

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 6/5/2021

Inspection Period: 5/30/2021 thru 6/5/2021



**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: 59.6 F	Secchi: 5.7 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	1	1.0' - 2.0'	AVG (Ft.)	1.2			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.4			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.52			
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG (Ft.)	1.7			
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.0			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	9.3			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	Next Visual Inspection 6/21-6/24				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.5', wkly					
Spill volume	0	per FPP	AVG (kcfs)	126.6	Avg %	51.3	
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 is currently conducting condition sampling every-other-day.

Adult Ladder Operations:

North and South fish ladders are operating within criteria. Entered shad mode on 6/3/21.

Project Operations:

Current outages: MU5-8 (Line 2 BPA MOD work), MU7, MU8, MU12, MU16. Spring spill started on April 10 with TSW's installed.

Tailwater Average Weekly TDG: 120.1

Maintenance:

JD North Fishway's pump 4 has been pulled for maintenance (RTS to be determined). Spillbay #10 will be operated manually until further notice.

Calibration - All gauges within the 0.3' criteria. Spillbay #3 failed on 6/5/21 at 0503, the spill was distributed to adjacent spillbays and RTS is TBD

Bird Data:

Cormorants have mainly dispersed, did see 2 this week however. Gull numbers increasing, mainly seen foraging below spillway in SW2 and SW3. Pelican numbers increasing on Preacher's Island, with more foraging behavior seen in spillway mainly below the TSW spill. Steady number of Grebes in PHFB. (see 'Bird Graph' tab for details). USDA Hazing started on 04/16/21.

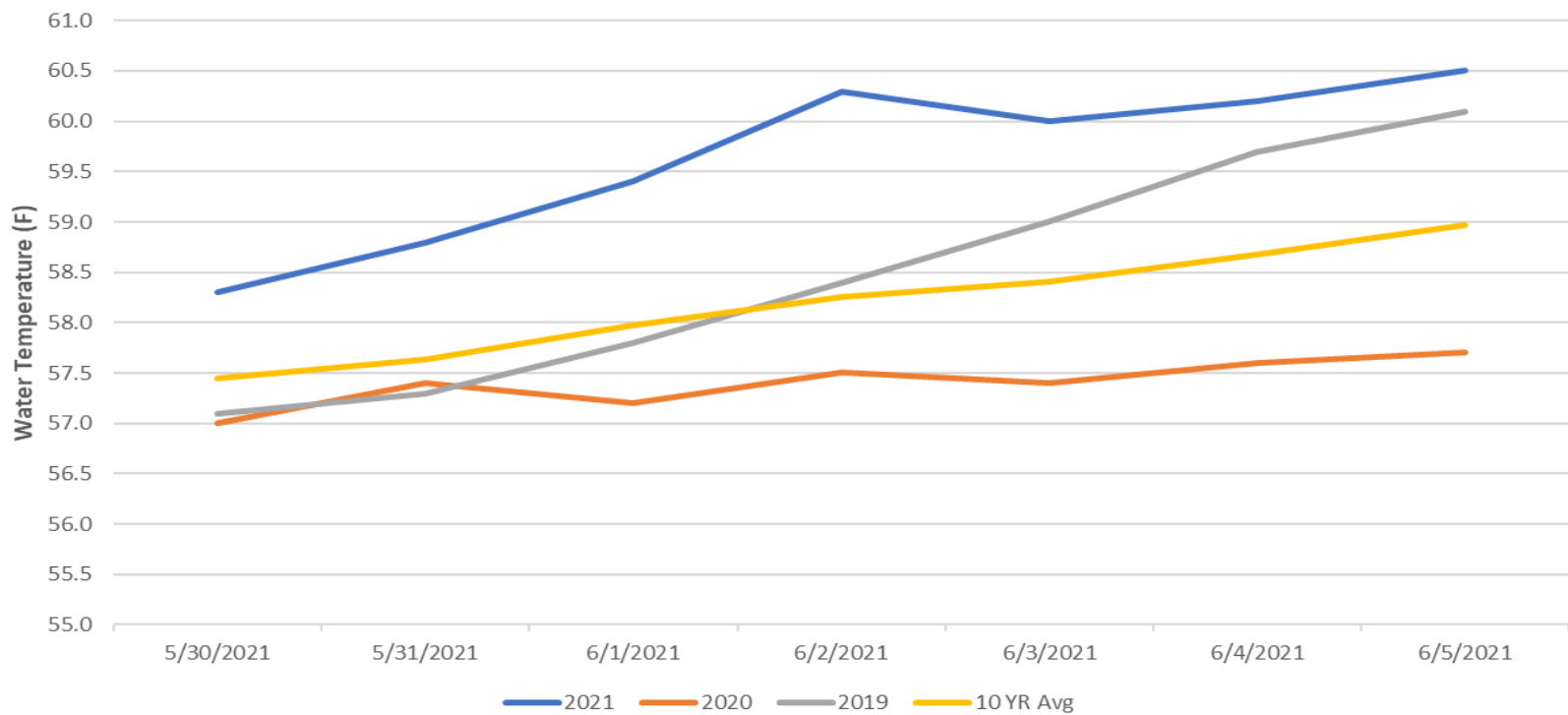
1 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 34 per day

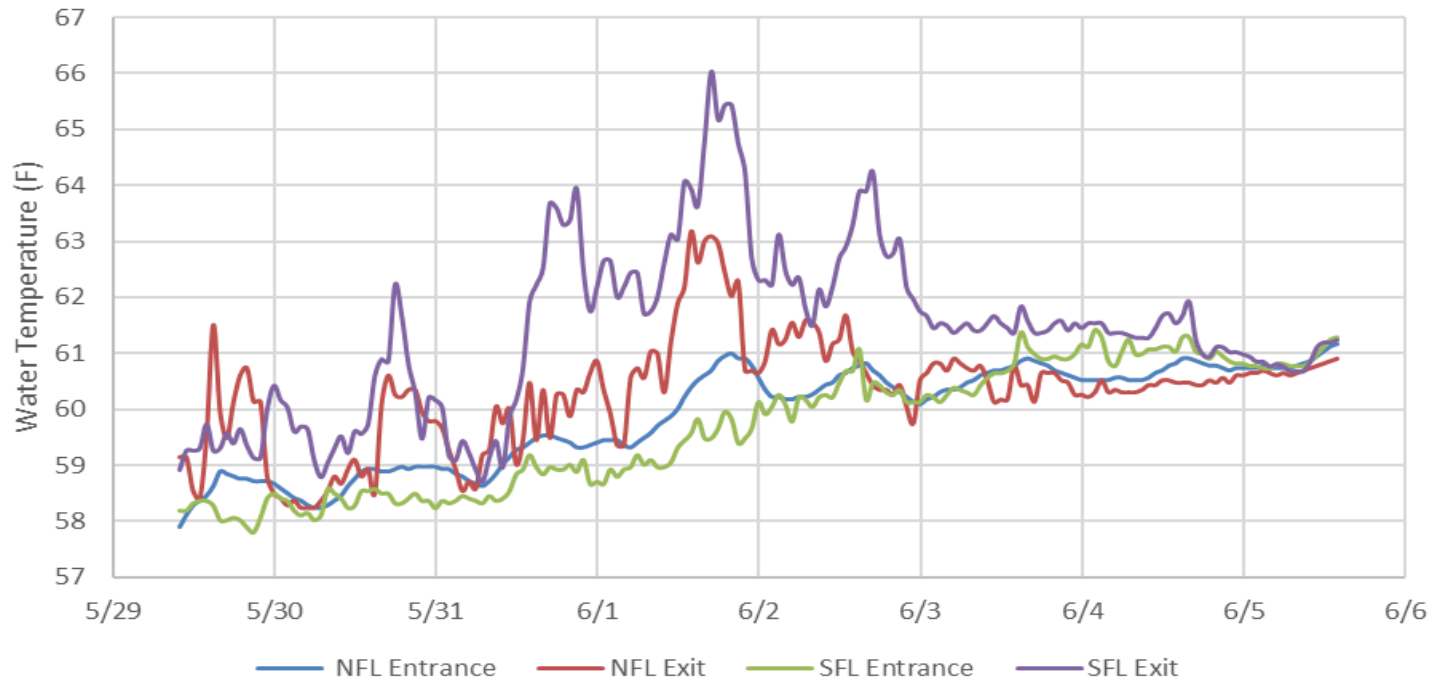
Research:

PSMFC Juvenile lamprey genetic work continues.

John Day Dam Water Temperatures (F)



Water Temperature of JDA Fish Ladders (5/30 - 6/5)



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)
5/31/2021	Unit 4	2.38	0,68,68	160.3
5/31/2021	Unit 12	2.54	0,68,68	160.3
6/3/2021	Unit 4	2.30	68,0,68	161.8
6/3/2021	Unit 12	2.61	68,0,68	161.8
6/5/2021	Unit 4	2.55	0,68,68	162.4
6/5/2021	Unit 12	2.72	0,68,68	162.4

Average Weekly Velocity (ft/sec)	2.52
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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	9.5	1.2	9.8	1.7	4.6	1.9	69.2	31.4	19
Sunday	8.6	8.9	1.3	8.7	1.7	4.6	1.6	167.4	75.9	19
Monday	8.3	8.5	1.5	8.2	1.4	4.5	1.7	162.1	76.0	19
Monday	9.4	9.6	1.0	9.7	1.5	4.7	1.7	72.6	31.7	19
Tuesday	8.4	8.6	1.5	8.5	1.4	4.6	1.8	163.2	76.2	19
Tuesday	9.9	10.1	1.1	10.0	1.0	4.6	1.6	75.0	31.8	19
Wednesday	oos	9.6	0.5	9.3	1.5	4.6	1.2	175.8	75.4	19
Wednesday	9.6	9.4	1.4	9.6	1.4	4.6	1.8	75.0	31.6	19
Thursday	8.0	8.5	1.4	8.5	1.6	4.6	1.7	175.9	72.6	19
Thursday	8.6	8.8	1.3	9.3	1.5	4.6	1.9	76.9	31.8	19
Friday	9.0	9.6	1.2	9.9	1.7	4.5	1.7	176.0	58.1	19
Friday	9.4	10.0	1.1	10.4	1.4	4.7	1.6	112.1	37.3	19
Saturday	8.8	9.4	1.1	10.0	1.5	4.6	1.8	180.1	56.7	18
Saturday	9.0	9.6	1.0	10.2	1.4	4.7	1.7	91.0	32.3	18
AVG:	9.0	9.3	1.2	9.4	1.5	4.6	1.7	126.6	51.3	18.9

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	58.3	6.0	N/A	45
Monday	58.8	6.0	2	35
Tuesday	59.4	5.5	N/A	30
Wednesday	60.3	5.3	3	45
Thursday	60.0	5.0	N/A	30
Friday	60.2	6.0	5	28
Saturday	60.5	6.0	N/A	22
AVG	59.6	5.7	3	34

John Day Dam
Avian Zones



JDA Bird Counts: 5/30/21 to 6/5/21

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				Bald Eagle				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)	F(1)	F(2)	NF(1)	NF(2)	
30-May	PHFB	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	33
30-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	26
30-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4
30-May	PH2	0	1	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	22
30-May	PH3	3	11	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	21
30-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-May	SW2	1	5	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	8
30-May	SW3	0	14	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	16
Avg/Survey		18		4		0		0		0		0		18		0		26		0		0		0		65
31-May	PHFB	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	19	36	0	0	0	0	0	0	56
31-May	SWFB	0	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	18
31-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8
31-May	PH2	1	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	13
31-May	PH3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
31-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31-May	SW2	6	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
31-May	SW3	15	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	22
Avg/Survey		22		4		1		0		0		0		11		0		33		0		0		0		69
1-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
1-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	21	0	0	0	0	0	0	41
1-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	17	3	0	0	0	0	0	0	0	0	0	0	20
1-Jun	SW2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1-Jun	SW3	12	9	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	23
Avg/Survey		12		0		0		0		0		0		11		0		22		0		0		0		44
2-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	5
2-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	0	0	0	0	0	0	40
2-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-Jun	PH3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
2-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	14	10	0	0	0	0	0	0	0	0	0	0	24
2-Jun	SW2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2-Jun	SW3	16	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
Avg/Survey		16		0		0		0		0		0		13		0		23		0		0		0		51

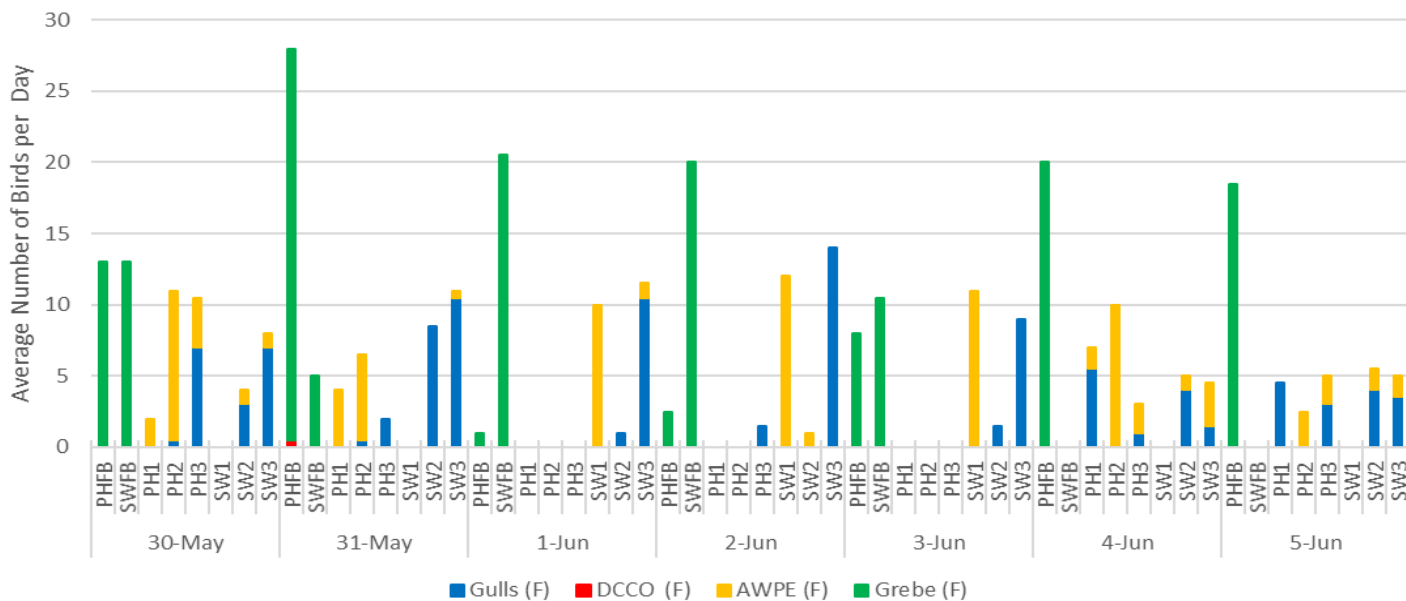
JDA Bird Counts: 5/30/21 to 6/5/21

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

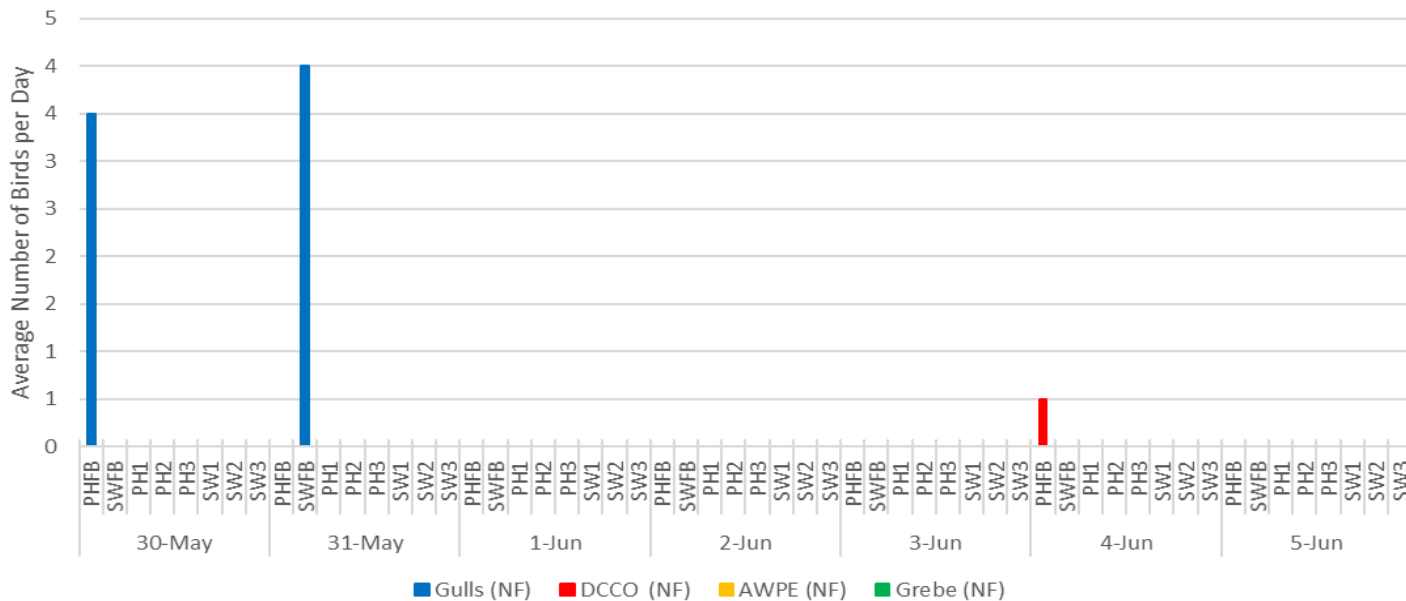
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Bald Eagle				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
3-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	16
3-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	21
3-Jun	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Jun	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	13	9		0	0	0	0	0	0	0	0	0	22
3-Jun	SW2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3-Jun	SW3	10	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Avg/Survey		11		0		0		0		0		0		11		0		19		0		0		0		40
4-Jun	PHFB	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	22	18	0	0	0	0	0	0	0	41
4-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Jun	PH1	3	8	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	14
4-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	20
4-Jun	PH3	0	2	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	6
4-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-Jun	SW2	3	5	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	10
4-Jun	SW3	3	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	9
Avg/Survey		12		0		0		1		0		0		18		0		20		0		0		0		50
5-Jun	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	17	0	0	0	0	0	0	0	37
5-Jun	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Jun	PH1	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
5-Jun	PH2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
5-Jun	PH3	3	3	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	10
5-Jun	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-Jun	SW2	8	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	11
5-Jun	SW3	6	1	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	10
Avg/Survey		15		0		0		0		0		0		8		0		19		0		0		0		41

Totals	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Bald Eagle				Total
	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	207	15	1	1	0	0	0	0	177	0	319	0	0	0	0	0	0	0	0	0	0	0	0	0	360
Avg/Survey	15	1	0	0	0	0	0	0	13	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	51

Foraging Avian Observations



Non-Foraging Avian Observations





Two swans (either Trumpeter or Tundra - too far away to tell) in SWFB on 5/30/21



Pelicans foraging in PH1&2 near TSW spill on 5/31/21