## **FISHWAY STATUS REPORT**

 Date:
 4/6/2019

 Inspection Period:
 3/31/2019
 thru
 4/6/2019



### 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 Nur	nber of Inspections:	Temperature:	<b>45</b> F	
	000	Limit				Secchi:	<b>3.8</b> Ft.
NORTH FISHWAY			Pump 2 re	eturned to service on 3/	'20. All 6 pump	os are available.	
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	High setting	High setti	ng 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						
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	Mid setting	Mid settir	ng is normal for JDS			
Count station differential	0	≤ 0.3'					
Weir crest depth (US gauge)	0	1.0' ± 0.1'					
South entrance differential	0	1.0' - 2.0'	AVG	1.3			
Entrance weir SE1	0	depth (≥ 8')	AVG	9.1			
Collection channel velocity	0	1.5 - 4 fps	AVG	2.54			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.7			
Entrance weir NE1	0	depth (≥ 8')	AVG	9.9			
Entrance weir NE2	0	depth (≥ 8')	AVG	9.3			
JUVENILE PASSAGE	0		Full flow b	oypass with pit detectio	n on 3/11. SMI	P sampling on 3/13	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.6			
Submersible traveling screens	0	visual inspect	Installed i	n units 1-4 on 2/27.			
Turbine trashrack drawdown	0	<1.5', wkly	N/A				
Vert barrier screen drawdown	0	<1.5', wkly	N/A				
Spill volume	0	per FPP	All gates o	on seal since 1 Decembe	er 2018. 2019 F	ish Spill season star	ts on 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:**

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 OOS due to oil leak since 2/9/19, it needs its motor replaced (spare one is on hand.) Planning for its repair underway. 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 North Fishway's LPS improvements contract is complete. LPS is expected to go into service in May 2019.

JD South AWS turbine 3 is OOS, Part are in contracting for purchase for the repair. Turbine 1 is running and the fishway is in criteria.

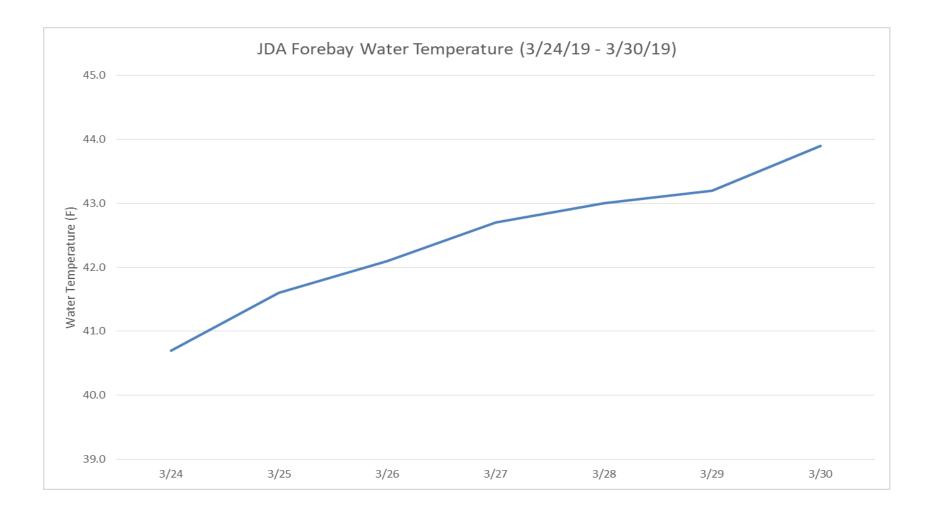
Calibration: All gauges/ sensors are within the criteria of 0.3'.

#### 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



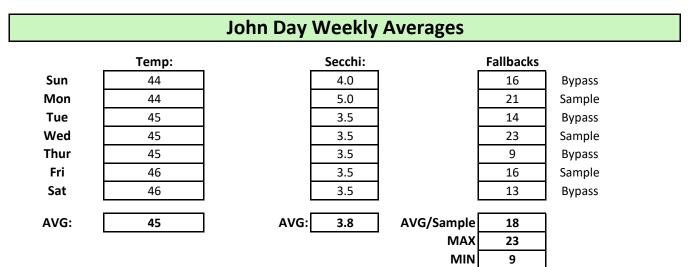
# JDA Collection Channel Velocity

Date	30-Mar-19
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:06	66	2.73
2 - 4	2:10	130	2.81
4 - 6	3:18	198	2.65
6 - 8	4:27	267	2.61
8 - 10	5:31	331	2.81
10 - 12	6:39	399	2.65
12 - 14	7:50	470	2.54
14 - 16	9:01	541	2.54
16 - 18	10:05	605	2.81
			2.68

Bay 19 TW:	160.9
Turbine 1-2:	68 RPM

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



	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	10.0	9.3	1.4	8.6	1.6	4.7	1.6
Sun	10.6	9.7	1.3	9.4	1.4	4.6	1.6
Mon	9.6	9.0	1.3	9.1	1.4	5.0	1.8
Mon	9.6	9.0	1.3	8.9	1.6	4.6	1.7
Tues	9.6	9.1	1.3	9.2	1.4	4.6	1.8
Tues	8.8	8.3	1.4	8.3	1.5	4.4	1.9
Wed	10.0	9.1	1.2	9.4	1.5	4.5	1.6
Wed	9.0	8.4	1.5	8.3	1.6	4.5	1.7
Thur	9.8	9.2	1.3	9.4	1.5	4.6	1.6
Thur	9.6	9.1	1.2	9.4	1.4	4.6	1.8
Fri	10.3	9.8	1.3	9.7	1.5	4.6	1.7
Fri	10.1	9.6	1.3	9.0	1.6	4.6	1.7
Sat	10.6	10.0	1.3	9.2	1.4	4.6	1.6
Sat	10.7	10.2	1.3	8.8	1.5	4.6	1.7
AVG:	9.9	9.3	1.3	9.1	1.5	4.6	1.7

## JDA Bird Counts: <u>3/24/19</u> to <u>3/30/19</u>

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

Date	Zone		Ģ	iulls			Cori	morant	:		Caspia	n tern			White	e Pelica	an		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)	
24-Mar	PHFB	0	0	1	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	18
24-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Mar	PH1	2	0	0	1	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7
24-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Mar	SW2	0	0	0	0	0	0	4	24	0	0	0	0	0	0	0	0	0	0	0	0	28
24-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	-		1	1	1	2	2	_	3		0	(	0	(	0	(	0	(	0	(	0	53
25-Mar		0	0	0	0	0	0	35	8	0	0	0	0	0	0	0	0	0	0	0	0	43
25-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Mar	PH1	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
25-Mar		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
25-Mar		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
25-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	-		1	1	1		3	_	2		0		0		0		0		0	, 	0	50
26-Mar		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
26-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Mar		0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
26-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Mar		0	0	0	0	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	29
26-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	-		)		0		5	_	.5		0		0		0		0		0		0	39
27-Mar		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	1	0	0	5
27-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Mar		0	0	0	0	1	4	32	0	0	0	0	0	0	0	0	0	0	0	0	0	37
27-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Mar		0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
27-Mar		0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	17
27-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	urvey	(	0	(	D	4	4	2	6		0	(	0	(	0	(	0		1	(	0	62

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Date	Zone		Ģ	alls			Cori	morant	:		Caspia	an 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)	
28-Mar	PHFB	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3
28-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Mar	PH1	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	27
28-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Mar	SW2	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
28-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	irvey	(	)	(	0		1	1	6		0	(	0	(	0	(	0		1	(	0	34
29-Mar		0	0	0	0	0	0	9	7	0	0	0	0	0	0	0	0	2	2	0	0	20
29-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	PH1	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
29-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Mar	SW2	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	15
29-Mar		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	L	(	0	2	2	1	6	_	0	(	0	(	0	(	0		2	(	0	39
30-Mar	PHFB	0	0	0	0	0	0	32	3	0	0	0	0	0	0	0	0	2	2	0	0	39
30-Mar	SWFB	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
30-Mar	PH1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
30-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Mar	SW2	0	0	0	1	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	22
30-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	irvey	0	)	1	.5	:	1	2	8		0	(	D	(	0	(	D	1	2	(	0	91

Totals	Ģ	Gulls	Cor	morant	Caspia	in tern	White	White Pelican Grebe				
	F	NF	F	NF	F	NF	F	NF	F	NF		
Weekly Total	4	33	31	288	0	0	0	0	12	0	368	
Avg/Survey	0	2	2	21	0	0	0	0	1	0	26	

