### FISHWAY STATUS REPORT

 Date:
 5/25/2019

 Inspection Period:
 5/19/2019
 thru
 5/25/2019



JD/WC Project-Fisheries P.O. Box 823 Rufus, Oregon 97050 Phone: 541-506-7860

JOHN DAY DAM

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: 56 F
	000	Limit	Secchi: 3.8 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 3 oos. 2 turbine operation as of 1200 on 22 May.
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	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 2.74
N. Entrance PH(Bay 19)differential	3	1.0' - 2.0'	AVG 1.7
Entrance weir NE1	0	depth (≥ 8')	AVG 11.7
Entrance weir NE2	0	depth (≥ 8')	AVG 10.4
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:

USDA Bird Hazing began on 15 April. 20 Pelicans observed on island below project in tailrace All 125 avian lines in place without any deficiencies.

#### **Operations:**

South Fish turbine 3 oos due to thrust bearing failure.

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.

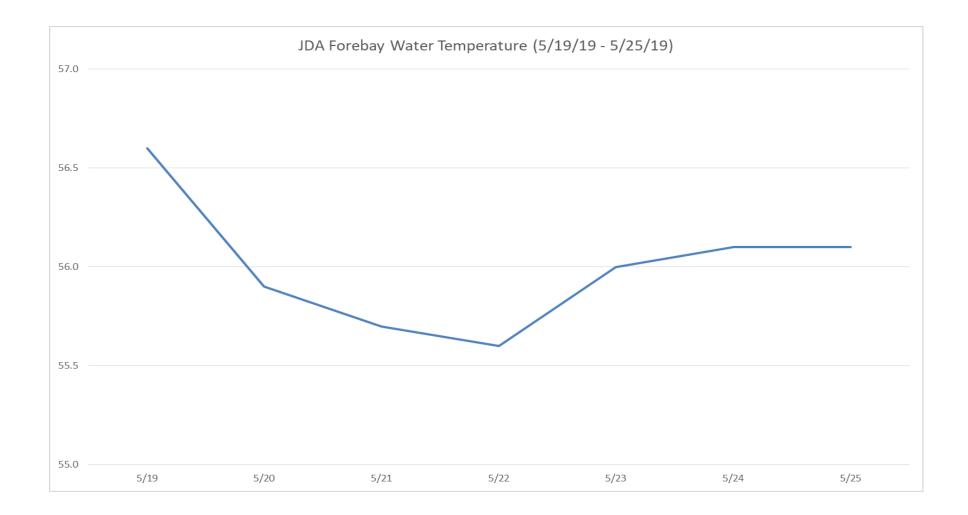
Calibration: All gauges/ sensors are within the criteria of 0.3'.

#### 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



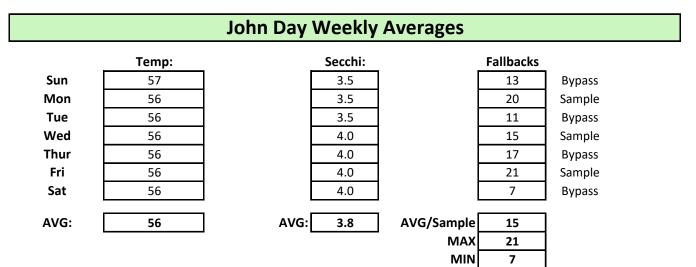
# JDA Collection Channel Velocity

Date	25-May-19
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:04	64	2.81
2 - 4	2:05	125	2.95
4 - 6	3:13	193	2.65
6 - 8	4:21	261	2.65
8 - 10	5:34	334	2.47
10 - 12	6:43	403	2.61
12 - 14	7:49	469	2.73
14 - 16	8:59	539	2.57
16 - 18	9:54	594	3.27
			2.74

Bay 19 TW:	162.6	]
Turbine 1&2:	68 RPM	Turbine #3 OOS

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



	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	12.4	11.0	1.4	9.8	1.4	4.6	1.8
Sun	12.4	11.0	1.5	8.3	1.4	4.6	2.0
Mon	12.5	11.1	1.4	8.3	1.6	4.5	1.8
Mon	12.7	11.3	1.1	8.4	1.6	4.2	1.6
Tues	11.7	10.3	1.0	8.6	1.5	4.6	1.6
Tues	11.9	10.5	1.3	8.4	1.5	4.5	1.8
Wed	12.2	10.8	1.4	8.8	1.3	4.6	1.5
Wed	11.6	10.2	1.5	8.4	1.6	4.5	1.4
Thur	11.2	9.8	1.5	8.2	1.5	4.6	1.9
Thur	11.8	10.5	1.3	8.4	1.6	4.5	1.6
Fri	10.8	9.5	1.5	8.0	1.7	4.4	1.7
Fri	11.0	9.6	1.4	8.0	1.5	4.5	1.6
Sat	10.9	10.3	1.4	8.7	1.4	4.7	1.8
Sat	10.9	10.3	1.4	8.0	1.7	4.5	1.8
AVG:	11.7	10.4	1.4	8.5	1.5	4.5	1.7

## JDA Bird Counts: <u>5/19/19</u> to <u>5/25/19</u>

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

Date	Zone		G	iulls			Corr	morant			Caspia	an tern			White	e Pelica	in		G	rebe		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)	
19-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	13	5	0	23
19-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-May		7	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
Avg/Su		2	6	(	0	(	)	(	0		0	(	0	(	0	(	0		9		3	74
20-May	PHFB	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	12	0	0	33
20-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May		25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Avg/Su		1	-		0		)	(			0		0		0		0		.6		0	<mark>58</mark>
21-May		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	28	0	0	57
21-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
21-May		10	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Avg/Su		1			)		)	(		-	0	-	0		1		0		8		0	84
22-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0	0	0	29
22-May		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May		14	9	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	29
22-May		21	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	22
Avg/Su	irvey	2	3		1	(	)	(	D		0	(	0	4	4	(	0	1	.5	(	0	83

## JDA Bird Counts: <u>5/19/19</u> <u>to</u> <u>5/25/19</u>

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

Date	Zone	e Gulls					Cori	norant			Caspia	n tern			White	e Pelica	n		G	rebe		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)	
23-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	33	12	0	0	46
23-May	SWFB	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
23-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-May	PH2	4	4	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	10
23-May	PH3	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
23-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-May	SW2	11	12	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	24
23-May	SW3	23	29	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	53
Avg/Su	urvey	4	8	(	0	(	)	(	)		0	(	0	:	3	(	)	2	.3	(	0	145
24-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	25	0	0	54
24-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	PH2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
24-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	SW2	0	4	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	7
24-May	SW3	15	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
Avg/Su	urvey	2	9	(	0	(	)	(	)		0	(	0		2	(	)	2	.7	(	0	114
25-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	31	0	0	57
25-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	PH2	4	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	7
25-May	PH3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
25-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May		36	46	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	86
Avg/Su	urvey	4	4	(	0	(	0	C	)		0	(	D	4	4	(	)	2	.9	(	0	15 <mark>2</mark>

Totals	Ģ	Gulls	Cor	morant	Caspia	in tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	389	1	0	0	0	0	24	0	<b>291</b>	5	710
Avg/Survey	28	0	0	0	0	0	2	0	21	0	51

