

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 12/17/2022

Inspection Period: 12/11/2022 thru 12/17/2022



**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 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: 7			Temperature: 43.0 F	Secchi: 6.0 Ft.
NORTH FISHWAY							
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	High setting					
Count station differential	0	≤ 0.3'					
Entrance differential	0	1.0' - 2.0'	AVG (Ft.)	#DIV/0!			
SOUTH FISHWAY							
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	Mid setting					
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.)	1.3			
Entrance weir SE1	1	depth (≥ 8')	AVG (Ft.)	9.0	Extremely low tw - weirs were at lower limit		
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.44			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.6			
Entrance weir NE1	2	depth (≥ 8')	AVG (Ft.)	8.8	Extremely low tw - weirs were at lower limit		
Entrance weir NE2	2	depth (≥ 8')	AVG (Ft.)	8.7	Extremely low tw - weirs were at lower limit		
JUVENILE PASSAGE							
Forebay/bypass conduit differential	1	4.0' - 5.0'	AVG (Ft.)	4.2	Sensor was OOC repaired that day		
Submersible traveling screens	0	visual inspect	STS being removed 12/12				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.2', wkly					
Spill volume	0	per FPP	Avg (kcfs)	14.4	Avg %		
Spill pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

Fisheries Related Operations

Smolt Monitoring Operations:

SMF was dewatered on 12/7

Adult Ladder Operations:

SFL is running in criteria, the NFL was placed on orifice flow Nov 29th, and dewatered on December 1st (see 22JDA16) for winter maintance

Project Operations:

Current outages: Line 1 (MU1-4 ETR-12/22/22) MU3 (ETR: 2/20/23) MU4 (ETR: 11/2/23), MU7 (ETR: 7/31/28), MU8 (ETR: 2/16/23), MU10 (ETR: 3/30/23) MU13 (ETR: 3/23/23)

Spill Season ended on November 29th at JDA

Maintenance:

NFL down for Winter Maintenance

Calibration:

All gauges within the 0.3' criteria.

Bird Data:

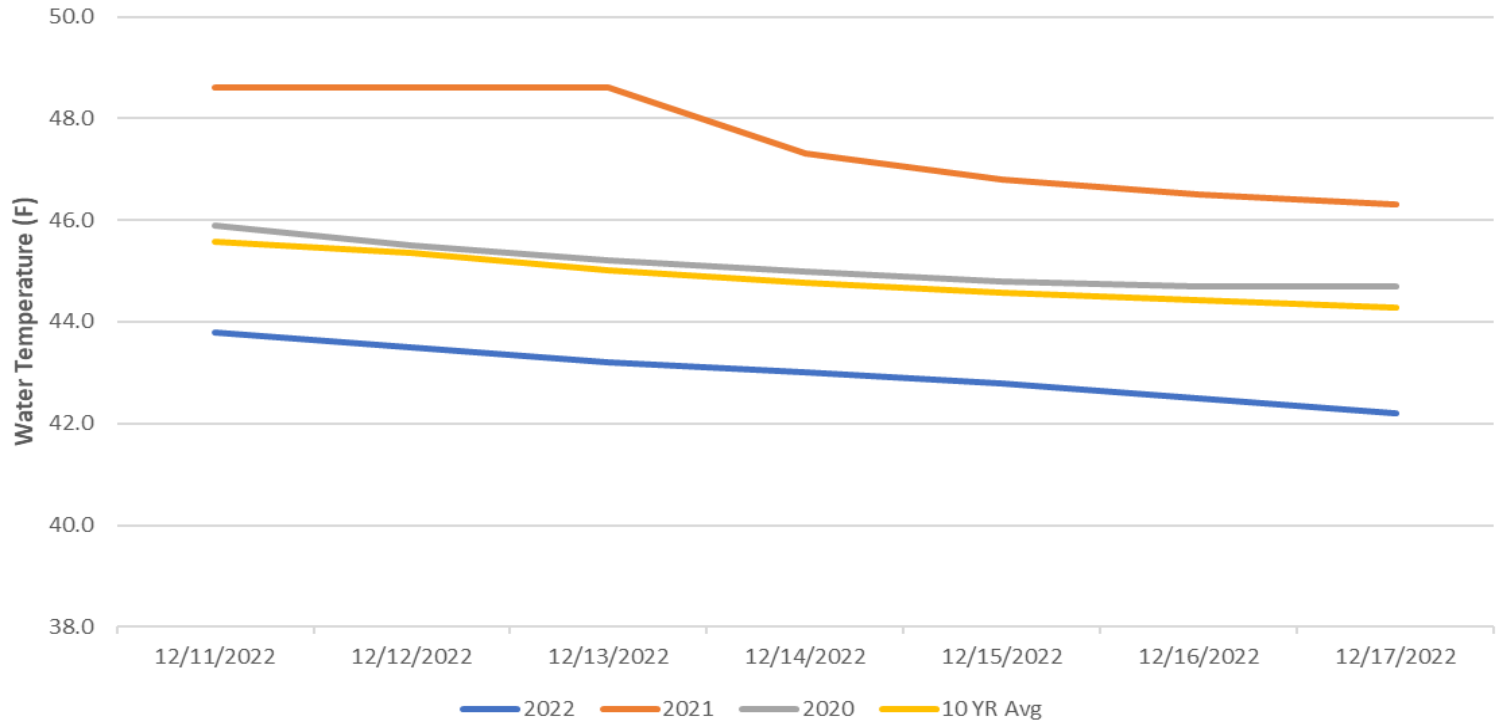
Gull and Cormorant numbers are holding steady, and Grebe numbers are decreasing. There are approximately 3 pelicans hanging around Preacher's Island with very few foraging observations in JDA bird counting zones.

11 of 125 avian lines down. No bird counts are currently being conducted on Saturdays and Sundays.

Research:

Preperations for the 2023 Research Season are underway - No new research is scheduled at this time

John Day Dam Water Temperature (F)



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)
12/12/2022	Unit 4	2.46	0,68,68	159.0
12/12/2022	Unit 12	2.55	0,68,68	159.0
12/14/2022	Unit 4	2.49	0,68,68	157.5
12/14/2022	Unit 12	2.41	0,68,68	157.5
12/16/2022	Unit 4	2.32	0,68,68	160.0
12/16/2022	Unit 12	2.39	0,68,68	160.0

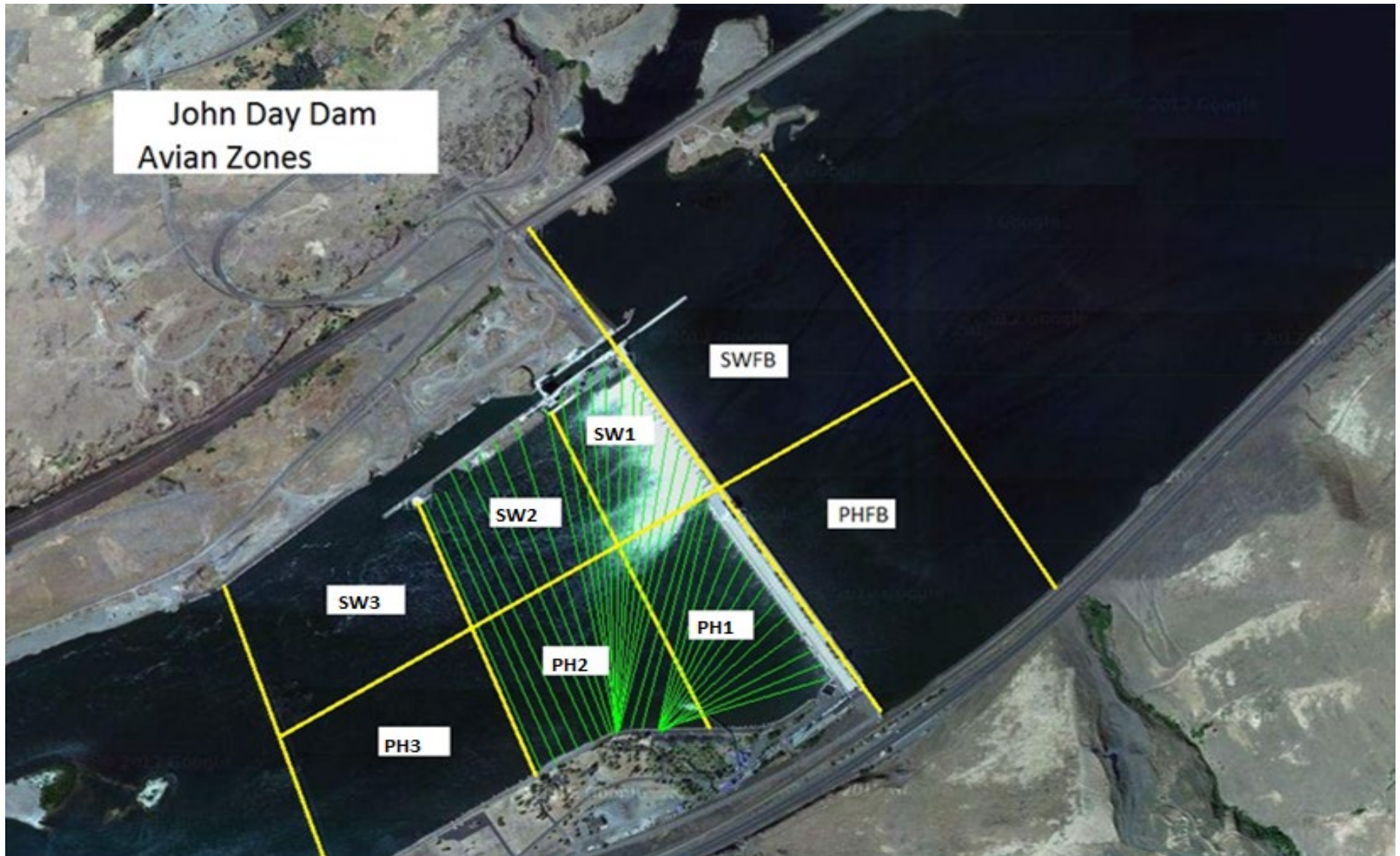
Average Weekly Velocity (ft/sec)	2.44
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JOHN DAY WEEKLY AVERAGES

	South Fish Ladder					NFL	JBS	Spill	
	SE1 (Ft)	S.Ent (Ft)	NE1 (Ft)	NE2 (Ft)	Bay19 (Ft)	N.Ent (Ft)	JBS Diff (Ft)	Spill Vol. (kcfs)	# Spillbays
Sunday	9.8	1.0	9.3	9.5	1.6	X	X	X	X
Monday	8.2	1.5	8.1	8.4	1.7	X	4.1	X	X
Tuesday	8.0	1.4	7.4	7.2	1.8	X	3.8	X	X
Wednesday	7.9	1.5	7.5	7.3	1.5	X	4.1	20.1	4
Thursday	10.1	1.2	9.4	9.2	1.7	X	4.6	8.6	1
Friday	10.4	1.0	9.9	9.7	1.4	X	4.5	X	X
Saturday	8.9	1.2	9.9	9.7	1.7	X	4.0	X	X
AVG:	9.0	1.3	8.8	8.7	1.6	#DIV/0!	4.2	14.4	2.5

	Temp (F)	Secchi (Ft)	Notes
Sunday	43.8	6.0	X: Winter Maintenance Entrance weir OOCs due to very low tailwater levels, weirs were put in manual and set to lower limit. They were still OOC JBS OOC due to a conduit sensor failure. The tainter gate was being run in manual mode. The issue was resolved that day
Monday	43.5	6.0	
Tuesday	43.2	6.0	
Wednesday	43.0	6.0	
Thursday	42.8	6.0	
Friday	42.5	6.0	
Saturday	42.2	6.0	
AVG	43.0	6.0	

John Day Dam
Avian Zones



JDA Bird Counts: 12/11/22 to 12/17/22

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)	
11-Dec	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Dec	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Dec	PHFB	0	0	250	0	2	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	256
12-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Dec	PH1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
12-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Dec	SW2	0	0	0	0	0	0	69	0	0	0	0	0	0	0	0	0	0	0	0	0	69
12-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		4	0	250	0	2	0	69	0	0	0	0	0	0	0	0	0	4	0	0	0	329
13-Dec	PHFB	0	0	1	0	0	0	29	0	0	0	0	0	0	0	0	3	0	0	0	0	33
13-Dec	SWFB	0	0	97	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98
13-Dec	PH1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
13-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Dec	SW2	0	0	0	0	0	0	23	0	0	0	0	0	2	0	0	0	0	0	0	0	25
13-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
Total/Survey		0	0	98	0	6	0	52	0	0	0	0	5	0	0	0	3	0	0	0	0	164
14-Dec	PHFB	0	0	0	0	2	0	30	0	0	0	0	0	0	0	0	3	0	0	0	0	35
14-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Dec	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Dec	SW2	0	0	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	52
14-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		0	0	0	0	2	0	82	0	0	0	0	0	0	0	0	3	0	0	0	0	87

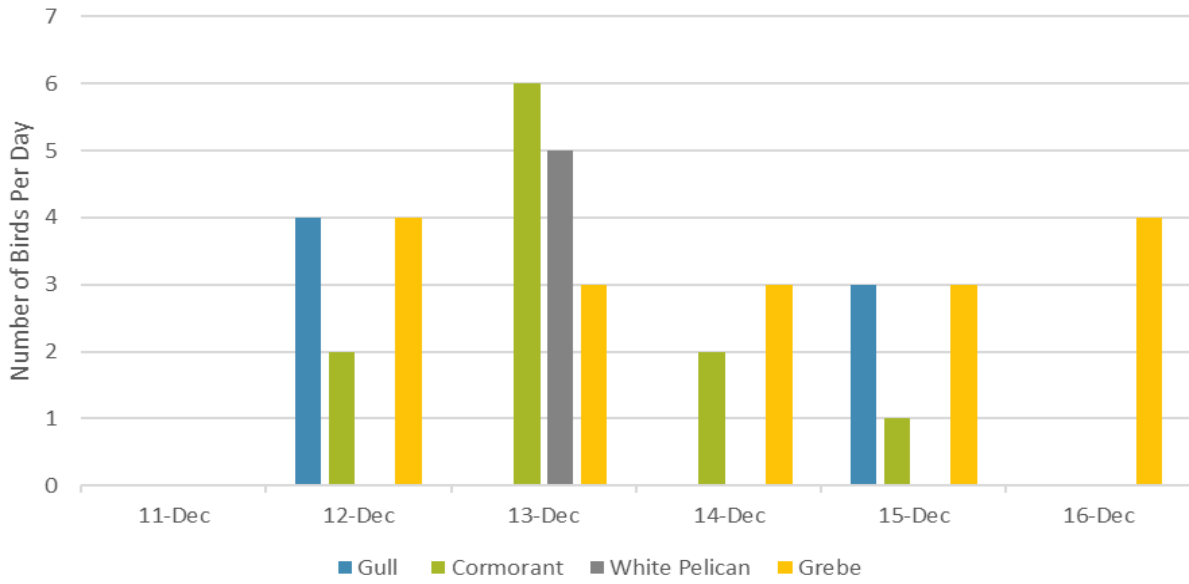
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		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
15-Dec	PHFB	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	3	0	0	0	20
15-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Dec	PH1	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
15-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Dec	SW2	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	50
15-Dec	SW3	0	0	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Total/Survey		3		1		1		74		0		0		0		0		3		0		82
16-Dec	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	
16-Dec	SWFB	0	0	163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	163	
16-Dec	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Dec	SW2	0	0	0	0	0	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	35
16-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		0		163		0		35		0		0		0		0		4		0		202
17-Dec	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Dec	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Dec	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Dec	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Dec	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Dec	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Dec	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Dec	SW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		0		0		0		0		0		0		0		0		0		0		0

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					
Weekly Total	7	512	11	312	0	0	5	0	17	0	864										
Avg/Survey	1	102	2	62	0	0	1	0	3	0	173										

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

