FISHWAY STATUS REPORT

Date: 10/5/2019

Inspection Period: 9/29/2019 thru 10/5/2019

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	Criteria	Total Number of Inspections: 14 Temperature: 65 F
	000	Limit	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			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 1.3
Entrance weir SE1	0	depth (≥ 8')) AVG 8.2
Collection channel velocity	0	1.5 - 4 fps	AVG 2.62
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.4
Entrance weir NE1	0	depth (≥ 8')) AVG 9.1
Entrance weir NE2	0	depth (≥ 8')) AVG 9.6
JUVENILE PASSAGE			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6
Submersible traveling screens	0	visual inspect	Monthly STS inspection incomplete due to Line3 outage. Only north half of STS inspected.
Turbine trashrack drawdown	0	<1.5', wkly	N/A Trashrack raking completed by 9/26. Very little debris was found.
Vert barrier screen drawdown	0	<1.5', wkly	N/A
Spill volume	0	per FPP	1.6 K at bay 2
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 bypass for the pit detection only since 9/15; it will continue through the end of November.

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:

See Bird Count tab for details.

All 125 avian lines in place without any deficiencies.

Operations:

September STS inspection incomplete on 9/19 due to line 3 outage work blocking access to the south half of PH. There were no bad STS found @ north half of PH.

Line 1 outage to replace the high voltage bushing started on 1 October per MOC (from 2018.) ETR is 10/23.

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.

Delayed MU5 RTS on 9/25.

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.

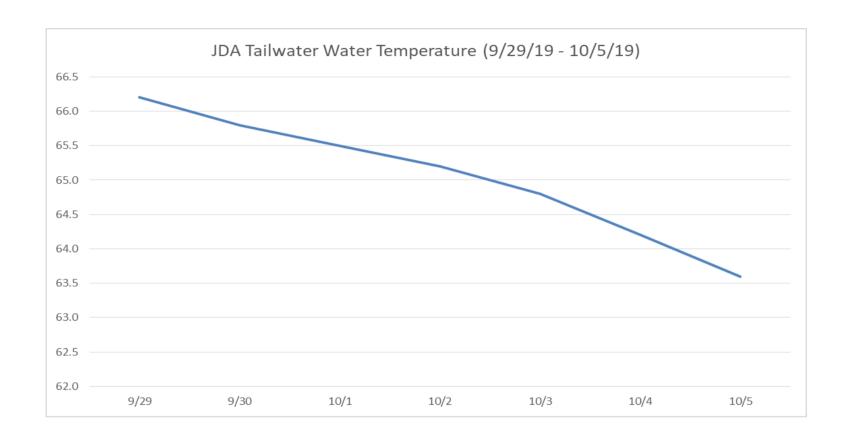
Washington F &W NPM dam angling ended with the season total of 1,835 fish in mid-September.

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 Collection Channel Velocity

Date	2-Oct-19
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:10	70	2.57
2 - 4	2:13	133	2.86
4 - 6	3:25	205	2.50
6 - 8	4:38	278	2.47
8 - 10	5:51	351	2.47
10 - 12	7:03	423	2.50
12 - 14	8:18	498	2.40
14 - 16	9:24	564	2.73
16 - 18	10:23	623	3.05
			2.62

Bay 19 TW:	159.9					
Turbine 1&2:	68 RPM					

Turbine #3 OOS

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

John Day Weekly Averages

	Temp:
Sun	66
Mon	66
Tue	66
Wed	65
Thur	65
Fri	62
Sat	64

Secchi:						
6.0						
6.0						
6.0						
6.0						
6.0						
6.0						
6.0						

Fallbacks	
NA	
NA	1
NA	1

AVG:	64.9

AVG/Sample	6.0	AVG:
MAX		
BAIN		

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.3	9.9	1.4	8.6	1.4	4.6	1.3
Sun	9.2	9.8	1.4	8.6	1.5	4.6	1.5
Mon	8.9	9.4	1.4	8.4	1.6	4.6	1.3
Mon	9.4	10.0	1.4	9.0	1.5	4.6	1.4
Tues	9.1	9.7	1.4	8.1	1.6	4.5	1.3
Tues	8.4	8.9	1.4	8.0	1.7	4.6	1.7
Wed	9.4	9.4	1.5	8.0	1.4	4.5	1.6
Wed	8.6	9.1	1.5	8.1	1.7	4.6	1.8
Thur	8.9	9.5	1.0	8.0	1.5	4.6	1.5
Thur	9.3	9.9	1.2	8.0	1.6	4.6	1.3
Fri	9.2	9.8	1.2	8.2	1.4	4.6	1.7
Fri	8.9	9.5	1.5	8.2	1.4	4.6	1.0
Sat	9.2	9.8	1.2	8.0	1.5	4.6	1.5
Sat	9.4	9.6	1.1	8.0	1.6	4.6	1.2
AVG:	9.1	9.6	1.3	8.2	1.5	4.6	1.4

JDA Bird Counts: <u>9/29/19</u> <u>to</u> <u>10/5/19</u>

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

Date	Zone		G	iulls			Cor	morant	:		Caspia	n 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)	
29-Sep	PHFB	0	0	0	175	2	0	0	0	0	0	0	0	0	0	0	0	33	35	32	34	311
29-Sep	SWFB	0	0	393	311	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	704
29-Sep	PH1	19	53	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
29-Sep	PH2	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
29-Sep	PH3	20	21	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	51
29-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Sep	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Sep	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su		6	6		40		2	(0		0	()	. !	5	()		4		3	1157
30-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	2	38	2	80
30-Sep		0	0	335	335	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	670
30-Sep		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
30-Sep		0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
30-Sep	PH3	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
30-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Sep	SW2	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
30-Sep	SW3	35	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	36
Avg/Su	ırvey	3	9	33	35		1	()		0	()		1	()		.0	2	0	831
	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	62	0	0	134
	SWFB	0	0	257	173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	430
1-Oct		16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
1-Oct		21	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
1-Oct		35	21	0	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	138
1-Oct		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Oct		0	0	0	4	0	0	0	8	0	0	0	0	0	0	0	4	0	0	0	0	16
1-Oct		17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Avg/Su		5	5	26	51	(0	4	1		0	()	(0	- 2	2		7	()	778
2-Oct	PHFB	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	22	0	0	0	33
2-Oct	SWFB	0	0	272	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	442
2-Oct	PH1	2	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
2-Oct	PH2	8	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
2-Oct	PH3	12	37	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	50
2-Oct		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Oct	SW2	0	0	0	0	0	0	22	0	0	0	0	0	1	0	0	0	0	0	0	0	23
2-Oct		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Avg/Su	ırvey	4	3	22	22	:	1	1	.7		0	()		1	()	1	1)	588

JDA Bird Counts: <u>9/29/19</u> <u>to</u> <u>10/5/19</u>

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)	
3-Oct	PHFB	0	0	0	50	0	2	5	0	0	0	0	0	0	0	0	0	50	34	0	0	141
3-Oct	SWFB	0	0	300	301	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	601
3-Oct	PH1	20	0	10	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	33
3-Oct	PH2	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
3-Oct	PH3	12	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	22
3-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Oct		0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	25
Avg/Su	ırvey	24 331		2 21			0 0		0 0			42			0	837						
	PHFB	0	0	0	102	0	0	21	0	0	0	0	0	0	0	0	0	45	41	0	0	209
4-Oct	SWFB	0	0	350	200	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	551
4-Oct	PH1	23	0	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
4-Oct	PH2	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
4-Oct	PH3	15	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	37
4-Oct	SW1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Oct		0	0	1	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	5
Avg/Su	ırvey	24 328		3 22		0 0		0	0		2		44		0		842					
	PHFB	0	0	0	0	0	0	20	4	0	0	0	0	0	0	0	0	67	42	0	0	133
	SWFB	0	0	376	421	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	797
5-Oct	PH1	20	12	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
5-Oct		15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
5-Oct	PH3	5	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	33
5-Oct		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Oct	SW2	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5-Oct		0	0	3	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Avg/Su	ırvey	2	8	40	02	- 1	1	3	7		0		0		0	()	5	5		0	1042

Totals	G	Gulls	Cori	morant	Caspia	n tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	555	4635	15	200	0	0	13	7	544	106	6075
Avg/Survey	40	331	1	14	0	0	1	1	39	8	434

