### **FISHWAY STATUS REPORT**

**Date:** 7/11/2015

**Inspection Period:** 7/5/2015 thru 7/11/2015

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: 73 F
	Out of Criteria	Limit	Secchi: 6.0 Ft.
NORTH FISHWAY			4 out of 6 AWS pumps available since 12/23/14
Exit differential	0	≤ 0.5′	
Exit Control weirs	0	High setting	MID setting to stop/prevent the sockeye fallback since 6/10, PM
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 1.6
Entrance weir SE1	0	depth (≥ 8′)	AVG 8.9
Collection channel velocity	0	1.5 - 4 fps	AVG 3.55
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.6
Entrance weir NE1	0	depth (≥ 8′)	AVG 8.7
Entrance weir NE2	0	depth (≥ 8′)	AVG 8.7
JUVENILE PASSAGE			Elevated smolt mortalities in daily sampling by PSMFC since 6/7; slight at first, variable/increasing
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6
Submersible traveling screens	0	visual inspect	
Turbine trashrack drawdown	0	<1.5', wkly	STS inspection completed by 6/18; four STSs with bad mesh were repaired/replaced with spares
Vert barrier screen drawdown	0	<1.5', wkly	MU intake trashracks' raking completed as scheduled by 6/24, very little debris found
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 bypass mode beginning 6/28 @ approximately 11am. Mon & Thurs sampling resumes for 6 hours (7am-1pm)

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.

Elevated smolt mortalities in daily sampling by PSMFC since 6/7. Minor at first, at 1.1 %, variable and reaching over 15% on 6/27, for unknown reason.

No obvious deficiency at JD JBS / SMF so could the high river water temps be responsible for the current, elevated sampling morts?

Debris load: very little debris.

Maintenance:

All devices working well without any issues at this time

Research:

None

Fallbacks: AVG: 36 MAX: 50 MIN: 21

#### 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.

Very few Gulls at the moment, but Pelicans have been increasingly penetrating the JD tailrace BRZ; feeding primarily on the south edge of spill.

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

Spillway Avian Line # 60 failed/ snapped on 6/15.

Avian Line #56 snapped 7/9, bringing totals to 6 JD lines missing with 119 lines remaining. Planning to replace in September/October

Avian predation continues minimal/insignificant.

#### **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.

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

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 commenced in the last week of June

Dam angling to remove NPM from JD PH tailrace, by a crew from Washington F&W underway. 2,055 season total as of 6/27.

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

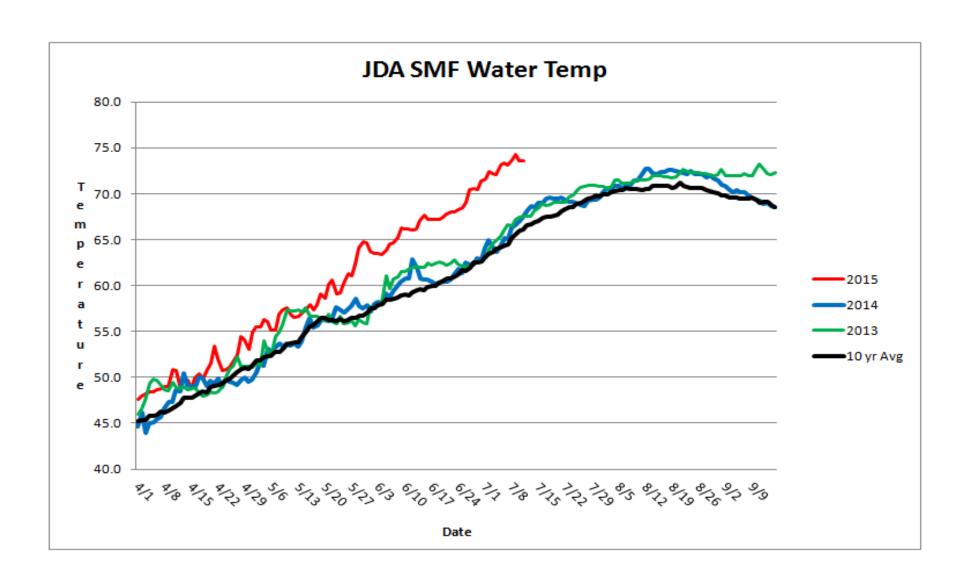
JD North LPS experimental operation ceased after its submersible pump (water supply) was found failed on 6/23. FFU coordinates for its repairs.

Kevin Moynahan

OPM John Day/Willow Creek Project

Date:

July 11, 2015



# **JDA Collection Channel Velocity**

 Date:
 3-Jul-15

 By:
 MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:23	83	2.17
2 - 4	2:11	131	3.75
4 - 6	3:03	183	3.46
6 - 8	3:52	232	3.67
8 - 10	4:41	281	3.67
10 - 12	5:32	332	3.53
12 - 14	6:24	384	3.46
14 - 16	7:18	438	3.33
16 - 18	7:55	475	4.86
			3.55

JDA Bird Counts: <u>7/5/15</u> to <u>7/11/15</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		Gulls			Corr	morant	:		Casp	ian ter	n	,	White	e Pelica	n		G	irebe		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
5-Jul	PHFB	0 0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	19	0	23
5-Jul	SWFB	0 0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5-Jul	PH1	0 0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	0	8
5-Jul	PH2	0 0	1	0	0	0	0	0	0	0	0	0	3	11	0	0	0	0	0	0	15
5-Jul	PH3	0 0	0	0	0	0	0	0	0	0	0	0	5	0	0	13	0	0	0	0	18
5-Jul	SW1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Jul	SW2	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Jul	SW3	9 7	0	0	0	0	0	0	0	0	0	0	0	0	9	5	0	0	0	0	30
Avg/S		8		3	0		(	)	(	)	(	)	1	.4	1	4		0	1	0	96
	PHFB	0 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	9	33
	SWFB	0 1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	PH1	0 0	0	0	0	0	0	0	0	0	0	0	6	0	0	2	0	0	0	0	8
	PH2	4 0	0	0	0	0	0	0	0	0	0	0	0	0	11	2	0	0	0	0	17
	PH3	4 0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	13
6-Jul	l SW1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW2	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW3	1 4	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	11
Avg/S		11		4	0		(	)	(	)	(	)		3	1	5		0	1	3	90
	PHFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	12	26
	SWFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PH1	0 5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	6
	PH2	0 2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	7
	PH3	6 7	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	17
	SW1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW2	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW3	8 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Avg/S		14		0	0		(			)		)		1		5		0		3	64
	PHFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	16
	SWFB	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PH1	0 0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7
	PH2	4 0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	7
	PH3	0 8	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	15
	SW1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW2	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW3	0 3	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	17
Avg/S	urvey	8		0	0		(	)	(	)	(	)		9	7	7		0	8	3	62

## JDA Bird Counts: <u>7/5/15</u> to <u>7/11/15</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		Gull	s			Corr	norant	:		Casp	ian ter	n	1	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
9-Jul	PHFB	1 1	. (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	15	8	35
	SWFB	0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PH1	0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PH2	0 (	) (	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
	PH3	6 6	6 (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
9-Jul	SW1	0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Jul	SW2	0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW3	4 3	} (	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	14
Avg/St		11		0		C	)	(	)	(	)	(	)	5	5	(	)	. !	5	1	.2	64
	PHFB	0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	14	10	29
10-Jul	SWFB	0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul	PH1	0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul		0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul	PH3	8 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
10-Jul	SW1	0 (	)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul	SW2	0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul		3 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Avg/St		6		0		C	)	(	)	(	)	(	)	(	)	(	)	r —	3	1	.2	40
	PHFB	0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	3	15	24
	SWFB	0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul		0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul		0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul		10 4	_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
11-Jul	_	0 (	) (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul	_	0 (		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul		7 2	2 (	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Avg/Si	urvey	12		0		C	)	(	)	(	)		)	(	)	(	)		3	9	9	47

Totals	(	Gulls	Cormorant		Casp	ian tern	White	e Pelican	G	Total		
Totals	F	NF	F	NF	F	NF	F	NF	F	NF	Total	
Weekly Total	135	13	0	0	0	0	61	81	21	152	463	
Avg/Survey	10	1	0	0	0	0	4	6	2	11	33	



## John Day Weekly Averages

	Temp:
Sun	72
Mon	74
Tues	73
Wed	73
Thur	74
Fri	74
Sat	73

Secchi:	
6.0	
6.0	
6.0	
6.0	
6.0	
6.0	
6.0	
-	Ī

6.0

AVG:

Fallbacks	
50	
Bypass	
Bypass	
Bypass	
21	
Bypass	
Bypass	
-	

AVG	
MAX	
MIN	21

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.5	8.6	1.7	8.5	1.5	4.5	1.8
Sun	8.7	8.8	1.7	8.5	1.5	4.5	1.6
Mon	9.3	9.4	1.4	9.1	1.4	4.6	1.7
Mon	9.2	9.3	1.6	9.0	1.5	4.6	1.8
Tues	9.0	9.0	1.5	8.8	1.5	4.6	1.6
Tues	9.4	9.5	1.4	9.5	1.5	4.5	1.7
Wed	8.1	8.1	1.6	8.5	1.6	4.6	1.6
Wed	8.4	8.4	1.6	8.4	1.5	4.5	1.5
Thur	8.7	8.3	1.5	9.1	1.5	4.6	1.5
Thur	8.8	8.8	1.4	9.5	1.5	4.6	1.5
Fri	8.3	8.3	1.6	8.7	1.6	4.5	1.6
Fri	8.6	8.6	1.4	9.2	1.4	4.6	1.5
Sat	8.0	8.0	1.8	8.3	1.6	4.5	1.5
Sat	9.1	9.1	1.5	9.7	1.4	4.6	1.4
AVG:	8.7	8.7	1.6	8.9	1.5	4.6	1.6