FISHWAY STATUS REPORT

Date:	7/7/2018		
Inspection Period:	7/1/2018	thru	7/7/2018

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 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	Inspections	Criteria	Total Number of Inspections: 14 Temperature: 67 F
	Out of Criteria	Limit	Secchi: 5.1 Ft.
NORTH FISHWAY			In service with all 6 AWS pumps total 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	1.3' ± 0.1'	1.3' for shad passage since 5/24
Entrance differential	0	1.0' - 2.0'	AVG 1.5
SOUTH FISHWAY	0		In service with two AWS turbines and two FOGs.
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	1.3' ± 0.1'	1.3' for shad passage since 5/24
South entrance differential	0	1.0' - 2.0'	AVG 1.4
Entrance weir SE1	0	depth (≥ 8')	AVG 8.2
Collection channel velocity	0	1.5 - 4 fps	AVG 2.53
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.7
Entrance weir NE1	0	depth (≥ 8')	AVG 10.1
Entrance weir NE2	0	depth (≥ 8')	AVG 10.1
JUVENILE PASSAGE	0		In service since 2/28.
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6
Submersible traveling screens	0	visual inspect	June STS inspection completed 6/18. One bad STS at MU1 replaced with working spare.
Turbine trashrack drawdown	0	<1.5', wkly	Monthly trashracks raking completed on 6/27. Very little debris was raked of the trashracks.
Vert barrier screen drawdown	0	<1.5', wkly	
Spill volume	0	per FPP	Summer spill operations started on 6/16 per FOP.
Spill pattern	0	per FPP	Two TSWs, bays 18 & 19 open since 4/10/18 AM.
Turbine Unit Priority	0	per FPP	
Turbine 1% Efficiency	0	per FPP	

SMOLT MONITORING FACILITY

Operation:

SMF is in every other day/24 hrs sampling mode. The Switch Gate is moved between sampling and bypass every day, AM.

Maintenance:

SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway. Awaiting for \$ 170 K UFR to complete in FY18. **Research**: None

Birds :

White pelicans continue increasing on the island downstream of BRZ and inside of the BRZ. See Avian Numbers tab for details.

All 125 avian lines in place without any deficiencies. USDA boat hazing commenced on 4/16 and will continue 7 days a week thru 7/31.

Operations:

JD South Fishway in service, with two AWS turbines and two FOGs since 2/28/18. Awaiting special funding to overhaul turbines 1 & 2 (\$ 3 million each.)

JD North Ladder in service since 12/21/17. 6 out of 6 AWS pumps available again since 4/18/18.

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

Maintenance:

JD South AWS turbine 1 is OOS, in poor condition and urgently awaiting its overhaul as soon as \$ 3 million becomes available (hopefully in a year or two ?) Calibration: All gauges/ sensors are within the criteria of 0.3'.

Research:

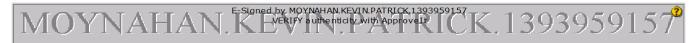
JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18.

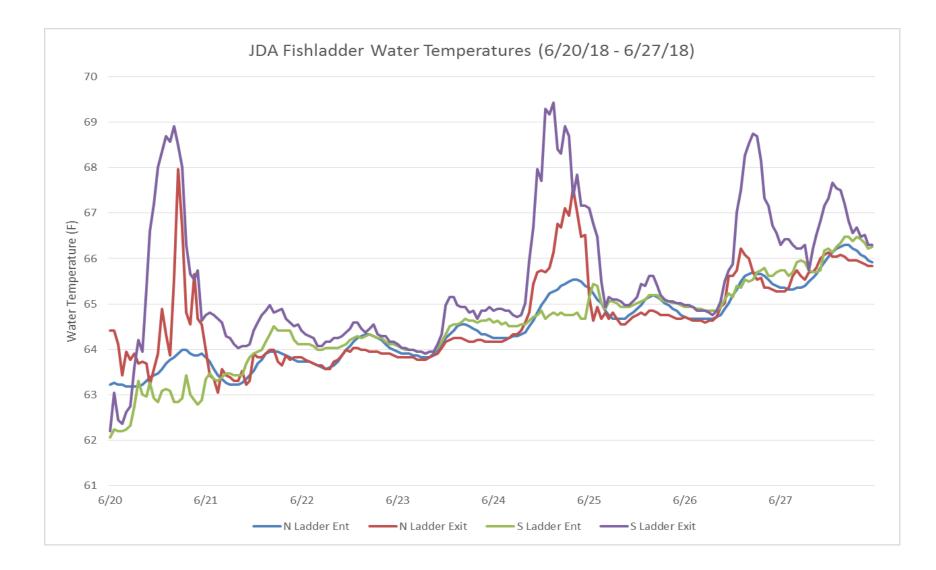
JD North LPS was started up on 6/20 AM. It is monitored by JD Fisheries with CRITFC retaining all unmarked adult lamprey for the tribal replanting programs.

Catches were great over the weekend with first day, 6/21 at 30, and then the high of 86 fish caught on Saturday 6/23.

WDFW NPM angling from JD PH Tailrace deck continues since 5/1. Catches increased significantly in June s with 988 NPM caught thru 7/01.

Uof I crew continues monitoring the RT Adult Lamprey passage at both JD Adult Fishways.





JDA Collection Channel Velocity

Date	29-Jun-18
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:09	69	2.61
2 - 4	2:16	136	2.69
4 - 6	3:32	212	2.37
6 - 8	4:51	291	2.28
8 - 10	6:15	375	2.14
10 - 12	7:24	444	2.61
12 - 14	8:35	515	2.54
14 - 16	9:44	584	2.61
16 - 18	10:46	646	2.90
			2.53

Bay 19 TW: 161.7 turbine 2-3=68rpm

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



	Temp:		Secchi:		Fallbacks
Sun	66		5.5		500
Mon	66		5.5		
Tue	66		5.0		375
Wed	67		5.0		
Thur	67		5.0		270
Fri	67		5.0		
Sat	67	[5.0		266
AVG:	67	AVG:	5.1	AVG/Sample	266
		-		MAX	500
				MIN	240

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19	
Sun	9.5	9.5	1.7	8.3	1.4	4.5	1.8	
Sun	9.1	9.1	1.4	8.2	1.6	4.6	1.8	
Mon	10.1	10.1	1.4	8.3	1.5	4.6	1.4	
Mon	10.3	10.3	1.5	8.0	1.5	4.6	1.4	
Tues	10.9	10.8	1.3	8.7	1.7	4.6	1.4	
Tues	10.8	10.8	1.3	8.0	1.5	4.7	1.6	
Wed	9.8	9.8	1.4	8.1	1.7	4.5	1.7	
Wed	10.2	10.2	1.3	8.0	1.6	4.6	1.6	
Thur	9.2	9.2	1.5	8.1	1.4	4.6	1.9	
Thur	10.5	10.5	1.5	8.1	1.4	4.5	1.8	
Fri	9.7	9.7	1.5	8.2	1.5	4.6	1.7	
Fri	11.3	11.3	1.4	8.5	1.5	4.6	1.6	
Sat	9.1	9.1	1.3	8.0	1.5	4.6	1.6	
Sat	10.3	10.3	1.5	8.2	1.4	4.6	1.8	
AVG:	10.1	10.1	1.4	8.2	1.5	4.6	1.7	

JDA Bird Counts: <u>7/1/18</u> to <u>7/7/18</u>

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

Date	Zone		G	iulls			Corr	morant		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)	
1-Jul	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	24	22	0	0	47
1-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jul	PH1	4	1	0	0	0	0	0	0	0	0	0	0	13	7	0	0	0	0	0	0	25
1-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	12	16	0	0	0	0	0	0	28
1-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	12
1-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
1-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	5	0	0	0	0	12
	SW3	0	1	0	0	0	0	0	0	0	0	0	0	33	0	0	0	0	0	0	0	34
Avg/Su	-	3	3	()	(0	()		0	(0	5	2	3	3	2	3	()	161
	PHFB	6	1	0	0	0	0	0	0	0	0	0	0	6	0	0	2	18	23	0	0	56
2-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jul	PH1	7	4	0	0	0	0	0	0	0	0	0	0	10	13	0	0	0	0	0	0	34
2-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	23	33	0	0	0	0	0	0	56
2-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	20	16	0	0	0	0	0	0	36
2-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6
2-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	1	16	0	0	0	0	0	0	17
	SW3	0	0	0	0	0	0	0	0	0	0	0	0	42	26	0	0	0	0	0	0	68
Avg/Su		9	9	()	(0	()		0	(0	-	06	1	1		21	()	273
3-Jul	PHFB	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	22	25	0	0	49
	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Jul		1	0	0	0	0	0	0	0	0	0	0	0	11	15	0	0	0	0	0	0	27
3-Jul		0	0	0	0	0	0	0	0	0	0	0	0	15	10	0	0	0	0	0	0	25
3-Jul		0	0	0	0	0	0	0	0	0	0	0	0	3	8	0	0	0	0	0	0	11
	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9
Avg/Su	-		L	-	L		0)		0		0	-	7		0	1	.4)	123
	PHFB	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	7	0	0	33
	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Jul		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
	SW1	0	0	0	0	0	0	0	0	0	0	0	0	52	22	0	0	0	0	0	0	74
	SW2	0	0	0	0	0	0	0	0	0	0	0	0	16	3	0	0	0	0	0	0	19
	SW3	3	1	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	9
Avg/Su	urvey	5	5	()	(0	()		0	(0	5	1	(0	1	.4	()	138

JDA Bird Counts:7/1/18to7/7/18NF(1): Non-Forage AM SurveyNF(2): Non-Forage PM Survey

Caspian tern Date Zone Gulls Cormorant White Pelican Grebe Total F(1) F(2) NF(1) NF(2) NF(1) NF(2) NF(2) F(1) F(2) NF(1) NF(2) NF(1) NF(2) F(1) F(2) F(1) F(2) NF(1) F(1) F(2) 5-Jul PHFB 5-Jul SWFB 5-Jul PH1 5-Jul PH2 5-Jul PH3 5-Jul SW1 5-Jul SW2 5-Jul SW3 Avg/Survey 6-Jul PHFB 6-Jul SWFB 6-Jul PH1 6-Jul PH2 6-Jul PH3 6-Jul SW1 6-Jul SW2 6-Jul SW3 Avg/Survey 7-Jul PHFB 7-Jul SWFB 7-Jul PH1 7-Jul PH2 7-Jul PH3 7-Jul SW1 7-Jul SW2 7-Jul SW3 Avg/Survey

Totals	Ċ	Gulls	Cor	morant	Caspia	in tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	57	22	0	0	0	0	1073	8	259	0	1419
Avg/Survey	4	2	0	0	0	0	77	1	19	0	101