

FISHWAY STATUS REPORT

Date: 5/4/2019
Inspection Period: 4/28/2019 thru 5/4/2019

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.
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: 53 F
				Secchi: 2.4 Ft.
NORTH FISHWAY				
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				
Exit differential	0	≤ 0.5'	Turbine 3 oos. 2 turbine operation as of 1200 on 25 April.	
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'	Set to Shad setting to provide more flow to SE1	
South entrance differential	0	1.0' - 2.0'	AVG 1.6	
Entrance weir SE1	0	depth (≥ 8')	AVG 9.2	
Collection channel velocity	0	1.5 - 4 fps	AVG 3.03	
N. Entrance PH(Bay 19)differential	3	1.0' - 2.0'	AVG 1.9	
Entrance weir NE1	0	depth (≥ 8')	AVG 11.1	
Entrance weir NE2	0	depth (≥ 8')	AVG 9.6	
JUVENILE PASSAGE				
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect		
Turbine trashrack drawdown	0	<1.5', wkly	N/A	
Vert barrier screen drawdown	0	<1.5', wkly	N/A	
Spill volume	0	per FPP	Spill season started 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:

USDA Bird Hazing began on 15 April. 20 Pelicans observed on island below project in tailrace
All 125 avian lines in place without any deficiencies.

Operations:

Turbine 1 rts on 25 April. The heat exchanger had broken and needed repair. Awaiting clutch on turbine 3.

Trash raking of units began on 3/21.

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

Maintenance:

JD North AWS pump 2 returned to service on 3/27.

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 South fish turbine's anti-ratchet gear was damaged beyond repair on 9 Apr. A spare is being assessed as a possible repair part.

JD North Fishway's LPS: Installation of the old pump assembly and electric controls will proceed at the end of April for start of trapping season.

JD South AWS turbine 3 is OOS, Part are to arrive on 26 April.

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

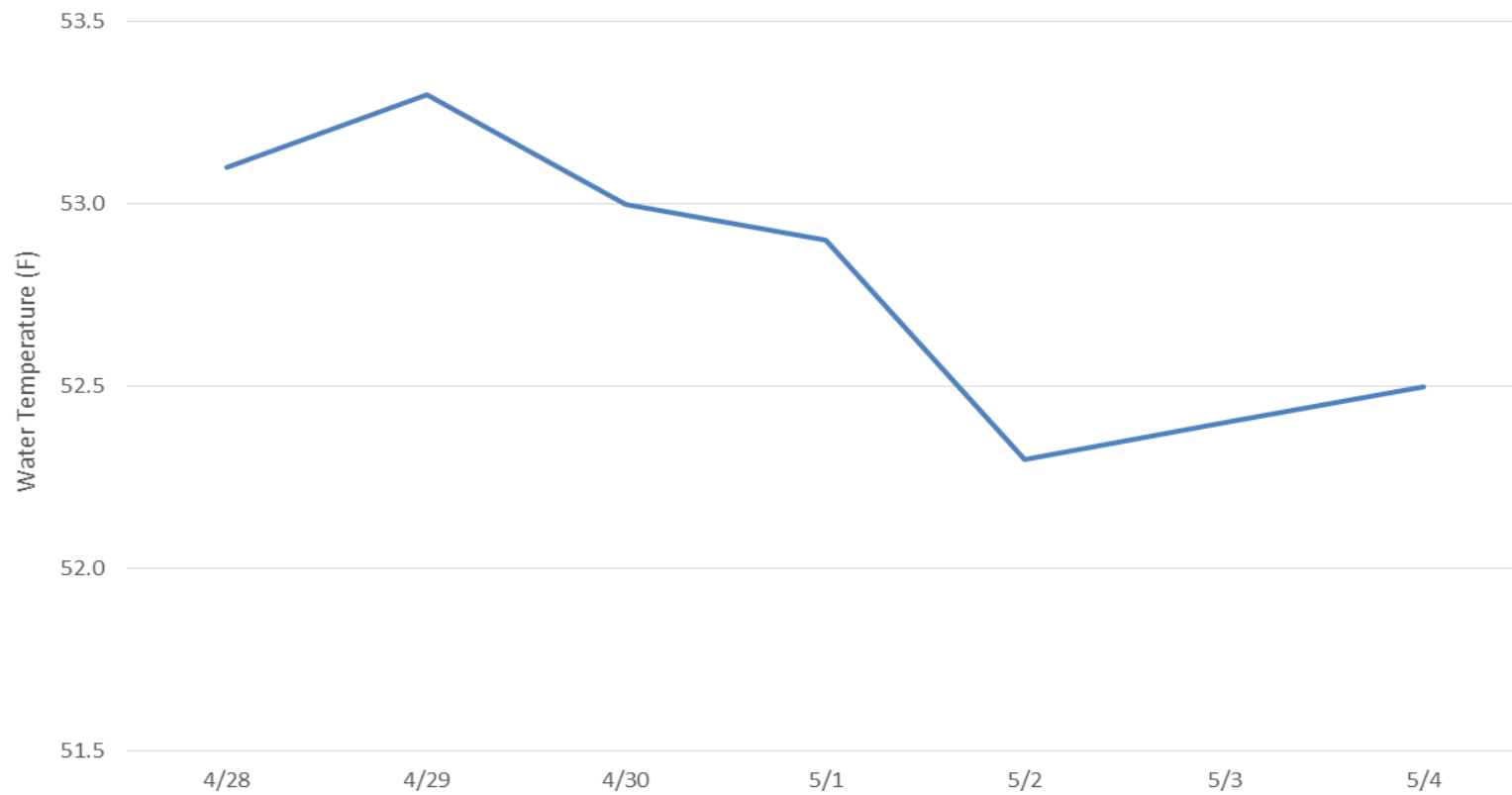
Research:

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 Forebay Water Temperature (4/28/19 - 5/4/19)



JDA Collection Channel Velocity

Date 25-Apr-19

By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:00	60	3.00
2 - 4	2:01	121	2.95
4 - 6	3:02	182	2.95
6 - 8	4:04	244	2.90
8 - 10	5:03	303	3.05
10 - 12	6:07	367	2.81
12 - 14	7:07	427	3.00
14 - 16	8:02	482	3.27
16 - 18	8:56	536	3.33
			3.03

Bay 19 TW:	161.6
Turbine 1&2:	68 RPM

Turbine #3 OOS

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

John Day Weekly Averages

	Temp:	Secchi:	Fallbacks	
Sun	53	2.0	0	Bypass
Mon	53	2.5	71	Sample
Tue	53	2.5	0	Bypass
Wed	53	2.5	58	Sample
Thur	52	2.5	0	Bypass
Fri	52	2.5	42	Sample
Sat	53	2.5	0	Bypass
AVG:	53	AVG: 2.4	AVG/Sample 43	
			MAX 71	
			MIN 0	

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	12.1	10.7	1.4	9.8	1.4	4.5	1.7
Sun	11.5	10.1	1.7	9.1	1.2	4.6	1.6
Mon	12.1	10.8	1.6	9.5	1.5	4.9	1.5
Mon	11.7	10.3	1.9	9.1	1.5	4.6	1.6
Tues	11.8	10.4	1.4	9.2	1.5	4.6	1.8
Tues	11.7	10.3	1.7	9.6	1.7	4.6	1.6
Wed	11.4	9.9	1.5	9.5	1.5	4.5	2.0
Wed	10.5	8.6	1.5	8.3	1.6	4.5	1.9
Thur	10.0	8.5	1.5	9.2	1.5	4.5	1.8
Thur	10.8	9.3	1.6	9.7	1.7	4.5	2.0
Fri	10.5	9.1	1.9	9.1	1.4	4.6	2.0
Fri	10.0	8.6	1.7	8.4	1.6	4.5	2.4
Sat	11.2	9.8	1.4	10.4	1.5	4.6	2.2
Sat	9.7	8.4	1.9	8.5	1.4	4.6	2.5
AVG:	11.1	9.6	1.6	9.2	1.5	4.6	1.9

JDA Bird Counts: 4/28/19 to 5/4/19

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)	
28-Apr	PHFB	3	0	0	0	1	0	15	0	0	0	0	0	0	0	0	0	69	1	0	0	89
28-Apr	SWFB	0	0	0	9	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	12
28-Apr	PH1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
28-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Apr	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Apr	SW3	4	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Avg/Survey		11		5		1		9		0		0		0		0		35		0		120
29-Apr	PHFB	0	0	3	0	0	0	18	0	0	0	0	0	0	0	0	0	65	43	0	0	129
29-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Apr	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Apr	PH3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
29-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Apr	SW3	5	9	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0	28
Avg/Survey		10		2		0		9		0		0		0		7		54		0		163
30-Apr	PHFB	3	0	0	0	21	0	0	0	0	0	0	0	0	0	0	0	56	0	0	0	80
30-Apr	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
30-Apr	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Apr	PH2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
30-Apr	PH3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
30-Apr	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Apr	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Apr	SW3	11	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Avg/Survey		16		0		11		0		0		0		0		0		29		0		109
1-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	35	34	34	137
1-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-May	SW3	4	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
Avg/Survey		18		0		0		0		0		0		0		0		35		34		172

JDA Bird Counts: 4/28/19 to 5/4/19

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)	
2-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	28	33	27	122
2-May	SWFB	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5
2-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-May	SW3	11	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Avg/Survey		22		2		0		0		0		0		0		0		32		30		170
3-May	PHFB	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	29	27	28	27	113
3-May	SWFB	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
3-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-May	SW3	10	32	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	46
Avg/Survey		21		3		0		0		0		0		2		0		28		28		163
4-May	PHFB	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	29	15	28	15	88
4-May	SWFB	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
4-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-May	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10
4-May	SW3	9	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	13
Avg/Survey		5		6		0		1		0		0		7		0		22		22		123
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		202		34		22		37		0		0		18		14		467		226		1020
Avg/Survey		14		2		2		3		0		0		1		1		33		16		73

John Day Dam
Avian Zones

