FISHWAY STATUS REPORT

Date: 3/14/2020

Inspection Period: 3/8/2020 thru 3/14/2020

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 Nun	nber of Insp	ections:	13	Temperature:		42 F
	оос	Limit					Secchi:	5.5 Ft.	
NORTH FISHWAY			NFW rts o	n 1/23					
Exit differential	0	≤ 0.5′							
Exit Control weirs	0	High setting							
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			SFW rts o	n 2/28					
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	8.9					
Collection channel velocity	0	1.5 - 4 fps	AVG	2.45					
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG	1.7					
Entrance weir NE1	0	depth (≥ 8')	AVG	8.6					
Entrance weir NE2	0	depth (≥ 8')	AVG	8.7					
JUVENILE PASSAGE			Screens p	ulled on all ເ	ınits since early Jar	nuary 2020.			
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG	4.4	JBS rts 3/9/20				
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	y gates on se	eal since 11/29 aft	er 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 4/1/2020.

Maintenance:

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

SMF SCADA update underway and is to be completed by 12 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 was taken oos for Winter maintenance on 24 January.

JD North Adult Fishway RTS on 01/23/20. 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. It's rts 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 rts on 27 Feb. The thrust bearing on turbine 3 has been replaced and the turbine is ready to return to service.

Joint repair work on the SFL exit control section is ongoing.

JD North Fishway returned to service on 1/23. Pump 3 has returned to service, pump 4 has been pulled for maintenance.

NFL LPS water supply pumps were pulled and inspected. No defencies where found and the supply pumps where reinstalled.

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

Research:

None at this time.

Approved by: Ron Twiner, Acting OPM



JDA Collection Channel Velocity

Date	9-Mar-20	
By:	LR/KRM	

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:05	65	2.77
2 - 4	2:19	139	2.43
4 - 6	3:37	217	2.31
6 - 8	4:56	296	2.28
8 - 10	6:13	373	2.34
10 - 12	7:33	453	2.25
12 - 14	8:48	528	2.40
14 - 16	9:59	599	2.54
16 - 18	11:05	665	2.73
			2.45

Bay 19 TW	Level	160.7
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

Secchi:

5.5 5.5 5.5 5.5

	Temp:
Sun	42
Mon	42
Tue	43
Wed	43
Thur	43
Fri	43
Sat	43

AVG:

42.5
43
43
43
43
43
42
42

5.5
5.5
5.5

AVG:	5.5	
•		

Fallbacks
NA

VG/Sample	#DIV/0!
MAX	0
MIN	0

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	8.3	8.4	1.4	8.7	1.5	oos	1.8
Sun						008	
Mon	9.4	9.5	1.4	9.2	1.4	008	1.9
Mon	8.9	8.9	1.5	8.5	1.5	4.6	1.8
Tues	9.2	9.3	1.5	8.9	1.4	4.6	1.6
Tues	8.2	8.1	1.2	8.1	1.6	4.4	1.6
Wed	8.7	8.6	1.3	8.9	1.4	4.3	1.7
Wed	8.7	8.7	1.1	8.9	1.4	4.3	1.5
Thur	8.5	8.6	1.5	9.1	1.5	4.5	1.8
Thur	8.5	8.6	1.3	9.0	1.6	4.3	1.3
Fri	8.5	8.6	1.3	9.2	1.5	4.5	1.7
Fri	8.2	8.3	1.4	8.9	1.5	4.4	1.8
Sat	9.2	9.2	1.2	9.8	1.5	4.6	1.7
Sat	8.1	8.2	1.4	8.7	1.7	4.4	1.9
AVG:	8.6	8.7	1.3	8.9	1.5	4.4	1.7

JDA Bird Counts: <u>3/8/20</u> to <u>3/14/20</u>

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

Date	Zone	Gulls				Cormorant					Caspian tern				White Pelican				Grebe			
		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)	
8-Mar	PHFB	0	0	0	0	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	0	37
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	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8-Mar	SW2	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
8-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	urvey	0			0		2	2	2		0		0	(0	()	(0	()	46
9-Mar	PHFB	0	0	0	0	0	0	17	6	0	0	0	0	0	0	0	0	0	0	0	0	23
	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Mar	PH1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
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	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9-Mar	SW1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9-Mar	_	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	11
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		1			0		3	1			0		0		0)		0)	42
10-Mar		0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	30
10-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Mar	_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Mar		0	0	0	0	0	0	1	25	0	0	0	0	0	0	0	0	0	0	0	0	26
10-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/St		0	_		0		0	2			0		0)	`)		0	(,	56
11-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar		0	0	0	0	0	0	25	11	0	0	0	0	0	0	0	0	0	0	0	0	36
11-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		0	1	8		U		U		J	(J		U	(J	36

JDA Bird Counts: <u>3/8/20</u> <u>to</u> <u>3/14/20</u>

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

Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				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-Mar	PHFB	0	0	0	0	0	0	38	3	0	0	0	0	0	0	0	0	0	0	0	0	41
12-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Mar	PH1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Mar	SW1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12-Mar	SW2	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	15
12-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	ırvey	0)	- 2	2	2	8		0	()	(0		0	(0		0	60
13-Mar	PHFB	0	0	0	0	0	0	39	2	0	0	0	0	0	0	0	0	0	0	0	0	41
13-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Mar	PH1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
13-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Mar	SW2	0	0	0	0	0	0	3	22	0	0	0	0	0	0	0	0	0	0	0	0	25
13-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	ırvey	0)	2	2	3	3		0	()	(0		0	(0		0	69
14-Mar	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Mar	PH1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
14-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Mar	SW2	0	0	0	0	0	0	25	29	0	0	0	0	0	0	0	0	0	0	0	0	54
14-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	ırvey	0	•		0	:	L	2	7	•	0	()		D		0		0	•	0	56

Totals	G	ulls	Cori	morant	Caspia	n tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	2	0	18	345	0	0	0	0	0	0	365
Avg/Survey	0	0	1	25	0	0	0	0	0	0	26

