

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 7/13/2024

Inspection Period: 7/7/2024 thru 7/13/2024



**US Army Corps
of Engineers**
Portland District

JD/WC Project-Fisheries
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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: 13			Temperature:	68.8 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	Switched to "Salmon Mode" on 7/15/24 (water depth over weirs switched from 1.3' ± 0.1' to 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	Switched to "Salmon Mode" on 7/15/24 (water depth over weirs switched from 1.3' ± 0.1' to 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	<i>(2 FPS is optimal)</i>		
N. Entrance PH (Bay 19) Differential	0	1.0' - 2.0'	Avg. (Ft.)	1.4			
Entrance Weir NE1	0	Depth (≥ 8')	Avg. (Ft.)	8.8			
Entrance Weir NE2	0	Depth (≥ 8')	Avg. (Ft.)	8.8			
JUVENILE PASSAGE							
Forebay/Bypass Conduit Differential	0	4.0' - 5.0'	Avg. (Ft.)	4.6			
Submersible Traveling Screens	0	Per FPP	next inspection 07/22-07/25				
Turbine Trashrack Drawdown	0	<1.5'					
Vert. Barrier Screen Drawdown	0	<1.2'					
Spill Volume	0	Per FPP	Avg. (kcfs)	53.3	Avg. (%)	34.9	
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.

From June 16 - September 15 condition monitoring will occur 3-days/week (Monday, Wednesday, Friday).

High water temperature protocols go into effect when water temperatures $\geq 70^{\circ}\text{F}$ (Monday and Thursday sampling) and returns to normal sampling when daily $< 69.5^{\circ}\text{F}$.

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).

Switched to "Salmon Mode" on 7/15/24

Project Operations:

Summer spill started 6/16/24 ([Late Summer Spill begins: 8/1/24], [Spillbay 2 adult attraction begins: 8/1/24]).

Current outages: MU2: (ETR: 9/19/24), MU3 (ETR: 8/1/24), MU7 (ETR: 10/1/25), MU10 (ETR: 1/16/25), MU13 (ETR: 8/1/24), 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: 116.1

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 (occured 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.

Calibration: All gauges within the 0.3' criteria.

Bird Data:

Increased pelican foraging (~141/inspection from 132), no change in gull foraging (~3/inspection), slight decrease in grebe foraging (~2/inspection from 3), and no foraging cormorants.

There are ~300 pelicans hanging around Preacher's Island.

10 of 125 avian lines are down

Lethal take season total @ JDA: 25-California Gulls, 1 Cormorant

Research:

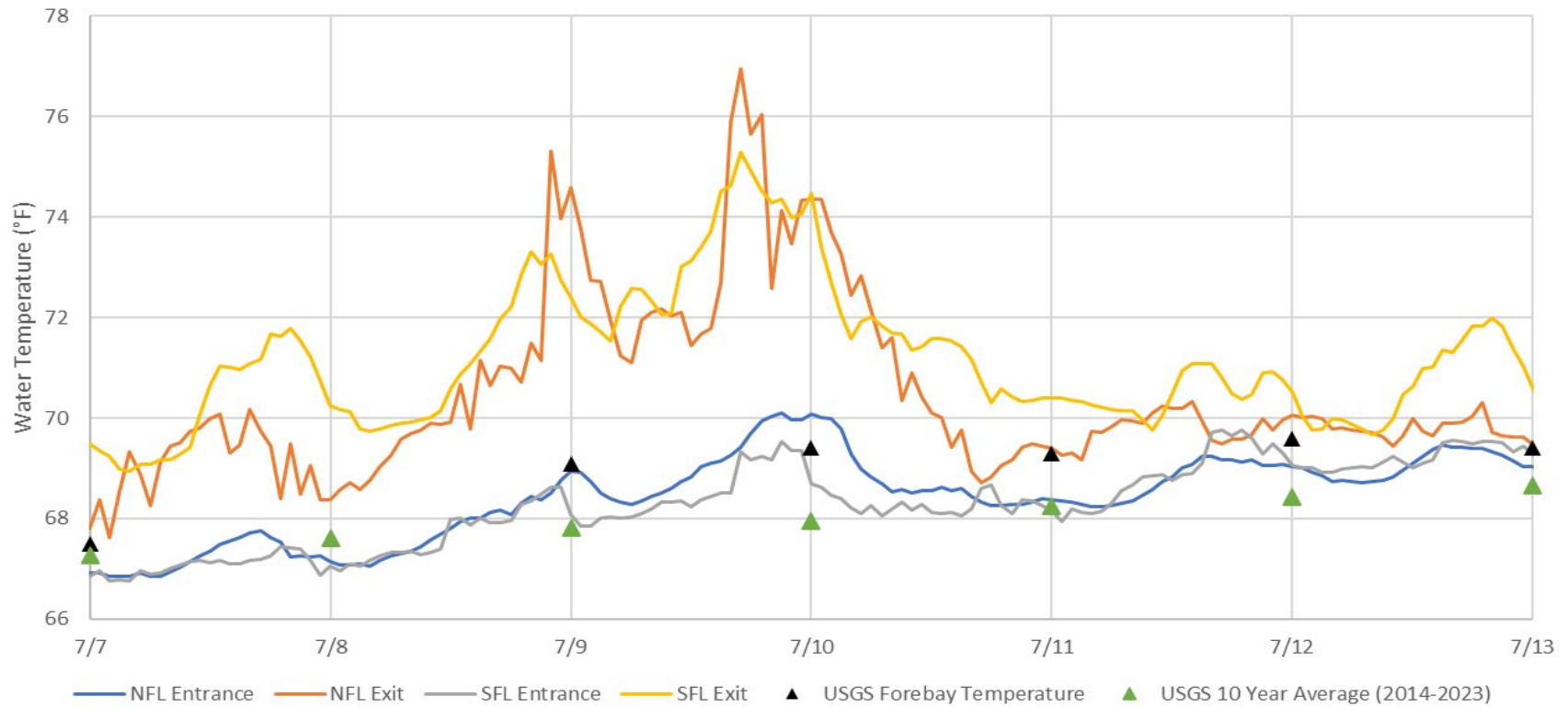
Four Peaks started ladder counts on 4/1/24 (ends 10/31/24).

PNNL juvenile lamprey passage behavior and survival study is ongoing.

USDA started boat hazing on 04/18/24 (ends 7/31/24)

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

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)
7/8/2024	Unit 4	1.99	55,0,60	160.3
7/8/2024	Unit 12	1.98	55,0,60	160.3
7/10/2024	Unit 4	1.95	55,0,60	160.4
7/10/2024	Unit 12	1.93	55,0,60	160.4
7/12/2024	Unit 4	2.02	55,0,60	159.4
7/12/2024	Unit 12	2.02	55,0,60	159.4

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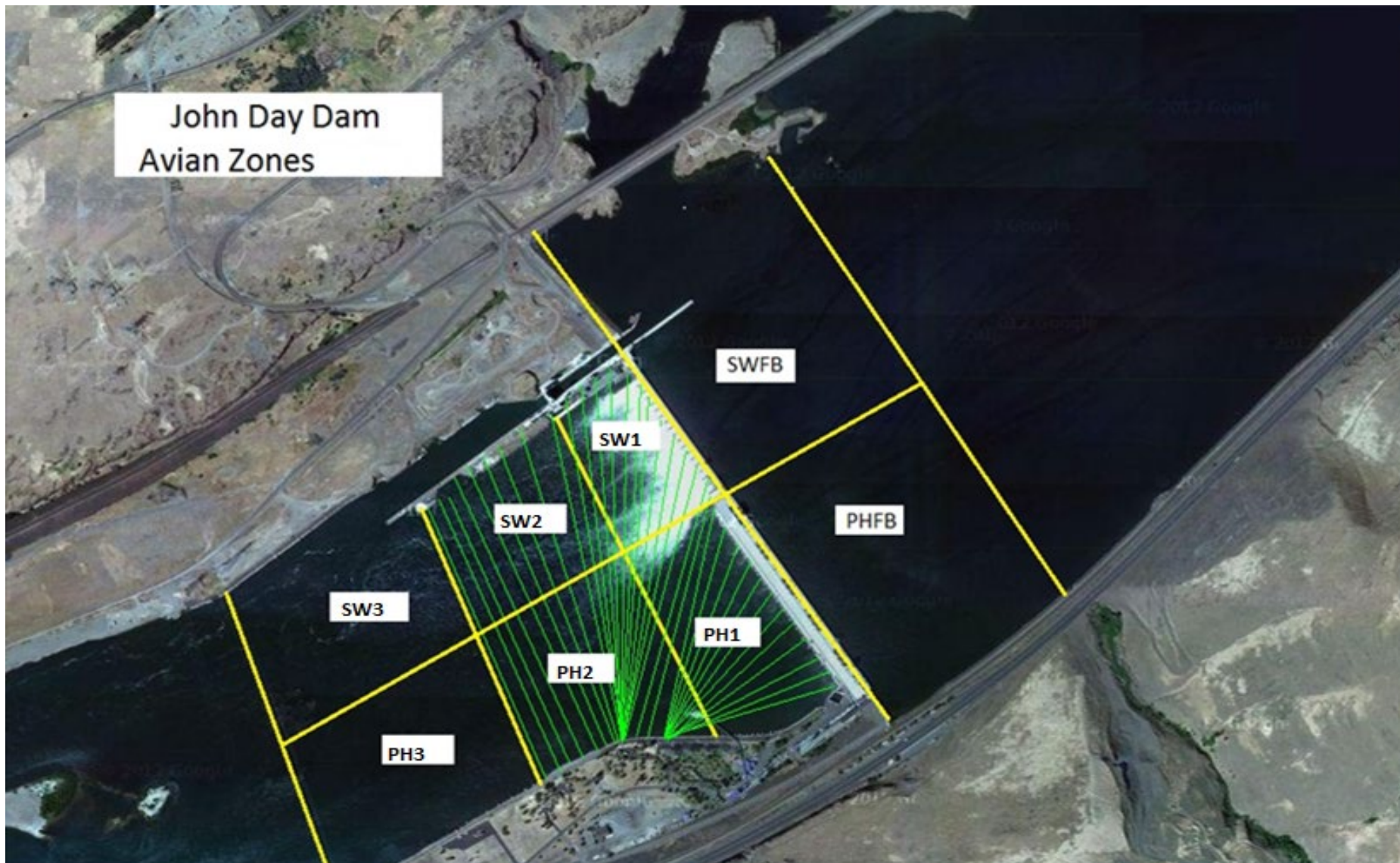
JOHN DAY WEEKLY AVERAGES

	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	1.1	8.9	8.8	1.3	1.4	4.4	46.1	35.7	16
Sunday	8.1	1.1	9.1	9.1	1.4	1.5	4.7	51.2	35.0	19
Monday	8.2	1.0	8.8	8.7	1.4	1.5	4.5	51.0	35.5	19
Monday	8.2	1.3	9.4	9.4	1.6	1.4	4.6	63.2	34.0	19
Tuesday	8.2	1.0	8.3	8.2	1.5	1.7	4.5	56.5	35.4	19
Tuesday	8.2	1.0	8.6	8.6	1.5	1.6	4.7	63.2	34.9	19
Wednesday	8.1	1.1	8.4	8.4	1.4	1.6	4.6	56.0	35.7	19
Wednesday	9.0	1.1	9.2	9.1	1.5	1.6	4.5	67.0	32.8	19
Thursday	8.2	1.1	8.7	8.6	1.2	1.4	4.6	49.0	35.3	18
Thursday	All-Hands Project Picnic in the Afternoon									
Friday	8.1	1.2	8.2	8.0	1.6	1.7	4.6	39.5	36.1	14
Friday	8.3	1.0	9.0	8.9	1.0	1.5	4.7	59.7	35.6	17
Saturday	8.1	1.1	8.5	8.4	1.5	1.6	4.7	35.2	35.9	11
Saturday	8.0	1.0	9.9	9.9	1.1	1.5	4.6	55.9	32.4	17
AVG:	8.2	1.1	8.8	8.8	1.4	1.5	4.6	53.3	34.9	17.4

	*River Temp (°F)	Secchi (Ft)	Notes
Sunday	67.5	6.0	
Monday	67.6	6.0	
Tuesday	69.1	6.0	
Wednesday	69.4	6.0	
Thursday	69.3	6.0	
Friday	69.6	6.0	
Saturday	69.4	6.0	
AVG	68.8	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: 7/7/24 to 7/13/24

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)	
7-Jul	PHFB	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	5
7-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	44	47	0	0	0	0	0	0	91
7-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	30
7-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	10	3	20	0	0	0	0	0	33
7-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	30	26	0	0	0	0	0	0	56
7-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	30	20	0	0	0	0	0	0	50
7-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	50	25	0	0	0	0	0	0	75
Avg/Survey		1		0		0		0		0		0		158		10		2		0		170
8-Jul	PHFB	0	7	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	18
8-Jul	SWFB	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	4
8-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	43	30	0	0	0	0	0	0	73
8-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	5	15	0	0	0	0	0	0	20
8-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	15	20	0	0	0	0	0	0	35
8-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	28	67	0	0	0	0	0	0	95
8-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	15	20	0	0	0	0	0	0	35
8-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	30
Avg/Survey		4		5		0		1		0		0		144		1		1		0		155
9-Jul	PHFB	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	18
9-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	10	17	0	0	0	0	0	0	27
9-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
9-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	15
9-Jul	SW1	1	0	0	0	0	0	0	0	0	0	0	0	10	20	0	0	0	0	0	0	31
9-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	30
9-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	21
Avg/Survey		1		6		0		0		0		0		63		0		3		0		72
10-Jul	PHFB	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	40
10-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	14	5	0	0	0	0	0	0	19
10-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	12	25	0	0	0	0	0	0	37
10-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	26	15	0	0	0	0	0	0	41
10-Jul	SW1	2	2	0	0	0	0	0	0	0	0	0	0	3	10	0	0	0	0	0	0	17
10-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	10	3	0	0	0	0	0	0	13
10-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	28	12	0	0	0	0	0	0	40
Avg/Survey		2		17		0		0		0		0		82		0		3		0		104

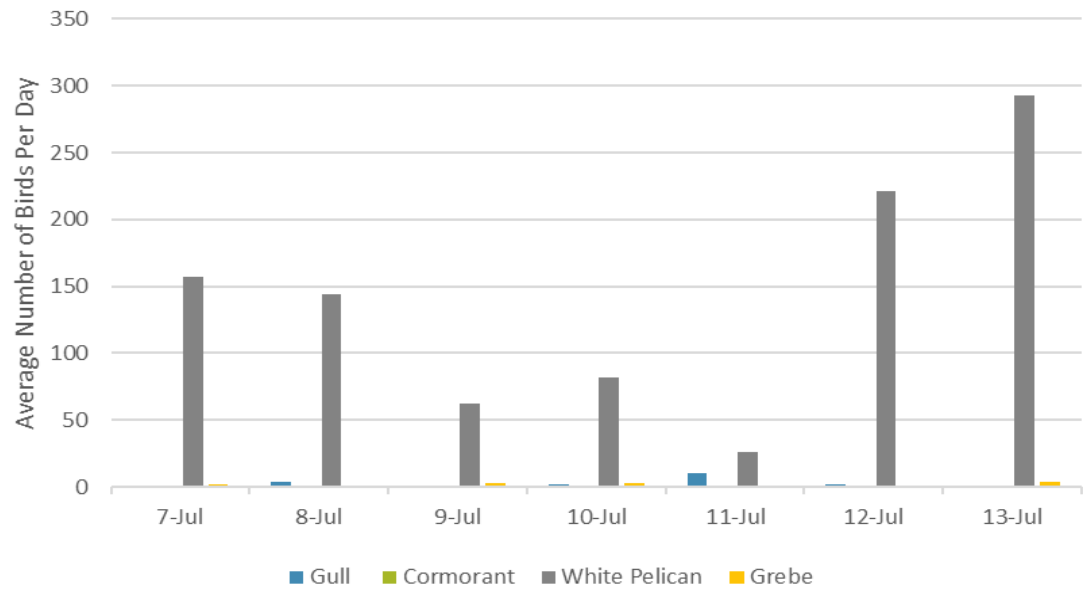
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Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total	
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)		
11-Jul	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
11-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Jul	PH1	10	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	15	
11-Jul	PH2	10	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	15	
11-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	12	
11-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	30	
Avg/Survey		10		0		0		0		0		0		26		0		1		0		37	
12-Jul	PHFB	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	
12-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	20	12	0	0	0	0	0	0	32	
12-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	48	12	0	0	0	0	0	0	60	
12-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	25	55	0	0	0	0	0	0	80	
12-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	57	10	0	0	0	0	0	0	67	
12-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	83	30	0	0	0	0	0	0	113	
12-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	32	57	80	10	0	0	0	0	179	
Avg/Survey		2		0		0		0		0		0		221		45		0		0		268	
13-Jul	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	
13-Jul	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	13	7	0	0	0	0	0	0	20	
13-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	81	26	0	0	0	0	0	0	107	
13-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	87	101	0	0	0	0	0	0	188	
13-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	101	169	110	0	0	0	0	0	380	
Avg/Survey		0		0		0		0		0		0		293		55		4		0		351	

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	37	55	0	2	0	0	0	0	1970	222	25	0	2311								
Avg/Survey	3	4	0	0	0	0	0	141	16	2	0	165									

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

