

FISHWAY STATUS REPORT

Date: 2/18/2017
 Inspection Period: 2/12/2017 thru 2/18/2017



US Army Corps
 of Engineers
 Portland District

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 fish season, Dec. 1 - Feb. 29.
 Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspections	Criteria	Total Number of Inspections:	7	Temperature:	35 F
	Out of Criteria	Limit			Secchi:	6.0 Ft.
NORTH FISHWAY			Returned to service on 1/19/17 after its winter maintenance was all completed.			
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'	Diffuser 9 in Manual due to frozen water level sensor, Fish crew making adjustments daily			
Entrance differential	0	1.0' - 2.0'	AVG	1.5		
SOUTH FISHWAY			Dewatered for its annual maintenance on 1/24/17. RTS at the end of February.			
Exit differential	oos	≤ 0.5'				
Exit Control weirs	oos	Mid setting	Mid setting is normal for JDS			
Count station differential	oos	≤ 0.3'				
Weir crest depth (US gauge)	oos	1.0' ± 0.1'				
South entrance differential	oos	1.0' - 2.0'	AVG	#DIV/0!		
Entrance weir SE1	oos	depth (≥ 8')	AVG	#DIV/0!		
Collection channel velocity	oos	1.5 - 4 fps	AVG			
N. Entrance PH(Bay 19)differential	oos	1.0' - 2.0'	AVG	#DIV/0!		
Entrance weir NE1	oos	depth (≥ 8')	AVG	#DIV/0!		
Entrance weir NE2	oos	depth (≥ 8')	AVG	#DIV/0!		
JUVENILE PASSAGE			OOS after its all 49 STSs were removed by 1/24. Dewatered on 2/2/17.			
Forebay/bypass conduit differential	oos	4.0' - 5.0'	AVG	#DIV/0!		
Submersible traveling screens	oos	visual inspect				
Turbine trashrack drawdown	oos	<1.5', wkly	light debris loads			
Vert barrier screen drawdown	oos	<1.5', wkly				
Spill volume	oos	N/A				
Spill pattern	oos	per FPP				
Turbine Unit Priority	oos	per FPP				
Turbine 1% Efficiency	oos	per FPP				

SMOLT MONITORING FACILITY

Operation:

SMF OOS for winter maintenance. RTS in late March with first 24 hrs sampling on 2 April 2017.

Maintenance:

JBS expansion joint immediately downstream of Tainter Gate was found with its one side, 1/2 metal cover peeled of the wall and dangerously sticking into flow by 2 feet during SMF dewatering on 11/28. JD Structural removed the plate and JBS returned quickly to service the same day. Appears to be a recent failure. The joint will be repaired during winter outage in February/March 2017 and possibly redesigned the following winter, 2018 to increase its long term durability. SMF SCADA update/mods' investigation by JD Electrical underway. The SCADA "As Builts" by JD Electrical starting soon.

Research:

None

Fallbacks: AVG: MAX: 0 MIN: 0

Birds :

see the Avian Numbers tab.

15 Navlock (# 43 & 58 broke the week of 10/17) 6 Spillway, 6 Tower-to-Tower, 1 PH lines are missing out of 125 grid's total.

PDT will reinstall up to 15 critical, missing lines before May 2017; JD Fisheries believes that this will be sufficient for the Avian Grid to remain effective.

Great news as the contract was awarded significantly below its estimate! All missing lines will be reinstalled in Phase 2, in the fall of 2017.

Operations:

All 49 STSs were removed by 1/24/17. JBS Collection and Bypass Channels were dewatered on 2/2 with NO FISH found. RTS is before 1 April, 2017.

JD North Fishway returned to service on 19 January 2017. CS's Diffuser 9 remains in Manual due to frozen water level sensor & JD Fisheries adjusts it daily.

JD South Fishway upper was successfully dewatered on 1/24/17. One adult, six juvenile steelhead along and 101 adult lamprey required bagging and were

MU Gatewell Drawdowns: weekly or more frequently as necessary.

Maintenance:

JBS Tainter Gate sustained damage to its gear box caused by the accumulated ice (which interfered with its movements.) JD Maintenance assessing the damage and is planning to repair it before 1 April.

JD South Fishway AWS turbine 1 OOS long term due to failed pump's lower bearing. A possible, temporary "Band-Aid" repair by JD Mechanical this winter but need additional \$ 50K in special funding/ UFR.

JD STS crane's emergency repairs were all completed by 1/31. The crane remains in risky operational condition until it's replaced with a brand new machine.

However, the necessary \$ 5 million funding for its replacement isn't yet available...

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

Research:

Adult PIT antennas' installation at JD South Fishway started on 1/25 and its on schedule.

E-Signed by MOYNAHAN, KEVIN, PATRICK, 1393959157
VERIFY authenticity with ApproveIt
MOYNAHAN, KEVIN, PATRICK, 1393959157

JDA Water Temperature



JDA Collection Channel Velocity

Date 17-Nov-16

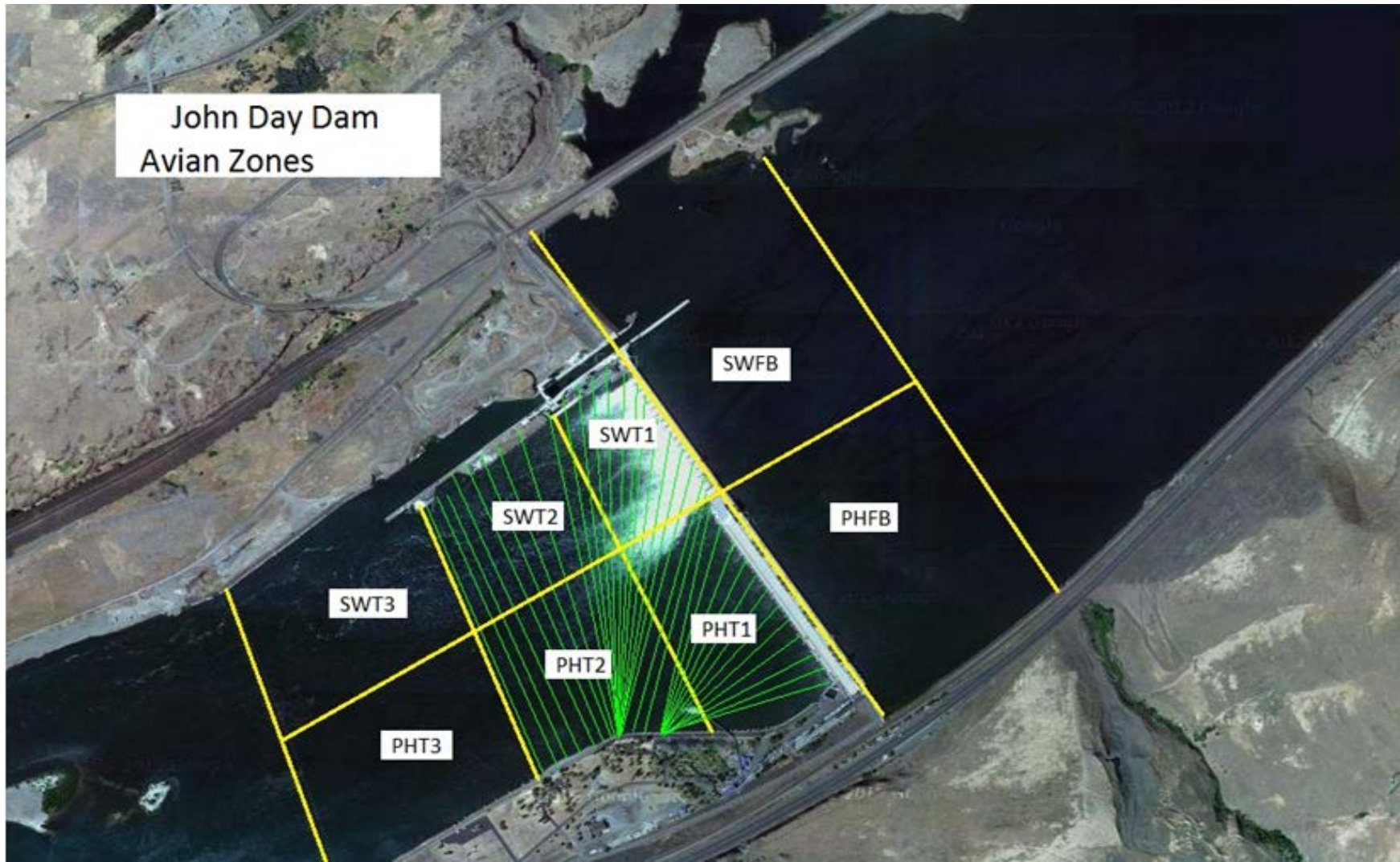
By: MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:55	55	3.27
2 - 4	1:41	101	3.91
4 - 6	2:30	150	3.67
6 - 8	3:19	199	3.67
8 - 10	4:09	249	3.60
10 - 12	4:54	294	4.00
12 - 14	5:45	345	3.53
14 - 16	6:36	396	3.53
16 - 18	7:26	446	3.60
			3.64

TW 160.6

#1 RPM	OOS
#2 RPM	60
#3 RPM	60

John Day Dam
Avian Zones



John Day Weekly Averages

	Temp:	Secchi:	Fallbacks
Sun	35	6.0	
Mon	35	6.0	
Tue	35	6.0	
Wed	35	6.0	
Thur	35	6.0	
Fri	35	6.0	
Sat	35	6.0	
AVG:	35	6.0	AVG
			0
			MAX
			0
			MIN

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	oos	oos	oos	oos	1.7	oos	oos
Sun							
Mon	oos	oos	oos	oos	1.4	oos	oos
Mon							
Tues	oos	oos	oos	oos	1.5	oos	oos
Tues							
Wed	oos	oos	oos	oos	1.6	oos	oos
Wed							
Thur	oos	oos	oos	oos	1.5	oos	oos
Thur							
Fri	oos	oos	oos	oos	1.5	oos	oos
Fri							
Sat	oos	oos	oos	oos	1.6	oos	oos
Sat							
AVG:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1.5	#DIV/0!	#DIV/0!

JDA Bird Counts: 2/12/17 to 2/18/17

F(1): Forage AM survey F(2): Forage PM Survey 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)			
16-Feb	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
16-Feb	PH1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
16-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Feb	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Feb	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	1	1	0	0	0	0	0	0	0	0	1	0			5							
17-Feb	PHFB	0	0	1	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
17-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Feb	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Feb	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Feb	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		0	1	0	10	0	0	0	0	0	0	0	0	0			20							
18-Feb	PHFB	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
18-Feb	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Feb	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Feb	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Feb	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Feb	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Feb	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Feb	SW3	0	0	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	14	0	0	0	0	0	0	0	0	0			28							
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total		
		F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF			
Weekly Total		0	8	9	77	0	0	0	0	0	0	0	0	2	0			96						
Avg/Survey		0	1	1	6	0	0	0	0	0	0	0	0	0	0			7						