### **FISHWAY STATUS REPORT**

**Date:** 6/6/2015

**Inspection Period:** 5/30/2015 thru 6/6/2015

All JD Fishways are inspected twice per day during fish season, Mar. 1 - Nov. 30 Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

### 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: 64 F
	Out of Criteria	Limit	Secchi: 5.9 Ft.
NORTH FISHWAY			5 out of 6 AWS pumps available since 12/23/14
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	1.3' ± 0.1'	1.3' for shad passage since 5/27
Entrance differential	0	1.0' - 2.0'	AVG 1.5
SOUTH FISHWAY			3 AWS Turbines in regular service since 2/28/15
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 (US gauge)	0	1.3' ± 0.1'	1.3 ' for shad passage since 5/26
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 3.35
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.7
Entrance weir NE1	0	depth (≥ 8')	AVG 9.1
Entrance weir NE2	0	depth (≥ 8′)	AVG 9.0
JUVENILE PASSAGE			MU4C orifice found closed due to failed shaft-gate connection on 6/3 AM. RTS 6/4 at 1700 hrs
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6
Submersible traveling screens	0	visual inspect	Monthly STS camera inspection complete by 5/21; one STS w/torn mesh replaced with spare
Turbine trashrack drawdown	0	<1.5', wkly	Monthly MU trashrack raking complete by 5/28. Light debris loads continue.
Vert barrier screen drawdown	0	<1.5', wkly	
Spill volume	0	30/40 %	Fish spill and TSWs' operation continues since 4/10/15 per FOP
Spill pattern	0	per FPP	Per 2015 FOP
Turbine Unit Priority	0	per FPP	
Turbine 1% Efficiency	0	per FPP	

#### **SMOLT MONITORING FACILITY**

#### Operation:

SMF in sampling mode since 3/31 AM. 24 hrs/ 7 days a week sampling by PSMFC as required by FPP.

JD Fisheries crew continues 24/7 swing shift schedule as required by FPP; it will continue this until the end of sampling season on 9/15.

Debris load: very little debris.

#### Maintenance:

All devices working well without any issues at this time

Research:

None

Fallbacks: AVG: 24 MAX: 36 MIN: 17

#### OTHER JOHN DAY ISSUES:

#### 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. USADA avian hazing from a boat began 4/16. Typical hazing shifts are 06:00 - 14:30

#### **Operations:**

JD North Fishway in regular service; 5 out of 6 AWS pumps are available. Repair work on pump 4 continues; pump 3 has vibration issues and should be the last last in service.

JBS in regular service since 3/27. MU4C orifice was found closed due to operating shaft-to-gate connection's failure on 6/3 AM. The gatewell had to be dewatered to expose/gain access for the repair. JD Mechanical worked from a man basket and replaced two connecting bolts. RTS on 6/4 at 5 PM. See the JD MFR for details.

JD South Fishway in regular service with 3 AWS Turbines; it is meeting the optimal FPP criteria.

MU Gatewell Drawdowns: Differentials are checked Wednesdays and Sundays; all gatewells were in criteria.

#### Maintenance:

JD North AWS pumps: five out of total six are available. Repair of AWS pump #4 by a contractor started on 1/26 & is ongoing.

An HVAC contractor inspected the two AC units at JD N AWS Pumps Substation on 5/26. Both units were found to be in good condition; their performance issues have been due to the dirt and debris accumulation on the heat exchanger coils. They will require more frequent, deep cleaning with pressurized water.

Currently one AC unit is in service and the second awaits a few control board parts, which are expected within a few weeks and on time before the hot weather arrives.

Calibration: All gauges/ sensors are within the criteria of 0.3'.

#### Research:

2015 Adult Fish Counting by Normandeau Associates commenced on 1 April, 2015 and will continue daily through 1 November.

Lamprey trapping and collection of adults & juveniles for various tribal and non-tribal studies are currently coordinated by JD Fisheries. Expected to commence in early June.

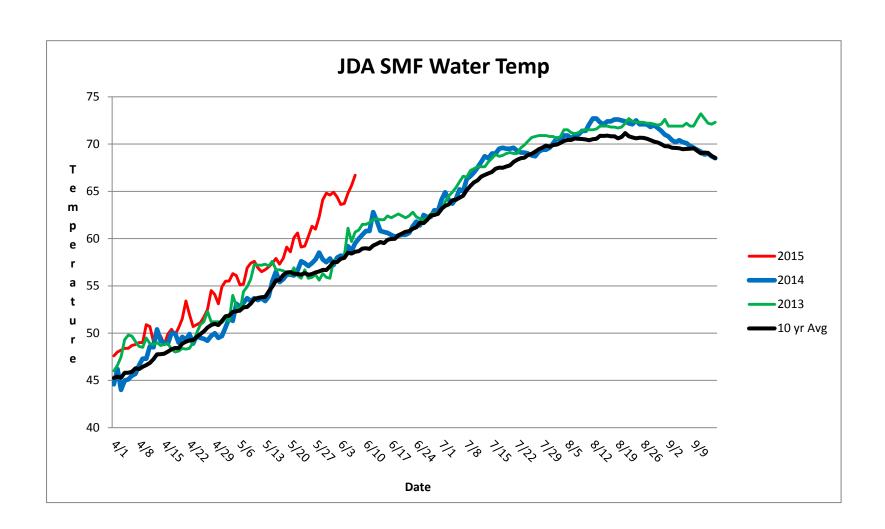
Dam angling to remove NPM from JD PH tailrace, by a crew from Washington F&W underway. 360 NPM caught the last week with 934 season total as of 6/07.

Proposal by PSMFC to install Adult PIT antennas at both JD Fishways is pending; possible installation during the next winter maintenance season 2015/16.

JD North LPS monitoring by FFU crew continues. Adult lamprey numbers are increasing from  $\sim$ 1/day on average -  $\sim$ 10/day on average

Kevin Moynahan OPM John Day/Willow Creek Project Date:

June 6, 2015



# **JDA Collection Channel Velocity**

Date: 4-Jun-15
By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:21	82	2.20
2 - 4	2:09	129	3.83
4 - 6	3:06	181	3.46
6 - 8	3:50	238	3.16
8 - 10	4:45	295	3.16
10 - 12	5:39	351	3.21
12 - 14	6:45	408	3.16
14 - 16	7:33	461	3.40
16 - 18	8:15	500	4.62
			3.35

JDA Bird Counts: <u>5/31/15</u> to <u>6/6/15</u>

F(1): Forage AM survey F(2): Forage PM Survey NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Date	Zone	G	Gulls			Corr	moran	t		Casp	ian ter	n	,	White	e Pelica	an		G	rebe		Total
Date	Zone	F(1) F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	TOLAT
31-May	PHFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	22
31-May		0 0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	44	64
31-May	PH1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-May	PH2	2 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
31-May	PH3	5 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
31-May	SW1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-May		0 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
31-May		6 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Avg/St		11		8	0	)		0	(	)	(	0	(	0	(	0	1	.4	2	2	107
1-Jun		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	41	70
	SWFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jun		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jun		0 0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1-Jun		0 0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
1-Jun		0 0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
1-Jun		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jun		0 0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Avg/Su		0		12	0		(	0		)	(	0		0	(	0		0		5	94
	PHFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	38	64
	SWFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jun		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jun		0 0	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
2-Jun		0 0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2-Jun		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jun		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jun		0 0	3	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	8
Avg/Su		0	1	10	0	)	(	0	(	)		)	. (	0		1		0	3	2	86
	PHFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	31
	SWFB	0 0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	0	0	42
3-Jun		4 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
3-Jun		1 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3-Jun	_	2 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3-Jun		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Jun		0 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3-Jun		0 3	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	12
Avg/Su	urvey	7		4	0			0	(	)	(	0	(	0	!	5	3	3	(	0	96

## JDA Bird Counts: <u>5/31/15</u> to <u>6/6/15</u>

F(1): Forage AM survey F(2): Forage PM Survey NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Date	Zone		G	ulls			Corr	morant	:		Casp	ian ter	n	'	White	e Pelica	an		G	rebe		Total
Date	Zone	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	Total
4-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	11	0	0	24
4-Jun	SWFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Jun	PH3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	6
4-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Jun	SW2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4-Jun		0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Avg/Su	ırvey	4		2	2	(	)	(	)	(	)	(	0	(	0		1	1	.2	(	0	36
5-Jun	PHFB	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	11	6	0	0	20
5-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Jun	PH1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5-Jun	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5-Jun	PH3	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
5-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Jun	SW3	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	12
Avg/Su	ırvey	14		1	L	(	)	(	)	(	)	(	0	(	0		1		9	(	0	47
6-Jun	PHFB	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	8	28
6-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
6-Jun	PH2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6-Jun	PH3	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
6-Jun	SW1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6-Jun	SW2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6-Jun	SW3	3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Avg/Su	ırvey	17		2	2	(	)	(	)	(	)		)	(	)	:	1		0	1	2	63

Totals	(	Gulls	Corı	morant	Casp	ian tern	White	e Pelican	G	Total	
Totals	F	NF	F	NF	F	NF	F	NF	F	NF	Total
Weekly Total	104	76	0	0	0	0	0	14	133	202	<b>529</b>
Avg/Survey	7	5	0	0	0	0	0	1	10	14	38



## John Day Weekly Averages

	Temp:
Sun	62
Mon	64
Tues	64
Wed	64
Thur	63
Fri	64
Sat	64

Secchi:								
5.0								
6.0								
6.0								
6.0								
6.0								
6.0								
6.0								

Fallbacks	
20	
20	
19	
22	
17	
33	
36	
-	

AVG: 64

AVG: 5.9

AVG 24 MAX 36 MIN 17

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.8	9.7	1.5	8.9	1.6	4.6	1.7
Sun	9.8	9.8	1.5	8.4	1.4	4.5	1.7
Mon	9.7	9.7	1.5	8.5	1.5	4.6	1.7
Mon	9.4	9.3	1.6	8.2	1.6	4.5	1.6
Tues	9.3	9.2	1.4	8.4	1.6	4.6	1.6
Tues	9.5	9.4	1.4	8.6	1.6	4.5	1.6
Wed	8.4	8.5	1.6	8.6	1.6	4.5	1.7
Wed	8.6	8.6	1.6	9.0	1.6	4.5	1.7
Thur	8.5	8.5	1.5	9.0	1.5	4.5	1.9
Thur	8.9	8.9	1.4	9.5	1.5	4.6	1.7
Fri	8.7	8.7	1.8	8.2	1.5	4.6	1.5
Fri	8.9	8.9	1.7	8.6	1.6	4.6	1.7
Sat	8.3	8.3	1.6	8.4	1.5	4.7	1.7
Sat	8.9	8.9	1.5	9.0	1.4	4.6	1.5
AVG:	9.1	9.0	1.5	8.7	1.5	4.6	1.7