

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 8/24/2024

Inspection Period: 8/18/2024 thru 8/24/2024



JD/WC Project-Fisheries
P.O. Box 823
Rufus, Oregon 97050
Phone: 541-739-1061

All JDA 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:	70.5 F
							Secchi:	6.0 Ft.
NORTH FISHWAY								
Exit Differential	0	≤ 0.5'						
Exit Control Weirs	0	High Setting						
Count Station Differential	0	≤ 0.3'						
Weir Crest Depth (DS Gauge)	0	Per FPP	"Salmon Mode" (water depth over weirs 1.0' ± 0.1')					
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	Per FPP	"Salmon Mode" (water depth over weirs 1.0' ± 0.1')					
South Entrance Differential	0	1.0' - 2.0'	Avg. (Ft.)	1.1				
Entrance Weir SE1	0	Depth (≥ 8')	Avg. (Ft.)	8.2				
Collection Channel Velocity	0	1.5' - 4.0' FPS	Avg. (Ft.)	1.98	(2 FPS is optimal)			
N. Entrance PH (Bay 19) Differential	0	1.0' - 2.0'	Avg. (Ft.)	1.3				
Entrance Weir NE1	0	Depth (≥ 8')	Avg. (Ft.)	9.4				
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	Per FPP						
Turbine Trashrack Drawdown	0	<1.5'						
Vert. Barrier Screen Drawdown	0	<1.2'						
Spill Volume	0	Per FPP	Avg. (kcfs)	21.2	Avg. (%)	19.9		
Spill Pattern	0	Per FPP						
Turbine Unit Priority	0	Per FPP						
Turbine 1% Efficiency	0	Per FPP						

Fisheries Related Operations

Smolt Monitoring Operations (SMF):

The 2024 SMF sampling season started April 1st for condition monitoring only.

High water temperature protocol went into effect on 7/16 (Monday and Thursday sampling) and returns to normal sampling when daily water temperatures drop below <69.5°F. All samples will run from approximately 0700-1300 or until the target of 100 fish of the predominant species is reached.

Adult Ladder Operations:

NFL is operating in criteria.

SFL FOG's removed. Operating 2 SFL turbines @ reduced RPMs (SFT-1 or 2: 55 RPMs and SFT-3: 60 RPMs).

Project Operations:

Late Summer spill started 8/1/24 (TSW's remain deployed and spillbay-2 running for attraction flow - See FPP for more details).

Current outages: MU2: (ETR: 9/19/24), MU3 (ETR: 8/29/24), MU7 (ETR: 10/1/25), MU10 (ETR: 1/16/25), MU14 (ETR: 04/30/26).

Spillbay Outages: #1-missing brake/motor (ETR: Unknown), #6 and #10-operate in manual/local mode only (Estimated Repair: Unknown).

Weekly Average Tailwater TDG: 110.3

Maintenance:

NFL AWS pump #4 is OOS, with an unknown RTS date (see 21JDA02).

NFL AWS pump #2 has a failed RTD sensor that keeps it from reading an accurate temperature on the lower bearing (occurred 4/22/23). Therefore, there is no overheat fail safe and it is being run as a last on first off pump (the pump will need to be unstacked to repair the sensor). The repair date is unknown.

NFL AWS pump #3 is serving as a backup, with a harmonic filter overtemp (see 24JDA11).

Calibration: All gauges within the 0.3' criteria.

Bird Data:

Decrease in pelican foraging (~2/inspection from 10), gull foraging increased (~62/inspection from 42), 1-foraging cormorant, and 1-foraging grebe.

There are ~40 pelicans hanging around Preacher's Island.

12 of 125 avian lines are down

Research:

Four Peaks started ladder counts on 4/1/24 (ends 10/31/24).

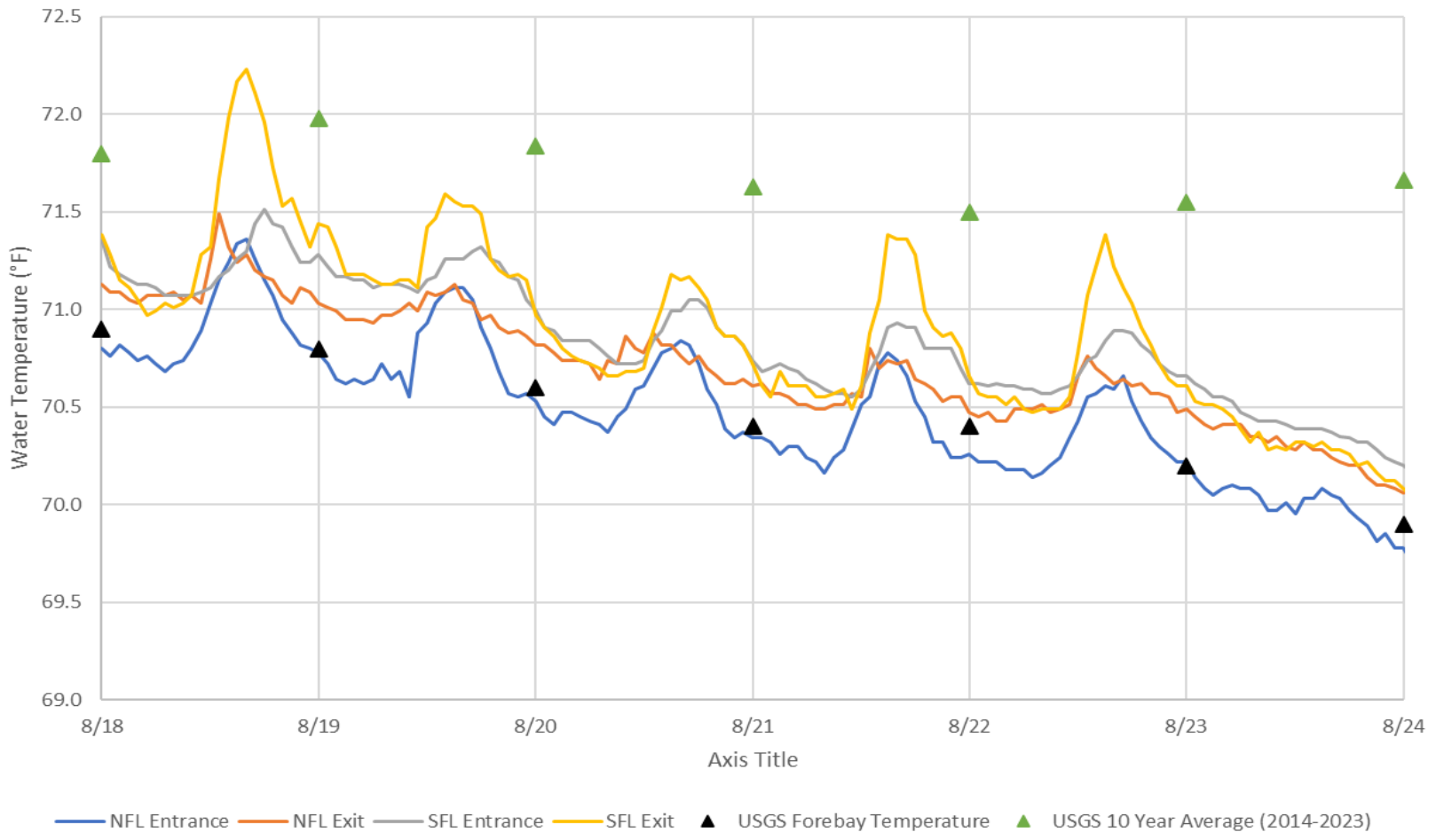
PNNL juvenile lamprey passage behavior and survival study is ongoing.

USDA bird hazing season ended on 7/31/24.

WDFW dam angling started fishing on 5/1/24.

CRITFC started collecting lamprey for translocation on 6/5/24

JDA Water 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)
8/19/2024	Unit 4	1.93	55,0,60	160.1
8/19/2024	Unit 12	1.94	55,0,60	160.1
8/21/2024	Unit 4	2.02	55,0,60	160.0
8/21/2024	Unit 12	2.01	55,0,60	160.0
8/24/2024	Unit 4	1.99	55,0,60	159.4
8/24/2024	Unit 12	1.97	55,0,60	159.4

Average Weekly Velocity (ft/sec)	1.98
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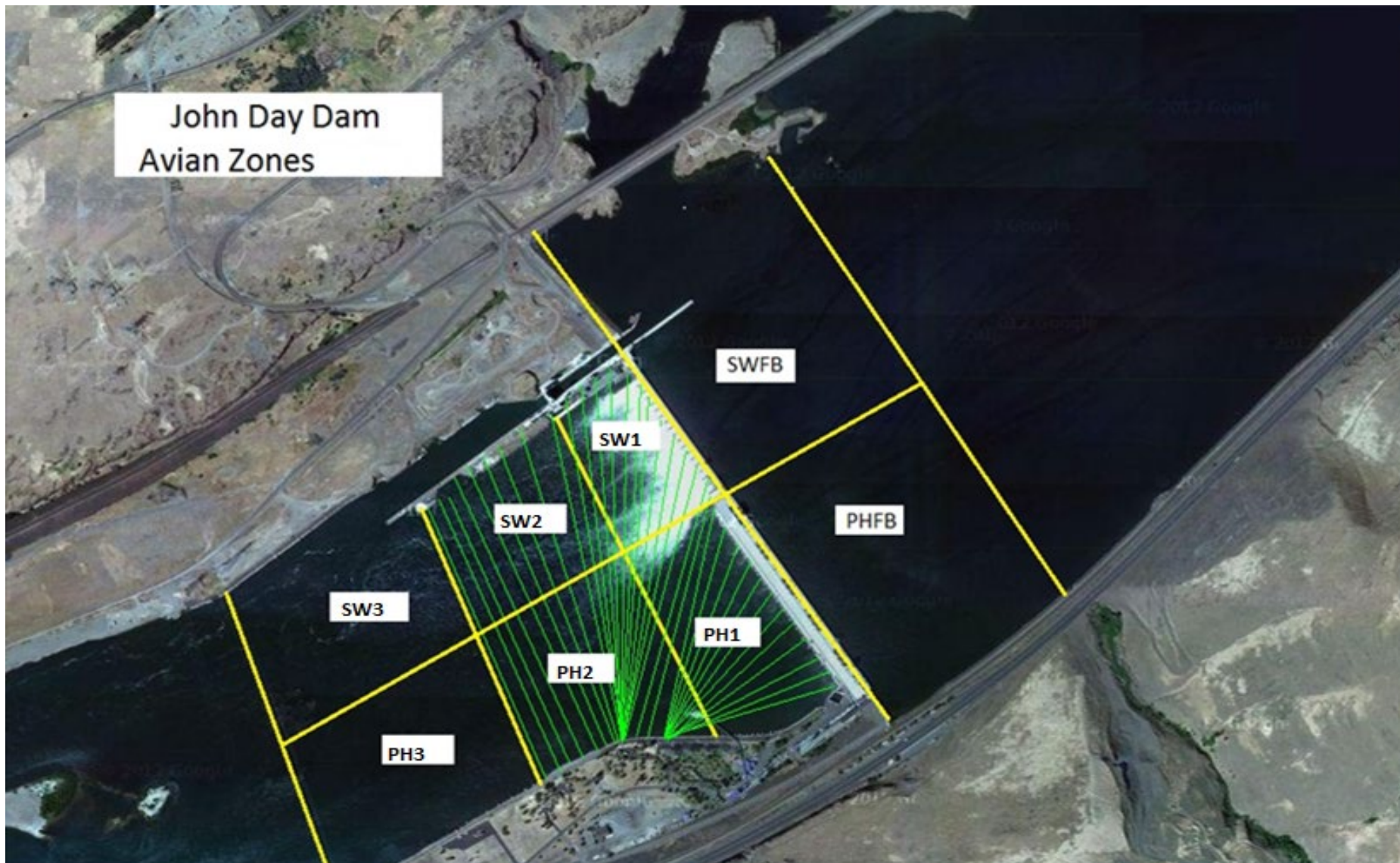
JOHN DAY WEEKLY AVERAGES

	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)	Spill (%)	# Spillbays
Sunday	8.2	1.0	8.1	8.0	1.0	1.6	4.7	21.2	23.4	3
Sunday	8.1	1.0	8.9	8.2	1.2	1.6	4.7	21.2	23.8	3
Monday	8.2	1.0	10.0	9.2	1.4	1.4	4.6	21.2	18.0	3
Monday	8.3	1.0	9.2	8.5	1.2	1.7	4.6	21.2	17.8	3
Tuesday	8.2	1.0	9.2	8.4	1.2	1.6	4.6	21.2	20.6	3
Tuesday	8.3	1.0	9.9	9.2	1.2	1.4	4.6	21.2	20.7	3
Wednesday	8.3	1.0	9.8	9.0	1.1	1.5	4.5	21.2	22.1	3
Wednesday	8.2	1.0	9.9	10.0	1.2	1.5	4.6	21.2	19.2	3
Thursday	8.1	1.0	9.6	9.6	1.3	1.5	4.8	21.2	17.5	3
Thursday	8.2	1.0	10.2	10.2	1.4	1.3	4.5	21.2	15.2	3
Friday	8.1	1.1	8.5	8.5	1.5	1.4	4.6	21.0	23.0	3
Friday	8.4	1.0	9.2	9.2	1.2	1.4	4.5	21.0	19.7	3
Saturday	8.4	1.4	9.1	9.1	1.4	1.4	4.6	21.2	19.1	3
Saturday	8.3	1.3	9.7	9.7	1.5	1.4	4.6	21.2	18.9	3
AVG:	8.2	1.1	9.4	9.1	1.3	1.5	4.6	21.2	19.9	3.0

	*River Temp (°F)	Secchi (Ft)	Notes
Sunday	70.9	6.0	
Monday	70.8	6.0	
Tuesday	70.6	6.0	
Wednesday	70.4	6.0	
Thursday	70.4	6.0	
Friday	70.2	6.0	
Saturday	69.9	6.0	
AVG	70.5	6.0	

*Note: River temperatures are the 'average' taken at the time of inspection and are not a true daily average temperature

John Day Dam
Avian Zones



JDA Bird Counts: 8/18/24 to 8/24/24

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)	
18-Aug	PHFB	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
18-Aug	SWFB	0	4	41	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	118
18-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Aug	PH2	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
18-Aug	PH3	70	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90
18-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18-Aug	SW2	10	15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	26
18-Aug	SW3	210	2	20	0	0	0	4	7	0	0	0	0	4	2	10	0	0	0	0	0	259
Avg/Survey		163		77		0		14		0		0		4		5		0		0		263
19-Aug	PHFB	0	0	49	0	0	0	7	0	0	0	0	0	0	0	0	0	2	2	0	0	60
19-Aug	SWFB	0	0	0	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
19-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Aug	PH3	30	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
19-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19-Aug	SW3	100	37	0	11	0	0	0	0	0	0	0	0	3	6	0	0	0	0	0	0	157
Avg/Survey		90		90		0		4		0		0		5		0		2		0		190
20-Aug	PHFB	0	0	82	10	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	96
20-Aug	SWFB	0	0	6	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121
20-Aug	PH1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Aug	PH3	8	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	16
20-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-Aug	SW2	14	5	4	4	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	30
20-Aug	SW3	37	14	3	0	0	0	22	0	0	0	0	0	1	0	0	0	0	0	0	0	77
Avg/Survey		43		112		2		11		0		0		2		0		2		0		171
21-Aug	PHFB	0	0	1	58	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	62
21-Aug	SWFB	0	0	122	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	185
21-Aug	PH1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-Aug	PH3	24	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	31
21-Aug	SW1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21-Aug	SW2	6	13	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
21-Aug	SW3	19	15	0	4	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	43
Avg/Survey		43		126		0		3		0		0		1		0		2		0		173

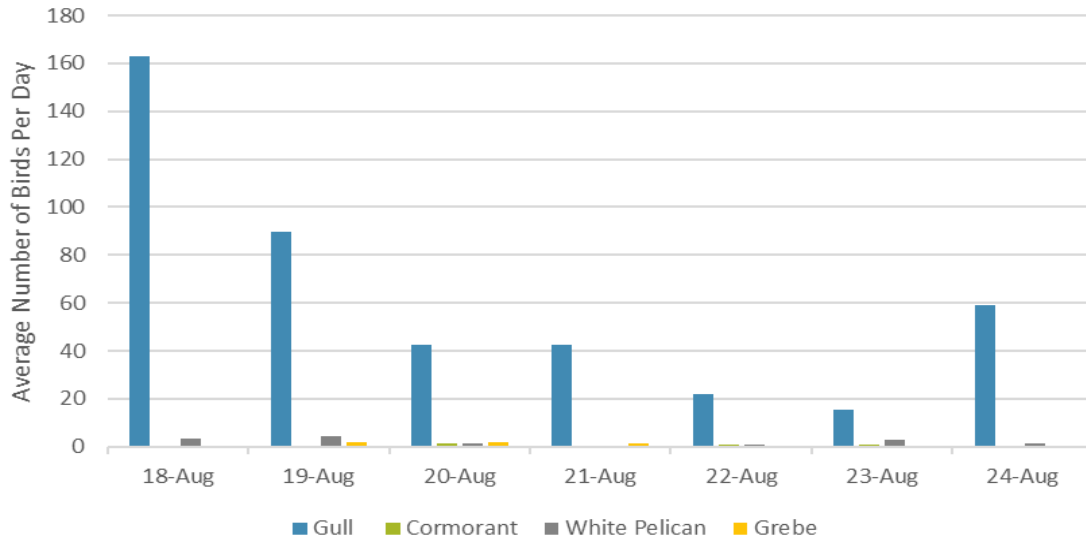
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Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
22-Aug	PHFB	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
22-Aug	SWFB	0	0	110	153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	263
22-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Aug	PH3	9	6	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	17
22-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-Aug	SW2	12	6	0	3	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	24
22-Aug	SW3	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Avg/Survey		22		136		1		1		0		0		1		0		0		0		160
23-Aug	PHFB	0	0	2	77	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	81
23-Aug	SWFB	0	0	139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	139
23-Aug	PH1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Aug	SW2	29	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	30
23-Aug	SW3	0	2	4	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	11
Avg/Survey		16		111		1		1		0		0		3		0		0		0		132
24-Aug	PHFB	0	0	0	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
24-Aug	SWFB	0	0	52	50	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	104
24-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Aug	PH2	57	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
24-Aug	PH3	51	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	57
24-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Aug	SW3	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Avg/Survey		59		72		1		1		0		0		2		2		0		0		135

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	868	1445	8	67	0	0	31	13	11	0	2443										
Avg/Survey	62	103	1	5	0	0	2	1	1	0	175										

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

