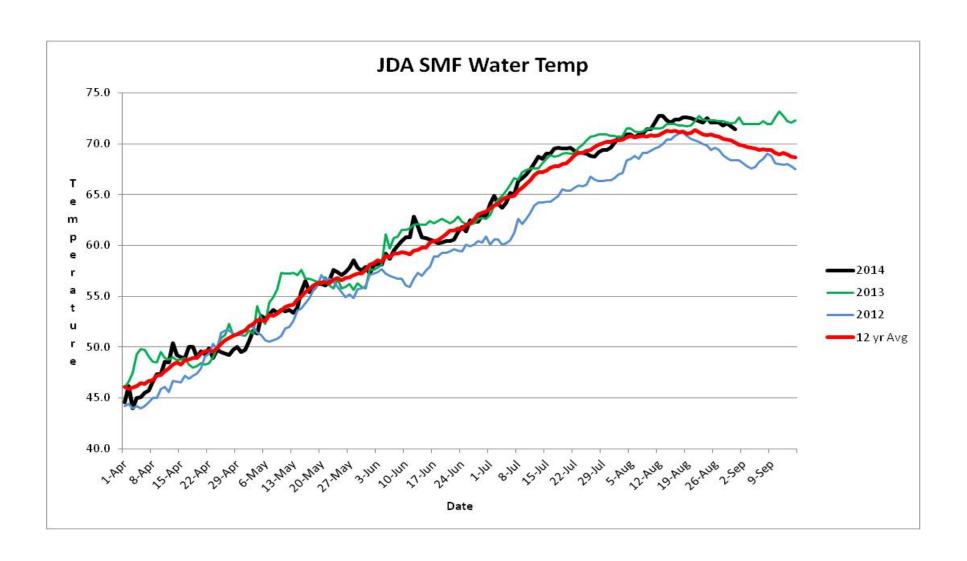
#### Research:

2014 Adult Fish Counting by Normandeau Associates completed on October 31. No fish counting at JD to occur until 1 April, 2015.

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.

Kevin Moynahan Date:\_\_\_\_ 18-Nov-14

OPM John Day/Willow Creek Project



JD	JDA COLLECTION CHANNEL VELOCITY												
	Ì												
		Date	7-Nov-14										
	-	Ву:	egg,pkr	•									
				_									
	Bay(s)	Time	Sec.	Velocity (f/s)									
	0-2	01:11.0	71	2.54									
	2 - 4	0:02:08	128	3.16									
	4 - 6	0:03:05	185	3.16									
	6 - 8	0:04:02	242	3.16									
	8 - 10	0:04:57	297	3.27									
	10 - 12	0:05:55	355	3.10									
	12 - 14	0:06:55	415	3.00									
	14 - 16	0:07:55	475	3.00									
	16 - 18	0:08:35	515	4.50									
				3.21									
	-												
	-												
	_						-						
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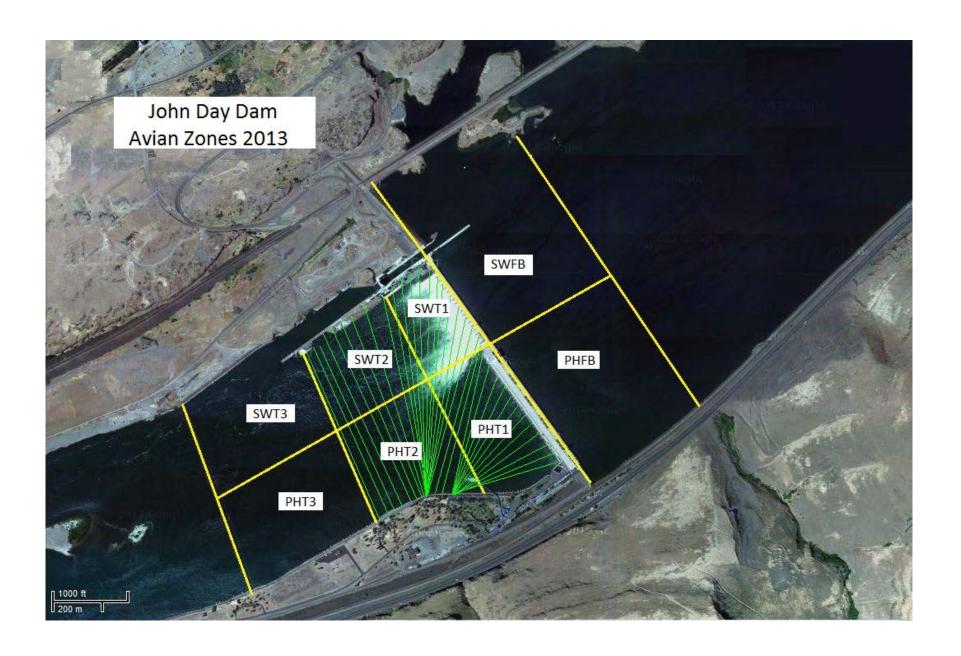
# **2014 JDA Piscivorous Bird Counts**

F=foraging, NF=non-foraging

		Time		Gull		Cormo	orant	Caspia	n tern	AWP	E	Gre	be	Total	
Date	Session	(24 hr)	Zone	F	NF	F	NF	F	NF	F	NF	F	NF	birds in	Observer
9-Nov-14	36331011		PHFB	0	250	0	0	0	0	0	0	<b>-</b>	200	zone 450	
9-Nov-14	1		SWFB	0	300	0	0	0	0	0	0	0	0	300	egg
9-Nov-14	1		PH1	80	0	0	0	0	0	0	0	0	0	80	egg egg
9-Nov-14	1		PH2	150	0	0	0	0	0	0	0	0	0	150	egg
9-Nov-14	1		PH3	30	0	0	0	0	0	0	0	0	0	30	egg
9-Nov-14	1		SW1	0	0	7	0	0	0	0	0	0	0	7	egg
9-Nov-14	1		SW2	0	0	0	5	0	0	0	0	0	0	5	egg
9-Nov-14	1		SW3	11	0	0	0	0	0	0	0	0	0	11	egg
9-Nov-14	2		PHFB	0	1255	0	0	0	0	0	0	0	150	1405	pkr
9-Nov-14	2		SWFB	0	495	0	0	0	0	0	0	0	45	540	pkr
9-Nov-14	2	14:00		167	0	0	1	0	0	0	0	0	0	168	pkr
9-Nov-14	2	14:00		21	0	0	0	0	0	0	0	0	0	21	pkr
9-Nov-14	2	14:00	PH3	7	0	0	0	0	0	0	0	0	0	7	pkr
9-Nov-14	2	14:00	SW1	0	0	0	0	0	0	0	0	0	0	0	pkr
9-Nov-14	2	14:00	SW2	0	0	0	0	0	0	0	0	0	0	0	pkr
9-Nov-14	2	14:00	SW3	0	0	0	0	0	0	0	0	0	0	0	pkr
10-Nov-14	1	7:30	PHFB	0	300	0	0	0	0	0	0	0	150	450	egg
10-Nov-14	1	7:30	SWFB	0	700	0	0	0	0	0	0	0	0	700	egg
10-Nov-14	1	7:30	PH1	0	0	4	0	0	0	0	0	0	0	4	egg
10-Nov-14	1	7:30	PH2	150	0	0	0	0	0	0	0	0	0	150	egg
10-Nov-14	1		PH3	15	0	0	0	0	0	0	0	0	0	15	egg
10-Nov-14	1		SW1	0	0	0	0	0	0	0	0	0	0	0	egg
10-Nov-14	1		SW2	0	0	0	45	0	0	0	0	0	0	45	egg
10-Nov-14	1		SW3	10	0	0	0	0	0	0	0	0	0	10	egg
10-Nov-14	2		PHFB	0	511	0	0	0	0	0	0	0	199	710	pkr
10-Nov-14	2		SWFB	0	444	0	0	0	0	0	0	0	0	444	pkr
10-Nov-14	2	14:00		207	0	6	0	0	0	0	0	0	0	213	pkr
10-Nov-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pkr
10-Nov-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pkr
10-Nov-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pkr
10-Nov-14	2		SW2	0	0	0	0	0	0	0	0	0	0	0	pkr
10-Nov-14	2		SW3	0	0	2	0	0	0	0	0	0	0	2	pkr
11-Nov-14			PHFB	22	205	0	0	0	0	0	0	0	201	428	pkr
11-Nov-14	1	7:30	SWFB	0	507	0	0	0	0	0	0	0	0	507	pkr

11-Nov-14	1	7:30 PH1	l 0	0	4	ol	0	ol	0	0	0	0	4	pkr
11-Nov-14	1	7:30 PH2	0	0	0	0	0	0	0	0	0	0	0	pkr
11-Nov-14	1	7:30 PH3	5	0	0	0	0	0	0	0	0	0	5	pkr
11-Nov-14	1	7:30 SW1	0	0	0	0	0	0	0	0	0	0	0	pkr
11-Nov-14	1	7:30 SW2	0	0	0	0	0	0	0	0	0	0	0	pkr
11-Nov-14	1	7:30 SW3	7	0	0	11	0	0	0	0	0	0	18	pkr
11-Nov-14	2	14:00 PHFB	37	311	0	0	0	0	0	0	0	201	549	pkr
11-Nov-14	2	14:00 SWFB	57	440	0	0	0	0	0	0	0	4	501	pkr
11-Nov-14	2	14:00 PH1	0	0	4	0	0	0	0	0	0	0	4	pkr
11-Nov-14	2	14:00 PH2	0	0	0	0	0	0	0	0	0	0	0	pkr
11-Nov-14	2	14:00 PH3	0	0	0	0	0	0	0	0	0	0	0	pkr
11-Nov-14	2	14:00 SW1	0	0	0	0	0	0	0	0	0	0	0	pkr
11-Nov-14	2	14:00 SW2	0	0	0	0	0	0	0	0	0	0	0	pkr
11-Nov-14	2	14:00 SW3	0	0	0	0	0	0	0	0	0	0	0	pkr
12-Nov-14	1	7:30 PHFB	0	0	0	0	0	0	0	0	0	78	78	DEK
12-Nov-14	1	7:30 SWFB	0	450	0	0	0	0	0	0	0	0	450	DEK
12-Nov-14	1	7:30 PH1	0	0	11	0	0	0	0	0	0	0	11	DEK
12-Nov-14	1	7:30 PH2	0	0	0	0	0	0	0	0	0	0	0	DEK
12-Nov-14	1	7:30 PH3	37	0	0	0	0	0	0	0	0	0	37	DEK
12-Nov-14	1	7:30 SW1	0	0	0	0	0	0	0	0	0	0	0	DEK
12-Nov-14	1	7:30 SW2	0	0	0	0	0	0	0	0	0	0	0	DEK
12-Nov-14	1	7:30 SW3	0	0	0	0	0	0	0	0	0	0	0	DEK
12-Nov-14	2	14:00 PHFB	0	0	0	0	0	0	0	0	0	87	87	Jim
12-Nov-14	2	14:00 SWFB	0	500	0	0	0	0	0	0	0	0	500	Jim
12-Nov-14	2	14:00 PH1	0	0	4	0	0	0	0	0	0	0	4	Jim
12-Nov-14	2	14:00 PH2	3	0	0	0	0	0	0	0	0	0	3	Jim
12-Nov-14	2	14:00 PH3	59	0	0	0	0	0	0	0	0	0	59	Jim
12-Nov-14	2	14:00 SW1	0	0	0	0	0	0	0	0	0	0	0	Jim
12-Nov-14	2	14:00 SW2	0	0	0	0	0	0	0	0	0	0	0	Jim
12-Nov-14	2	14:00 SW3	12	0	0	0	0	0	0	0	0	0	12	Jim
13-Nov-14	1	7:30 PHFB	0	0	0	0	0	0	0	0	0	72	72	DEK
13-Nov-14	1	7:30 SWFB	0	117	0	0	0	0	0	0	0	0	117	DEK
13-Nov-14	1	7:30 PH1	4	0	15	0	0	0	0	0	0	0	19	DEK
13-Nov-14	1	7:30 PH2	0	0	0	0	0	0	0	0	0	0	0	DEK
13-Nov-14	1	7:30 PH3	18	0	0	0	0	0	0	0	0	0	18	DEK
13-Nov-14	1	7:30 SW1	0	0	0	0	0	0	0	0	0	0	0	DEK
13-Nov-14	1	7:30 SW2	0	0	0	0	0	0	0	0	0	0	0	DEK
13-Nov-14	1	7:30 SW3	0	0	0	0	0	0	0	0	0	0	0	DEK
13-Nov-14	2	14:00 PHFB	0	37	0	0	0	0	0	0	0	104	141	Jim
13-Nov-14	2	14:00 SWFB	0	183	0	0	0	0	0	0	0	0	183	Jim

13-Nov-14	2	14:00	PH1	4	0	9	0	0	0	0	0	0	0	13	Jim
13-Nov-14	2	14:00	PH2	0	0	0	0	0	0	0	0	0	0	0	Jim
13-Nov-14	2		PH3	О	0	0	0	0	0	0	0	0	0	0	Jim
13-Nov-14	2	14:00	SW1	0	0	0	0	0	0	0	0	0	0	0	Jim
13-Nov-14	2	14:00	SW2	0	0	0	0	0	0	0	0	0	0	0	Jim
13-Nov-14	2	14:00	SW3	0	0	0	0	0	0	0	0	0	0	0	Jim
14-Nov-14	1	7:30	PHFB	0	0	0	0	0	0	0	0	0	114	114	DEK
14-Nov-14	1	7:30	SWFB	0	450	0	0	0	0	0	0	0	0	450	DEK
14-Nov-14	1	7:30	PH1	0	0	5	0	0	0	0	0	0	0	5	DEK
14-Nov-14	1	7:30	PH2	1	0	1	0	0	0	0	0	0	0	2	DEK
14-Nov-14	1	7:30	PH3	0	0	0	0	0	0	0	0	0	0	0	DEK
14-Nov-14	1	7:30	SW1	0	0	0	0	0	0	0	0	0	0	0	DEK
14-Nov-14	1	7:30	SW2	0	0	0	0	0	0	0	0	0	0	0	DEK
14-Nov-14	1	7:30	SW3	0	0	0	0	0	0	0	0	0	0	0	DEK
14-Nov-14	2	14:00	PHFB	0	0	0	0	0	0	0	0	0	115	115	Jim
14-Nov-14	2		SWFB	0	390	0	0	0	0	0	0	3	0	393	Jim
14-Nov-14	2	14:00	PH1	12	0	5	0	0	0	0	0	0	0	17	Jim
14-Nov-14	2	14:00	PH2	0	0	0	0	0	0	0	0	0	0	0	Jim
14-Nov-14	2		PH3	0	0	0	0	0	0	0	0	0	0	0	Jim
14-Nov-14	2		SW1	0	0	0	0	0	0	0	0	0	0	0	Jim
14-Nov-14	2	14:00	SW2	0	0	0	0	0	0	0	0	0	0	0	Jim
14-Nov-14	2		SW3	0	0	0	19	0	0	0	0	0	0	19	Jim
15-Nov-14	1		PHFB	0	0	0	0	0	0	0	0	0	68	68	DEK
15-Nov-14	1		SWFB	0	200	0	0	0	0	0	0	0	0	200	DEK
15-Nov-14	1		PH1	0	0	0	0	0	0	0	0	0	0	0	DEK
15-Nov-14	1		PH2	0	0	0	0	0	0	0	0	0	0	0	DEK
15-Nov-14	1		PH3	0	0	0	0	0	0	0	0	0	0	0	DEK
15-Nov-14	1		SW1	0	0	0	0	0	0	0	0	0	0	0	DEK
15-Nov-14	1		SW2	0	0	0	0	0	0	0	0	0	0	0	DEK
15-Nov-14	1		SW3	0	0	0	0	0	0	0	0	0	0	0	DEK
15-Nov-14	2		PHFB	0	0	0	0	0	0	0	0	0	103	103	Jim
15-Nov-14	2		SWFB	0	0	0	0	0	0	0	0	0	0	0	Jim
15-Nov-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	Jim
15-Nov-14	2		PH2	0	0	0	0	0	0	0	0	0	0	0	Jim
15-Nov-14	2		PH3	0	0	0	0	0	0	0	0	0	0	0	Jim
15-Nov-14	2		SW1	0	0	0	0	0	0	0	0	0	0	0	Jim
15-Nov-14	2		SW2	0	0	0	0	0	0	0	0	0	0	0	Jim
15-Nov-14	2	14:00	SW3	0	0	0	0	0	0	0	0	0	0	0	Jim



### John Day:

	Temp:		Secchi:		Fallbacks
Sun	57		5.0		
Mon	57		5.0		
Tues	56		5.5		
Wed	55		5.0		
Thur	55		5.0		
Fri	55		5.0		
Sat	54		5.0		
AVG:	56	AVG:	5.1	AVG	#DIV/0!
				MAX	#DIV/0!
				MIN	#DIV/0!
				MIN	#DIV/

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.9	8.9	1.4	8.9	1.5	4.6	1.5
Sun	9.6	9.7	1.3	9.6	1.4	4.7	1.3
Mon	9.6	9.6	1.3	9.7	1.5	4.5	1.4
Mon	8.0	8.1	1.5	8.0	1.6	4.6	1.4
Tues	8.9	9.0	1.5	8.9	1.4	4.6	1.5
Tues	8.7	8.8	1.5	8.8	1.6	4.7	1.5
Wed	9.2	9.3	1.5	9.3	1.3	4.6	1.4
Wed	9.3	9.3	1.5	9.3	1.5	4.5	1.4
Thur	9.3	9.4	1.4	9.3	1.4	4.6	1.3
Thur	9.1	9.1	1.5	9.2	1.5	4.5	1.4
Fri	8.9	9.0	1.4	9.1	1.5	4.5	1.5
Fri	9.0	9.0	1.5	9.1	1.5	4.5	1.4
Sat	9.3	9.4	1.3	9.5	1.5	4.7	1.3
Sat	8.3	8.3	1.7	8.3	1.8	4.5	1.6
AVG:	9.0	9.1	1.5	9.1	1.5	4.6	1.4