

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 9/17/2022

Inspection Period: 9/11/2022 thru 9/17/2022



**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:	70.6 F
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.)	1.4			
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.)	8.4			
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.)	8.8			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.0			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect					
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.2', wkly					
Spill volume	0	per FPP	Avg (kcfs)	1.6	Avg %	1.5	
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 concluded the 2022 sampling season on September 15.

Adult Ladder Operations:

Both ladders are operating within criteria.

Project Operations:

Current outages: MU4, MU6, MU7, MU8, MU10, MU11, MU13-MU16 (Line Outage). TSWs were removed on 8/31. From August 15 through November 30, adult fish attraction flow will be provided by spilling through Bay 2 open one stop (approximately 1.6 kcfs) during daylight hours.

Maintenance:

NFL HVAC unit replaced and returned to service on 6 July - repairs did not fully fix the HVAC system and the repairs are currently being investigated

Calibration:

All gauges within the 0.3' criteria.

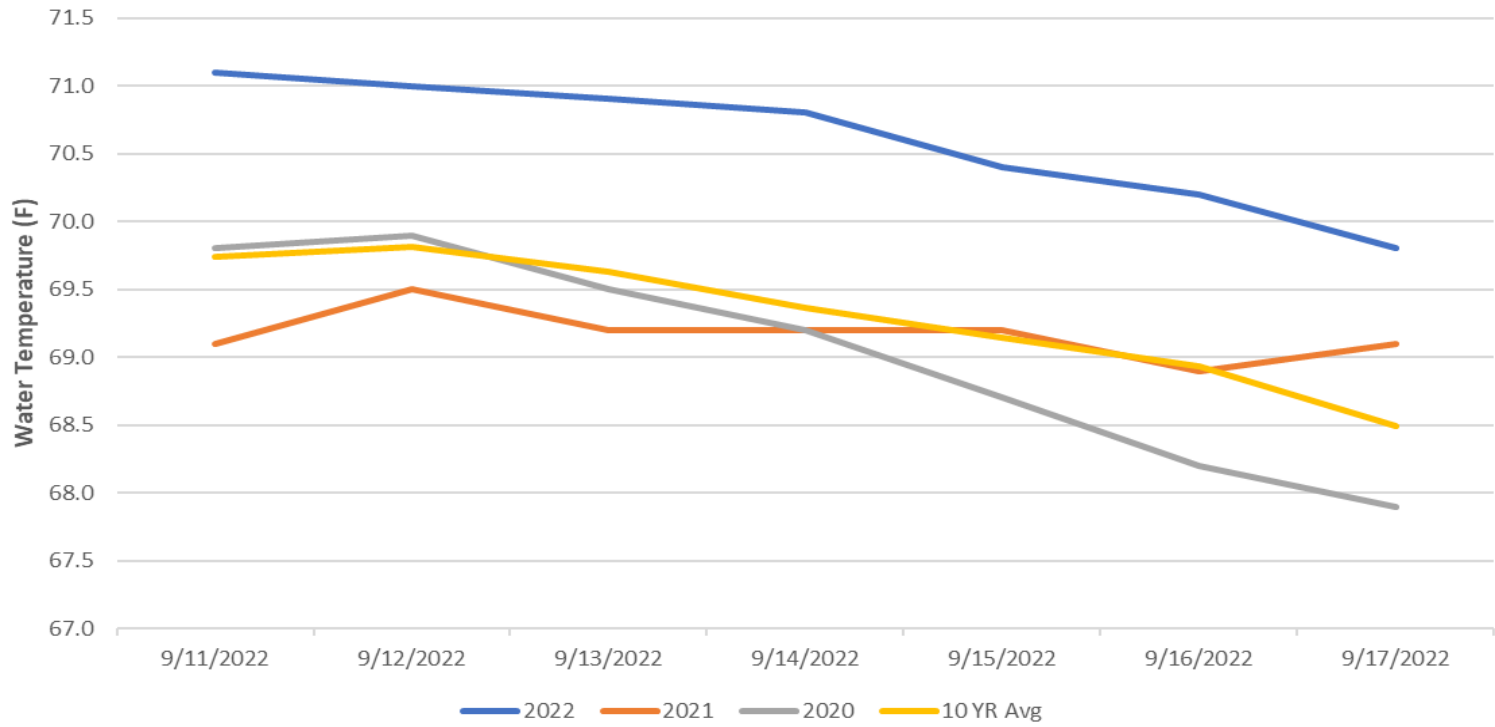
Bird Data:

Gull and Cormorant numbers are increasing. Grebe and Pelican numbers have decreased.
7 of 125 avian lines down.

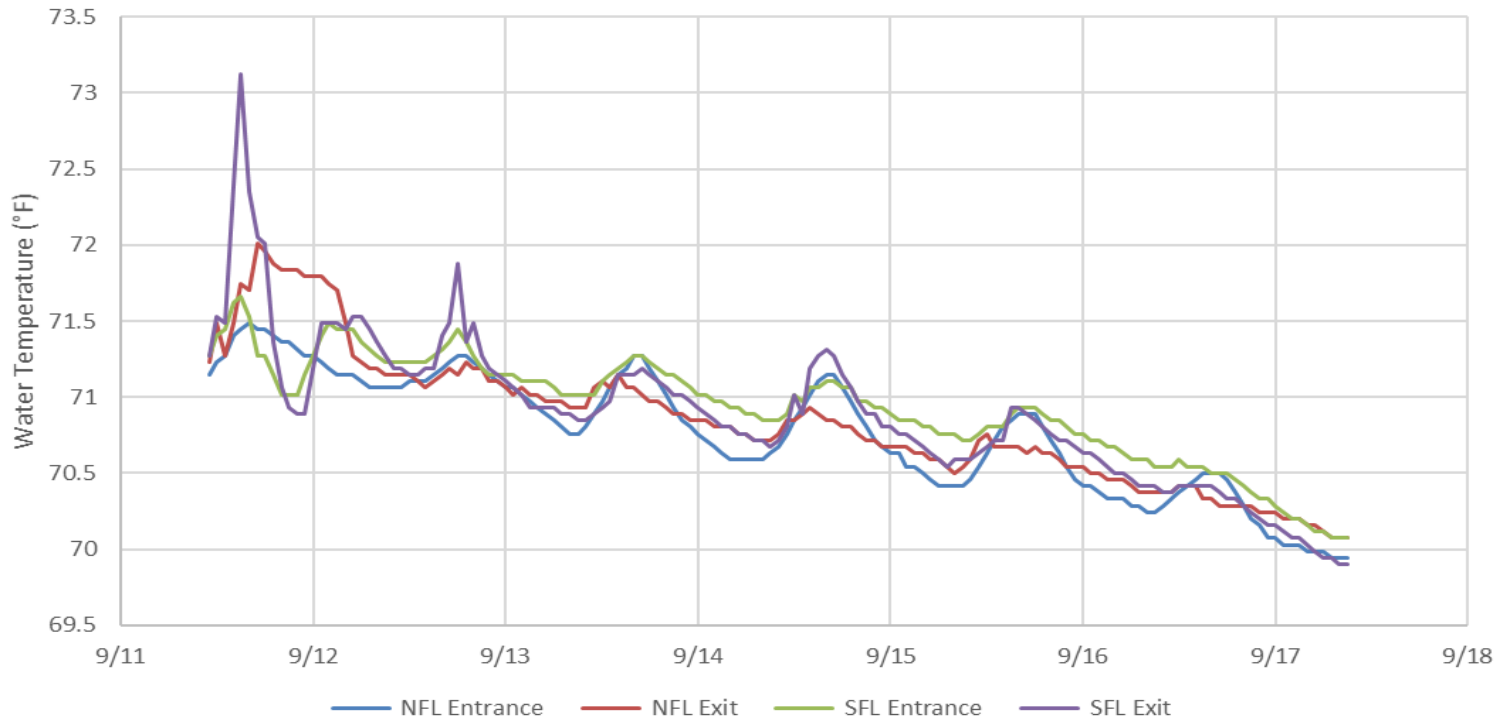
Research:

Adult fish counting started April 1.
USGS temperature probes were removed from the forebay on 9/14.

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)
9/12/2022	Unit 4	2.51	0,68,68	160.0
9/12/2022	Unit 12	2.59	0,68,68	160.0
9/14/2022	Unit 4	2.56	0,68,68	159.7
9/14/2022	Unit 12	2.54	0,68,68	159.7
9/16/2022	Unit 4	2.50	0,68,68	159.5
9/16/2022	Unit 12	2.61	0,68,68	159.5

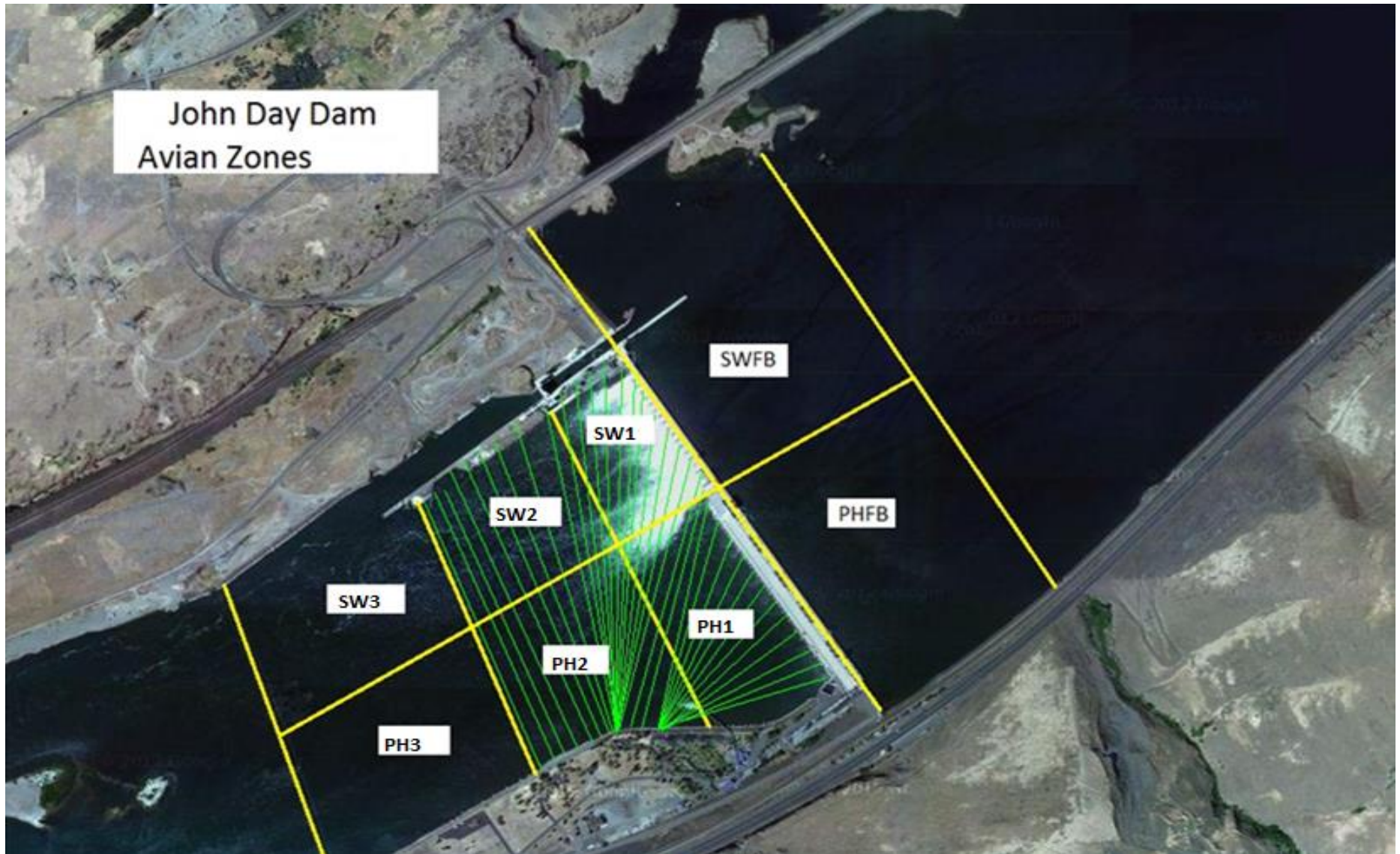
Average Weekly Velocity (ft/sec)	2.55
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JOHN DAY WEEKLY AVERAGES

	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	8.4	1.4	8.9	8.7	1.8	1.5	4.7	1.6	1.7	1
Sunday	9.1	1.2	9.6	9.4	1.7	1.4	4.6	1.5	1.3	1
Monday	8.5	1.2	9.3	9.1	1.6	1.5	4.5	1.5	1.6	1
Monday	9.0	1.4	9.5	9.3	1.6	1.5	4.6	1.6	1.4	1
Tuesday	8.9	1.2	9.8	9.6	1.4	1.3	4.6	1.6	1.0	1
Tuesday	9.0	1.1	9.3	9.6	1.4	1.4	4.6	1.5	1.0	1
Wednesday	8.2	1.4	8.9	8.9	1.9	1.1	4.7	1.6	1.6	1
Wednesday	8.1	1.4	8.2	8.8	1.5	1.4	4.5	1.5	1.7	1
Thursday	8.0	1.4	8.4	9.0	1.5	1.5	4.5	1.6	1.7	1
Thursday	8.0	1.5	8.0	8.6	1.9	1.4	4.3	1.5	1.7	1
Friday	8.2	1.3	8.2	8.8	1.8	1.4	4.6	1.6	1.8	1
Friday	8.5	1.2	8.3	8.9	1.9	1.4	4.5	1.5	1.6	1
Saturday	8.2	1.5	8.3	8.9	1.8	1.4	4.6	1.6	1.6	1
Saturday	8.1	1.6	8.3	8.9	1.7	1.4	4.7	1.6	1.7	1
AVG:	8.4	1.3	8.8	9.0	1.7	1.4	4.6	1.6	1.5	1.0

	Temp (F)	Secchi (Ft)	Average # of Pelicans on Island Per Day
Sunday	71.1	6.0	
Monday	71.0	6.0	6
Tuesday	70.9	6.0	2
Wednesday	70.8	6.0	
Thursday	70.4	6.0	4
Friday	70.2	6.0	12
Saturday	69.8	6.0	16
AVG	70.6	6.0	8

John Day Dam
Avian Zones



JDA Bird Counts: 9/11/22 to 9/17/22

F(1): Forage AM survey F(2): Forage PM Survey NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

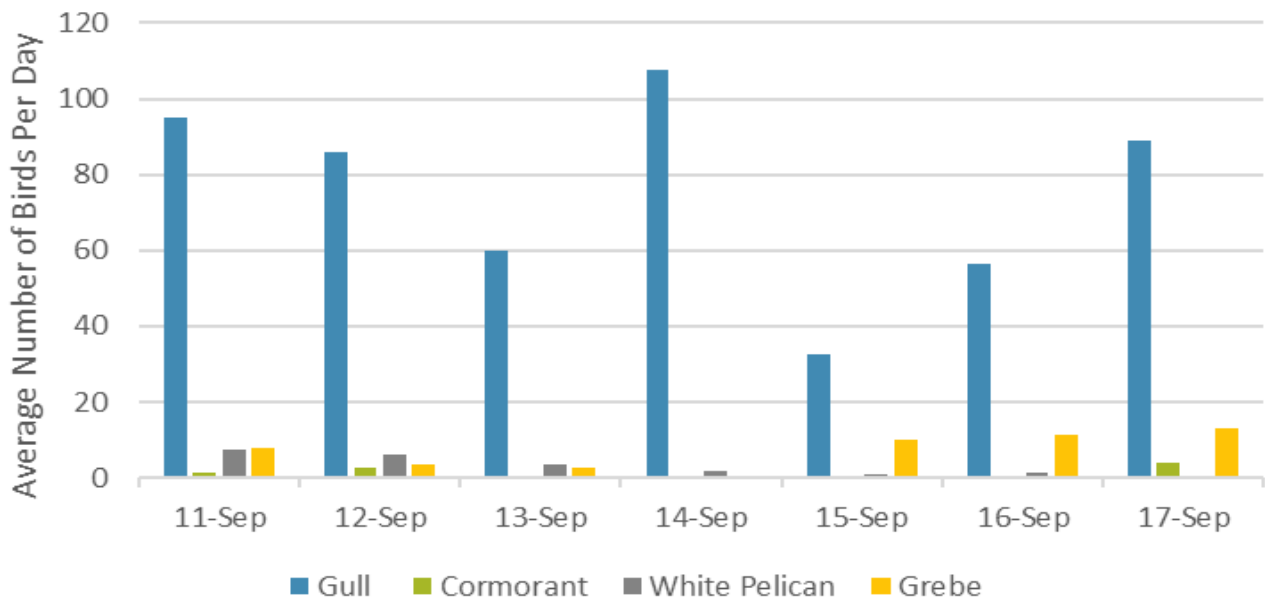
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
11-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	8	0	0	16
11-Sep	SWFB	0	0	168	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	290
11-Sep	PH1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Sep	PH3	157	23	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	0	193
11-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Sep	SW2	0	0	0	2	0	0	39	40	0	0	0	0	0	0	0	0	0	0	0	0	81
11-Sep	SW3	0	10	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	12
Total/Survey		95		146		2		40		0		0		8		0		8		0		298
12-Sep	PHFB	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	7	0	0	0	9
12-Sep	SWFB	0	0	23	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	153
12-Sep	PH1	31	0	0	0	2	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	37
12-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Sep	PH3	115	10	0	0	0	0	0	0	0	0	0	0	6	4	0	0	0	0	0	0	135
12-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-Sep	SW2	0	0	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	33
12-Sep	SW3	0	16	0	0	0	0	5	0	0	0	0	0	1	0	0	0	0	0	0	0	22
Total/Survey		86		77		3		20		0		0		6		0		4		0		195
13-Sep	PHFB	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	5	0	0	18
13-Sep	SWFB	0	0	137	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	312
13-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
13-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Sep	PH3	47	5	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	0	57
13-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13-Sep	SW2	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	18
13-Sep	SW3	54	14	0	0	0	0	11	0	0	0	0	0	0	0	1	2	0	0	0	0	82
Total/Survey		60		156		0		21		0		0		4		2		3		0		245
14-Sep	PHFB	0	0	0	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
14-Sep	SWFB	0	0	110	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140
14-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
14-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Sep	PH3	0	0	10	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	13
14-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Sep	SW2	75	0	0	0	0	0	7	20	0	0	0	0	0	0	0	0	0	0	0	0	102
14-Sep	SW3	140	0	0	0	0	0	0	0	0	0	0	0	3	0	4	0	0	0	0	0	147
Total/Survey		108		79		0		14		0		0		2		4		0		0		206

JDA Bird Counts: 9/15/22 to 9/17/22

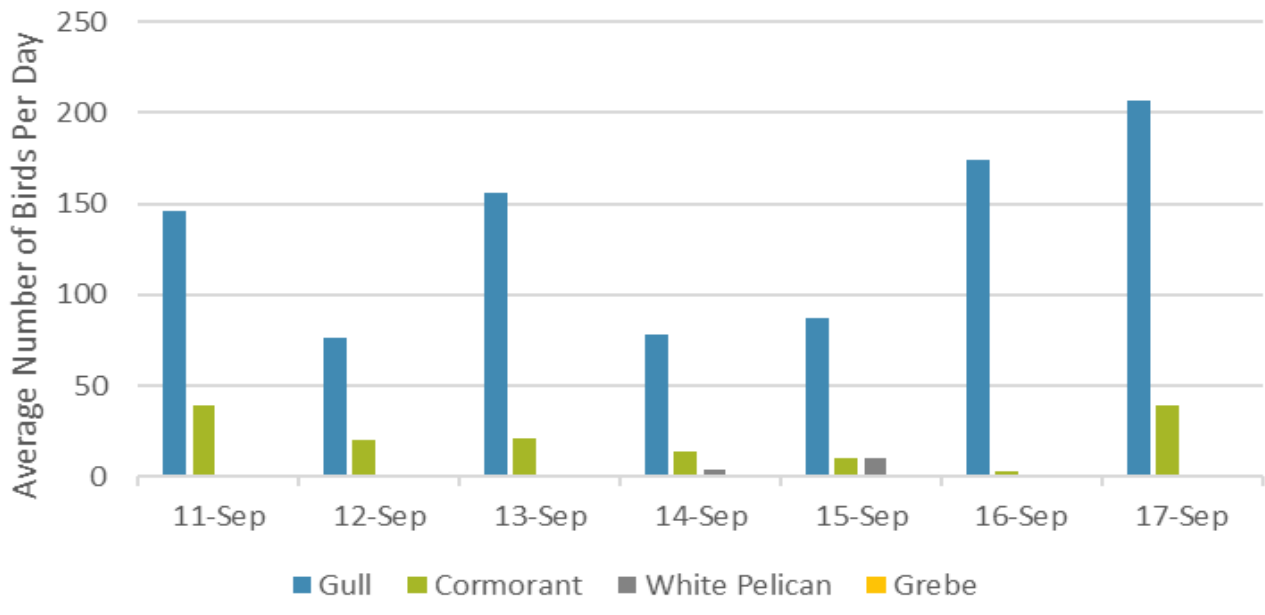
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Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
15-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0	20
15-Sep	SWFB	0	0	60	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	135
15-Sep	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Sep	PH2	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
15-Sep	PH3	25	0	0	21	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	48
15-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-Sep	SW2	0	20	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	22
15-Sep	SW3	10	0	0	18	0	0	20	0	0	0	0	0	0	0	10	8	0	0	0	0	66
Total/Survey		33		87		0		10		0		0		1		10		10		0		151
16-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	15	0	0	23
16-Sep	SWFB	0	0	95	253	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	348
16-Sep	PH1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Sep	PH3	87	22	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	112
16-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16-Sep	SW2	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
16-Sep	SW3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total/Survey		57		174		1		3		0		0		2		0		12		0		247
17-Sep	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	10	0	0	26
17-Sep	SWFB	0	0	236	177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	413
17-Sep	PH1	8	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
17-Sep	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Sep	PH3	137	28	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	167
17-Sep	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17-Sep	SW2	0	0	0	0	0	0	44	35	0	0	0	0	0	0	0	0	0	0	0	0	79
17-Sep	SW3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Total/Survey		89		207		4		40		0		0		0		0		13		0		352
Totals		Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Total
		F		NF		F		NF		F		NF		F		NF		F		NF		
Weekly Total		1053		1849		17		294		0		0		43		30		97		0		1692
Avg/Survey		75		132		1		21		0		0		3		2		7		0		242

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds





A rare sighting at John Day - Brown Pelican spotted on 9/12/22 in PH1 zone (last known brown pelican observation was in November 2016 PH1-zone)