

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 5/22/2021

Inspection Period: 5/16/2021 thru 5/22/2021



**US Army Corps
of Engineers**
Portland District

JD/WC Project-Fisheries
P.O. Box 823
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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: 57.0 F	Secchi: 5.9 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.)	1.6			
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.)	1.3			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.2			
Collection channel velocity	0	1.5 - 4 fps	AVG (Ft.)	2.58			
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.)	9.2			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	Next Visual Inspection 5/24-5/27				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.5', wkly					
Spill volume	0	per FPP	AVG (kcfs)	128.1	Avg %	59.8	
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.

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: 118.6

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.

Bird Data:

Cormorants have dispersed, no sightings this week. Gull numbers increasing, mainly seen foraging below spillway. Pelican numbers steady on Preacher's Island, with more foraging behavior seen in spillway. Steady number of Grebes in PHFB. (see 'Bird Graph' tab for details). USDA Hazing started

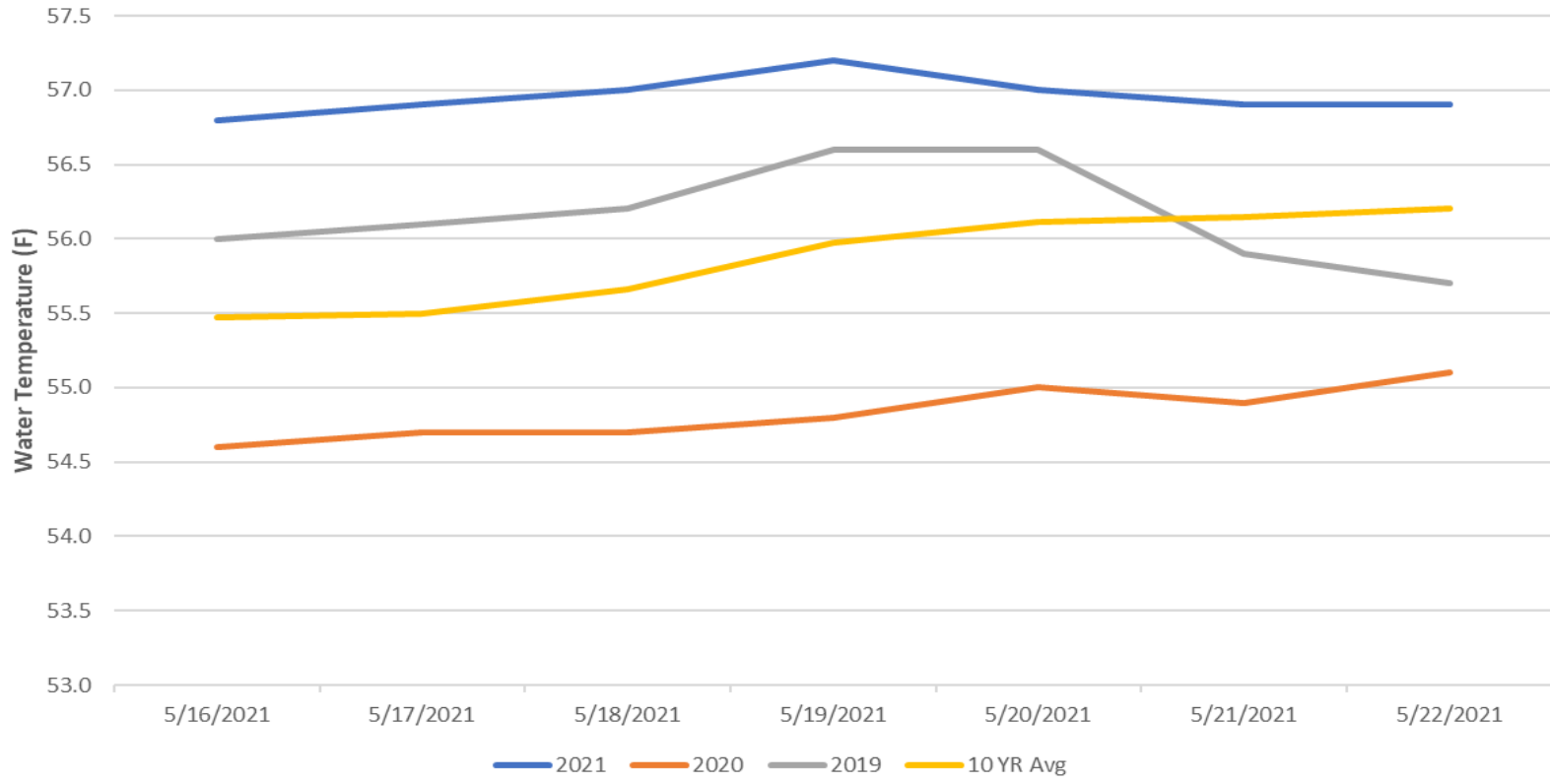
1 of 125 avian lines down, will need to be replaced

Pelicans on Preacher's Island: averaged 23 per day

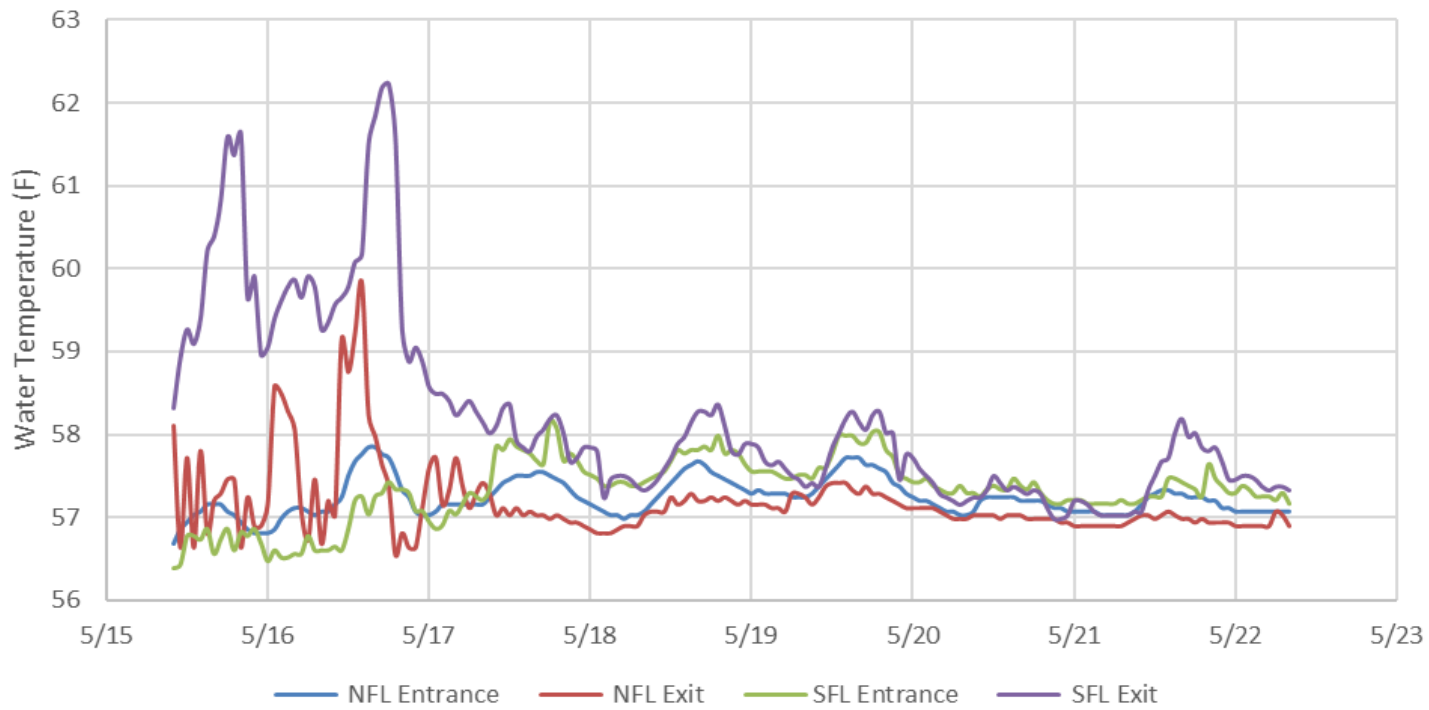
Research:

PSMFC Juvenile lamprey genetic work continues.

John Day Dam Water Temperatures (F)



Water Temperatures of JDA Fish Ladders (5/16 - 5/22)



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)
5/16/2021	Unit 4	2.65	0,68,68	161.3
5/16/2021	Unit 12	2.75	0,68,68	161.3
5/21/2021	Unit 4	2.48	0,68,68	160.5
5/21/2021	Unit 12	2.54	0,68,68	160.5
5/22/2021	Unit 4	2.45	0,68,68	160.5
5/22/2021	Unit 12	2.59	0,68,68	160.5

Average Weekly Velocity (ft/sec)	2.58
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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	8.8	8.9	1.3	8.8	1.7	4.5	1.7	171.2	77.0	19
Sunday	9.4	9.7	1.2	9.9	1.4	4.6	1.8	72.0	32.1	19
Monday	8.6	8.8	1.3	8.7	1.7	4.5	1.8	157.9	74.0	19
Monday	8.7	8.9	1.4	8.8	1.6	4.5	1.9	148.0	74.0	19
Tuesday	8.8	9.0	1.4	8.9	1.4	4.5	1.7	154.0	74.6	19
Tuesday	8.0	8.2	1.4	8.2	1.4	4.5	1.9	153.0	74.4	19
Wednesday	10.0	10.2	1.2	10.2	1.6	4.6	1.7	72.2	31.5	19
Wednesday	9.0	9.2	1.2	10.0	1.7	4.9	1.2	172.1	76.2	19
Thursday	9.8	10.0	1.2	10.0	1.4	4.6	1.7	69.8	31.8	19
Thursday	8.5	8.7	1.4	8.6	1.6	4.5	1.6	167.6	76.0	19
Friday	9.3	9.5	1.1	9.7	1.5	4.6	1.8	68.7	31.9	19
Friday	8.4	8.7	1.2	8.7	1.6	4.6	1.9	161.0	75.6	19
Saturday	9.5	9.7	1.0	9.8	1.7	4.5	1.5	67.2	32.1	19
Saturday	8.5	8.7	1.4	8.5	1.6	4.5	1.5	159.0	75.5	19
AVG:	9.0	9.2	1.3	9.2	1.6	4.6	1.7	128.1	59.8	19.0

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	56.8	6.0	N/A	17
Monday	56.9	6.0	11	35
Tuesday	57.0	6.0	N/A	29
Wednesday	57.2	5.5	0	20
Thursday	57.0	6.0	N/A	19
Friday	56.9	6.0	3	8
Saturday	56.9	6.0	N/A	30
AVG	57.0	5.9	5	23

John Day Dam
Avian Zones



JDA Bird Counts: 5/16/21 to 5/22/21

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)	
16-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	18
16-May	SWFB	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
16-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
16-May	PH2	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
16-May	PH3	1	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
16-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
16-May	SW2	2	6	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	18
16-May	SW3	14	27	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	51
Avg/Survey		42		23		0		0		0		0		12		0		9		0		0		0		85
17-May	PHFB	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
17-May	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
17-May	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
17-May	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
17-May	PH3	5	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
17-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	12
17-May	SW2	22	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
17-May	SW3	98	88	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	192
Avg/Survey		121		0		0		0		0		0		9		0		0		0		0		0		130
18-May	PHFB	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	32
18-May	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
18-May	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
18-May	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
18-May	PH3	5	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
18-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0	7
18-May	SW2	16	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
18-May	SW3	104	106	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	211
Avg/Survey		131		9		0		0		0		0		4		0		8		0		0		0		151
19-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	27	0	0	0	0	0	0	43
19-May	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
19-May	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
19-May	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
19-May	PH3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
19-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	8
19-May	SW2	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
19-May	SW3	92	25	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	127
Avg/Survey		66		0		0		0		0		0		9		0		22		0		0		0		97

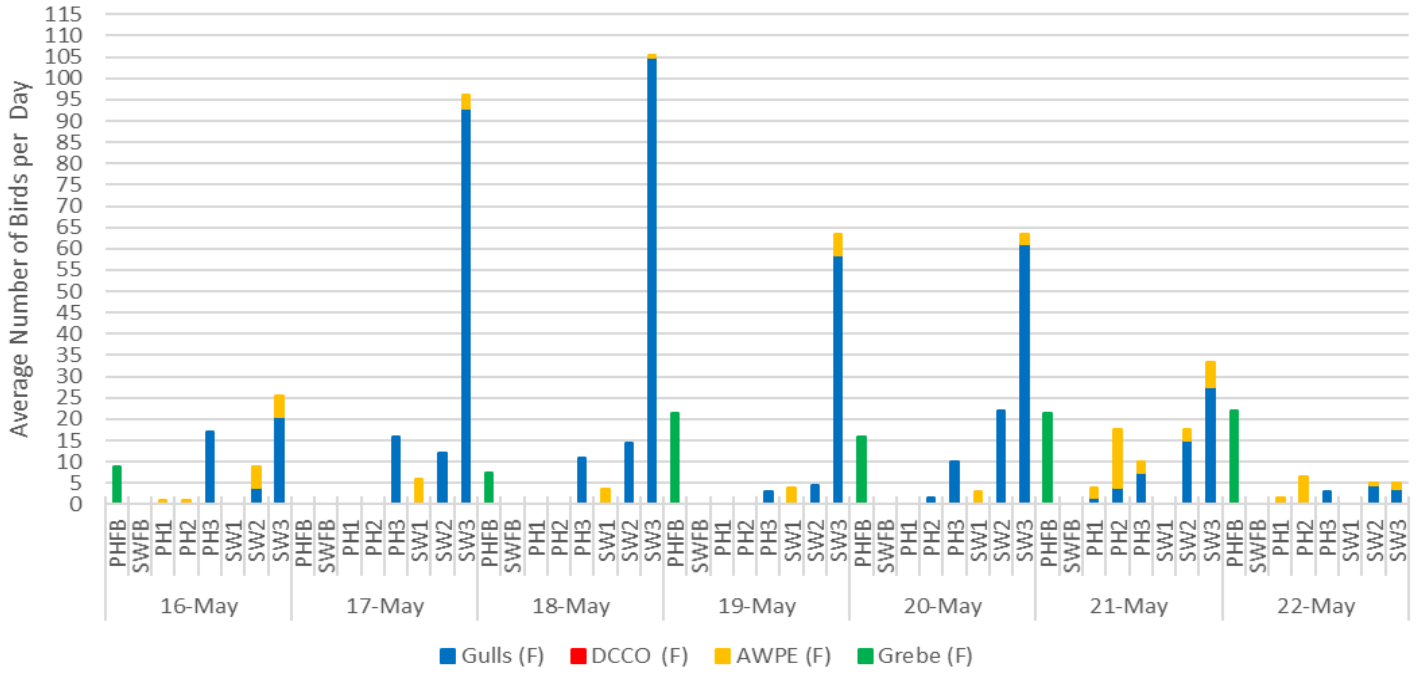
JDA Bird Counts: 5/16/21 to 5/22/21

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

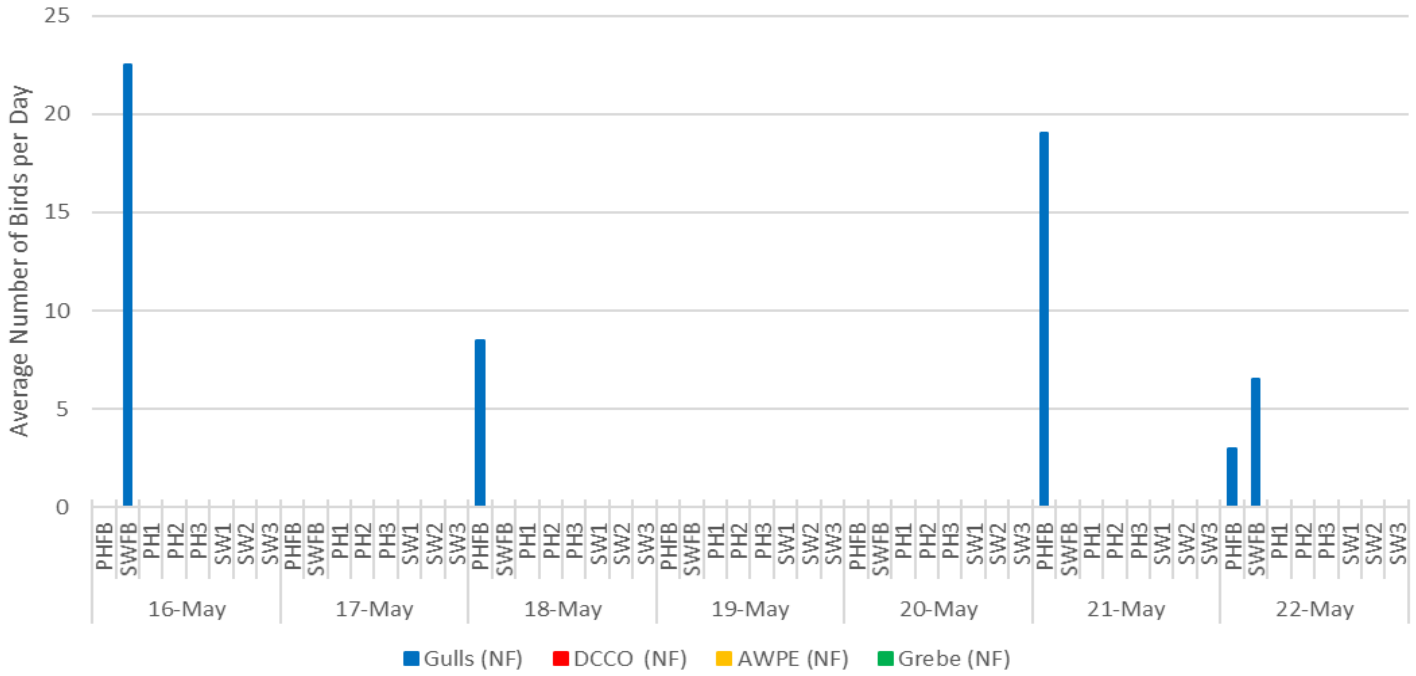
Date	Zone	Gulls				Cormorant				Caspian tern				White Pelican				Grebe				Bald Eagle				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
20-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16	0	0	0	0	0	0	32
20-May	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
20-May	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
20-May	PH2	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
20-May	PH3	15	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
20-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6
20-May	SW2	11	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
20-May	SW3	68	54	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	127
Avg/Survey		95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	116
21-May	PHFB	0	0	27	11	0	0	0	0	0	0	0	0	0	0	0	0	26	17	0	0	0	0	0	0	81
21-May	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
21-May	PH1	1	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	8
21-May	PH2	5	3	0	0	0	0	0	0	0	0	0	0	1	26	0	0	0	0	0	0	0	0	0	0	35
21-May	PH3	11	4	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	20
21-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
21-May	SW2	3	27	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0	35
21-May	SW3	18	37	0	0	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0	0	67
Avg/Survey		56	19	0	0	0	0	0	0	0	0	0	0	27	0	0	0	22	0	0	0	0	0	0	0	123
22-May	PHFB	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	25	19	0	0	0	0	0	0	50
22-May	SWFB	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
22-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3
22-May	PH2	0	1	0	0	0	0	0	0	0	0	0	0	3	9	0	0	0	0	0	0	0	0	0	0	13
22-May	PH3	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
22-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
22-May	SW2	5	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	10
22-May	SW3	2	5	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	10
Avg/Survey		12	10	0	0	0	0	0	0	0	0	0	0	10	0	0	0	22	0	0	0	0	0	0	0	53

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	1041	119	0	0	0	0	0	0	0	0	0	0	152	0	195	0	0	0	0	0	0	0	0	0	754
Avg/Survey	74	9	0	0	0	0	0	0	0	0	0	0	11	0	14	0	0	0	0	0	0	0	0	0	108

Foraging Avian Observations



Non-Foraging Avian Observations





Date	Average Spill %	Min Spill %	Max Spill %	Average Outflow
16-May	61.7	31.8	77.0	223.6
17-May	60.4	31.6	76.4	205.5
18-May	59.7	31.8	74.6	203.7
19-May	61.2	31.9	76.8	221.8
20-May	61.2	31.6	76.4	220.4
21-May	60.6	31.7	75.4	213.1
22-May	60.6	31.6	75.5	209.9

http://pweb.crohms.org/dd/nwdp/project_hourly/webexec/rep?r=jda&date=05%2F22%2F2021