

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 7/10/2021

Inspection Period: 7/4/2021 thru 7/10/2021



**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:	70.0 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.)	1.3			
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	9.7			
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.)	1.6			
Entrance weir NE1	1	depth (≥ 8')	AVG (Ft.)	9.0			
Entrance weir NE2	0	depth (≥ 8')	AVG (Ft.)	10.1			
JUVENILE PASSAGE							
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG (Ft.)	4.6			
Submersible traveling screens	0	visual inspect	Next Visual Inspection 7/12-7/15				
Turbine trashrack drawdown	0	<1.5', wkly					
Vert barrier screen drawdown	0	<1.5', wkly					
Spill volume	0	per FPP	AVG (kcfs)	53.4	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:

High temperature sampling protocols went into effect on 7/8/21 due to water temperatures exceeding 70°F. Smolt Monitoring Facility is currently conducting condition sampling on Monday and Thursday each week until daily average water temperatures drop below 70°F.

Adult Ladder Operations:

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

Project Operations:

Current outages: MU7, MU8, MU9-12 (Line 3 BPA MOD work) MU12, MU13, MU16. Summer Spill started on June 16.
Tailwater Average Weekly TDG: 114.9

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 motor for spill gate #3 will need to be replaced.

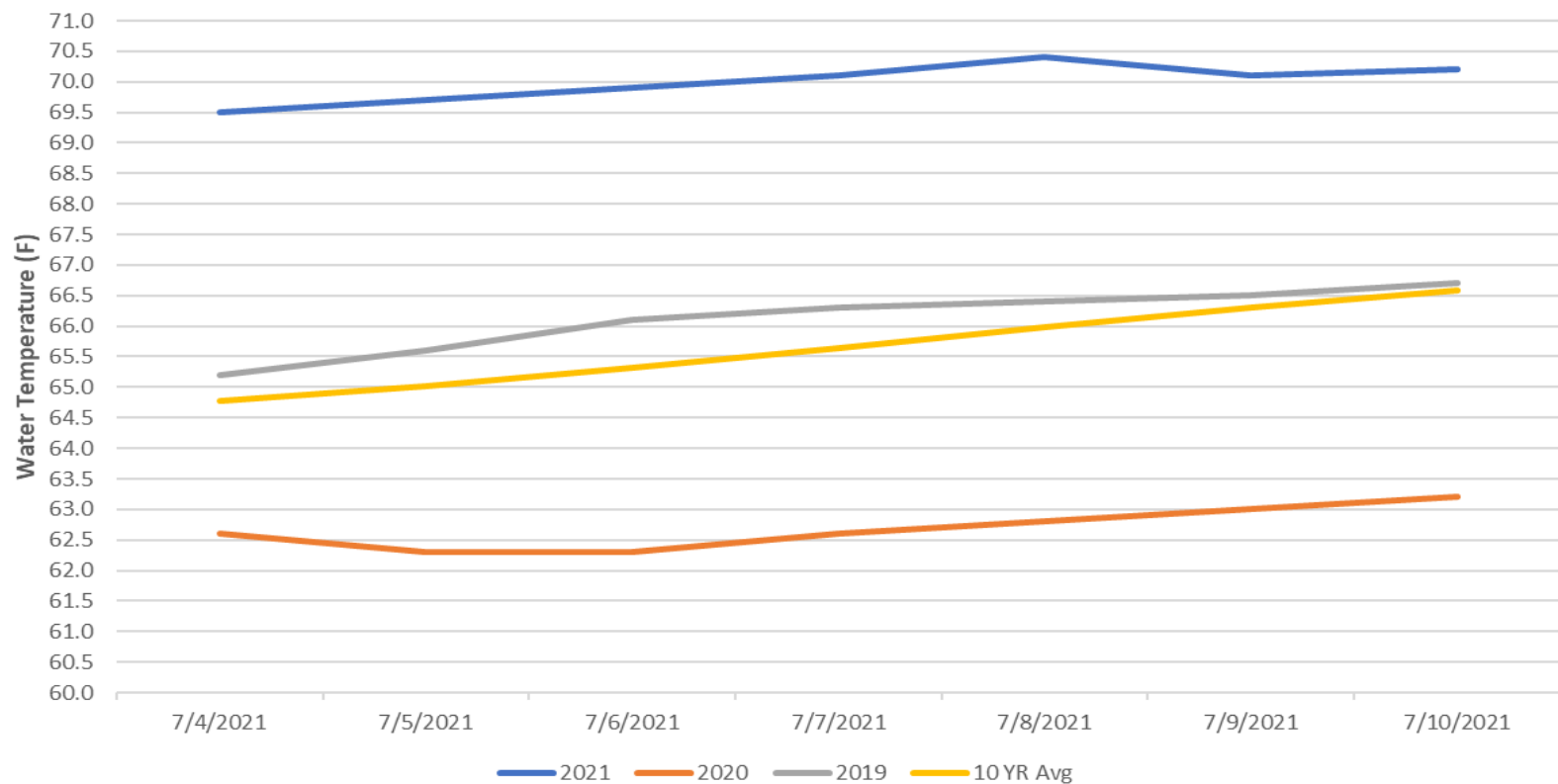
Bird Data:

Cormorants have dispersed. Gull numbers low. Pelican numbers increasing on Preacher's Island, with more foraging behavior seen in spillway. Steady number of Grebes in PHFB. (see 'Bird Count' 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 150 per day

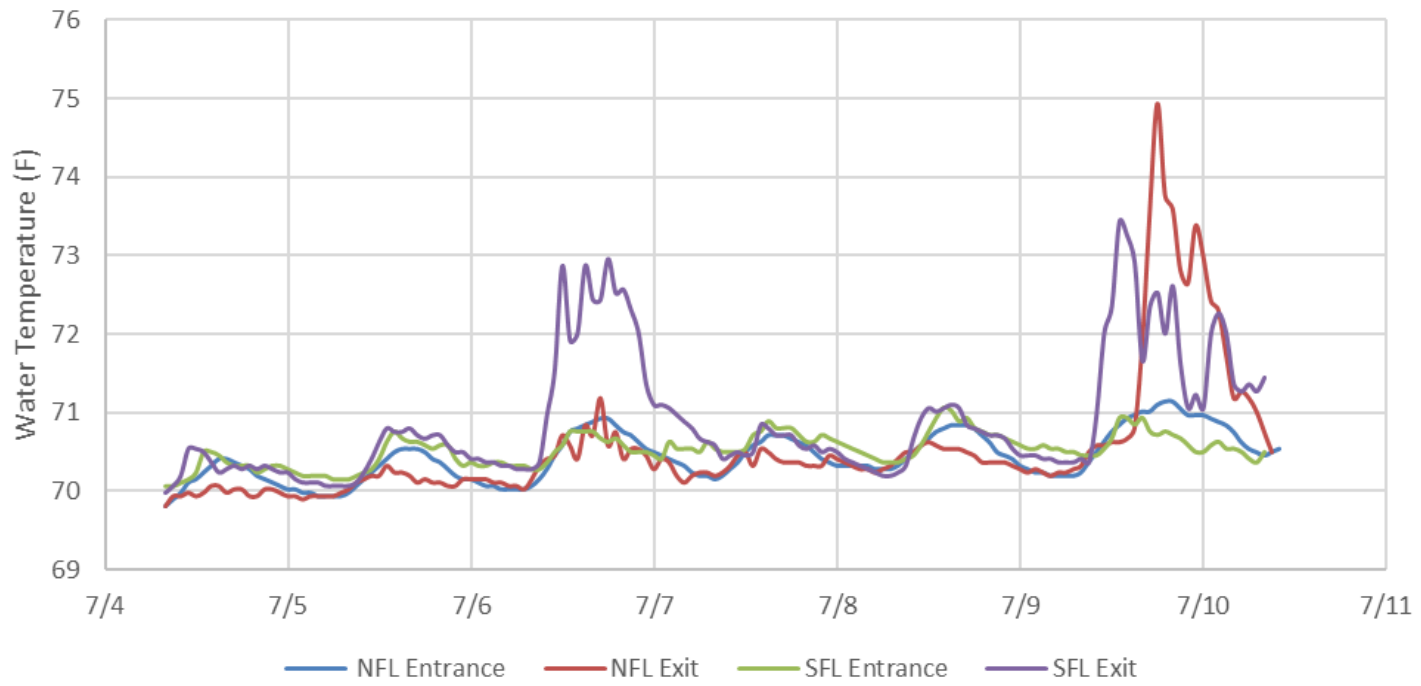
Research:

PSMFC Juvenile lamprey genetic work continues.

John Day Dam Water Temperatures (F)



Water Temperature of JDA Fish Ladders (7/4 - 7/10)



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)
7/5/2021	Unit 4	2.51	0,68,68	159.9
7/5/2021	Unit 12	2.63	0,68,68	159.9
7/9/2021	Unit 4	2.57	0,68,68	159.7
7/9/2021	Unit 12	2.63	0,68,68	159.7
7/10/2021	Unit 4	2.55	0,68,68	159.9
7/10/2021	Unit 12	2.58	0,68,68	159.9

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	8.2	10.0	1.4	9.1	1.5	4.5	2.0	58.0	34.5	18
Sunday	8.4	10.2	1.3	9.1	1.5	4.6	1.5	61.0	34.8	18
Monday	7.8	9.6	1.4	9.2	1.6	4.5	1.9	51.0	35.3	18
Monday	8.8	10.1	1.2	9.6	1.6	4.6	1.4	53.0	34.8	18
Tuesday	8.8	8.9	1.5	9.4	1.3	4.6	1.6	54.0	32.2	18
Tuesday	10.0	11.2	1.4	10.8	1.5	4.5	1.7	67.0	31.6	18
Wednesday	9.3	10.4	1.3	9.8	1.5	4.5	1.7	54.0	35.2	18
Wednesday	10.0	11.1	1.2	10.1	1.5	4.6	1.3	58.0	36.0	18
Thursday	8.9	10.1	1.3	9.4	1.5	4.5	1.6	53.0	39.8	17
Thursday	8.8	10.1	1.2	9.2	1.6	4.6	1.4	53.0	35.7	17
Friday	8.9	9.4	1.3	9.8	1.3	4.6	1.7	45.6	34.7	16
Friday	10.0	10.6	1.0	10.6	1.5	4.6	1.5	56.1	34.5	18
Saturday	9.1	9.6	1.3	9.2	1.4	4.5	1.6	40.0	34.3	13
Saturday	9.5	10.0	1.1	9.9	1.3	4.6	1.7	44.0	35.2	15
AVG:	9.0	10.1	1.3	9.7	1.5	4.6	1.6	53.4	34.9	17.1

	Temp (F)	Secchi (Ft)	Fallbacks	Average # of Pelicans on Island Per Day
Sunday	69.5	6.0	9	66
Monday	69.7	6.0	N/A	110
Tuesday	69.9	6.0	25	190
Wednesday	70.1	6.0	N/A	178
Thursday	70.4	6.0	25	217
Friday	70.1	6.0	N/A	194
Saturday	70.2	6.0	N/A	98
AVG	70.0	6.0	20	150

John Day Dam
Avian Zones



JDA Bird Counts: 7/4/21 to 7/10/21

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)					
4-Jul	PHFB	0	0	12	7	0	0	0	0	0	0	0	0	2	4	0	0	14	13	0	0	0	0	0	0	0	0	0	0	52
4-Jul	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	0	0	0	0
4-Jul	PH1	2	5	0	0	0	0	0	0	0	0	0	0	38	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
4-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	27	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
4-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	47	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
4-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	18	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
4-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	12	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
4-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	16	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Avg/Survey		4		10		0		0		0		0		144		0		14		0		0		0		171				
5-Jul	PHFB	0	0	18	9	0	0	0	0	0	0	0	0	6	4	0	0	17	18	0	0	0	0	0	0	0	0	0	0	72
5-Jul	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	0	0	0	0
5-Jul	PH1	2	2	0	0	0	0	0	0	0	0	0	0	29	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
5-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	23	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59
5-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	75	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	133
5-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	12	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39
5-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
5-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	33	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45
Avg/Survey		2		14		0		0		0		0		177		0		18		0		0		0		210				
6-Jul	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	3	7	0	0	15	11	0	0	0	0	0	0	0	0	0	0	36
6-Jul	SWFB	0	0	3	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
6-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
6-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	16	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
6-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	58	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112
6-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	44	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
6-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	41	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
Avg/Survey		0		2		0		0		0		0		157		0		13		0		0		0		172				
7-Jul	PHFB	0	1	0	0	0	0	0	0	0	0	0	0	6	3	0	0	12	11	0	0	0	0	0	0	0	0	0	0	33
7-Jul	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	0	0	0	0
7-Jul	PH1	0	2	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
7-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	14	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26
7-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	9	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
7-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
7-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84
7-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
Avg/Survey		2		0		0		0		0		0		112		0		12		0		0		0		125				

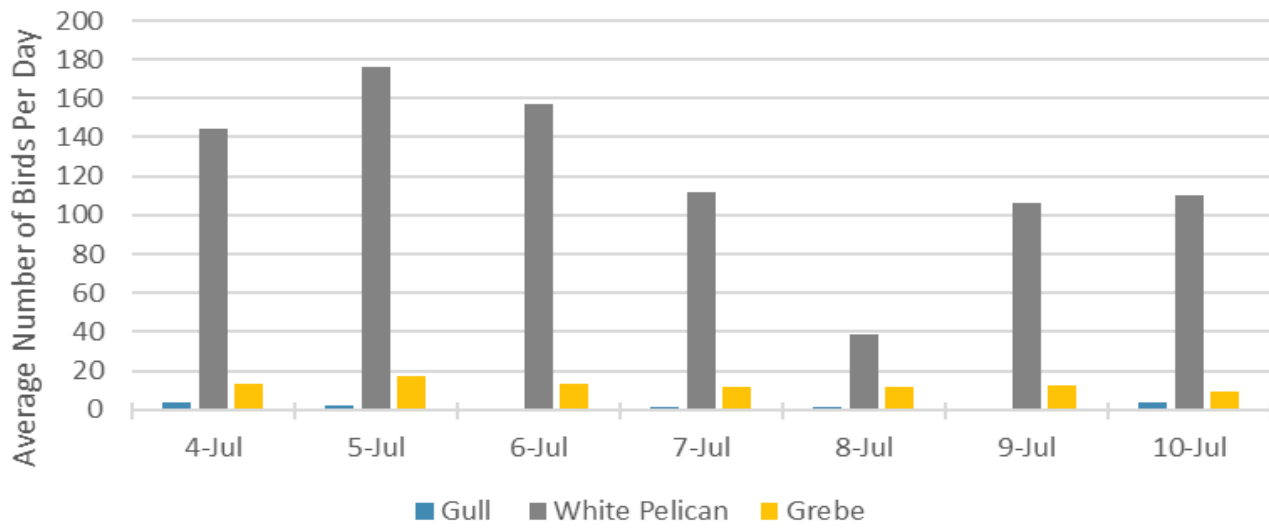
JDA Bird Counts: 7/4/21 to 7/10/21

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)	
8-Jul	PHFB	0	0	0	21	0	0	0	2	0	0	0	0	3	0	0	0	14	9	0	0	0	0	0	0	49
8-Jul	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
8-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	9	14	0	0	0	0	0	0	0	0	0	0	23
8-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	13
8-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	8
8-Jul	SW1	3	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	9
8-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7
8-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	15	2	0	0	0	0	0	0	0	0	0	0	17
Avg/Survey		2		11		0		1		0		0		39		0		12		0		0		0		63
9-Jul	PHFB	0	0	10	4	1	0	0	1	0	0	0	0	0	0	0	0	12	13	0	0	0	0	0	0	41
9-Jul	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
9-Jul	PH1	0	0	0	0	0	0	0	0	0	0	0	0	9	10	0	0	0	0	0	0	0	0	0	0	19
9-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	11	12	0	0	0	0	0	0	0	0	0	0	23
9-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	57	11	0	0	0	0	0	0	0	0	0	0	68
9-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	8	9	0	0	0	0	0	0	0	0	0	0	17
9-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	20	6	0	0	0	0	0	0	0	0	0	0	26
9-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	55	4	0	0	0	0	0	0	0	0	0	0	59
Avg/Survey		0		7		1		1		0		0		106		0		13		0		0		0		127
10-Jul	PHFB	0	3	6	0	0	0	0	1	0	0	0	0	0	0	0	0	9	9	0	0	0	0	0	0	28
10-Jul	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
10-Jul	PH1	2	3	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	0	0	0	0	0	12
10-Jul	PH2	0	0	0	0	0	0	0	0	0	0	0	0	7	12	0	0	0	0	0	0	0	0	0	0	19
10-Jul	PH3	0	0	0	0	0	0	0	0	0	0	0	0	47	60	0	0	0	0	0	0	0	0	0	0	107
10-Jul	SW1	0	0	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	0	0	0	0	0	0	0	11
10-Jul	SW2	0	0	0	0	0	0	0	0	0	0	0	0	34	4	0	0	0	0	0	0	0	0	0	0	38
10-Jul	SW3	0	0	0	0	0	0	0	0	0	0	0	0	33	6	0	0	0	0	0	0	0	0	0	0	39
Avg/Survey		4		3		0		1		0		0		111		0		9		0		0		0		127

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			
Weekly Total	25	90	1	4	0	0	0	0	1689	0	177	0	0	0	0	0	0	0							
Avg/Survey	2	6	0	0	0	0	0	0	121	0	13	0	0	0	0	0									

Foraging Piscivorous Birds





American White Pelicans in the tailrace