

FISHWAY STATUS REPORT

Date: 3/16/2019
Inspection Period: 3/10/2019 thru 3/16/2019

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 OOC	Criteria Limit	Total Number of Inspections: 14	Temperature: 37 F
				Secchi: 6.0 Ft.
NORTH FISHWAY			Pump 2 OOS due to oil leak since 2/9/19. 5 out of 6 pumps available, 3 are in service.	
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	0			
Exit differential	0	≤ 0.5'		
Exit Control weirs	0	Mid setting	Mid setting 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 1.4	
Entrance weir SE1	0	depth (≥ 8')	AVG 8.8	
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		Full flow bypass with pit detections on 3/11. SMP sampling on 3/13	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect	Installed 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 on seal since 1 December 2018. 2019 Fish Spill season starts 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 were 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:

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 Fishladder Water Temperatures (F) (3/1/19 - 3/18/19)



JDA Collection Channel Velocity

Date 16-Mar-19

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:20	80	2.25
2 - 4	2:33	153	2.47
4 - 6	3:58	238	2.12
6 - 8	5:15	315	2.34
8 - 10	6:29	389	2.43
10 - 12	7:41	461	2.50
12 - 14	9:06	546	2.12
14 - 16	10:23	623	2.34
16 - 18	11:27	687	2.81
			2.37

Bay 19 TW: 159.7

Turbine 1-2: 68 RPM

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

John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	36	6.0	NA
Mon		6.0	NA
Tue	37	6.0	NA
Wed	36	6.0	4
Thur	37	6.0	9
Fri	37	6.0	0
Sat	37	6.0	1
AVG:	37	AVG: 6.0	AVG/Sample 2
			MAX 9
			MIN 1

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	9.0	8.4	1.4	8.5	1.5	4.5	1.6
Sun	8.5	8.0	1.6	8.0	1.5	4.6	1.7
Mon	8.6	8.0	1.5	8.1	1.6	4.6	1.6
Mon	9.1	8.7	1.4	8.8	1.4	4.6	1.7
Tues	9.1	8.6	1.5	9.5	1.5	4.6	1.5
Tues	9.7	9.1	1.3	8.0	1.5	4.6	1.5
Wed	9.8	9.1	1.3	9.4	1.5	4.6	1.4
Wed	10.1	9.5	1.2	9.9	1.5	4.7	1.5
Thur	9.0	8.4	1.3	9.2	1.5	4.5	1.8
Thur	8.3	7.7	1.4	8.4	1.6	4.6	1.8
Fri	10.0	9.3	1.2	9.1	1.5	4.6	1.6
Fri	9.3	8.8	1.5	9.0	1.6	4.6	1.5
Sat	8.9	8.2	1.5	8.7	1.5	4.5	1.8
Sat	8.6	8.0	1.5	8.5	1.5	4.6	1.9
AVG:	9.1	8.6	1.4	8.8	1.5	4.6	1.6

JDA Bird Counts: 3/10/19 to 3/16/19

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)	
10-Mar	PHFB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
10-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Mar	PH1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
10-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Mar	SW1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10-Mar	SW2	0	0	0	0	0	0	55	54	0	0	0	0	0	0	0	0	0	0	0	0	109
10-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	0	0	0	2	0	55	0	0	0	0	0	0	0	0	0	1	0	0	0	115
11-Mar	PHFB	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar	PH1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Mar	SW2	0	0	0	0	0	0	22	25	0	0	0	0	0	0	0	0	0	0	0	0	47
11-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	0	0	0	1	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	50
12-Mar	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
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	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12-Mar	SW1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12-Mar	SW2	0	0	0	0	0	0	17	54	0	0	0	0	0	0	0	0	0	0	0	0	71
12-Mar	SW3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Avg/Survey		0	0	0	0	2	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	80
13-Mar	PHFB	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13-Mar	SW2	0	0	0	0	0	0	55	26	0	0	0	0	0	0	0	0	0	0	0	0	81
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/Survey		0	0	2	0	1	0	41	0	0	0	0	0	0	0	0	0	0	0	0	0	85

JDA Bird Counts: 3/10/19 to 3/16/19

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)	
14-Mar	PHFB	0	0	0	0	1	0	24	12	0	0	0	0	0	0	0	0	0	0	0	0	37
14-Mar	SWFB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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	18	23	0	0	0	0	0	0	0	0	0	0	0	0	41
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/Survey		0		0		2		39		0		0		0		0		0		0		81
15-Mar	PHFB	0	0	4	1	2	0	10	3	0	0	0	0	0	0	0	0	0	0	0	0	20
15-Mar	SWFB	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
15-Mar	PH1	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
15-Mar	PH2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
15-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Mar	SW2	0	0	0	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	34
15-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0		5		4		24		0		0		0		0		0		0		65
16-Mar	PHFB	0	0	24	0	1	0	33	3	0	0	0	0	0	0	0	0	0	0	0	0	61
16-Mar	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Mar	PH1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
16-Mar	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Mar	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Mar	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Mar	SW2	0	0	0	0	0	0	1	36	0	0	0	0	0	0	0	0	0	0	0	0	37
16-Mar	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0		12		2		37		0		0		0		0		0		0		101
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		0		37		25		514		0		0		0		0		1		0		577
Avg/Survey		0		3		2		37		0		0		0		0		0		0		41

John Day Dam
Avian Zones

