FISHWAY STATUS REPORT

Date: 3/9/2019

Inspection Period: 3/3/2019 thru 3/9/2019

JOHN DAY DAM



JD/WC Project-Fisheries P.O. Box 823

Rufus, Oregon 97050 Phone: 541-506-7860

All JD Fishways are inspected once per day during winter maintenance, Dec. 1 - Feb. 28. Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspection	Criteria	Total Num	nber of Inspections	s:	Temperature:		36 F	
	ООС	Limit					Secchi:	6.0 Ft.	
NORTH FISHWAY			Pump 2 O	OS due to oil leak s	since 2/9/19.	5 out	of 6 pumps availabl	e, 3 are in serv	/ice.
Exit differential	0	≤ 0.5′							
Exit Control weirs	0	High setting	High settir	ng is normal for JDI	V				
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 settin	g 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	1.5					
Entrance weir SE1	0	depth (≥ 8')	AVG	8.3					
Collection channel velocity	0	1.5 - 4 fps	AVG	2.54					
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	#DIV/0!					
Entrance weir NE1	0	depth (≥ 8')	AVG	#DIV/0!					
Entrance weir NE2	0	depth (≥ 8')	AVG	#DIV/0!					
JUVENILE PASSAGE	0		Remains in	n winter bypass du	e to freezing	tempe	rature		
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.6					
Submersible traveling screens	0	visual inspect	STS's insta	lled in 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	n seal since 1 Dece	ember 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 remains oos due to freezing temperatures. Expected rts is 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: None

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:

JD North in service since 1/17/19 with 5 out of 6 AWS pumps available (#2 OOS due to oil leak.) Additionally, two more pumps are frequently OOS short term due to SKF alarms. Their auto greasing device needs minor mechanical service before returning to service (long term problem.) 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.

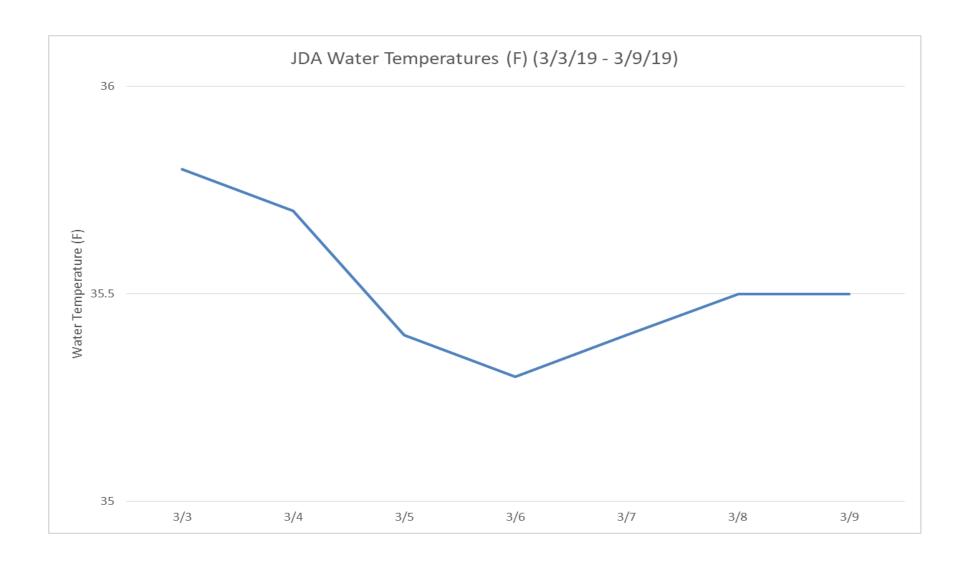
Calibration: All gauges/ sensors are within the criteria of 0.3'.

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	6-Mar-19
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:07	67	2.69
2 - 4	2:18	138	2.54
4 - 6	3:28	208	2.57
6 - 8	4:37	277	2.61
8 - 10	5:47	347	2.57
10 - 12	7:00	420	2.47
12 - 14	8:17	497	2.34
14 - 16	9:35	575	2.31
16 - 18	10:40	640	2.77
			2.54

Bay 19 TW:	161.1
Turbine 1-2:	68 RPM

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

John Day Weekly Averages

	Temp:
Sun	36
Mon	36
Tue	36
Wed	36
Thur	36
Fri	36
Sat	36
	-

Secchi:
6.0
6.0
6.0
6.0
6.0
6.0
6.0

	Fallbacks
,	

AVG: 36

AVG: 6.0

AVG/Sample #DIV/0!

MAX 0

MIN 0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.3	8.3	1.5	8.7	1.6	4.6	1.7
Sun	8.5	8.5	1.5	8.0	1.5	4.6	1.6
Mon	8.3	8.3	1.5	8.3	1.5	4.6	1.6
Mon	8.0	8.0	1.5	8.0	1.5	4.6	1.7
Tues	8.6	8.6	1.5	8.4	1.5	4.6	1.7
Tues	8.2	8.2	1.6	8.2	1.7	4.6	1.6
Wed	9.1	9.1	1.3	8.7	1.4	4.6	1.8
Wed	9.0	9.0	1.4	8.3	1.5	4.6	1.7
Thur	8.4	8.4	1.5	8.5	1.5	4.6	1.6
Thur	8.2	8.2	1.4	8.2	1.5	4.6	1.7
Fri	8.1	8.3	1.6	8.0	1.4	4.6	1.9
Fri	8.0	8.0	1.5	8.4	1.6	4.6	1.5
Sat	8.9	8.3	1.6	8.3	1.4	4.5	1.8
Sat	8.5	8.0	1.4	8.3	1.7	4.5	1.6
AVG:	8.4	8.4	1.5	8.3	1.5	4.6	1.7

JDA Bird Counts: <u>3/3/19</u> to <u>3/9/19</u>

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

Date	Zone		Gulls					Cormorant				Caspian tern				e Pelica	ın	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-Mar	PHFB	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	O
3-Mar	PH1	0	0	0	0	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
3-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Mar	PH3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3-Mar	SW1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3-Mar	SW2	0	0	0	0	0	0	2	17	0	0	0	0	0	0	0	0	0	0	0	0	19
3-Mar	SW3	0	0	0	0	0	0	23	5	0	0	0	0	0	0	0	0	0	0	0	0	28
Avg/Su	irvey	()		1	(6	2	4	•	0)	(0	(0	(0		0	62
4-Mar	PHFB	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
4-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Mar		0	0	0	0	6	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
4-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Mar	SW1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4-Mar		0	0	0	0	0	0	28	30	0	0	0	0	0	0	0	0	0	0	0	0	58
4-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su		()		8		3	· -	0)		0	`)		0		0	81
5-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Mar	_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Mar		0	0	0	0	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
5-Mar		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5-Mar	_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Mar	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Mar		0	0	0	0	0	0	27	27	0	0	0	0	0	0	0	0	0	0	0	0	54
5-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su))		7	_	7	I 0	0	,))	`)))	68
6-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Mar	_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6-Mar		0	0	0	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
6-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	'
6-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6-Mar	_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6-Mar		0	0	0	0	0	0	33	17	0	0	0	0	0	0	0	0	0	0	0	0	50
6-Mar	irvey	0	0	0	0	0	0	0	0 5	0	0	0	0	0	0	0	0	0	0	0	0	

JDA Bird Counts: <u>3/3/19</u> <u>to</u> <u>3/9/19</u>

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

Date	Zone	Gulls					Cori	morant			Caspia	n tern			White	e Pelica	ın	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-Mar	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Mar	PH1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
7-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Mar	SW1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7-Mar	SW2	0	0	0	0	0	0	24	38	0	0	0	0	0	0	0	0	0	0	0	0	62
7-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/St	urvey		0	(0	ļ	5	3	1		0	(0	(0	(0	(0	(0	71
8-Mar		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Mar	PH1	0	0	0	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
8-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Mar		0	0	0	0	0	0	44	44	0	0	0	0	0	0	0	0	0	0	0	0	88
8-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	()	- 2	2	4	5		0)	. (0)		0	(0	94
9-Mar		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
9-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Mar		0	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
9-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Mar	SW2	0	0	0	0	0	0	55	55	0	0	0	0	0	0	0	0	0	0	0	0	110
9-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	(0		7	5	6		0	(0	(0	(0		0	(0	125

Totals	(Gulls	Cori	morant	Caspia	ın tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	0	2	77	480	0	0	0	0	0	0	559
Avg/Survey	0	0	6	34	0	0	0	0	0	0	40

