## FISHWAY STATUS REPORT

Date:	1/27/2018		
Inspection Period:	1/21/2018	thru	1/27/2018

### JOHN DAY DAM

US Army Corps of Engineers Portland District JD/WC Project-Fisheries P.O. Box 823 Rufus, Oregon 97050 Phone: 541-506-7860

All JD Fishways are inspected once per day during the winter maintenance season, Dec. 1 - Feb. 28.

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

John Day Dam	Inspections	Criteria	Total Number of Inspections: 7 Temperature: 41 F
	Out of Criteria	Limit	Secchi: 6.0 Ft.
NORTH FISHWAY			In service since 12/22/17 with all 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'	
Entrance differential	0	1.0' - 2.0'	AVG 1.5
SOUTH FISHWAY	OOS		OOS since dewatered on 1/08. RTS is the week of 2/20/18.
Exit differential	OOS	≤ 0.5'	
Exit Control weirs	OOS	Mid setting	Mid setting is normal for JDS
Count station differential	OOS	≤ 0.3'	
Weir crest depth (US gauge)	OOS	1.0' ± 0.1'	
South entrance differential	OOS	1.0' - 2.0'	AVG #DIV/0!
Entrance weir SE1	OOS	depth (≥ 8')	AVG #DIV/0!
Collection channel velocity	OOS	1.5 - 4 fps	AVG 2.64
N. Entrance PH(Bay 19)differential	OOS	1.0' - 2.0'	AVG #DIV/0!
Entrance weir NE1	OOS	depth (≥ 8')	AVG #DIV/0!
Entrance weir NE2	OOS	depth (≥ 8')	AVG #DIV/0!
JUVENILE PASSAGE	OOS		JBS season completed on 12/15/17. It was dewatered on 1/23. RTS is week of 2/20.
Forebay/bypass conduit differential	OOS	4.0' - 5.0'	AVG 4.6
Submersible traveling screens	OOS	visual inspect	All STSs removed from PH gatewells by 12/21/17, PMs and repairs underway.
Turbine trashrack drawdown	OOS	<1.5', wkly	
Vert barrier screen drawdown	OOS	<1.5', wkly	
Spill volume	NA	per FPP	Spillway on seal since 8/31/17
Spill pattern	NA	per FPP	
Turbine Unit Priority	0	per FPP	
Turbine 1% Efficiency	0	per FPP	

#### SMOLT MONITORING FACILITY

#### **Operation:**

SMF OOS since 11/30/17. It will return to service on 1 March 2018 which is one month earlier than the normal starting date at JD, per FPOM request.

#### Maintenance:

Switch Gate's Lower Seals replacement/ improvements to reduce water leakage and risk to passing juvenile lamprey underway.

SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway.

#### Research: None

#### Birds :

Only a few birds, mostly cormorants are present at JD at this time. See the Avian Numbers tab for details.

The avian lines' contractor is making fantastic progress due to mild and non-windy winter and is expected to complete all work early, by 3/1/18.

#### **Operations:**

JBS channels were dewatered on 1/23. JD Fisheries salvaged two adult steelhead and one 2 -3 feet sturgeon which were released into forebay in excellent condition. RTS week of 2/20.

JD South Fishway OOS/ dewatered since 1/08. Dewatering went well with hardly any fish encountered upstream of the CS due to flushing 3X. Only a handful of adult shad and 4 steelhead juveniles were bagged and released into tailrace in excellent condition. Additionally, 180 adult lamprey were found hiding inside of the Lamprey Trap. They were netted, loaded into transport tank and released into Forebay, a few miles upstream of the dam, in excellent condition.

JD North Ladder in service since 12/21/17. All 6 AWS pumps are available.

MU Gatewell Drawdowns: none due to winter maintenance season. Will commence in early March 2018.

#### Maintenance:

Maintenance of JBS Tainter gate, orifices' hardware and one expansion joint repairs are underway.

JD South Fishway OOS/ dewatered since 1/08. Expansion joints and AWS turbine 3 oil leak's repairs by JD Maintenance underway.

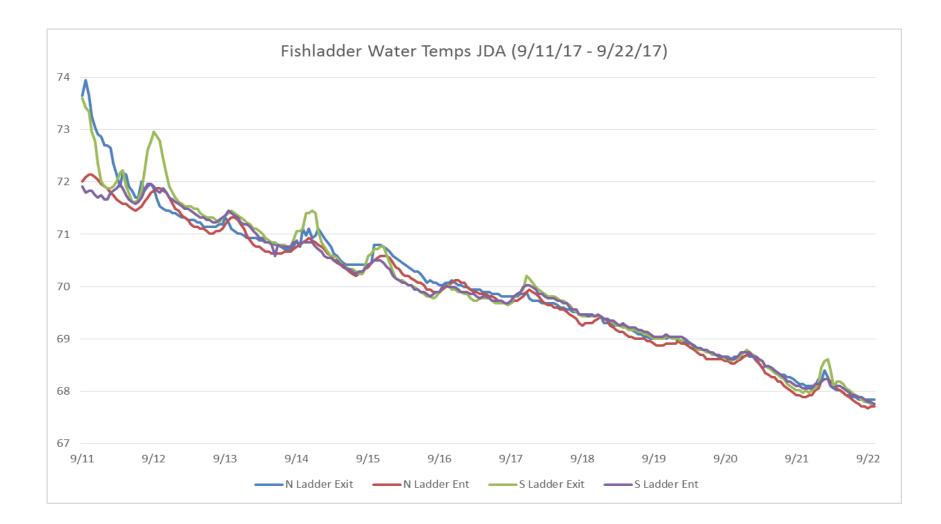
ROV inspection of JDS CC and JDN entrance gratings is planned for 1/30.

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

#### Research:

Adult PIT Support contract ran into minor issues and has been delayed since November. However, the contract is to be accepted by 2/1 and then PSMFC's crew will complete their hardware installation in February. Both ladders should be ready to detect Adult PITs by 1 March 2018.

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# JDA Collection Channel Velocity

Date	13-Dec-17
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:04	64	2.81
2 - 4	2:11	131	2.69
4 - 6	3:19	199	2.65
6 - 8	4:28	268	2.61
8 - 10	5:39	339	2.54
10 - 12	6:50	410	2.54
12 - 14	8:03	483	2.47
14 - 16	9:08	548	2.77
16 - 18	10:14	614	2.73
			2.64

TW Bay19 =

161.2

RPMs:

68/68 (2&3) (1 @ 0)

FPP Criteria:

1.5–4.0 feet per second (2 fps optimum)



		John Day	Weekly	Averages	
	Temp:		Secchi:		Fallbacks
Sun	41		6.0		NA
Mon	41		6.0		NA
Tue	41		6.0		NA
Wed	41		6.0		NA
Thur	41		6.0		NA
Fri	41		6.0		NA
Sat	41		6.0		NA
AVG:	41	AVG:	6.0	AVG	NA
				MAX	NA

NA

MIN

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	005	OOS	005	OOS	1.5	4.6	OOS
Sun							
Mon	005	005	005	00S	1.4	4.6	OOS
Mon							
Tues	005	005	005	00S	1.4	005	OOS
Tues							
Wed	005	005	005	00S	1.5	005	OOS
Wed							
Thur	005	00S	005	00S	1.5	005	005
Thur							
Fri	005	005	005	00S	1.5	005	OOS
Fri							
Sat	005	OOS	005	OOS	1.5	005	OOS
Sat							
AVG:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.5	4.6	#DIV/0!

## JDA Bird Counts: <u>1/21/18</u> to <u>1/27/18</u>

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

Date	Zone		Ģ	Gulls			Cor	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)	
21-Jan	PHFB	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
21-Jan	SWFB	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
21-Jan	PH1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
21-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Jan		0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
21-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su		1		4		1		9		0		0		0		0		0		0		28
22-Jan		0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
22-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jan		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Jan	SW1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22-Jan	-	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
22-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	-	0		0		2	1	16		0		0	1	0	1	0		0	1	0		35
23-Jan		1	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	16
23-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Jan		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23-Jan		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Jan		0	0	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	8
23-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su		2		1	1	1	1	11		0		0	1	0	1	0		0	1	0		27
24-Jan		0	0	4	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	15
24-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jan		4	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
24-Jan		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
24-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	urvey	2		2		2		6		0		0		0		0		0		0		23

## JDA Bird Counts: <u>1/21/18</u> <u>to</u> <u>1/27/18</u>

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

Date	Zone		Ģ	Gulls			Cori	morant			Caspia	ın 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)	
25-Jan	PHFB	0	0	8	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	13
25-Jan	SWFB	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
25-Jan	PH1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
25-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Jan	SW2	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	9
25-Jan		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		5	-	1		7		0		0	-	0		0	-	0		0	_	25
26-Jan	PHFB	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	6
26-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Jan	PH1	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
26-Jan	PH2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
26-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Jan	SW2	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
26-Jan	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		2		12		0		0		0		0		0		0		30
27-Jan	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	ırvey	0		0		0		0		0		0		0		0		0		0		0

Totals	Gulls	;		Со	rmor	ant		Cas	pian	tern White Pelican Grebe										Total	
	F		NF		F		NF	NF			NF		F		NF		F		NF		
eekly Total	9		24		15		120		0		0		0		0		0		0		168
wg/Survey	1		2		1		9		0		0		0		0		0		0		12