

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 10/9/2021

Inspection Period: 10/3/2021 thru 10/9/2021



**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:	64.9 F
						Secchi:	6.0 Ft.
NORTH FISHWAY							
Exit differential	0	≤ 0.5'					
Exit Control weirs	0	High setting	High setting is normal				
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	Mid setting is normal				
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.)	1.7			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.5			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.77			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.9			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.1			
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	Next Visual Inspection 9/27-9/30				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.5', wkly					
Spill volume	0	per FPP	AVG (kcfs)	1.6	Avg %	1.9	
Spill pattern	0	per FPP					
Turbine Unit Priority	0	per FPP					
Turbine 1% Efficiency	0	per FPP					

Fisheries Related Operations

Smolt Monitoring Operations:

The Smolt Monitoring Program concluded the 2021 sampling season on 9/15.

Adult Ladder Operations:

North and South fish ladders are operating within criteria.

Project Operations:

Current outages: MU7, MU8, MU12, MU13-16, MU14, MU15, MU16. Adult attraction flow for the North fish ladder is provided through spill bay #2 open one stop (1.6kcfs) during daylight hours through November 30th

Maintenance:

JD North Fishway's pump 4 has been pulled for maintenance (RTS to be determined).

Calibration:

All gauges within the 0.3' criteria.

Bird Data:

Steady number of cormorants mainly roosting on PHFB towers, or rocks in SW2 and SW3. Gull numbers increasing with high numbers resting on the wing wall in the SWFB and modest numbers foraging in the tailrace mainly PH3 in the morning. Pelican numbers decreasing, mostly seen resting on Preacher's Island. Slight increase of grebes in PHFB. (see 'Bird Count' tab for details).

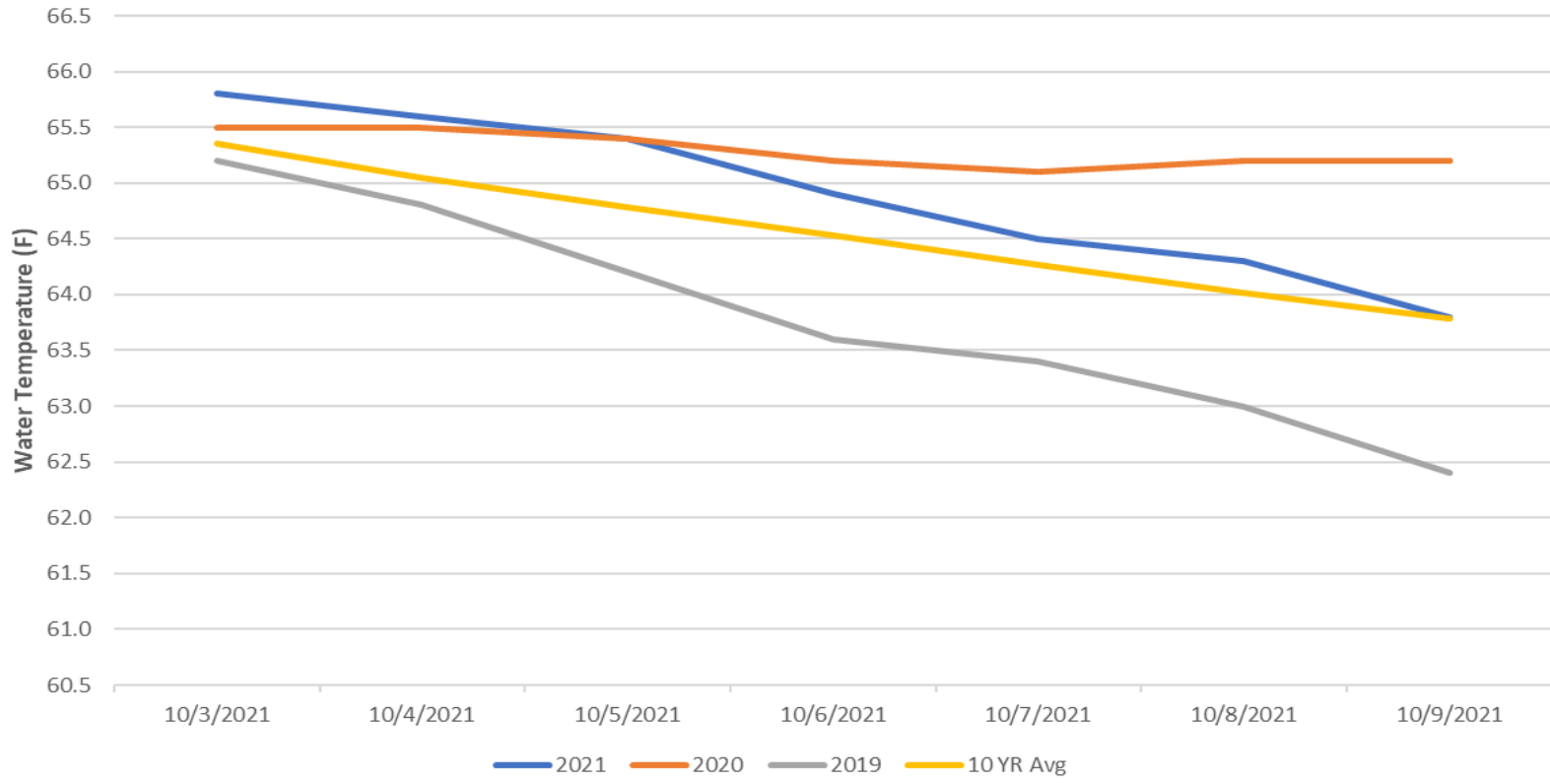
8 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 8 per day

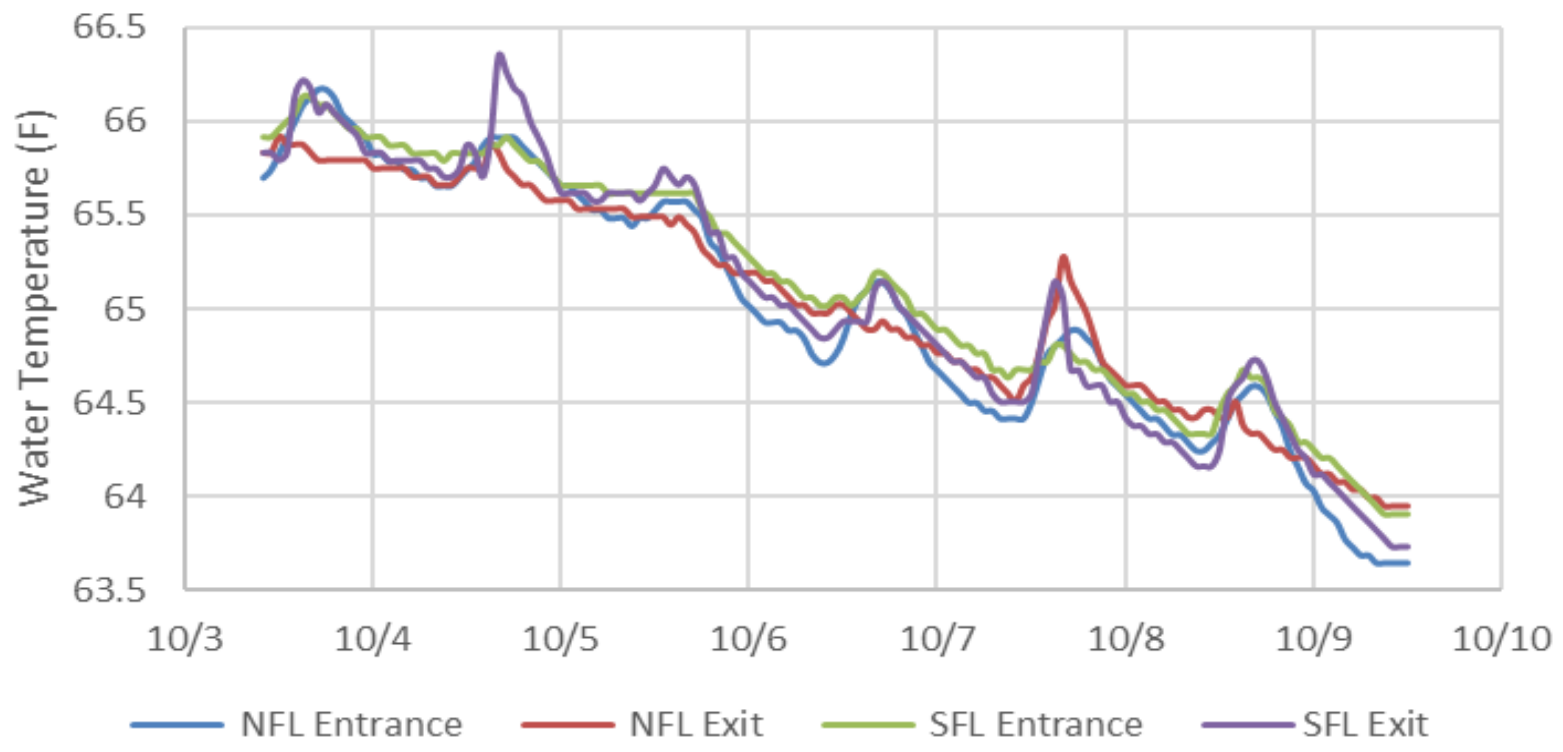
Research:

None

John Day Dam Water Temperatures (F)



JDA Ladder Temperatures (10/3 - 10/9)



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)
10/4/2021	Unit 4	2.62	0,68,68	159.6
10/4/2021	Unit 12	2.83	0,68,68	159.6
10/8/2021	Unit 4	2.80	0,68,68	159.3
10/8/2021	Unit 12	2.94	0,68,68	159.3
10/9/2021	Unit 4	2.69	0,68,68	159.3
10/9/2021	Unit 12	2.76	0,68,68	159.3

Average Weekly Velocity (ft/sec)	2.77
----------------------------------	------

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	9.1	9.0	1.6	8.9	1.4	4.7	2.0	1.6	2.2	1
Sunday	8.8	8.8	1.6	8.8	1.6	4.6	2.0	1.6	2.1	1
Monday	9.0	8.9	1.7	8.6	1.7	4.5	2.0	1.6	1.9	1
Monday	8.8	8.8	1.7	8.4	1.5	4.6	1.8	1.6	2.2	1
Tuesday	9.4	9.3	1.6	8.6	1.6	4.6	1.6	1.6	1.9	1
Tuesday	9.4	9.4	1.5	8.8	1.5	4.6	1.8	1.6	1.7	1
Wednesday	9.1	9.0	1.8	8.0	1.6	4.6	1.9	1.6	1.8	1
Wednesday	9.2	9.2	1.7	8.3	1.6	4.6	1.8	1.6	1.8	1
Thursday	9.3	9.2	1.5	8.5	1.5	4.6	1.9	1.6	1.8	1
Thursday	9.2	9.2	1.6	8.3	1.6	4.6	1.6	1.6	1.9	1
Friday	9.4	9.3	1.6	8.8	1.4	4.6	2.0	1.6	1.7	1
Friday	9.2	9.2	1.8	8.6	1.5	4.6	2.0	1.6	1.4	1
Saturday	8.6	8.5	1.8	8.4	1.4	4.5	2.0	1.6	2.2	1
Saturday	8.8	8.8	1.8	8.6	1.4	4.6	2.0	1.6	2.1	1
AVG:	9.1	9.0	1.7	8.5	1.5	4.6	1.9	1.6	1.9	1.0

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	65.8	6.0	N/A	15
Monday	65.6	6.0	N/A	12
Tuesday	65.4	6.0	N/A	16
Wednesday	64.9	6.0	N/A	0
Thursday	64.5	6.0	N/A	0
Friday	64.3	6.0	N/A	10
Saturday	63.8	6.0	N/A	0
AVG	64.9	6.0	N/A	8

John Day Dam
Avian Zones



JDA Bird Counts: 10/3/21 to 10/9/21

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)	
3-Oct	PHFB	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3-Oct	SWFB	0	0	319	367	0	0	0	0	0	0	0	0	0	0	0	0	53	53	0	0	792
3-Oct	PH1	8	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
3-Oct	PH2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3-Oct	PH3	25	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
3-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Oct	SW2	0	0	0	3	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	17
3-Oct	SW3	0	0	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	33
Avg/Survey		28		345		0		27		0		0		0		0		53		0		452
4-Oct	PHFB	0	0	0	0	1	0	16	0	0	0	0	0	0	0	0	0	52	0	0	0	69
4-Oct	SWFB	0	0	241	357	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	598
4-Oct	PH1	35	32	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
4-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Oct	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Oct	SW3	0	0	0	0	0	0	27	24	0	0	0	0	0	0	1	0	0	0	0	0	52
Avg/Survey		34		299		2		34		0		0		1		1		26		0		395
5-Oct	PHFB	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
5-Oct	SWFB	0	0	93	138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	231
5-Oct	PH1	15	15	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
5-Oct	PH2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
5-Oct	PH3	35	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
5-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Oct	SW3	4	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	7
Avg/Survey		48		116		2		9		0		0		0		1		0		0		175
6-Oct	PHFB	0	0	0	65	0	0	23	0	0	0	0	0	0	0	0	0	49	46	0	0	183
6-Oct	SWFB	0	0	321	223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	544
6-Oct	PH1	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
6-Oct	PH2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
6-Oct	PH3	18	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
6-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-Oct	SW3	0	0	0	0	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Avg/Survey		26		305		0		28		0		0		0		0		48		0		405

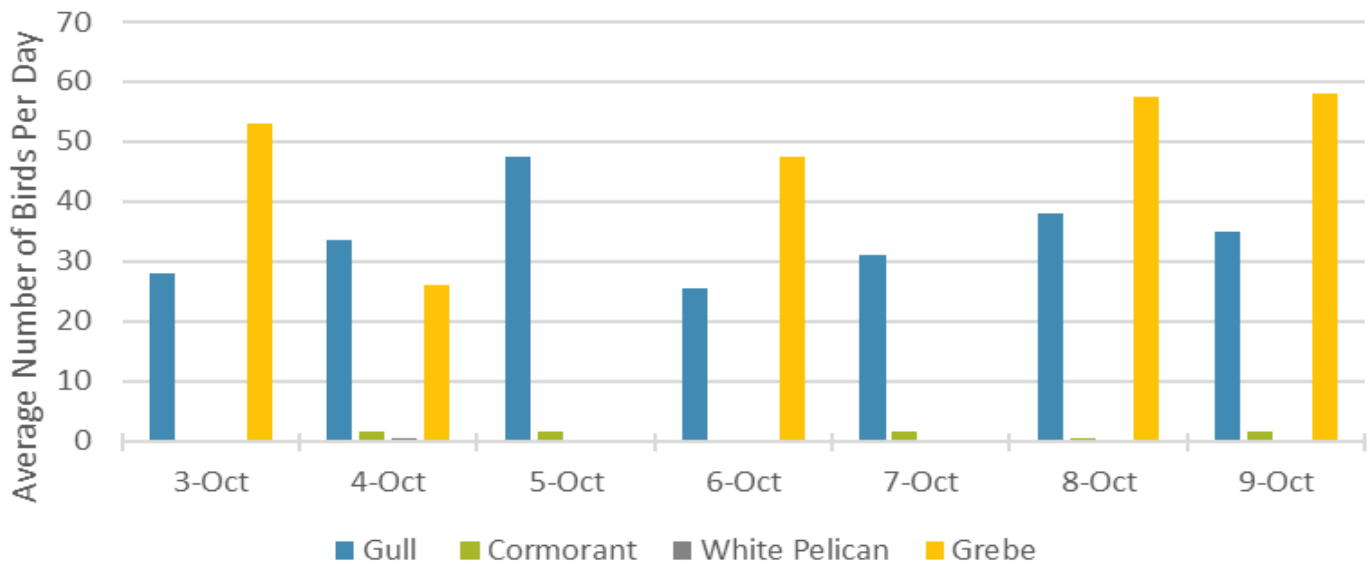
JDA Bird Counts: 10/3/21 to 10/9/21

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-Oct	PHFB	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
7-Oct	SWFB	0	0	302	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	302
7-Oct	PH1	8	15	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
7-Oct	PH2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
7-Oct	PH3	12	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
7-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Oct	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7-Oct	SW3	9	0	0	25	0	0	6	33	0	0	0	0	0	0	0	0	0	0	0	0	73
Avg/Survey		31		164		2		23		0		0		0		0		0		0		219
8-Oct	PHFB	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	58	57	0	0	0	122
8-Oct	SWFB	0	0	378	402	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	780
8-Oct	PH1	2	21	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
8-Oct	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Oct	PH3	32	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48
8-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-Oct	SW2	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	9
8-Oct	SW3	0	5	0	0	0	0	25	24	0	0	0	0	0	0	0	0	0	0	0	0	54
Avg/Survey		38		390		1		33		0		0		0		0		58		0		519
9-Oct	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	55	0	0	0	116
9-Oct	SWFB	0	0	414	366	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	780
9-Oct	PH1	2	35	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
9-Oct	PH2	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
9-Oct	PH3	7	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
9-Oct	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9-Oct	SW2	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
9-Oct	SW3	0	0	0	0	0	0	23	25	0	0	0	0	0	0	0	0	0	0	0	0	48
Avg/Survey		35		390		2		28		0		0		0		0		58		0		512

Totals	Gulls		Cormorant		Caspian tern		White Pelican		Grebe		Total
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	477	4014	13	359	0	0	1	3	484	0	2676
Avg/Survey	34	287	1	26	0	0	0	0	35	0	382

Foraging Piscivorous Birds



Non-Foraging Piscivorous Birds

