

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/30/2021

Inspection Period: 10/24/2021 thru 10/30/2021



**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.
Additional and 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:	58.3 F
						Secchi:	6.0 Ft.
NORTH FISHWAY							
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	High setting	High setting is normal				
Count station differential	0	≤ 0.3'					
Entrance differential	0	1.0' - 2.0'	AVG (Ft.)	1.5			
SOUTH FISHWAY							
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	Mid setting	Mid setting is normal				
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 (Ft.)	1.7			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.3			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.79			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.9			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.1			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.1			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	Next Visual Inspection 11/22-11/25				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.5', wkly					
Spill volume	0	per FPP	Avg (kcfs)	1.6	Avg %	2.0	
Spill pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

Fisheries Related Operations

Smolt Monitoring Operations:

The Smolt Monitoring Program concluded the 2021 sampling season on 9/15.

Adult Ladder Operations:

North and South fish ladders are operating within criteria.

Project Operations:

Current outages: MU1-4 (BPA Line 1 outage), MU2, MU7, MU8, MU12, MU13-16, MU13, MU14, MU15, MU16. Adult attraction flow for the North fish ladder is provided through spill bay #2 open one stop (1.6kcfs) during daylight hours through November 30th

Maintenance:

JD North Fishway's pump 4 has been pulled for maintenance (RTS to be determined).

Calibration:

All gauges within the 0.3' criteria.

Bird Data:

Steady number of cormorants mainly roosting on rocks in SW2 and SW3. Gull numbers increasing with high numbers resting on the wing wall in the SWFB and modest numbers foraging in the tailrace mainly PH1 and PH3 in the morning. Pelican numbers minimal, a couple seen resting on Preacher's Island. Increase in number of grebes in PHFB. (see 'Bird Count' tab for details).

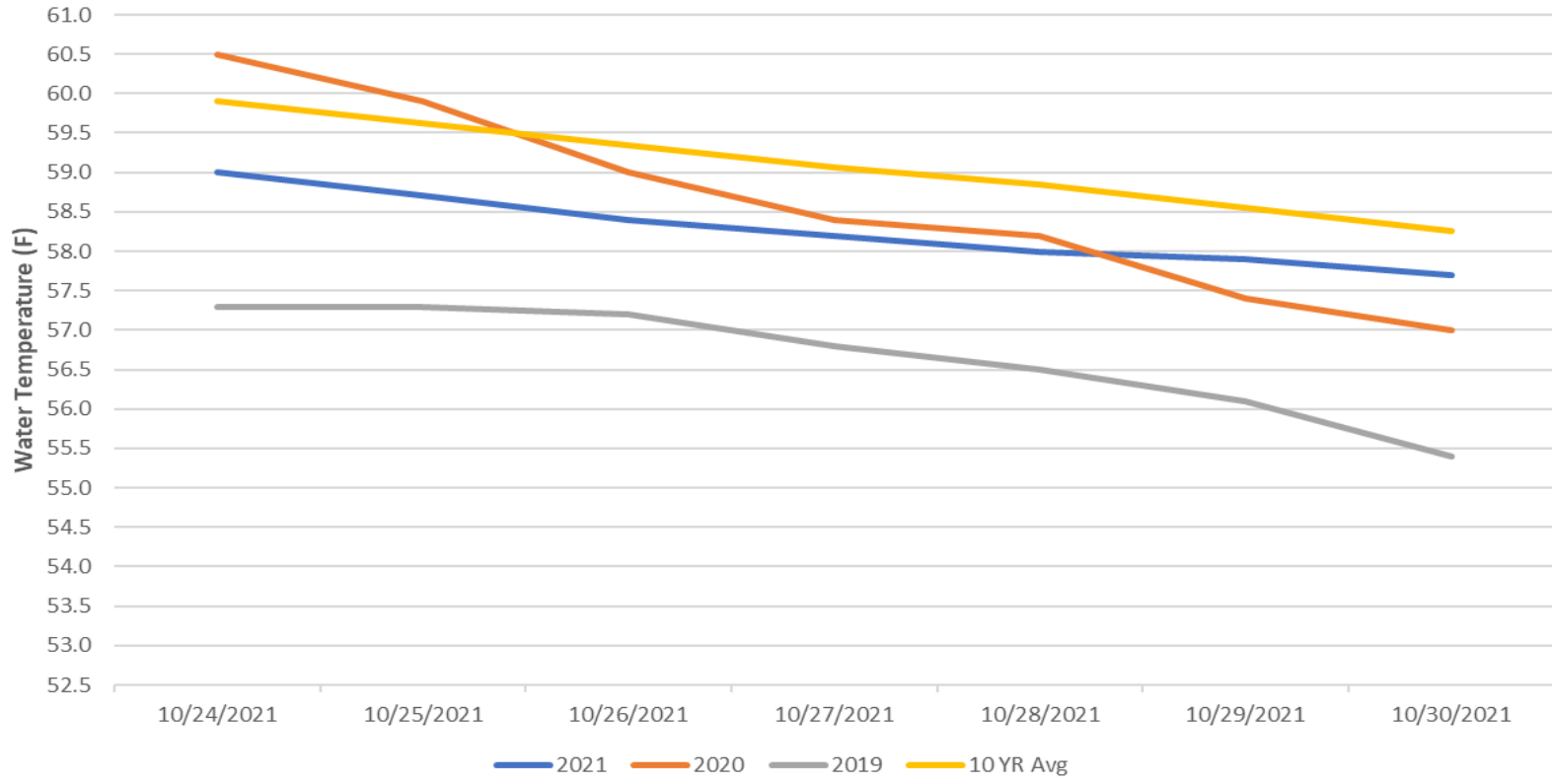
8 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 2 per day

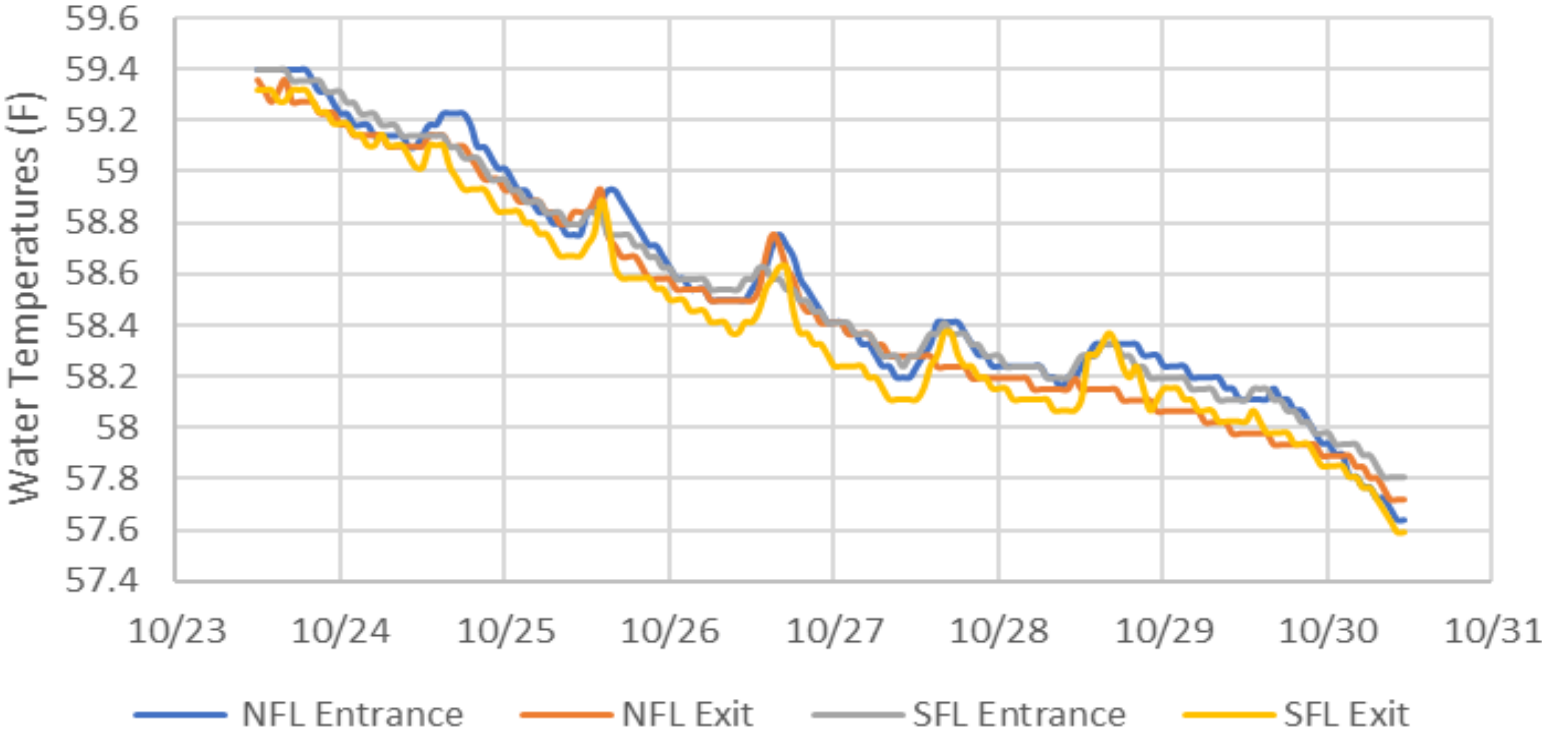
Research:

None

John Day Dam Water Temperatures (F)



JDA Ladder Temperatures (10/24 - 10/30)



JDA Collection Channel Velocity

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

Date	Measurement Location	Speed (ft/sec)	SFL Turbine RPMs (1,2,3)	Bay 19 TW (ft)
10/25/2021	Unit 4	2.70	0,68,68	160.4
10/25/2021	Unit 12	2.82	0,68,68	160.4
10/29/2021	Unit 4	2.71	0,68,68	160.0
10/29/2021	Unit 12	2.89	0,68,68	160.0
10/30/2021	Unit 4	2.71	0,68,68	159.5
10/30/2021	Unit 12	2.90	0,68,68	159.5

Average Weekly Velocity (ft/sec)	2.79
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JOHN DAY WEEKLY AVERAGES

	NE1 (Ft)	NE2 (Ft)	S.Ent (Ft)	SE1 (Ft)	N.Ent (Ft)	JBS Diff (Ft)	Bay19 (Ft)	Spill Vol. (kcfs)	Spill %	# Spillbays
Sunday	8.9	8.8	1.7	8.6	1.6	4.6	2.0	1.6	1.7	1
Sunday	8.8	8.8	1.5	8.8	1.6	4.6	2.0	1.6	1.7	1
Monday	9.5	9.4	1.6	8.7	1.3	4.6	1.8	1.6	1.6	1
Monday	9.6	9.6	1.6	8.6	1.3	4.5	1.5	1.6	1.6	1
Tuesday	9.2	9.1	1.7	8.3	1.5	4.7	1.8	1.6	1.8	1
Tuesday	8.7	8.7	1.7	8.1	1.5	4.6	1.8	1.6	2.3	1
Wednesday	9.0	8.9	1.7	8.0	1.4	4.6	1.9	1.6	2.1	1
Wednesday	9.2	9.1	1.7	8.1	1.5	4.6	1.6	1.6	2.0	1
Thursday	9.0	8.9	1.7	8.1	1.6	4.5	1.8	1.6	2.0	1
Thursday	9.0	9.0	1.7	8.3	1.5	4.6	1.9	1.6	2.7	1
Friday	9.2	9.2	1.6	8.4	1.5	4.5	2.0	1.6	2.5	1
Friday	9.0	9.0	1.8	8.1	1.5	4.6	2.0	1.6	2.6	1
Saturday	9.2	9.1	1.8	8.3	1.5	4.6	2.0	1.6	2.0	1
Saturday	9.1	9.1	1.7	8.4	1.5	4.5	2.0	1.6	2.0	1
AVG:	9.1	9.1	1.7	8.3	1.5	4.6	1.9	1.6	2.0	1.0

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	59.0	6.0	N/A	3
Monday	58.7	6.0	N/A	2
Tuesday	58.4	6.0	N/A	0
Wednesday	58.2	6.0	N/A	3
Thursday	58.0	6.0	N/A	3
Friday	57.9	6.0	N/A	3
Saturday	57.7	6.0	N/A	2
AVG	58.3	6.0	N/A	2

John Day Dam
Avian Zones



JDA Bird Counts: 10/24/21 to 10/30/21

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)	
24-Oct	PHFB	0	0	0	253	0	1	0	0	0	0	0	0	0	0	0	0	78	0	0	332	
24-Oct	SWFB	0	0	575	678	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1253	
24-Oct	PH1	0	18	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20	
24-Oct	PH2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
24-Oct	PH3	122	41	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	164	
24-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
24-Oct	SW2	0	0	0	0	0	3	55	37	0	0	0	0	0	0	0	0	0	0	0	95	
24-Oct	SW3	0	0	40	25	0	0	12	21	0	0	0	0	0	0	0	0	0	0	0	98	
Avg/Survey		93		786		3		63		0		0		0		1		39		0		983
25-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	85	0	0	96	
25-Oct	SWFB	0	0	1044	483	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1527	
25-Oct	PH1	5	0	0	123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128	
25-Oct	PH2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
25-Oct	PH3	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	
25-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25-Oct	SW2	0	0	0	0	0	0	29	34	0	0	0	0	0	0	0	0	0	0	0	63	
25-Oct	SW3	9	0	11	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	46	
Avg/Survey		35		831		1		45		0		0		0		0		48		0		958
26-Oct	PHFB	0	0	182	0	0	0	0	0	0	0	0	0	0	0	0	89	67	0	0	338	
26-Oct	SWFB	0	0	1007	873	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1880	
26-Oct	PH1	16	7	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	
26-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
26-Oct	PH3	199	167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	366	
26-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
26-Oct	SW2	0	0	0	0	0	0	12	17	0	0	0	0	0	0	0	0	0	0	0	29	
26-Oct	SW3	0	0	0	0	0	0	71	60	0	0	0	0	0	0	0	0	0	0	0	131	
Avg/Survey		195		1042		0		80		0		0		0		0		78		0		1394
27-Oct	PHFB	0	0	907	0	0	0	0	0	0	0	0	0	0	0	0	83	0	0	0	990	
27-Oct	SWFB	0	0	9	412	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	421	
27-Oct	PH1	8	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	
27-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
27-Oct	PH3	20	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	123	
27-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
27-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
27-Oct	SW3	0	12	0	0	0	0	45	38	0	0	0	0	0	0	0	0	0	0	0	95	
Avg/Survey		79		664		0		42		0		0		0		0		42		0		826

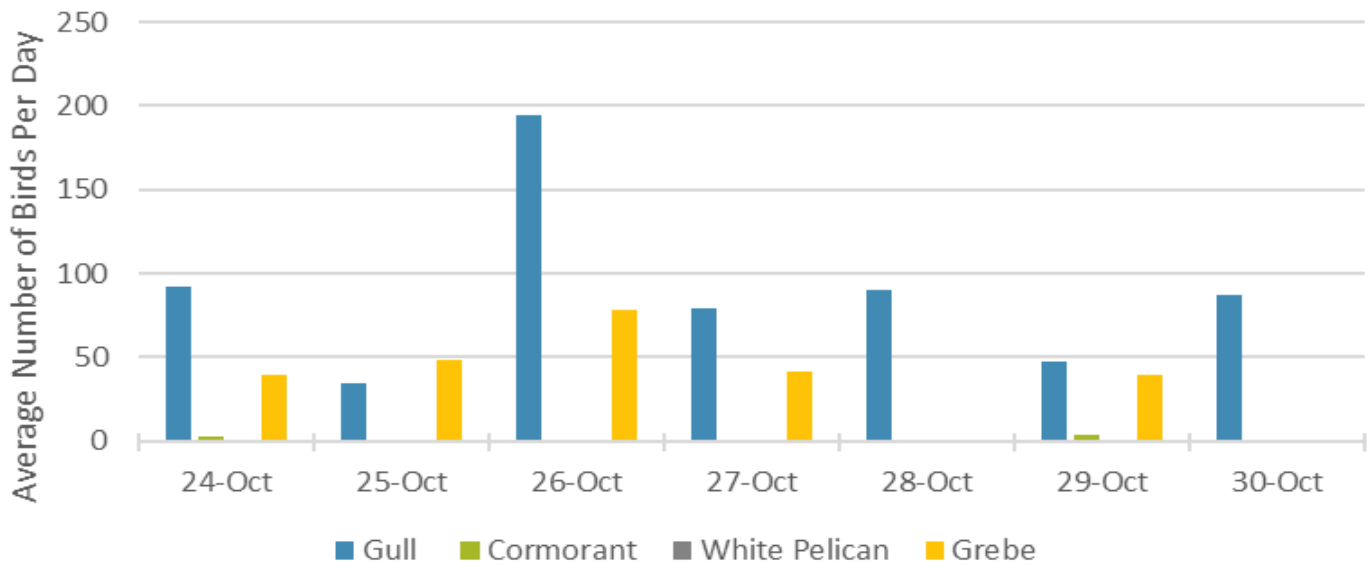
JDA Bird Counts: 10/24/21 to 10/30/21

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-Oct	PHFB	0	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
28-Oct	SWFB	0	0	0	425	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	425
28-Oct	PH1	0	47	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
28-Oct	PH2	47	37	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94
28-Oct	PH3	21	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
28-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Oct	SW2	0	0	7	0	0	0	45	33	0	0	0	0	0	0	0	0	0	0	0	0	85
28-Oct	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avg/Survey		90		250		0		39		0		0		0		0		0		0		379
29-Oct	PHFB	0	0	0	230	0	0	0	0	0	0	0	0	0	0	0	0	79	0	0	0	309
29-Oct	SWFB	0	0	525	477	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1002
29-Oct	PH1	0	46	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
29-Oct	PH2	27	4	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
29-Oct	PH3	6	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
29-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Oct	SW2	0	0	0	0	0	0	27	31	0	0	0	0	0	0	0	0	0	0	0	0	58
29-Oct	SW3	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	16
Avg/Survey		47		616		4		37		0		0		0		0		40		0		744
30-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Oct	SWFB	0	0	718	882	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1600
30-Oct	PH1	12	18	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
30-Oct	PH2	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
30-Oct	PH3	71	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	124
30-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-Oct	SW2	0	0	0	0	0	0	20	31	0	0	0	0	0	0	0	0	0	0	0	0	51
30-Oct	SW3	8	0	17	0	0	0	35	15	0	0	0	0	0	0	0	0	0	0	0	0	75
Avg/Survey		87		809		1		51		0		0		0		0		0		0		947

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			
Weekly Total	1249	9992	17	710	0	0	0	0	0	1	492	0	6231								
Avg/Survey	89	714	1	51	0	0	0	0	0	0	35	0	890								

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

