FISHWAY STATUS REPORT

Date: 4/13/2019

Inspection Period: 4/7/2019 thru 4/13/2019

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. Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspection	Criteria	Total Number of Inspections	: 14	Temperature:	48 F
-	ООС	Limit	-		Secchi:	3.7 Ft.
NORTH FISHWAY					-	
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'				
Entrance differential	0	1.0' - 2.0'	AVG 1.5			
SOUTH FISHWAY	0		Turbine 1 & 3 oos. 1 turbine	operation as of 14	00 on 9 April.	
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'	Set to Shad setting to provide	more flow to SE1		
South entrance differential	3	1.0' - 2.0'	AVG 1.0			
Entrance weir SE1	8	depth (≥ 8')	AVG 7.1			
Collection channel velocity	0	1.5 - 4 fps	AVG 2.54			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.5			
Entrance weir NE1	9	depth (≥ 8')	AVG 3.9			
Entrance weir NE2	2	depth (≥ 8')	AVG 9.5			
JUVENILE PASSAGE	0					
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	N/A			
Vert barrier screen drawdown	0	<1.5', wkly	N/A			
Spill volume	0	per FPP	Spill season started 10 April			
Spill pattern	0	per FPP	None			
Turbine Unit Priority	0	per FPP				
Turbine 1% Efficiency	0	per FPP				

SMOLT MONITORING FACILITY

Operation:

SMOLT MONITORING FACILITY began sampling on 3/13 at 1400. A broken pipe flange that supplies flume and rotating gate water was cracked preventing start up on 3/11.

Maintenance:

SMF SCADA update by JD Electrical/ Portland District's engineers is underway but its completion is delayed by one year to February 2020. Due to complexity of electronic components and incomplete as-builts which are pending at this time.

Research:

CRITFC genetic samples where collected by PSMFC.

ADULT FISHWAYS & TW AVIAN GRID

Birds:

Bird numbers have declined significantly due to low juvenile shad abundance in winter. See Avian Numbers tab for details. All 125 avian lines in place without any deficiencies.

Operations:

1 Turbine operation on South fish ladder. On 9 April, fish turbine one was tagged oos with a broken anti ratchet gear.

Trash raking of units began on 3/21.

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

Maintenance:

JD North AWS pump 2 returned to service on 3/27.

JD North AWS pumps frequent SKF alarms (auto greasing issues) continue and are cleared by JD Maintenance & Ops immediately. Planning for a long term fix underway.

JD South fish turbine's anti-ratchet gear was damaged beyond repair on 9 Apr. A spare is being assesed as a possible repair part.

JD North Fishway's LPS: Installation of the old pump assembly and electric controls will proceed at the end of April for start of trapping season.

JD South AWS turbine 3 is OOS, Part are to arrive on 26 April.

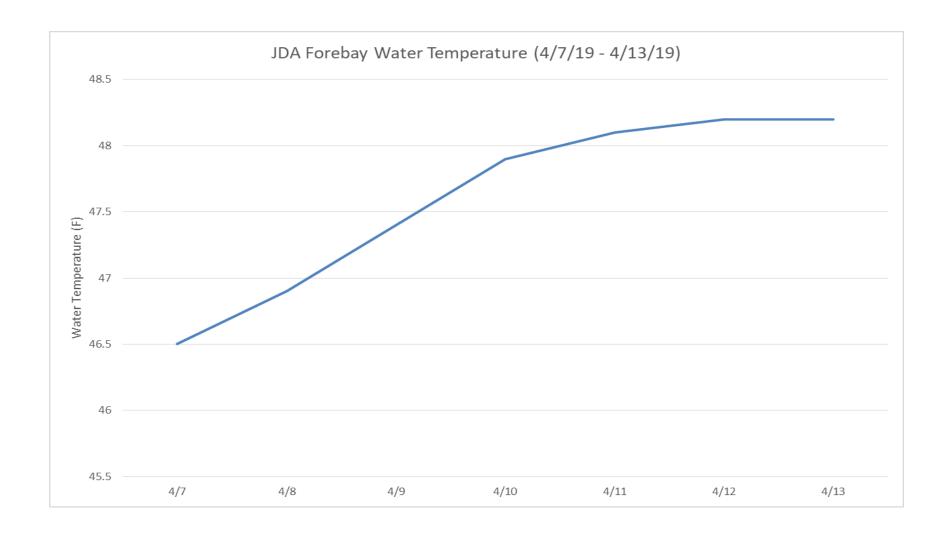
Calibration: All gauges/ sensors are within the criteria of 0.3'.

Research:

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	14-Apr-19
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	2:54	174	1.03
2 - 4	4:57	297	1.46
4 - 6	7:22	442	1.24
6 - 8	9:51	591	1.21
8 - 10	12:01	721	1.38
10 - 12	14:12	852	1.37
12 - 14	16:35	995	1.26
14 - 16	18:41	1121	1.43
16 - 18	20:29	1229	1.67
			1.34

Bay 19 TW:	161.6						
Turbine 2:	68 RPM						

Turbine #1, and #3 OOS

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

John Day Weekly Averages

	Temp:
Sun	47
Mon	47
Tue	47
Wed	48
Thur	48
Fri	48
Sat	48

	Secchi:
	3.5
	3.5
	4.0
	4.0
	3.5
	3.5
	4.0
AVG:	3.7

Fallbacks	
6	Bypass
15	Sample
17	Bypass
38	Sample
24	Bypass
23	Sample
16	Bypass
	•

3.7	AVG/Sample	23
	MAX	38
	MIN	6

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	10.5	9.9	1.5	8.6	1.4	4.6	1.7
Sun	10.8	10.2	1.4	8.4	1.5	4.6	1.7
Mon	10.4	9.7	1.2	8.7	1.6	4.6	1.8
Mon	11.2	10.6	1.0	9.2	1.5	4.6	1.5
Tues	11.7	11.1	1.1	8.8	1.6	4.6	1.4
Tues	0.0	11.6	0.3	8.5	1.5	4.8	1.2
Wed	0.0	10.7	0.4	6.6	1.3	4.6	1.0
Wed	0.0	8.8	1.0	5.0	1.6	4.6	1.7
Thur	0.0	8.8	0.8	5.2	1.6	4.6	1.6
Thur	0.0	7.9	1.1	5.8	1.7	4.5	1.5
Fri	0.0	8.4	1.1	5.3	1.5	4.7	1.9
Fri	0.0	8.4	1.2	4.8	1.6	4.6	1.5
Sat	0.0	7.8	1.1	6.3	1.5	4.5	1.7
Sat	0.0	8.9	1.2	7.5	1.2	4.6	1.3
AVG:	3.9	9.5	1.0	7.1	1.5	4.6	1.5

JDA Bird Counts: <u>4/7/19</u> <u>to</u> <u>4/13/19</u>

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

Date	Zone		G	Gulls			Cor	morant	:		Caspia	Caspian tern White Pelican Grebe			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)	
7-Apr	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	16	0	0	35
7-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Apr	SW2	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/St			0)		.3)	,	0)		0)		.8)	60
	PHFB	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	8	0	0	9
	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Apr		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Apr		0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
8-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su			1)		.0				0)		0)		4)	29
1	PHFB	1	0	0	0	0	0	21	27	0	0	0	0	0	0	0	0	7	12	0	0	68
	SWFB	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
9-Apr		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/St			2	- 4	4		0		4		0)		0	`)		.0)	77
10-Apr		0	1	0	7	0	2	0	0	0	0	0	0	0	0	0	0	29	21	0	0	60
10-Apr		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
10-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Apr		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	urvey		1	4	4		L		2		U	(J		U	(J	2	.5		J	65

JDA Bird Counts: <u>4/7/19</u> <u>to</u> <u>4/13/19</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)	
11-Apr	PHFB	0	0	0	2	0	2	4	0	0	0	0	0	0	0	0	0	28	18	0	0	54
11-Apr	SWFB	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Apr	PH3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey 2 3				1 2				0 0			0 0			23 0			0	61				
12-Apr		0	2	0	0	0	0	8	0	0	0	0	0	0	0	0	0	25	17	0	0	52
12-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Apr	PH1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Apr	PH3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su			3		1	()	4	1		0		0		0	()	2	21	(0	57
13-Apr		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	10
13-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Apr		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	ırvey		2	(0	()	()		0	(0		0	()		4	(0	10

Totals	Gulls		Cori	morant	Caspia	n tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	17	22	48	65	0	0	0	0	207	0	359
Avg/Survey	1	2	3	5	0	0	0	0	15	0	26

