## FISHWAY STATUS REPORT

**Date:** 11/1/2014

**Inspection Period:** 10/26 thru 11/01/2014

# 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: 61 F
-	Out of Criteria	Limit	Secchi: 5.0 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	High setting	changed to HIGH due to Forebay > 265.0 on 11/1, to optimize the control section's flows
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 8.7
Collection channel velocity	0	1.5 - 4 fps	AVG 3.11
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.4
Entrance weir NE1	0	depth (≥ 8')	
Entrance weir NE2	0	depth (≥ 8')	AVG 8.7
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	October STS/VBS camera inspection 10/20-25: no problems were found
Turbine trashrack drawdown	0	<1.5', wkly	Intake trashracks raked and continued gatewells debris removal this week, 10/27 - 30
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.

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 a 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.

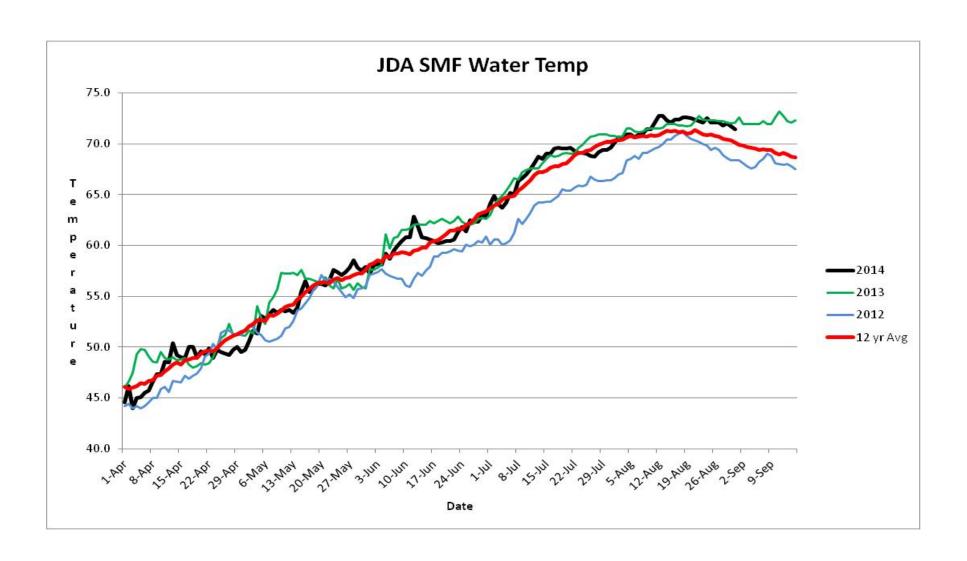
#### Research:

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: 2-Nov-14

OPM John Day/Willow Creek Project



JD	A COL	LECTION	ON CHA	ANNEL V	ELOCI	TY	
		_					
		Date	24-Oct-14	•			
		Ву:	MZ,pkr	•			
	Bay(s)	Time	Sec.	Velocity (f/s)			
	0-2	01:13.0	73	2.47			
	2 - 4	0:02:10	130	3.16			
	4 - 6	0:03:11	191	2.95			
	6 - 8	0:04:17	257	2.73			
	8 - 10	0:05:15	315	3.10			
	10 - 12	0:06:14	374	3.05			
	12 - 14	0:07:13	433	3.05			
	14 - 16	0:08:11	491	3.10			
	16 - 18	0:08:52	532	4.39			
				3.11			
	•						
	•						
	-						

# **2014 JDA Piscivorous Bird Counts**

F=foraging, NF=non-foraging

				Gull		Cormo	orant	Caspia	n tern	AWP	E	Gre	be	Total	
_		Time	_	_		_		_		_		_		birds in	
Date	Session	(24 hr)	Zone	F	NF	F	NF	F	NF	F	NF	F	NF	zone	Observer
26-Oct-14	1		PHFB	0	0	0	16	0	0	0	0	110	0	126	egg
26-Oct-14	1		SWFB	0	400	0	0	0	0	0	0	0	0	400	egg
26-Oct-14	1		PH1	0	0	3	0	0	0	0	0	0	0	3	egg
26-Oct-14	1		PH2	0	0	0	0	0	0	0	0	0	0	0	egg
26-Oct-14	1		PH3	1	0	0	0	0	0	0	0	0	0	1	egg
26-Oct-14	1		SW1	0	0	5	0	0	0	0	0	0	0	5	egg
26-Oct-14	1		SW2	0	0	0	0	0	0	0	0	0	0	0	egg
26-Oct-14	1		SW3	0	0	0	35	0	0	0	0	0	0	35	egg
26-Oct-14	2		PHFB	0	0	0	0	0	0	0	0	120	0	120	pete
26-Oct-14	2		SWFB	0	400		0	0	0	0	0	0	0	400	pete
26-Oct-14	2	14:00		85	0		0	0	0	0	0	0	0	107	pete
26-Oct-14	2	14:00		26	0		0	0	0	0	0	0	0	26	pete
26-Oct-14	2	14:00		5	0		0	0	0	0	0	0	0	5	pete
26-Oct-14	2	14:00		0	0		0	0	0	0	0	0	0	0	pete
26-Oct-14	2		SW2	0	0	0	0	0	0	0	0	0	0	0	pete
26-Oct-14	2		SW3	3	0	0	0	0	0	0	0	0	0	3	pete
27-Oct-14	1		PHFB	0	0	0	0	0	0	0	0	0	200	200	egg
27-Oct-14	1		SWFB	0	500	0	0	0	0	0	0	0	0	500	egg
27-Oct-14	1		PH1	0	0	8	0	0	0	0	0	0	0	8	egg
27-Oct-14	1		PH2	0	0	0	1	0	0	0	0	0	0	1	egg
27-Oct-14	1		PH3	5	0	0	0	0	0	0	0	0	0	5	egg
27-Oct-14	1		SW1	0	0	0	0	0	0	0	0	0	0	0	egg
27-Oct-14	1	7:30	SW2	0	4	0	0	0	0	0	0	0	0	4	egg
27-Oct-14	1		SW3	0	7	0	67	0	0	0	0	0	0	74	egg
27-Oct-14	2		PHFB	0	180	0	0	0	0	0	0	0	189	369	pete
27-Oct-14	2	14:00	SWFB	0	270	0	0	0	0	0	0	0	0	270	pete
27-Oct-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pete
27-Oct-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pete
27-Oct-14	2	14:00	PH3	0	0	0	0	0	0	0	0	0	0	0	pete
27-Oct-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	pete
27-Oct-14	2	14:00	SW2	0	0	0	0	0	0	0	0	0	0	0	pete
27-Oct-14	2	14:00	SW3	0	0	0	0	0	0	0	0	0	0	0	pete
28-Oct-14		7:30	PHFB	0	0	0	0	0	0	0	0	0	220	220	egg
28-Oct-14	1	7:30	SWFB	0	500	0	0	0	0	0	0	15	0	515	egg

28-Oct-14	1	7:30	PH1	<b>l</b> 0	0	12	ol	0	0	0	0	0	o	12	egg
28-Oct-14	1	7:30	PH2	0	0	7	0	0	0	0	0	0	0	7	egg
28-Oct-14	1	7:30	PH3	48	0	0	0	0	0	0	0	0	0	48	egg
28-Oct-14	1	7:30	SW1	0	0	0	0	0	0	0	0	0	0	0	egg
28-Oct-14	1	7:30	SW2	0	0	3	0	0	0	0	0	0	0	3	egg
28-Oct-14	1	7:30	SW3	0	0	0	32	0	0	0	0	0	0	32	egg
28-Oct-14	2	14:00	PHFB	101	385	1	0	0	0	0	0	69	130	686	pete
28-Oct-14	2	14:00	SWFB	0	7	0	0	0	0	0	0	5	6	18	pete
28-Oct-14	2	14:00	PH1	0	0	1	0	0	0	0	0	0	0	1	pete
28-Oct-14	2	14:00	PH2	0	0	0	0	0	0	0	0	0	0	0	pete
28-Oct-14	2	14:00	PH3	0	0	0	0	0	0	0	0	0	0	0	pete
28-Oct-14	2	14:00	SW1	0	0	0	0	0	0	0	0	0	0	0	pete
28-Oct-14	2	14:00	SW2	0	0	0	0	0	0	0	0	0	0	0	pete
28-Oct-14	2	14:00	SW3	0	0	0	0	0	0	0	0	0	0	0	pete
29-Oct-14	1	7:30	PHFB	0	0	0	0	0	0	0	0	0	126	126	DEK
29-Oct-14	1		SWFB	0	300	0	0	0	0	0	0	0	0	300	DEK
29-Oct-14	1		PH1	0	0	11	0	0	0	0	0	0	0	11	DEK
29-Oct-14	1		PH2	62	0	0	0	0	0	0	0	0	0	62	DEK
29-Oct-14	1		PH3	15	0	2	0	0	0	0	0	0	0	17	DEK
29-Oct-14	1		SW1	0	0	3	0	0	0	0	0	0	0	3	DEK
29-Oct-14	1	7:30	SW2	0	0	0	0	0	0	0	0	0	0	0	DEK
29-Oct-14	1		SW3	0	0	0	0	0	0	0	0	0	0	0	DEK
29-Oct-14	2		PHFB	0	111	0	0	0	0	0	0	0	125	236	DEK
29-Oct-14	2		SWFB	0	280	0	0	0	0	0	0	0	0	280	DEK
29-Oct-14	2	14:00		44	0	12	0	0	0	0	0	0	0	56	DEK
29-Oct-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	DEK
29-Oct-14	2	14:00		1	0	0	0	0	0	0	0	0	0	1	DEK
29-Oct-14	2		SW1	0	0	4	0	0	0	0	0	0	0	4	DEK
29-Oct-14	2		SW2	0	0	0	0	0	0	0	0	0	0	0	DEK
29-Oct-14	2		SW3	0	0	0	0	0	0	0	0	0	0	0	DEK
30-Oct-14	1		PHFB	0	0	0	0	0	0	0	0	0	106	106	DEK
30-Oct-14	1		SWFB	0	340	0	0	0	0	0	0	0	0	340	DEK
30-Oct-14	1		PH1	43	0	14	0	0	0	0	0	0	0	57	DEK
30-Oct-14	1		PH2	36	0	0	0	0	0	0	0	0	0	36	DEK
30-Oct-14	1		PH3	5	0	0	0	0	0	0	0	0	0	5	DEK
30-Oct-14	1		SW1	0	0	3	0	0	0	0	0	0	0	3	DEK
30-Oct-14	1		SW2	0	0	0	0	0	0	0	0	0	0	0	DEK
30-Oct-14	1		SW3	0	0	0	0	0	0	0	0	0	0	0	DEK
30-Oct-14	2		PHFB	0	360	0	0	0	0	0	0	0	128	488	DEK
30-Oct-14	2	14:00	SWFB	0	66	0	0	0	0	0	0	0	0	66	DEK

30-Oct-14	2	14:00	PH1	11	0	14	0	0	0	0	0	0	0	25	DEK
30-Oct-14	2	14:00	PH2	47	0	0	0	0	0	0	0	0	0	47	DEK
30-Oct-14	2	14:00	PH3	19	0	0	0	0	0	0	0	0	0	19	DEK
30-Oct-14	2	14:00	SW1	0	0	2	0	0	0	0	0	0	0	2	DEK
30-Oct-14	2	14:00	SW2	0	0		0	0	0	0	0	0	0	0	DEK
30-Oct-14	2	14:00	SW3	0	0	0	0	0	0	0	0	0	0	0	DEK
31-Oct-14	1	7:30	PHFB	0	0	0	0	0	0	0	0	0	102	102	DEK
31-Oct-14	1	7:30	SWFB	0	425	0	0	0	0	0	0	0	0	425	DEK
31-Oct-14	1	7:30	PH1	47	0	7	0	0	0	0	0	0	0	54	DEK
31-Oct-14	1	7:30	PH2	72	0	0	0	0	0	0	0	0	0	72	DEK
31-Oct-14	1	7:30	PH3	6	0	0	0	0	0	0	0	0	0	6	DEK
31-Oct-14	1	7:30	SW1	0	0	0	0	0	0	0	0	0	0	0	DEK
31-Oct-14	1	7:30	SW2	0	0	0	0	0	0	0	0	0	0	0	DEK
31-Oct-14	1	7:30	SW3	0	0	0	0	0	0	0	0	0	0	0	DEK
31-Oct-14	2	14:00	PHFB	0	196	12	0	0	0	0	0	0	132	340	DEK
31-Oct-14	2	14:00	SWFB	0	220	0	0	0	0	0	0	0	0	220	DEK
31-Oct-14	2	14:00	PH1	47	0	8	0	0	0	0	0	0	0	55	DEK
31-Oct-14	2	14:00	PH2	62	0	0	0	0	0	0	0	0	0	62	DEK
31-Oct-14	2	14:00	PH3	6	0	0	0	0	0	0	0	0	0	6	DEK
31-Oct-14	2		SW1	0	0	0	0	0	0	0	0	0	0	0	DEK
31-Oct-14	2		SW2	0	0	0	0	0	0	0	0	0	0	0	DEK
31-Oct-14	2		SW3	0	0		0	0	0	0	0	0	0	0	DEK
1-Nov-14	1		PHFB	0	0	0	0	0	0	0	0	0	0	0	MZ
1-Nov-14	1		SWFB	0	0	_	0	0	0	0	0	0	0	0	MZ
1-Nov-14	1		PH1	0	0	0	0	0	0	0	0	0	0	0	MZ
1-Nov-14	1		PH2	0	0	0	0	0	0	0	0	0	0	0	MZ
1-Nov-14	1		PH3	0	0	0	0	0	0	0	0	0	0	0	MZ
1-Nov-14	1		SW1	0	0	_	0	0	0	0	0	0	0	0	MZ
1-Nov-14	1		SW2	0	0	_	0	0	0	0	0	0	0	0	MZ
1-Nov-14	1		SW3	0	0		0		0	0	0	0	0	0	MZ
1-Nov-14	2		PHFB	0	0		0	0	0	0	0	0	0	0	MZ
1-Nov-14	2		SWFB	0	0		0	0	0	0	0	0	0	0	MZ
1-Nov-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	MZ
1-Nov-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	MZ
1-Nov-14	2	14:00		0	0	0	0	0	0	0	0	0	0	0	MZ
1-Nov-14	2		SW1	0	0		0	0	0	0	0	0	0	0	MZ
1-Nov-14	2		SW2	0	0		0	0	0	0	0	0	0	0	MZ
1-Nov-14	2	14:00	SW3	0	0	0	0	0	0	0	0	0	0	0	MZ



### John Day:

	Temp:		Secchi:		Fallbacks
Sun	61		5.0		
Mon	61		5.0		
Tues	61		5.0		
Wed	61		5.0		
Thur	61		5.0		
Fri	61		5.0		
Sat	61		5.0		
AVG:	61	AVG:	5.0	AVG	#DIV/0!
		•		MAX	#DIV/0!
				MIN	#DIV/0!
				•	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.4	8.4	1.6	8.4	1.5	4.5	1.5
Sun	8.5	8.5	1.5	8.5	1.4	4.5	1.4
Mon	8.2	8.2	1.5	8.2	1.6	4.5	1.5
Mon	8.2	8.2	1.5	8.2	1.6	4.5	1.4
Tues	8.6	8.6	1.6	8.6	1.6	4.6	1.5
Tues	8.6	8.6	1.5	8.6	1.5	4.6	1.4
Wed	9.0	9.1	1.3	9.1	1.4	4.6	1.4
Wed	9.2	9.3	1.5	9.3	1.5	4.6	1.4
Thur	9.0	9.1	1.3	9.0	1.5	4.5	1.4
Thur	8.5	8.6	1.4	8.6	1.7	4.6	1.4
Fri	8.7	8.8	1.3	8.8	1.6	4.6	1.4
Fri	8.6	8.7	1.2	8.7	1.6	4.6	1.4
Sat	8.6	8.7	1.5	8.6	1.5	4.4	1.5
Sat	8.7	8.8	1.6	8.7	1.4	4.6	1.5
AVG:	8.6	8.7	1.5	8.7	1.5	4.6	1.4