

## FISHWAY STATUS REPORT

**Date:** 8/24/2019  
**Inspection Period:** 8/18/2019 thru 8/24/2019

### 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 passage season, Mar. 1 - Nov. 30.  
Additional and frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspection OOC	Criteria Limit	Total Number of Inspections:	14	Temperature:	72 F
			Secchi:			6.0 Ft.
<b>NORTH FISHWAY</b>			In service with 4 out of 6 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'	Returned to salmon setting of 1.0' on 7/29.			
Entrance differential	0	1.0' - 2.0'	AVG	1.5		
<b>SOUTH FISHWAY</b>	0		2 out of 3 AWS turbines in service			
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	1.0' ± 0.1'	Returned to salmon setting of 1.0' on 7/29.			
South entrance differential	0	1.0' - 2.0'	AVG	1.4		
Entrance weir SE1	1	depth (≥ 8')	AVG	8.5	OCC at 7.9'on 8/19 AM. PLC was adjusted immediately	
Collection channel velocity	0	1.5 - 4 fps	AVG	2.29		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.6		
Entrance weir NE1	0	depth (≥ 8')	AVG	9.5		
Entrance weir NE2	0	depth (≥ 8')	AVG	10.1		
<b>JUVENILE PASSAGE</b>	0					
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.6		
Submersible traveling screens	0	visual inspect	Monthly inspection found one STS-MU4 and one VBS- MU16 with minor mesh tears, 8/19.			
Turbine trashrack drawdown	0	<1.5', wkly	N/A			
Vert barrier screen drawdown	0	<1.5', wkly	N/A			
Spill volume	0	per FPP	Spill season continues since 10 April.			
Spill pattern	0	per FPP				
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

## SMOLT MONITORING FACILITY

### Operation:

SMF continues in service, and in criteria since 13 March 2019.

Limited, twice a week sampling (Mondays and Thursdays) commenced after the JD forebay temperature reached 70 F on 25 July. Limited sampling will continue until river temperature drops down below 69.5 F.

### Maintenance:

No maintenance issues of any kind at this time. Planning for the upcoming winter's SCADA update underway.

Research: None

## ADULT FISHWAYS & TW AVIAN GRID

### Birds:

USDA gull hazing ended on 31 July 2019. Very few gulls were present in the JD tailrace BRZ but a recorded number of white pelicans, up to approximately 300-400 per inspection, were observed in July. The white pelicans numbers have been declining since mid August. See Bird Count tab for details.

All 125 avian lines in place without any deficiencies.

### Operations:

Monthly STS inspection completed by 8/22. STS@MU4 and VBS@MU16 were found with minor mesh tears on 8/19. Both were repaired by the next day.

MU Gatewell Drawdown All MUs trashrack differentials are 1.5' or below according to twice a week inspections.

### Maintenance:

JD South Fishway continues operating with two AWS turbines (No. 1 & 2) since early April. AWS turbine No. 3 waiting for the replacement thrust bearing which is on order/ in contracting (at approx. \$ 20 K.)

JD South Fishway Collection Channel's gratings ROV inspection was completed on 8/14 with help of Mr. Jeff Randall, TD Fisheries. All gratings were found in place and properly attached without any brackets/bolts missing.

JD North Fishway continues operating in criteria. However, 2 out of 6 its ASW pumps are OOS due to auto greaser and oil leaks issues since mid June.

JD Maintenance is planning for unstocking/ inspection of pump # 3 to determine the undelaying causes in September 2019 (expensive work at \$ 45K)

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

### Research:

Four Peaks Env. adult salmonids counting at both JD fishways continues since 1 April 2019. The night video counting is ongoing as well.

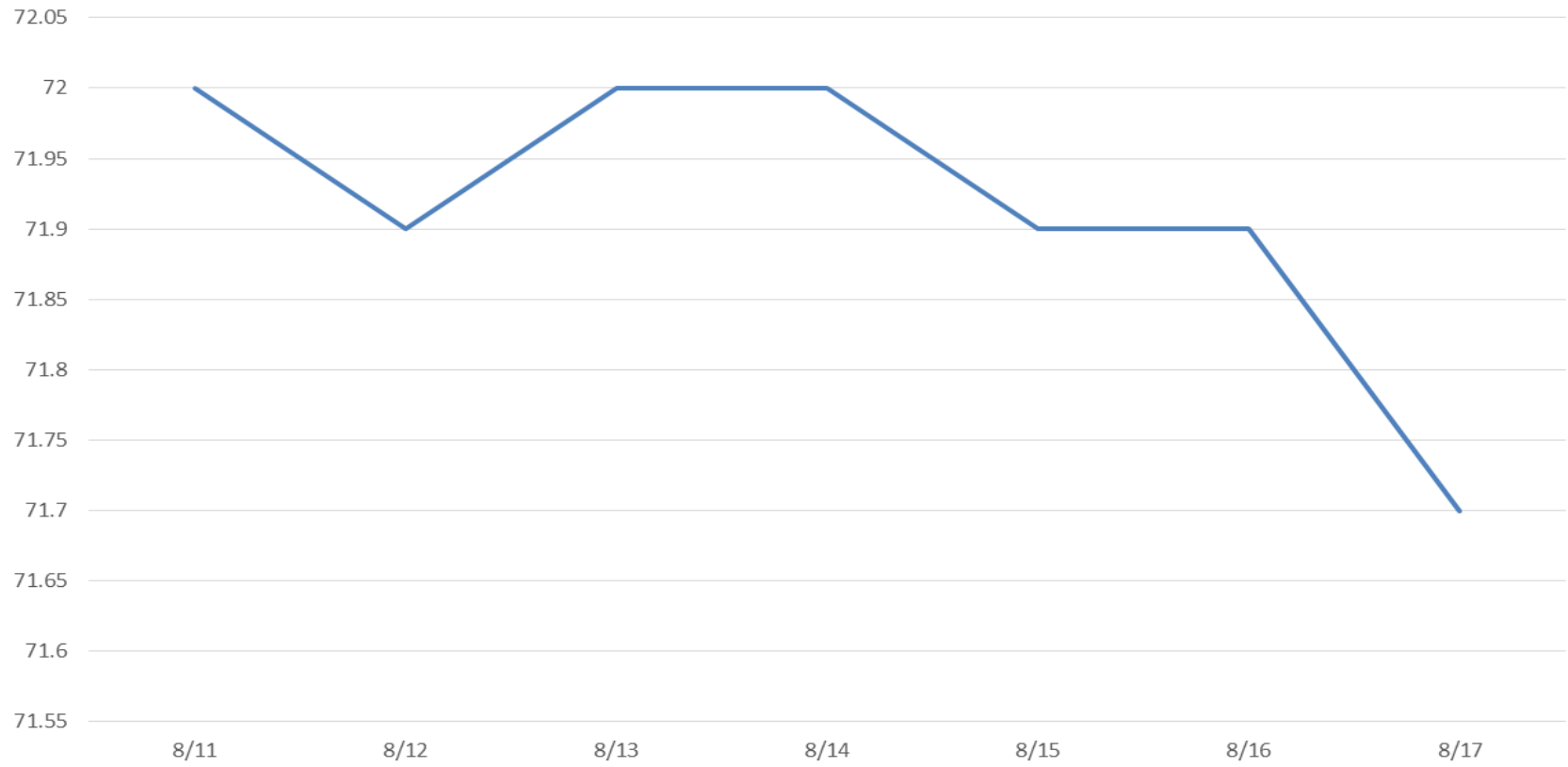
Washington F & W NPM dam angling continues since late April with the season total of 1,835 fish as of August 25. No fishing occurred this week due to low catches.

JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18.

Uof I crew continues monitoring the RT Adult Lamprey passage at both JD Adult Fishways.

Approved by: Ron Twiner, Acting OPM

JDA Forebay Water Temperature (8/11/19 8/17/19)



## JDA Collection Channel Velocity

**Date** 15-Aug-19

**By:** MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:27	87	2.07
2 - 4	2:52	172	2.12
4 - 6	4:14	254	2.20
6 - 8	5:35	335	2.22
8 - 10	6:54	414	2.28
10 - 12	8:09	489	2.40
12 - 14	9:38	578	2.02
14 - 16	10:53	653	2.40
16 - 18	11:55	715	2.90
			<b>2.29</b>

<b>Bay 19 TW:</b>	159.4
<b>Turbine 1&amp;2:</b>	68 RPM

Turbine #3 OOS

FPP Criteria: 1.5–4.0 feet per second (2 fps optimum)

## John Day Weekly Averages

	Temp:	Secchi:	Fallbacks	
Sun	72	6.0		
Mon	72	6.0	4	70° Sample
Tue	72	6.0		
Wed	72	6.0		
Thur	72	6.0	13	70° Sample
Fri	72	6.0		
Sat	72	6.0		
<b>AVG:</b>	<b>72</b>	<b>AVG: 6.0</b>	<b>AVG/Sample 9</b>	
			<b>MAX 13</b>	
			<b>MIN 4</b>	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.1	9.7	1.4	8.0	1.6	4.7	1.6
Sun	9.1	9.8	1.3	8.2	1.6	4.6	1.9
Mon	9.0	9.5	1.5	7.9	1.6	4.6	1.6
Mon	8.7	9.4	1.5	8.5	1.7	4.6	1.8
Tues	8.9	9.5	1.3	9.0	1.6	4.6	1.9
Tues	9.9	10.5	1.5	8.9	1.6	4.6	1.6
Wed	10.2	10.8	1.2	9.8	1.4	4.5	1.7
Wed	9.9	10.5	1.4	8.5	1.4	4.5	1.8
Thur	10.3	10.9	1.2	9.3	1.3	4.7	1.6
Thur	10.0	10.7	1.3	8.3	1.0	4.6	1.1
Fri	9.4	9.9	1.5	8.3	1.5	4.7	1.7
Fri	10.0	10.6	1.5	8.3	1.6	4.6	1.0
Sat	9.4	10.0	1.3	8.1	1.4	4.6	1.6
Sat	9.3	10.0	1.4	8.3	1.5	4.5	1.6
<b>AVG:</b>	<b>9.5</b>	<b>10.1</b>	<b>1.4</b>	<b>8.5</b>	<b>1.5</b>	<b>4.6</b>	<b>1.6</b>



**JDA Bird Counts: 8/11/19 to 8/17/19**

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

Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		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)	
11-Aug	PHFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11-Aug	SWFB	0	0	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
11-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	3	8	0	0	0	0	0	0	11
11-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	30	89	0	0	0	0	0	0	119
11-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	0	20	25	0	0	0	0	0	0	45
Avg/Survey		0		25		0		0		0		0		88		0		0		0		224
12-Aug	PHFB	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12-Aug	SWFB	4	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
12-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	5
12-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	45	52	0	0	0	0	0	0	97
12-Aug	SW3	10	0	0	0	0	0	0	0	0	0	0	0	68	37	0	0	0	0	0	0	115
Avg/Survey		8		13		0		0		0		0		104		0		0		0		248
13-Aug	PHFB	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
13-Aug	SWFB	25	0	0	33	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	60
13-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
13-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11
13-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13
13-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	112	6	0	0	0	0	0	0	118
13-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	0	111	28	0	0	0	0	0	0	139
Avg/Survey		13		17		0		2		0		0		141		0		0		0		345
14-Aug	PHFB	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	18
14-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
14-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	10	7	0	0	0	0	0	0	17
14-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	12	14	0	0	0	0	0	0	26
14-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	2	8	0	0	0	0	0	0	10
14-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	0	57	19	0	0	0	0	0	0	76
Avg/Survey		0		0		0		9		0		0		66		0		0		0		150

**JDA Bird Counts: 8/11/19 to 8/17/19**

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

Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		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)	
15-Aug	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
15-Aug	SWFB	0	0	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93
15-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
15-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	20	4	0	0	0	0	0	0	24
15-Aug	PH3	0	4	0	0	0	0	0	0	0	0	0	0	7	12	35	0	0	0	0	0	58
15-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	13
15-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	11	2	0	0	0	0	0	0	13
15-Aug	SW3	0	4	0	0	0	0	0	0	0	0	0	0	31	10	0	0	0	0	0	0	45
Avg/Survey		4		47		0		0		0		0		56		18		2		0		250
16-Aug	PHFB	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
16-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
16-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	11
16-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	0	14
16-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
16-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	8	25	0	0	0	0	0	0	33
16-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	0	45	0	0	0	0	0	0	0	45
Avg/Survey		1		0		0		1		0		0		53		0		0		0		108
17-Aug	PHFB	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5
17-Aug	SWFB	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
17-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
17-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	10	8	0	0	0	0	0	0	18
17-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	27	7	0	0	0	0	0	0	34
17-Aug	SW1	0	2	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	8
17-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	9	17	0	0	0	0	0	0	26
17-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	0	54	22	0	0	0	0	0	0	76
Avg/Survey		4		0		0		2		0		0		82		0		0		0		175
<b>Totals</b>		<b>Gulls</b>				<b>Cormorant</b>				<b>Caspian tern</b>				<b>White Pelican</b>				<b>Grebe</b>				<b>Total</b>
		F		NF		F		NF		F		NF		F		NF		F		NF		
<b>Weekly Total</b>		59		201		0		26		0		0		1176		35		3		0		1500
<b>Avg/Survey</b>		4		14		0		2		0		0		84		3		0		0		107



John Day Dam  
Avian Zones

