

FISHWAY STATUS REPORT

Date: 9/7/2019
Inspection Period: 9/1/2019 thru 9/7/2019

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 OOB	Criteria Limit	Total Number of Inspections:	14	Temperature:	72 F
			Secchi:	6.0 Ft.		
NORTH FISHWAY			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		
SOUTH FISHWAY	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	0	depth (≥ 8')	AVG	8.7		
Collection channel velocity	0	1.5 - 4 fps	AVG	2.64		
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.5		
Entrance weir NE1	0	depth (≥ 8')	AVG	9.9		
Entrance weir NE2	0	depth (≥ 8')	AVG	10.3		
JUVENILE PASSAGE	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	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 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.

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.

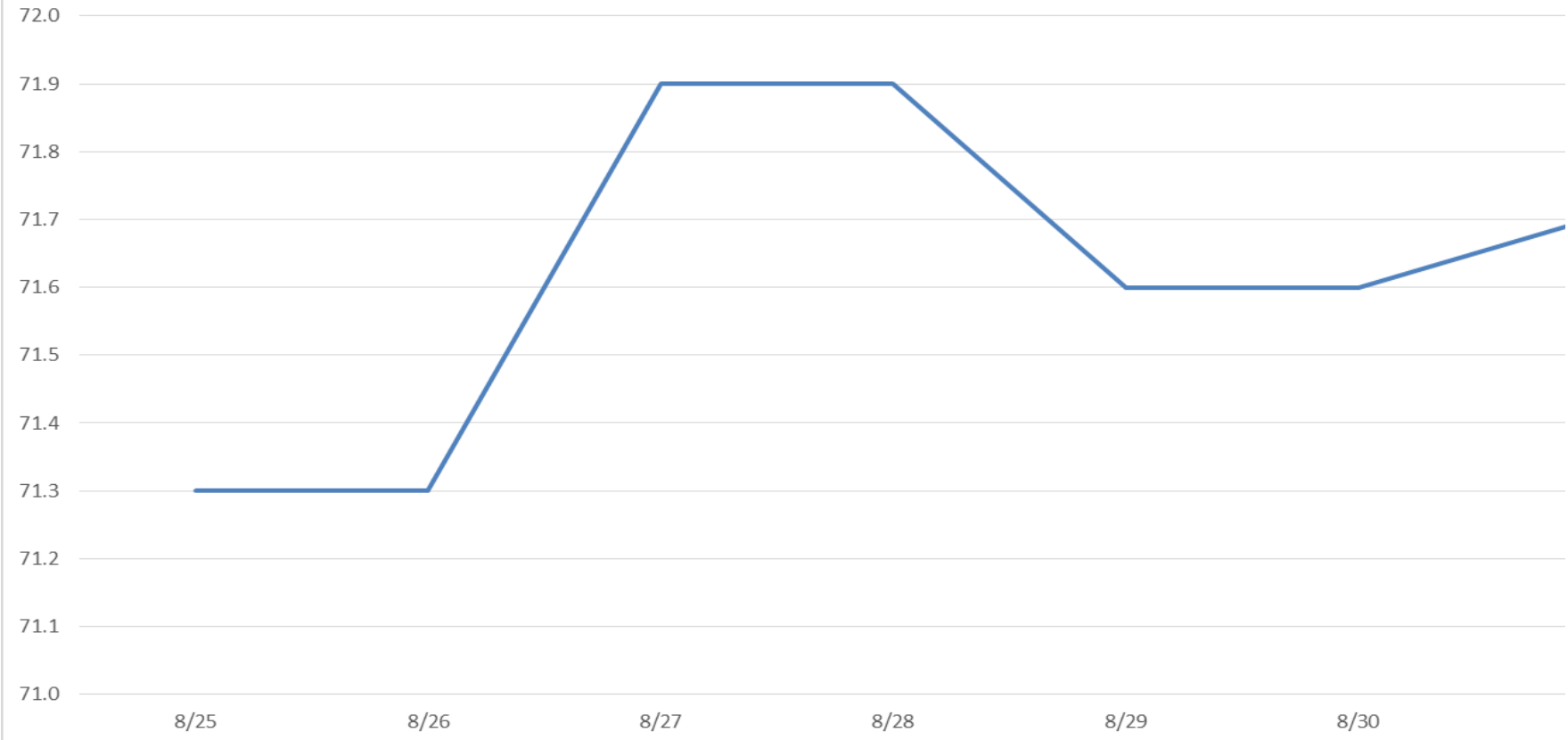
Washington F & W NPM dam angling continues since late April with the season total of 1,835 fish as of September 1. No fishing occurred this week due to low catches.

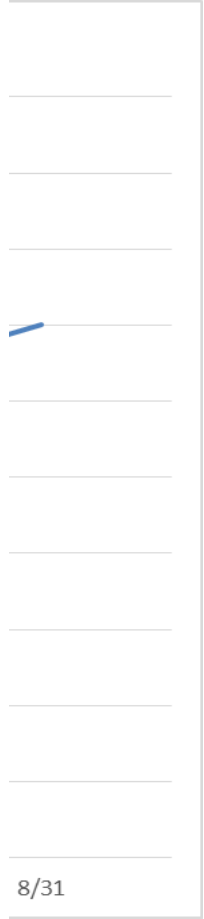
JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18.

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

Approved by: Ron Twiner, Acting OPM

JDA Forebay Water Temperature (8/25/19 - 8/31/19)





8/31

JDA Collection Channel Velocity

Date 30-Aug-19

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:05	65	2.77
2 - 4	2:19	139	2.43
4 - 6	3:25	205	2.73
6 - 8	4:33	273	2.65
8 - 10	5:41	341	2.65
10 - 12	6:49	409	2.65
12 - 14	7:55	475	2.73
14 - 16	9:05	545	2.57
16 - 18	10:14	614	2.61
			2.64

Bay 19 TW:	161.2
Turbine 1&2:	68 RPM

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	8	70° Sample
Tue	72	6.0		
Wed	72	6.0		
Thur	72	6.0	11	70° Sample
Fri	72	6.0		
Sat	72	6.0		
AVG:	72	AVG: 6.0	AVG/Sample 10	
			MAX 11	
			MIN 8	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	10.7	11.2	1.2	9.5	1.5	4.6	1.5
Sun	10.1	10.7	1.4	8.4	1.5	4.5	1.6
Mon	9.7	10.3	1.5	8.3	1.5	4.6	1.7
Mon	10.0	10.6	1.3	8.9	1.5	4.6	1.7
Tues	9.5	10.1	1.5	8.3	1.5	4.6	1.8
Tues	10.2	10.9	1.4	9.0	1.4	4.6	1.6
Wed	9.6	10.1	1.3	8.5	1.5	4.6	1.6
Wed	9.7	10.3	1.5	8.7	1.6	4.6	1.6
Thur	9.4	10.0	1.4	8.7	1.5	4.6	1.6
Thur	10.5	9.9	1.4	8.6	1.6	4.6	1.5
Fri	9.7	10.3	1.2	8.8	1.4	4.6	1.1
Fri	9.7	9.8	1.4	8.5	1.4	4.6	1.2
Sat	9.4	9.9	1.5	8.6	1.5	4.6	1.3
Sat	9.7	10.3	1.3	8.9	1.6	4.6	1.1
AVG:	9.9	10.3	1.4	8.7	1.5	4.6	1.5

JDA Bird Counts: 9/1/19 to 9/7/19

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)	
1-Sep	PHFB	0	0	6	47	0	0	22	3	0	0	0	0	0	0	0	0	7	0	0	0	85
1-Sep	SWFB	0	0	135	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	223
1-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Sep	PH2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1-Sep	PH3	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
1-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Sep	SW3	0	0	0	11	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	18
Avg/Survey		5		144		0		13		0		0		4		0		4		0		336
2-Sep	PHFB	0	0	0	12	0	0	18	0	0	0	0	0	0	0	0	0	10	3	0	0	43
2-Sep	SWFB	0	0	141	100	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	242
2-Sep	PH1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
2-Sep	PH2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
2-Sep	PH3	10	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
2-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Sep	SW2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2-Sep	SW3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Avg/Survey		28		127		1		9		0		0		0		0		7		0		342
3-Sep	PHFB	0	0	3	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	11
3-Sep	SWFB	157	0	0	112	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	274
3-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Sep	PH2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3-Sep	PH3	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
3-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Sep	SW2	1	2	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	21
3-Sep	SW3	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Avg/Survey		88		58		0		14		0		0		0		0		3		0		323
4-Sep	PHFB	0	0	0	4	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	25
4-Sep	SWFB	0	0	31	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
4-Sep	PH1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
4-Sep	PH2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Sep	SW2	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	15
4-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		3		39		0		18		0		0		0		0		0		0		119

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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)					
5-Sep	PHFB	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5-Sep	SWFB	0	0	98	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	154
5-Sep	PH1	25	0	0	4	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
5-Sep	PH2	1	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Sep	SW2	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
5-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		13		81		1		8		0		0		0		0		0		0		0		206		
6-Sep	PHFB	0	0	0	1	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
6-Sep	SWFB	0	25	120	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	227
6-Sep	PH1	20	14	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
6-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Sep	SW2	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
6-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		30		102		1		22		0		0		0		0		0		0		0		306		
7-Sep	PHFB	0	0	1	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
7-Sep	SWFB	0	30	70	110	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	213
7-Sep	PH1	50	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
7-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Sep	SW2	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
7-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		50		91		0		25		0		0		0		0		0		0		0		331		
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total				
		F		NF		F		NF		F		NF		F		NF		F		NF						
Weekly Total		433		1278		4		215		0		0		7		0		26		0		1963				
Avg/Survey		31		91		0		15		0		0		1		0		2		0		140				

John Day Dam
Avian Zones

