## FISHWAY STATUS REPORT

 Date:
 1/18/2020

 Inspection Period:
 1/12/2020
 thru
 1/18/2020



### 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. Additional and frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspection	Criteria	Total Nur	nber of Inspectio	ons:	7	Temperature:		<b>42</b> F
	000	Limit					Secchi:	<b>6.0</b> Ft.	
NORTH FISHWAY	OOS		OOS for w	vinter maintenan	ce since 11/30/1	.9. ETR delay	red to 1/23/20.		
Exit differential	005	≤ 0.5'							
Exit Control weirs	005	High setting							
Count station differential	OOS	≤ 0.3'							
Weir crest depth (DS gauge)	OOS	1.0' ± 0.1'							
Entrance differential	OOS	1.0' - 2.0'	AVG	#DIV/0!					
SOUTH FISHWAY			In service	with 2 AWS turb	ines. Planned d	ewatering for	r winter maintenan	ce on 1/27/20.	
Exit differential	0	≤ 0.5'							
Exit Control weirs	0	Mid setting	Mid settir	ng is normal for J	DS				
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	8.1					
Collection channel velocity	0	1.5 - 4 fps	AVG	2.68					
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.5					
Entrance weir NE1	0	depth (≥ 8')	AVG	9.8					
Entrance weir NE2	0	depth (≥ 8')	AVG	10.3					
JUVENILE PASSAGE			Screens p	ulled on all units	since early Janu	ary 2020.			
Forebay/bypass conduit differential	OOS	4.0' - 5.0'	AVG	4.6 0	ut of service as o	of 01-08-2020	)		
Submersible traveling screens	0	visual inspect							
Turbine trashrack drawdown	0	<1.5', wkly							
Vert barrier screen drawdown	0	<1.5', wkly							
Spill volume	0	per FPP	All spillwa	ay gates on seal s	ince 11/29 after	sunset.			
Spill pattern	0	per FPP							
Turbine Unit Priority	0	per FPP							
Turbine 1% Efficiency	0	per FPP							

#### SMOLT MONITORING FACILITY

**Operation:** 

OOS since 12/5/19. Planned RTS 3/1/2020.

#### Maintenance:

All AWS pipes winterized since early early December 2019. Winter maintenance of SMF hardware underway.

SMF SCADA update underway and is to be completed by 1 March 2020. JD Electricians are bench building the new control pannels to be installed in February. Portland District's Electrical Engineers will be resposible for loading of new software and testing to assure all components are working properly.

#### **ADULT FISHWAYS & TW AVIAN GRID**

#### Birds:

Winter birds only without much impact on JD fish passage. See Bird Count tab for details.

All 125 avian lines in place without any deficiencies.

Operations:

JD South Adult Fishway maintaining criteria with 2 AWS Turbines. Turbine 3 is currently under maintenance and will return to service by 1 March 2020.

JD North Adult Fishway OOS since 11/30/19. Dewatering pump 7 was re-installed with brand new components which will make the future dewaterings of lower

fishway easier and less costly. JD Maintenance continue repairs of AWS fish pump 4. RTS is 1 March 2020. Pump 3 will be OOS until it is repaired later during

the passge season. ETR is unknown due to its serious issues.

JBS was dewatered on 9 Jan for Winter maintenance and scada upgrade

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

#### Maintenance:

JD South Fishway continues operating with two AWS turbines (No. 1 & 2) since early April. AWS turbine 3 will have the new bearing installed in February. with ETR by 1 March 2020.

JD North Fishway continues OOS since 11/30/19. Pump 4 has been pulled out for assessment and Pump 3 is being reinstalled

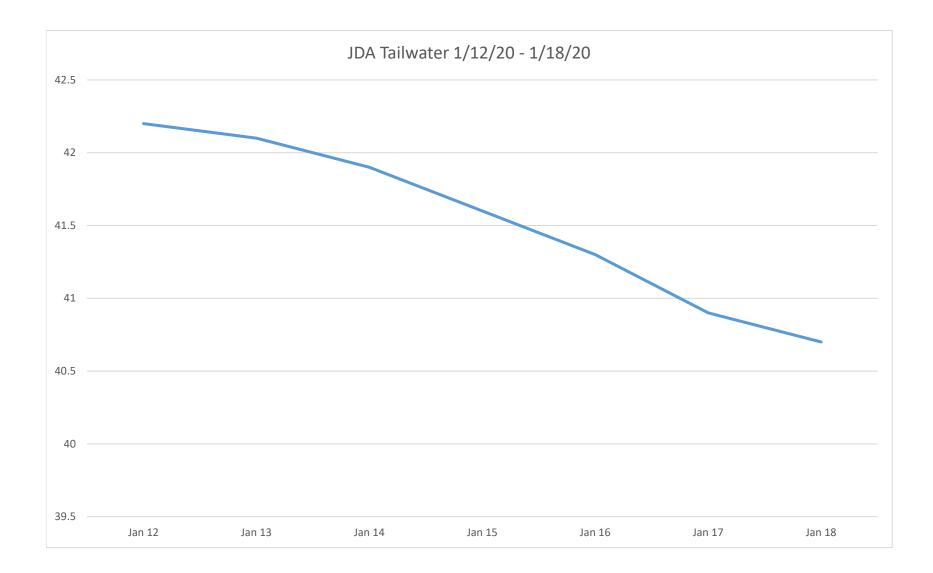
JD Maintenance unstacked pump 3 during the trouble shooting efforts in August - September. Both pumps are expected to be available for service, for 2020 passage season starting on 1 March.

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.

Approved by: Ron Twiner, Acting OPM



# JDA Collection Channel Velocity

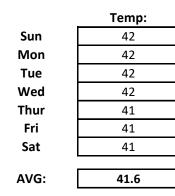
Date	10-Jan-20
By:	LR

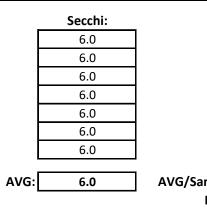
Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:04	64	2.81
2 - 4	2:11	131	2.69
4 - 6	3:16	196	2.77
6 - 8	4:22	262	2.73
8 - 10	5:27	327	2.77
10 - 12	6:33	393	2.73
12 - 14	7:50	470	2.34
14 - 16	9:12	552	2.20
16 - 18	10:11	611	3.05
			2.68

Bay 19 TW	Level	160.9
Turbine 1	RPM	68
Turbine 2	RPM	68
Turbine 3	RPM	OOS

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

## John Day Weekly Averages





MAX	0
mple	#DIV/0!
	NA

MIN

Fallbacks

NA

0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.9	9.4	1.4	8.0	005	OOS	1.7
Sun					005		
Mon	10.1	10.6	1.4	8.2	005	005	1.5
Mon					005		
Tues	10.5	11.0	1.4	8.0	005	005	1.4
Tues					005		
Wed	9.5	10.0	1.5	8.0	005	005	1.6
Wed					005		
Thur	9.8	10.3	1.6	8.0	005	005	1.5
Thur					005		
Fri	10.2	10.7	1.3	8.1	005	005	1.6
Fri					005		
Sat	9.6	10.2	1.6	8.1	005	005	1.4
Sat					005		
AVG:	9.8	10.3	1.5	8.1	#DIV/0!	#DIV/0!	1.5

## JDA Bird Counts: <u>1/12/20</u> to <u>1/18/20</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	in		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)	
12-Jan	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jan	PH1	8	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
12-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
12-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Jan	SW2	0	0	0	0	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	47
12-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		4	4	(	0	3	3	_	4		0	(	0	(	0		2	(	0	(	0	65
13-Jan		0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	12
13-Jan		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13-Jan		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Jan		0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	34
13-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		0		0		3	-	0		0		0		)		0		0	48
14-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jan		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
14-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Jan		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
14-Jan		0	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	37
14-Jan		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Avg/Su			2		0		2		.9		0		0		0	,	)		0		0	43
15-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jan		0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
15-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Jan		0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	30
15-Jan		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	(	0	(	6	1	.5		0	(	0	(	0	(	0	(	0	(	0	42

## JDA Bird Counts: <u>1/12/20</u> <u>to</u> <u>1/18/20</u>

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Date	Zone		Ģ	Gulls			Cori	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)	
16-Jan	PHFB	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jan	PH1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
16-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Jan	SW2	0	0	0	0	0	0	44	0	0	0	0	0	0	0	0	0	0	0	0	0	44
16-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	irvey	1		(	0	1	1	2	2		0	(	0		)	(	)		0		0	47
17-Jan	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jan	PH1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jan	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Jan		0	0	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	55
17-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	1	1	2	8		0	(	0	(	)	(	)	(	0		0	56
18-Jan		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18-Jan	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jan	PH1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
18-Jan	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jan	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Jan		0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	21
18-Jan		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Su	irvey	C	)	(	D	2	2	1	1		0	(	0	(	)	(	)	(	0		0	25

Totals	Gulls		Cor	morant	Caspia	in tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	14	0	28	280	0	0	0	4	0	0	326
Avg/Survey	1	0	2	20	0	0	0	0	0	0	23

