

## FISHWAY STATUS REPORT

**Date:** 9/28/2019  
**Inspection Period:** 9/22/2019 thru 9/28/2019

## 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: 68 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>			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	0	depth (≥ 8')	AVG 8.5	
Collection channel velocity	0	1.5 - 4 fps	AVG 2.38	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.5	
Entrance weir NE1	0	depth (≥ 8')	AVG 9.0	
Entrance weir NE2	0	depth (≥ 8')	AVG 9.6	
<b>JUVENILE PASSAGE</b>				
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	Trashrack raking completed by 8/29. Very little debris was found.
Vert barrier screen drawdown	0	<1.5', wkly	N/A	
Spill volume	0	per FPP	Spill season ended on 8/31. Two TSWs were shut down on 8/29, the last work day.	
Spill pattern	0	per FPP	Bay 2 open at 1.6K during daylight hours for adult attraction to North Entrance since 9/1.	
Turbine Unit Priority	0	per FPP		
Turbine 1% Efficiency	0	per FPP		

## SMOLT MONITORING FACILITY

### Operation:

SMF in primary bypass w/ pit detection as of 15 Sept

### Maintenance:

Sample and pit holding tanks being painted

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.

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 of its thrust bearing which is on order/ in contracting ( at approx. \$ 20 K.)

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)

North AWS pump 4 will be next to undergo similar repairs soon after #3 is done.

MU5 RTS originally scheduled for August, has been delayed due to unforeseen issues until 9/18.

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.

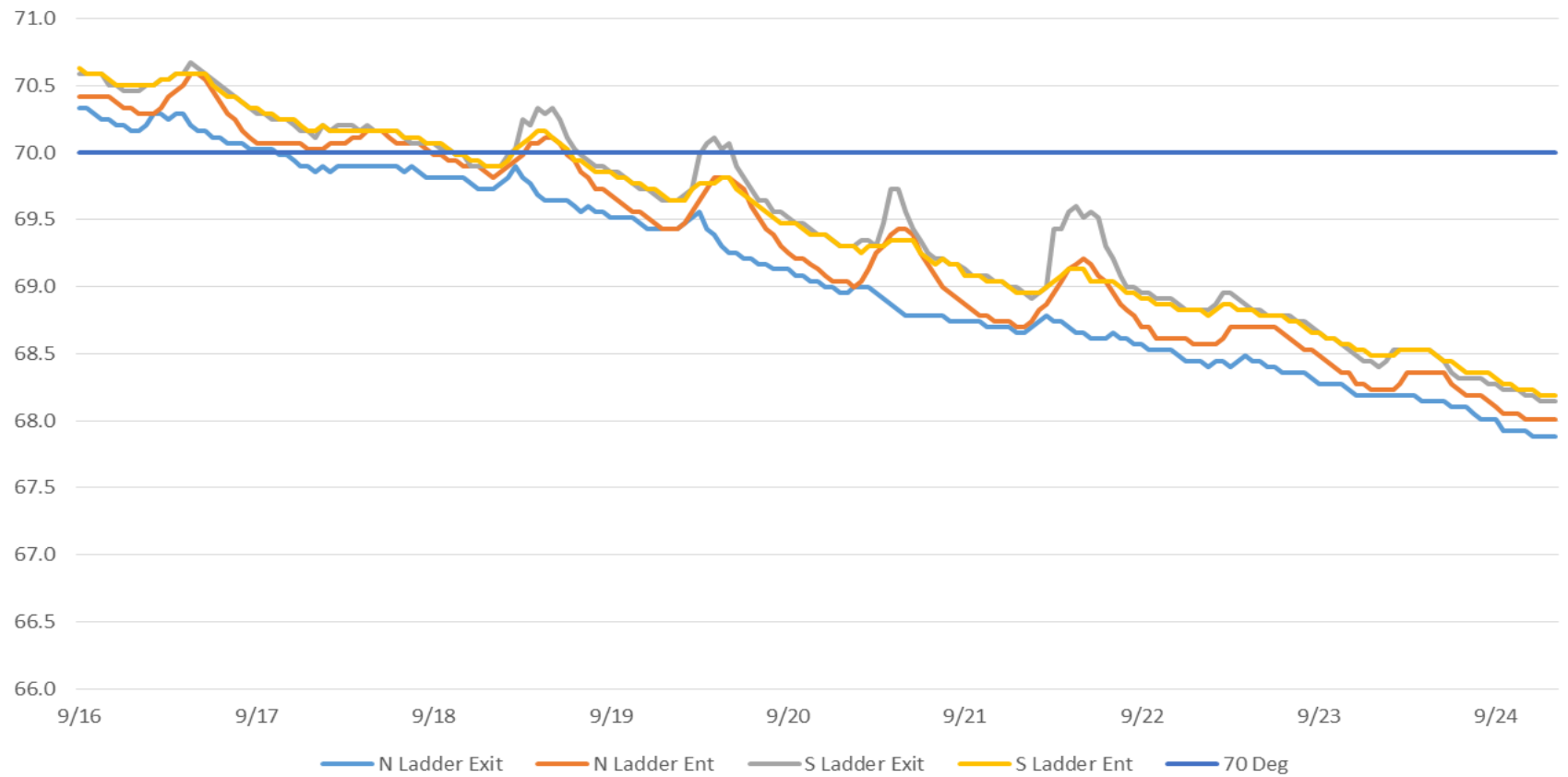
Washington F & W NPM dam angling continues since late April with the season total of 1,835 fish as of September 1. No fishing occurred this week due to low catches.

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 Fishladder Water Temperatures (9/16/19 - 9/24/19)



## JDA Collection Channel Velocity

**Date** 26-Sep-19

**By:** MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:21	81	2.22
2 - 4	2:37	157	2.37
4 - 6	3:55	235	2.31
6 - 8	5:11	311	2.37
8 - 10	6:31	391	2.25
10 - 12	7:53	473	2.20
12 - 14	9:09	549	2.37
14 - 16	10:19	619	2.57
16 - 18	11:24	684	2.77
			<b>2.38</b>

<b>Bay 19 TW:</b>	159.6
<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	69	6.0	NA
Mon	69	6.0	NA
Tue	68	6.0	NA
Wed	68	6.0	NA
Thur	68	6.0	NA
Fri	67	6.0	NA
Sat	67	6.0	NA
<b>AVG:</b>	<b>68.0</b>	<b>AVG: 6.0</b>	<b>AVG/Sample #DIV/0!</b>
			<b>MAX 0</b>
			<b>MIN 0</b>

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.9	9.5	1.5	8.2	1.6	4.6	1.6
Sun	8.6	9.2	1.5	8.2	1.6	4.6	1.8
Mon	9.3	9.9	1.4	8.2	1.6	4.6	1.3
Mon	9.0	9.6	1.4	8.4	1.5	4.7	1.5
Tues	8.9	9.5	1.4	8.4	1.5	4.6	1.5
Tues	9.0	9.7	1.3	8.6	1.6	4.6	1.4
Wed	9.2	9.7	1.4	8.7	1.5	4.6	1.5
Wed	9.1	9.7	1.3	8.7	1.7	4.6	1.4
Thur	8.6	9.1	1.4	8.3	1.4	4.6	1.5
Thur	9.0	9.6	1.4	8.6	1.3	4.6	1.4
Fri	9.2	9.8	1.4	8.6	1.5	4.6	1.5
Fri	9.0	9.6	1.3	8.6	1.6	4.6	1.5
Sat	9.2	9.8	1.3	8.8	1.5	4.6	1.4
Sat	9.1	9.6	1.5	8.5	1.6	4.6	1.5
<b>AVG:</b>	<b>9.0</b>	<b>9.6</b>	<b>1.4</b>	<b>8.5</b>	<b>1.5</b>	<b>4.6</b>	<b>1.5</b>



**JDA Bird Counts: 9/22/19 to 9/28/19**

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)	
22-Sep	PHFB	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	57	50	0	0	137
22-Sep	SWFB	0	0	271	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	271
22-Sep	PH1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4
22-Sep	PH2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22-Sep	PH3	65	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	68
22-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Sep	SW2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		34		136		0		16		0		0		2		0		55		0		482
23-Sep	PHFB	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23-Sep	SWFB	0	0	233	112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	345
23-Sep	PH1	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
23-Sep	PH2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23-Sep	PH3	12	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
23-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		6		173		4		1		0		0		0		0		0		0		366
24-Sep	PHFB	0	0	0	4	0	0	9	0	0	0	0	0	0	0	0	0	44	64	0	0	121
24-Sep	SWFB	0	0	203	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	296
24-Sep	PH1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
24-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Sep	PH3	103	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110
24-Sep	SW1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
24-Sep	SW2	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	23
24-Sep	SW3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Avg/Survey		56		150		2		16		0		0		0		0		54		0		554
25-Sep	PHFB	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	32	13	32	13	93
25-Sep	SWFB	0	0	217	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	322
25-Sep	PH1	2	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
25-Sep	PH2	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
25-Sep	PH3	5	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
25-Sep	SW1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
25-Sep	SW2	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	32
25-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		38		163		1		16		0		0		0		0		23		23		523

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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)	
26-Sep	PHFB	0	0	90	40	0	0	0	0	0	0	0	0	0	0	0	0	23	31	23	30	237
26-Sep	SWFB	0	0	115	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	250
26-Sep	PH1	0	17	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
26-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Sep	SW2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
26-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Avg/Survey</b>		<b>10</b>		<b>190</b>		<b>1</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>27</b>		<b>27</b>	<b>508</b>	
27-Sep	PHFB	0	0	0	144	0	0	0	0	0	0	0	0	0	0	0	0	36	35	36	35	286
27-Sep	SWFB	0	0	195	241	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	436
27-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Avg/Survey</b>		<b>0</b>		<b>290</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>36</b>		<b>36</b>	<b>722</b>	
28-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	35	35	35	140
28-Sep	SWFB	0	0	201	244	0	0	0	0	0	0	0	0	0	0	0	0	3	0	2	0	450
28-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Sep	SW2	0	5	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	40
28-Sep	SW3	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
<b>Avg/Survey</b>		<b>15</b>		<b>223</b>		<b>0</b>		<b>18</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>37</b>		<b>36</b>	<b>655</b>	
<b>Totals</b>		<b>Gulls</b>				<b>Cormorant</b>				<b>Caspian tern</b>				<b>White Pelican</b>				<b>Grebe</b>				<b>Total</b>
		<b>F</b>		<b>NF</b>		<b>F</b>		<b>NF</b>		<b>F</b>		<b>NF</b>		<b>F</b>		<b>NF</b>		<b>F</b>		<b>NF</b>		
<b>Weekly Total</b>		<b>315</b>		<b>2646</b>		<b>13</b>		<b>131</b>		<b>0</b>		<b>0</b>		<b>3</b>		<b>0</b>		<b>461</b>		<b>241</b>	<b>3810</b>	
<b>Avg/Survey</b>		<b>23</b>		<b>189</b>		<b>1</b>		<b>9</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>33</b>		<b>17</b>	<b>272</b>	



John Day Dam  
Avian Zones

