

FISHWAY STATUS REPORT

Date: 5/12/2013
Inspection Period: 5/5 thru 5/11/2013

JOHN DAY DAM



**US Army Corps
of Engineers**
Portland District

JD/WC Project-Fisheries
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Rufus, Oregon 97050
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All JD Fishways are inspected twice per day during walk throughs; frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspections	Criteria	Total Number of Inspections: 14	Temperature: 53.7 F
	Out of Criteria	Limit		Secchi: 4.0 Ft.
NORTH FISHWAY			In regular service with three AWS pumps since 4/3/13. Five operational since 4/09/13	
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	0	1.0' ± 0.1'		
Entrance differential	0	1.0' - 2.0'	AVG 1.5	
SOUTH FISHWAY			In regular service with all three AWS turbines since 2/12/13	
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	0	1.0' ± 0.1'		
South entrance differential	0	1.0' - 2.0'	AVG 1.4	
Entrance weir SE1	0	depth (≥ 8')	AVG 9.8	
Collection channel velocity	0	1.5 - 4 fps	ft/sec 2.94	
Bay 1 differential	0	1.0' - 2.0'	AVG 1.7	
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.4	
Entrance weir NE1	0	depth (≥ 8')	AVG 9.2	
Entrance weir NE2	0	depth (≥ 8')	AVG 9.3	
JUVENILE PASSAGE			JBS/SMF continues in regular service, in sampling mode	
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.6	
Submersible traveling screens	0	visual inspect	STSs camera inspection scheduled for the week of May 20.	
Turbine trashrack drawdown	0	<1.5', wkly	MU intake trashracks raking completed 5/1 ; very little visible debris was present	
Vert barrier screen drawdown	0	<1.5', wkly		
Spill volume	0	per FPP	Spill for fish passage started on 4/10; alternating 30/ 40 % levels same as 2012	
Spill pattern	0	per FPP		
Turbine Unit Priority	0	per FPP	MU Priority with two TSWs 4/10 through 8/31	
Turbine 1% Efficiency	0	per FPP		

SMOLT MONITORING FACILITY

Operation: SMF in regular sampling mode since 3/31/13. Manned 24/7 thru 9/15 by COE personnel. PSMFC biologists performing daily sampling. PDS screen rake continues in regular service without any issues.

Debris: Light with mostly small beaver-generated sticks and tumbleweeds.

Maintenance: No issues. All winter maintenance/PM activities successfully completed by 4/1/13.

SMF CCTV replacement is in planning stage ; the original system installed in 1998 is barely usable and its components have been failing frequently.

Research: None. No fish collections are planned for 2013.

Fallbacks: AVG: 37 MAX: 49 MIN: 31

OTHER ISSUES:

JOHN DAY

Birds: See Avian tabs.

122 avian lines are properly installed. Three lines are currently missing; a spillway/TSW line broke on 4/12/13. JD Management preparing a plan for the missing lines' replacement before 2014 passage season.

Daily, 8 hrs gull hazing shifts by USDA boat crew started at JD tailrace on 4/17; ongoing and effective so far.

Overall, the JD gull abundance / predation is minimal and under control.

Operations:

JD North Fishway in regular service with three AWS pumps operational since 4/2. Five pumps operational since 4/9; JDN is meeting the optimal entrance/FPP criteria of 1.5'.

JD South Fishway in regular service with all three AWS turbines; it is meeting the optimal entrances' criteria of 1.5' .

JD Ops reported that one JBS orifice, at MU 15 was opened prematurely resulting in back flow into an empty gatewell for approximately 15 minutes on 5/2. A subsequent inspection found one juvenile salmonid mort floating in that gatewell after it was filled up with water. JD Ops instituted new process to prevent any future occurrence of an incorrect orifice opening.

All JD Spillway bays are in regular service per FPP pattern requirement.

New construction:

The last of six JD North AWS pumps, # 5's completion is delayed by contractor/Construction Office; this pumps is non-critical/ always spare.

Maintenance:

No major issues to report.

Gatewell draw down: Measurements made on 5/05 and 5/08. All units were within established limits.

Calibration: 5/8/2013 All JD Fishways' PLCs/ water level sensors were within 0.3' margin of error.

Research:

WDFW dam angling crew commenced NPM removal from JD PH tailrace on 5/1. Fishing is slow with only 5 NPM caught that day; will continue through September.

Fish counting at both JD Fishways ongoing as required by FPP.

JD South Counting Station' automated lamprey trap in-water installation complete on 2/12; the trap's hoist will be installed outside of fishway in May.

JD North prototype Lamprey Passage System's (LPS) installation was successfully completed by University of Idaho crews by 3/12/13.

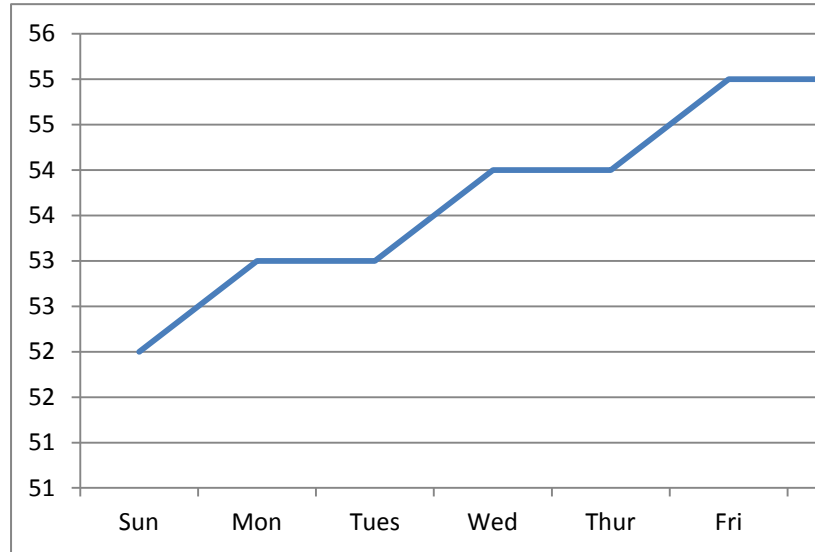
Adult Salmonids Radio telemetry equipment/antennas' set up completed at both JD fishways, by University of Idaho crew by early May; detecting adult spring chinook which were tagged at Bonneville Dam.

Glen A. Smith PE

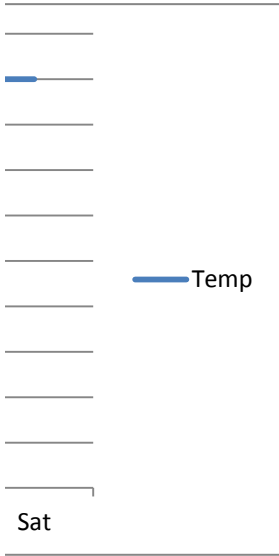
OPM John Day/Willow Creek Project

Date: _____

River Temperature



Day	Temp
Sun	52
Mon	53
Tues	53
Wed	54
Thur	54
Fri	55
Sat	55



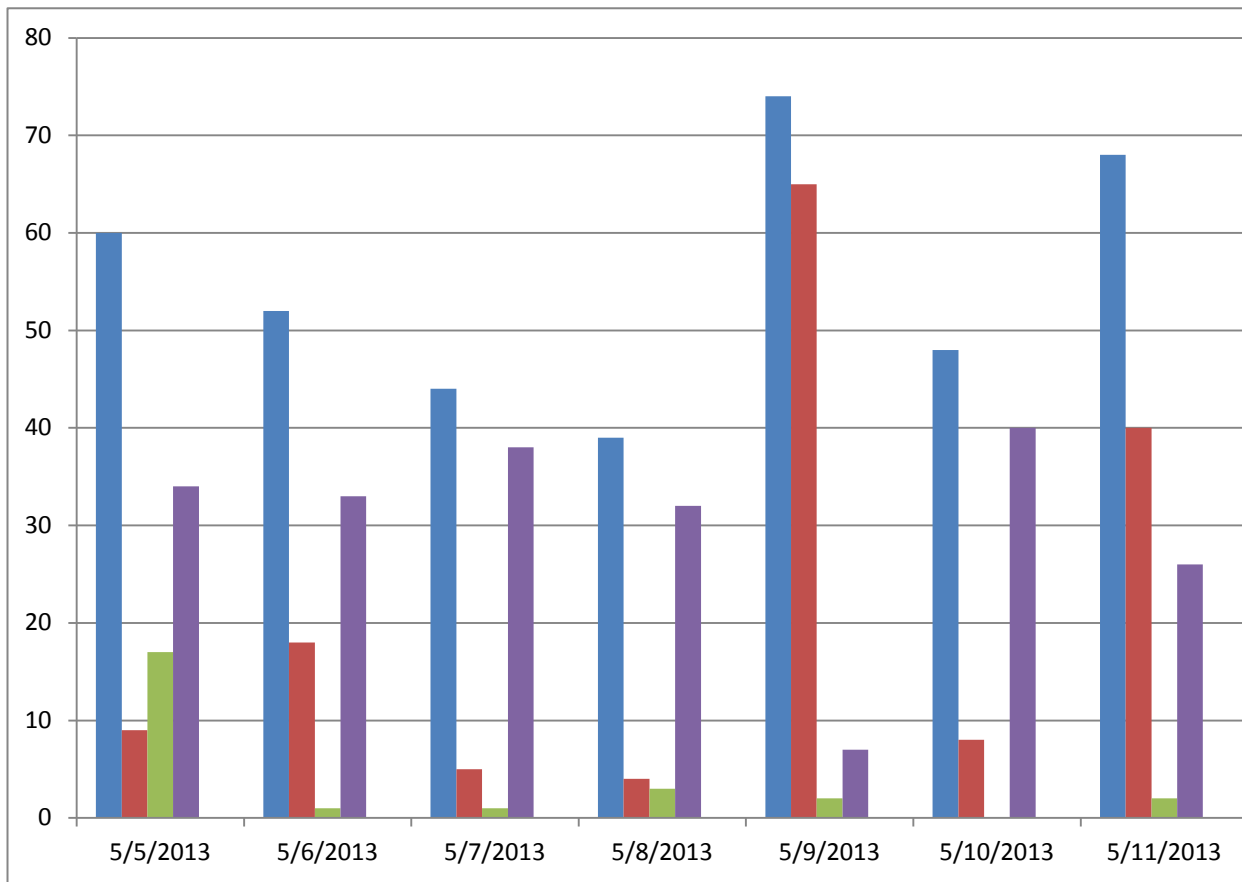
JDA COLLECTION CHANNEL VELOCITY

Date 10-May-13
By: Eric

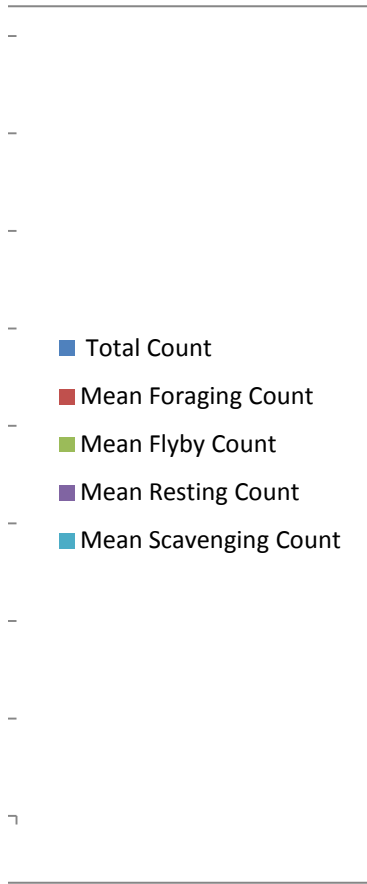
Bay(s)	Time	Sec.	Velocity (f/s)
0-2	0:01:38	98	1.84
2 - 4	0:02:42	162	2.81
4 - 6	0:03:38	218	3.21
6 - 8	0:04:40	280	2.90
8 - 10	0:05:49	349	2.61
10 - 12	0:06:55	415	2.73
12 - 14	0:08:01	481	2.73
14 - 16	0:09:07	547	2.73
16 - 18	0:09:54	594	3.83

2.94

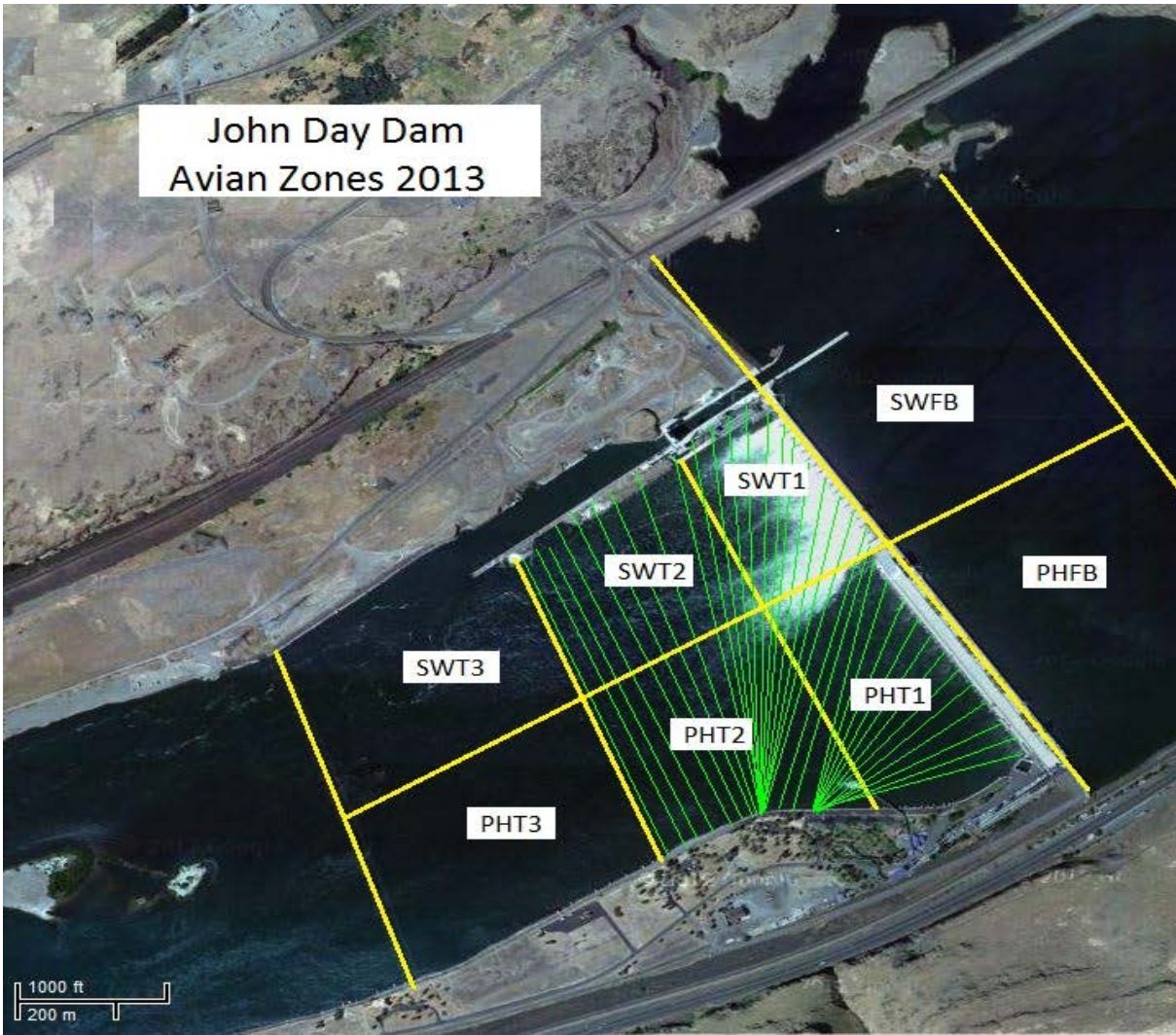
Bird Count by Activity



Date	Total Count	Mean Foraging Count	Mean Flyby Count	Mean Resting Count	Mean Scavenging Count
5/5/2013	60	9	17	34	
5/6/2013	52	18	1	33	
5/7/2013	44	5	1	38	
5/8/2013	39	4	3	32	
5/9/2013	74	65	2	7	
5/10/2013	48	8	40	40	
5/11/2013	68	40	2	26	



John Day Dam
Avian Zones 2013





John Day:

	Temp:	Secchi:	Fallbacks
Sun	52	5.0	35
Mon	53	5.0	32
Tues	53	5.0	31
Wed	54	3.5	32
Thur	54	4.0	45
Fri	55	4.0	49
Sat	55	4.0	34
AVG:	53.7	4.0	37
			MAX 49
			MIN 31

	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay1	Bay19
Sun	8.6	8.6	1.7	9.0	1.6	4.5	1.3	1.2
Sun	8.4	8.4	1.5	9.7	1.7	4.5	1.9	1.4
Mon	8.9	8.9	1.5	10.0	1.5	4.6	1.9	1.5
Mon	8.3	8.3	1.4	9.6	1.6	4.5	1.9	1.5
Tues	8.7	8.7	1.4	9.3	1.6	4.6	1.9	1.4
Tues	9.3	9.3	1.4	10.0	1.4	4.5	1.8	1.4
Wed	9.9	10.1	1.2	10.6	1.4	4.6	1.6	1.4
Wed	9.1	9.2	1.4	10.1	1.4	4.5	1.8	1.6
Thur	9.5	9.5	1.2	9.2	1.6	4.6	1.7	1.5
Thur	9.4	9.5	1.3	9.9	1.4	4.5	1.8	1.4
Fri	9.3	9.4	1.3	9.9	1.5	4.6	1.6	1.4
Fri	10.0	10.2	1.2	9.9	1.5	4.6	1.7	1.4
Sat	10.1	10.2	1.3	9.7	1.4	4.5	1.7	1.4
Sat	9.9	10.0	1.3	10.1	1.5	4.6	1.8	1.6
AVG:	9.2	9.3	1.4	9.8	1.5	4.6	1.7	1.4