

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 4/2/2022

Inspection Period: 3/27/2022 thru 4/2/2022



**US Army Corps
of Engineers**
Portland District

JD/WC Project-Fisheries
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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: 14				Temperature: 45.2 F	Secchi: 5.4 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.)	1.5				
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	0	depth (≥ 8')	AVG (Ft.)	8.9				
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.55				
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.7				
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.7				
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.6				
JUVENILE PASSAGE								
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.5				
Submersible traveling screens	0	visual inspect						
Turbine trashrack drawdown	0	<1.5', wkly						
Vert barrier screen drawdown	0	<1.5', wkly						
Spill volume	0	per FPP	Avg (kcfs)	0.0	Avg %	0.0		
Spill pattern	0	per FPP						
Turbine Unit Priority	0	per FPP						
Turbine 1% Efficiency	0	per FPP						

Fisheries Related Operations

Smolt Monitoring Operations:

Smolt Monitoring Facility started the 2022 sampling season on April 1 for condition monitoring only. From April 1 - June 15 condition sampling will occur 5 days a week (Monday-Friday) from approximately 0700-1300 or until the target of 100 fish of the predominant species has been reached. From June 16 - September 15 condition sampling will occur 3 days a week (Monday, Wednesday, Friday) from approximately 0700-1300 or until the target of 100 fish of the predominant species has been reached. High water temperature protocol goes into effect when water temperatures exceed 70F.

Adult Ladder Operations:

Both ladders are operating within criteria.

Project Operations:

Current outages: MU3, MU4, MU7, MU12.

Spring spill starts April 10 along with the Caspian tern forebaby operation for the Blalock islands.

USDA avian hazing will starting 15 April

Maintenance:

South fish turbine #2 was forced out of service on 30 March with an excessive vibration issue. Pumps 1 & 3 are running.

Calibration:

All gauges within the 0.3' criteria.

Bird Data:

Cormorant numbers are steady around 30, mainly roosting on rocks in SW2. Gull numbers minimal. A pelican seen occasionally resting on Preacher's Island or PH3. Small number of grebes have returned to PHFB. (see 'Bird Count' tab for details).

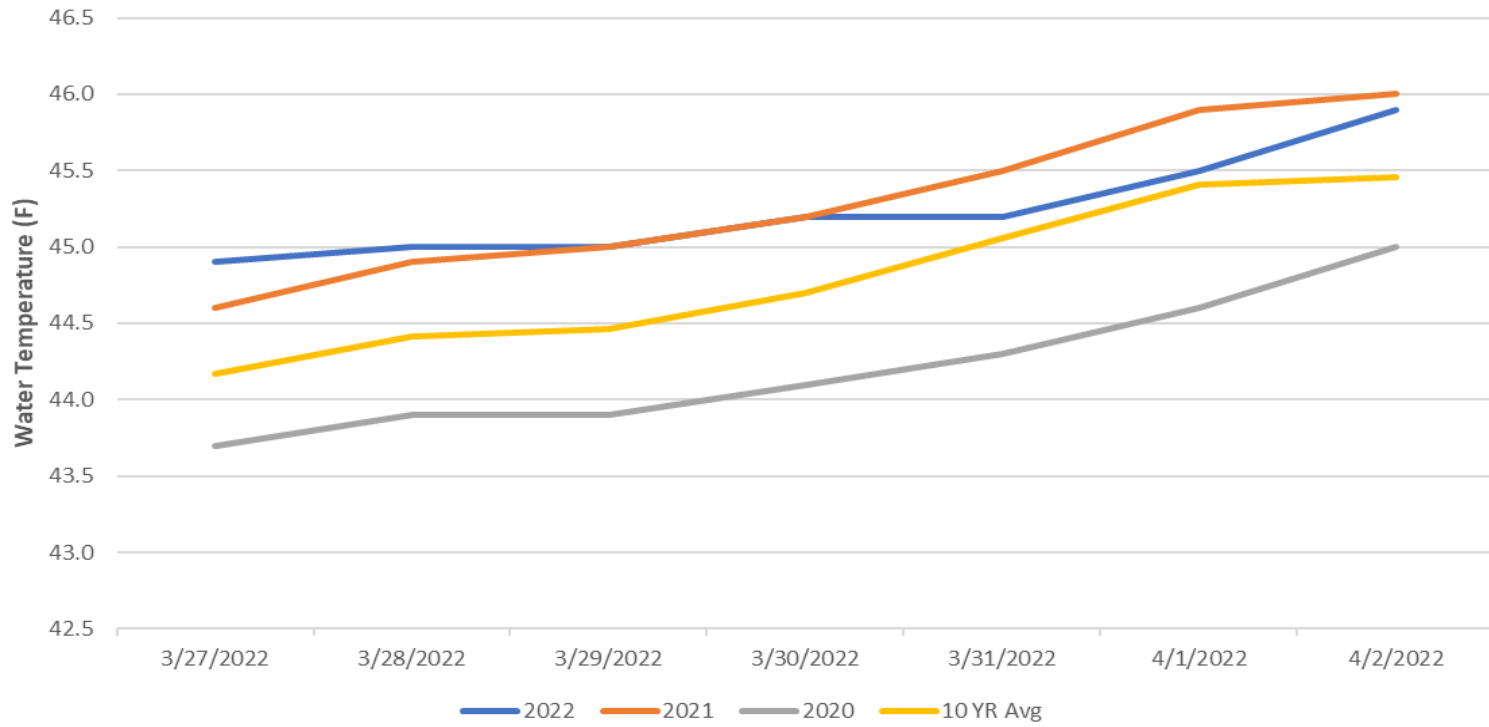
1 of 125 avian lines down. The 7 lines that were broken by the BPA line repair were replaced on 3/29. USDA hazing starts 4/16.

Pelicans on Preacher's Island: averaged 0 per day

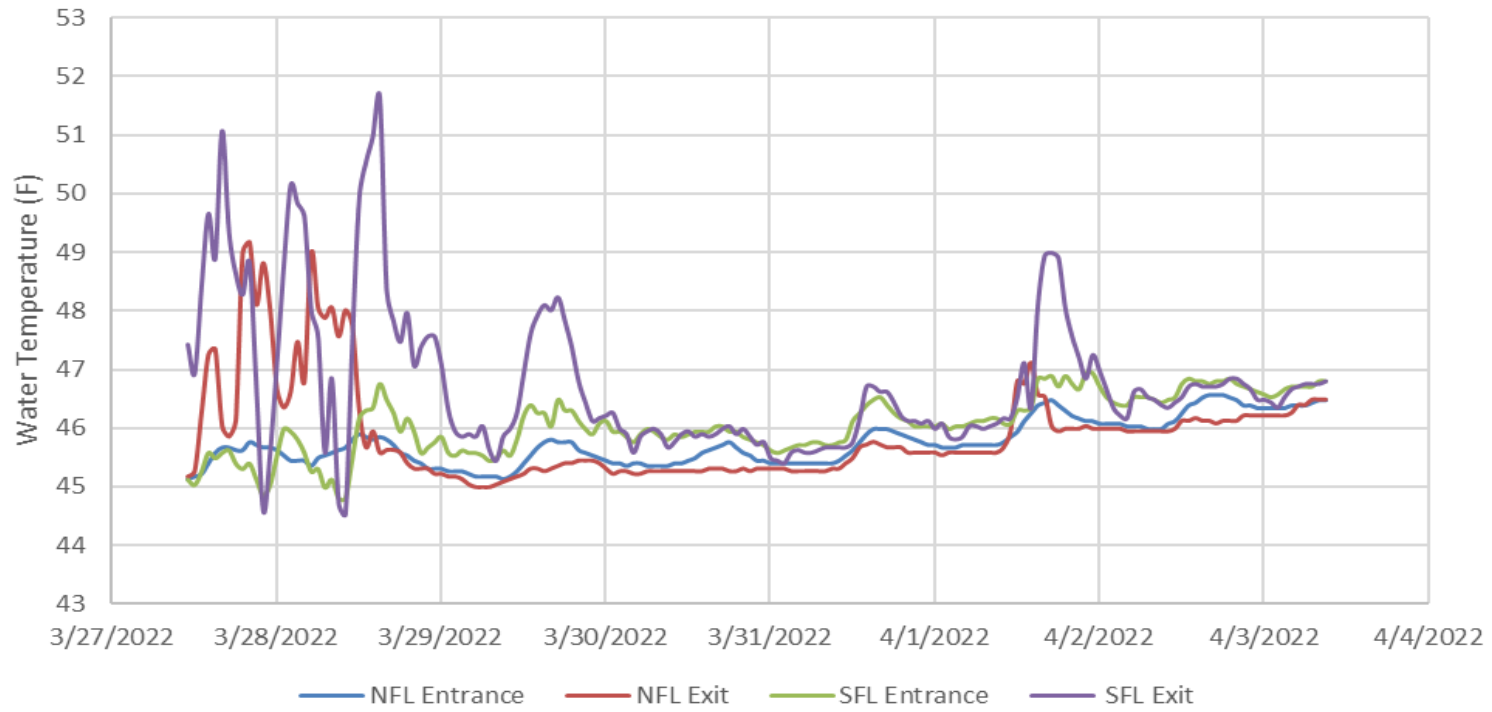
Research:

Adult fish counting will started April 1. USGS temperature probes were installed in the forebay on 3/29.

John Day Dam Water Temperature (F)



JDA Ladder Temperatures



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)
3/29/2022	Unit 4	2.59	0,68,68	160.8
3/29/2022	Unit 12	2.69	0,68,68	160.8
3/31/2022	Unit 4	2.45	68,0,68	160.5
3/31/2022	Unit 12	2.48	68,0,68	160.5
4/2/2022	Unit 4	2.51	68,0,68	160.8
4/2/2022	Unit 12	2.59	68,0,68	160.8

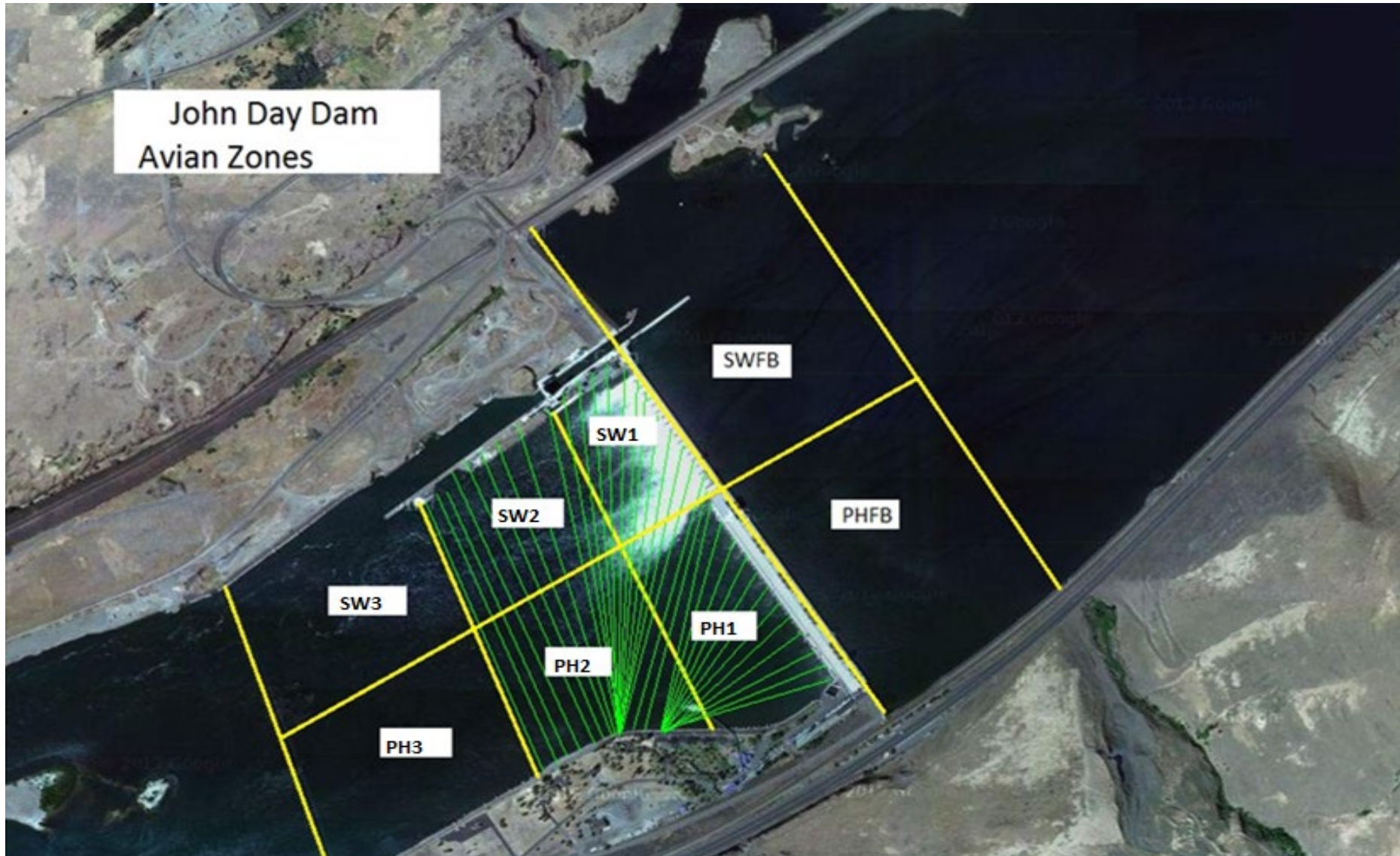
Average Weekly Velocity (ft/sec)	2.55
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JOHN DAY WEEKLY AVERAGES

	NE1 (Ft)	NE2 (Ft)	S.Ent (Ft)	SE1 (Ft)	N.Ent (Ft)	JBS Diff (Ft)	Bay19 (Ft)	Spill Vol. (kcfs)	Spill %	# Spillbays
Sunday	9.4	9.3	1.6	8.6	1.5		1.7	0.0	0.0	0
Sunday	9.3	9.3	1.4	8.6	1.6		1.6	0.0	0.0	0
Monday	9.3	9.2	1.4	8.7	1.4		1.8	0.0	0.0	0
Monday	9.3	9.2	1.5	8.5	1.6		1.7	0.0	0.0	0
Tuesday	9.7	9.6	1.3	9.0	1.5	4.6	1.7	0.0	0.0	0
Tuesday	10.1	9.9	1.1	9.5	1.5	4.6	1.7	0.0	0.0	0
Wednesday	10.0	9.9	1.4	8.9	1.4	4.3	1.8	0.0	0.0	0
Wednesday	9.9	9.9	1.3	9.0	1.4	4.5	1.5	0.0	0.0	0
Thursday	10.3	10.2	1.3	9.5	1.5	4.5	1.6	0.0	0.0	0
Thursday	9.2	9.2	1.2	8.4	1.7	4.5	1.8	0.0	0.0	0
Friday	9.7	9.5	1.4	8.7	1.6	4.4	1.6	0.0	0.0	0
Friday	9.8	9.7	1.3	8.9	1.5	4.6	1.6	0.0	0.0	0
Saturday	10.1	10.0	1.2	9.4	1.5	4.6	1.6	0.0	0.0	0
Saturday	9.5	9.5	1.3	8.8	1.5	4.6	1.7	0.0	0.0	0
AVG:	9.7	9.6	1.3	8.9	1.5	4.5	1.7	0.0	0.0	0.0

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	44.9	5.5	N/A	0
Monday	45.0	5.5	N/A	0
Tuesday	45.0	5.5	N/A	1
Wednesday	45.2	5.0	N/A	0
Thursday	45.2	5.0	N/A	0
Friday	45.5	5.5	N/A	0
Saturday	45.9	5.5	N/A	0
AVG	45.2	5.4	N/A	0

John Day Dam
Avian Zones

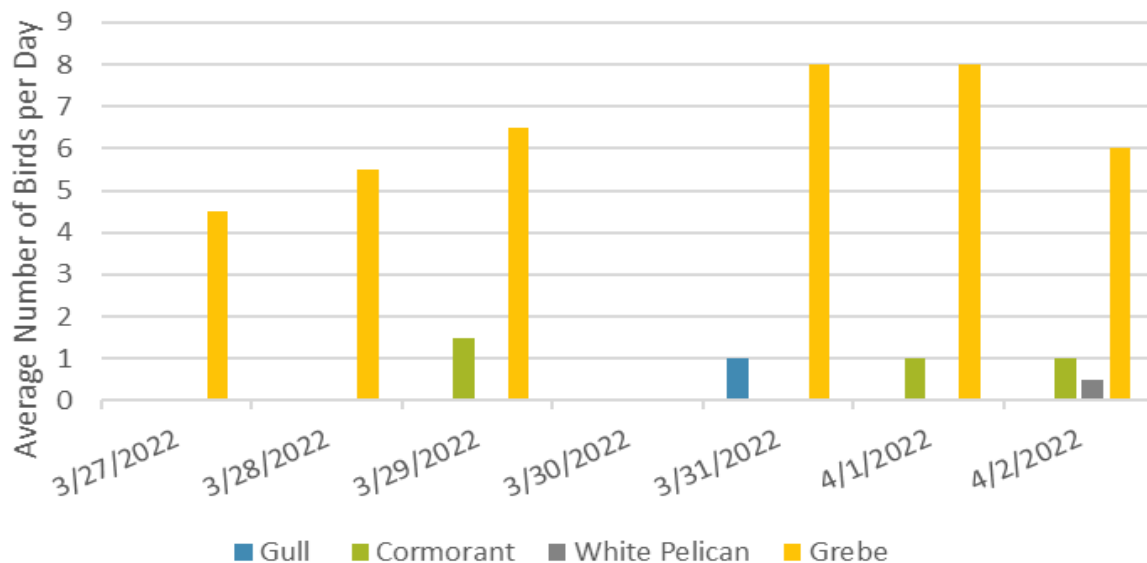


JDA Bird Counts: 3/31/22 to 4/2/22

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)	
31-Mar PHFB		0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	6	10	0	0	20
31-Mar SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Mar PH1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Mar PH2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Mar PH3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-Mar SW1		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
31-Mar SW2		0	0	0	0	0	0	7	27	0	0	0	0	0	0	0	0	0	0	0	0	34
31-Mar SW3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total/Survey		1		2		0		17		0		0		0		0		8		0		28
1-Apr PHFB		0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	8	8	0	0	0	27
1-Apr SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Apr PH1		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1-Apr PH2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Apr PH3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Apr SW1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Apr SW2		0	0	0	0	0	0	3	16	0	0	0	0	0	0	0	0	0	0	0	0	19
1-Apr 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		1		15		0		0		0		0		8		0		24
2-Apr PHFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	8	0	0	0	12
2-Apr SWFB		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Apr PH1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Apr PH2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Apr PH3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Apr SW1		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2-Apr SW2		0	0	0	2	0	0	21	31	0	0	0	0	0	1	0	0	0	0	0	0	55
2-Apr 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		1		1		26		0		0		1		0		6		0		35
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	Total
Weekly Total		2	7	7	303	0	0	1	0	77	0	199										
Avg/Survey		0	1	1	22	0	0	0	0	6	0	28										

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

