

FISHWAY STATUS REPORT - JOHN DAY DAM

Date: 8/29/2020

Inspection Period: 8/23/2020 thru 8/29/2020



**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: Secchi:	70.5 F 6.0 Ft.
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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.)	1.4					
Entrance weir SE1	0	depth (≥ 8')	AVG (Ft.)	8.0					
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.)	1.4					
Entrance weir NE1	0	depth (≥ 8')	AVG (Ft.)	9.0					
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	Last Visual Inspection 8/19 - 8/24		Next Visual Inspection 9/14 - 9/17				
Turbine trashrack drawdown	0	<1.5', wkly							
Vert barrier screen drawdown	0	<1.5', wkly							
Spill volume	0	per FPP	AVG (kcfs)	21.0	Avg %	15.1			
Spill pattern	0	per FPP							
Turbine Unit Priority	0	per FPP							
Turbine 1% Efficiency	0	per FPP							

Fisheries Related Operations

Smolt Monitoring Operations:

Condition sampling started 4/01/2020 and with COVID-19 restrictions, Oregon and Washington stay at home orders, and USACE limited staffing levels, the SMF will continue limited conditioning sampling (every other day) until further notice. River temperatures have reached 70 degrees and sampling will now be Mondays and Thursdays (as per FPP).

Adult Ladder Operations:

JD South Adult Fishway is operating within criteria.
JD North Adult Fishway is operating within criteria.

Project Operations:

Current outages: MU1, MU6, MU7, MU10, MU12, MU9. MU1 is scheduled to return 9/2/2020 and MU9 is scheduled to return 10/15/2020
Forebay Average weekly TDG-105.4, Tailwater Average Weekly TDG-112.9

Maintenance:

SMF SCADA update completed 17 March 2020. JD Electricians are working on SCADA programming and controls. Slowed by COVID-19 availability
JD North Fishway's pump 4 has been pulled for maintenance. - JD Maintenance continue repairs of AWS fish pump 4. RTS has yet TBD.
Calibration - All gauges within the 0.3' criteria. However NE-1, NE-2, Bay 19 tw, and Bay 19 ch sensors OOC - Running in manual mode (0 out of criteria inspections). These OOC are believed to be related to the unfinished SCADA upgrades (lack of comms)

Bird Data:

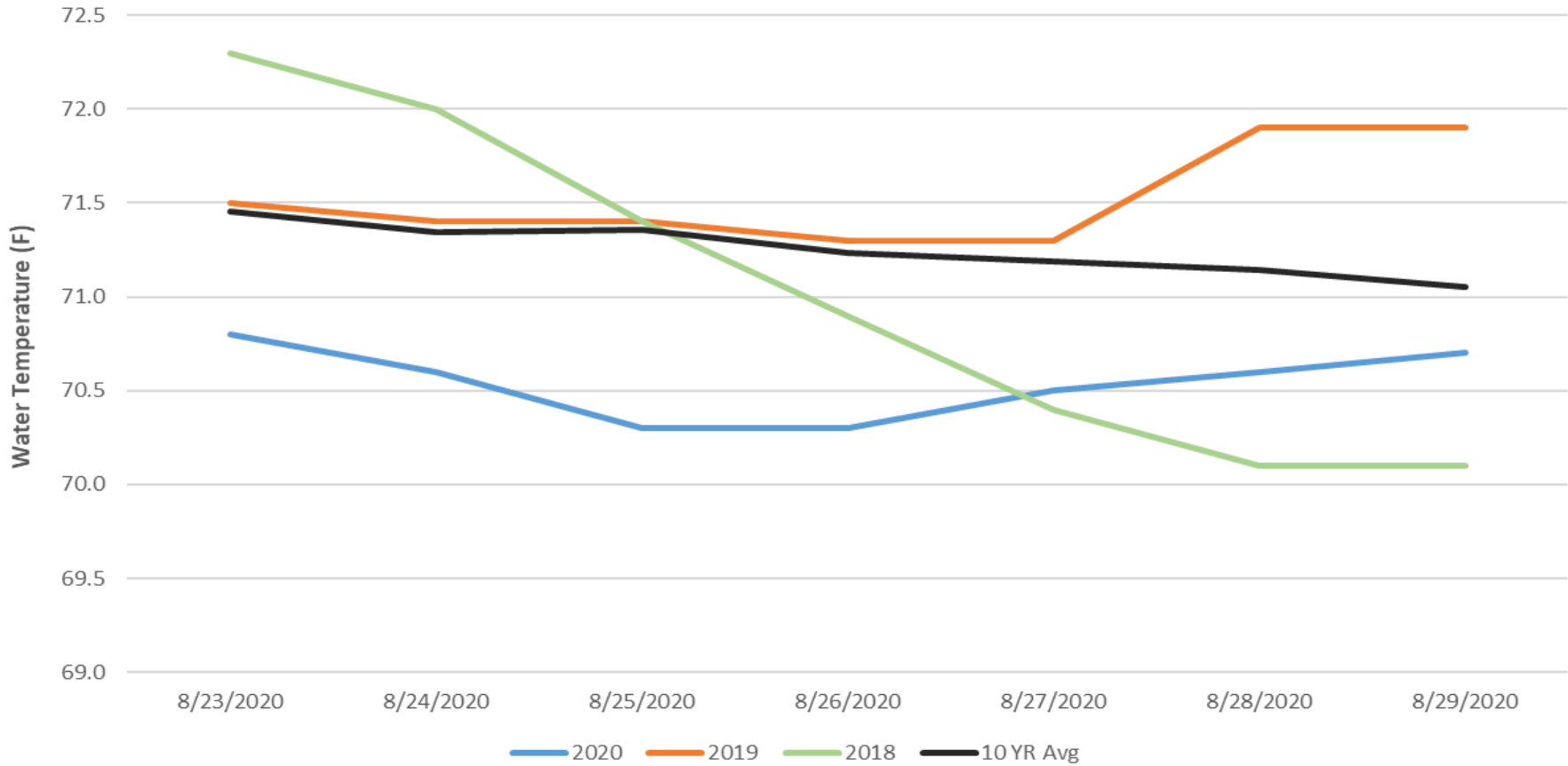
Few foraging gulls this week, decreasing number of foraging pelicans (see 'Bird Count' tab for details).
All 125 avian lines in place without any deficiencies.
Pelicans on Preacher's Island: averaged 26 per day (see Pelicans tab)

Research:

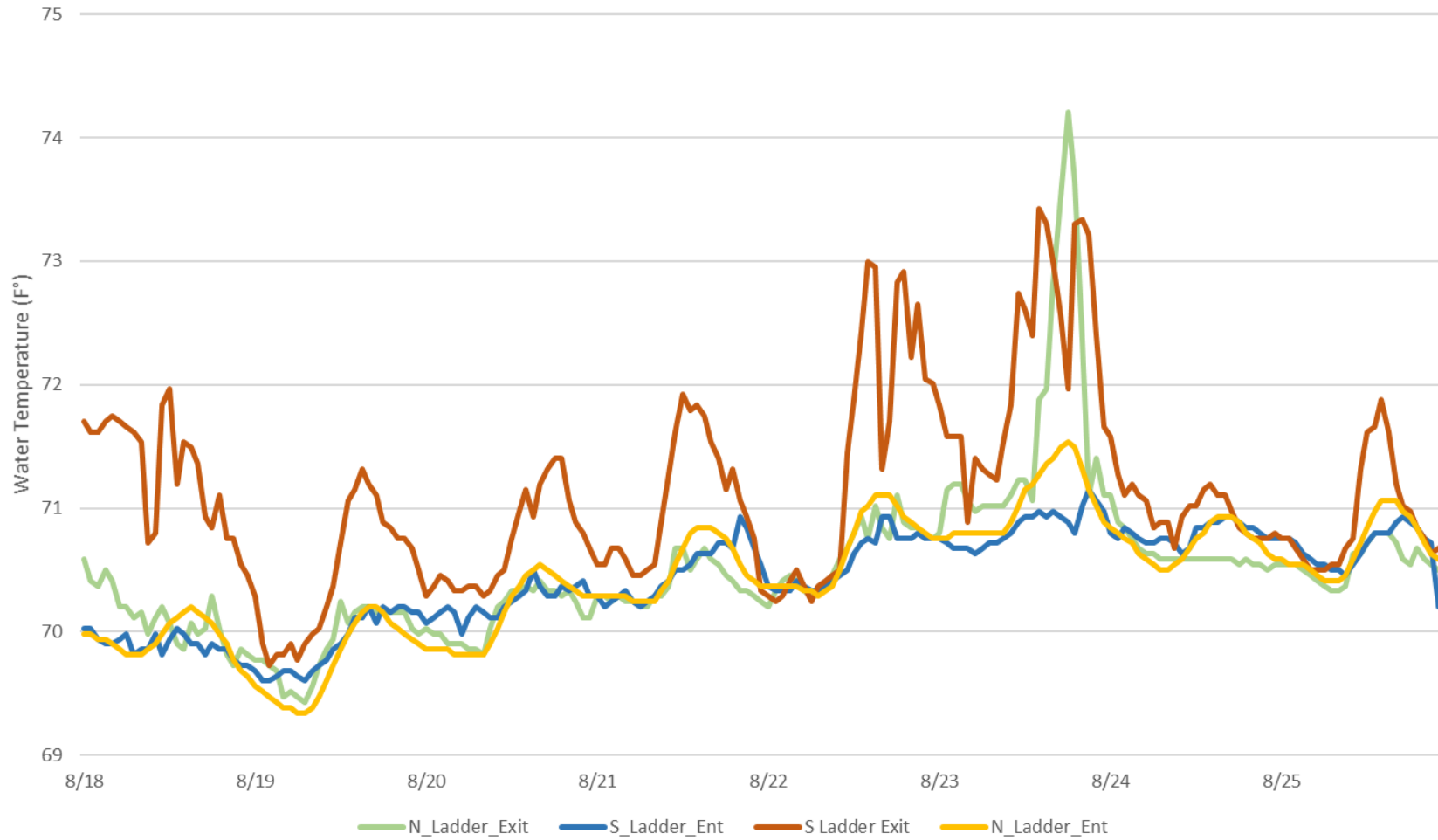
CRITFC genetics study at SMF

Approved by: Ron Twiner, Acting OPM

John Day Dam Water Temperatures (F)



JDA Fishladder Water Temperatures (8/18/20 - 8/25/20)



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)
8/23/2020	Unit 4	2.33	0,68,68	159.8
8/23/2020	Unit 12	2.54	0,68,68	159.8
8/26/2020	Unit 4	2.54	0,68,68	159.9
8/26/2020	Unit 12	2.62	0,68,68	159.9
8/28/2020	Unit 4	2.58	0,68,68	160.1
8/28/2020	Unit 12	2.67	0,68,68	160.1

Average Weekly Velocity (ft/sec)

2.55

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	8.3	8.3	1.5	8.0	1.6	4.5	1.8	21.0	15.4	3
Sunday	8.7	8.7	1.4	8.1	1.6	4.6	1.5	21.0	14.2	3
Monday	8.3	8.3	1.4	8.2	1.6	4.6	1.1	21.0	13.8	3
Monday	8.3	8.3	1.6	8.0	1.5	4.5	1.4	21.0	14.0	3
Tuesday	8.5	8.5	1.5	8.0	1.6	4.5	1.6	21.0	16.8	3
Tuesday	9.5	9.5	1.2	8.1	1.4	4.6	1.4	21.0	13.5	3
Wednesday	8.5	8.5	1.5	8.0	1.5	4.5	1.5	21.0	16.1	3
Wednesday	9.6	9.6	1.3	8.0	1.4	4.6	1.4	21.0	14.6	3
Thursday	9.3	9.3	1.2	8.1	1.4	4.6	1.2	21.0	15.4	3
Thursday	9.4	9.4	1.2	8.0	1.5	4.6	1.4	21.2	14.2	3
Friday	9.5	9.5	1.4	8.0	1.5	4.7	1.6	21.1	16.1	3
Friday	9.8	10.1	1.3	8.0	1.4	4.7	1.5	21.1	12.9	3
Saturday	9.0	9.2	1.4	8.0	1.6	4.5	1.4	21.1	17.4	3
Saturday	8.7	9.2	1.5	8.0	1.5	4.6	1.4	21.1	16.7	3
AVG:	9.0	9.0	1.4	8.0	1.5	4.6	1.4	21.0	15.1	3.0

	Temp (F)	Secchi (Ft)	Fallbacks	Pelicans on Island
Sunday	70.8	6.0	N/A	30
Monday	70.6	6.0	25	20
Tuesday	70.3	6.0	N/A	25
Wednesday	70.3	6.0	N/A	20
Thursday	70.5	6.0	16	44
Friday	70.6	6.0	N/A	15
Saturday	70.7	6.0	N/A	25
AVG	70.5	6.0	21	26

John Day Dam
Avian Zones



JDA Bird Counts: 8/23/20 to 8/29/20

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)	
23-Aug	PHFB	0	0	1	0	0	0	15	0	0	0	0	0	0	0	0	0	0	1	0	0	17
23-Aug	SWFB	0	1	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
23-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-Aug	SW3	10	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	20
Avg/Survey		6		8		0		8		0		0		5		0		1		0		53
24-Aug	PHFB	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	6
24-Aug	SWFB	0	0	41	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68
24-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Aug	PH3	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
24-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-Aug	SW2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
24-Aug	SW3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Avg/Survey		10		35		0		0		0		0		0		0		3		0		94
25-Aug	PHFB	0	0	9	7	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	19
25-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Aug	PH1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
25-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	0	6	0	17	7	0	0	0	0	30
Avg/Survey		2		8		0		1		0		0		3		12		1		0		52
26-Aug	PHFB	0	0	7	0	0	0	15	0	0	0	0	0	0	0	0	0	1	1	0	0	24
26-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7
26-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-Aug	SW3	0	6	0	0	0	0	0	0	0	0	0	0	2	6	14	0	0	0	0	0	28
Avg/Survey		3		4		0		8		0		0		8		7		1		0		59

JDA Bird Counts: 8/23/20 to 8/29/20

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)	
27-Aug	PHFB	0	0	1	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	15
27-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4
27-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Aug	PH2	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
27-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27-Aug	SW2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
27-Aug	SW3	2	7	0	0	0	0	0	0	0	0	0	0	2	11	28	0	0	0	0	0	50
Avg/Survey		6		1		0		9		0		0		7		14		2		0		76
28-Aug	PHFB	0	0	1	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	13
28-Aug	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	3	0	0	16
28-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28-Aug	SW3	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	7
Avg/Survey		0		1		0		6		0		0		4		0		8		0		36
29-Aug	PHFB	0	0	1	12	0	0	9	0	0	0	0	0	0	0	0	0	0	13	0	0	35
29-Aug	SWFB	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	14
29-Aug	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Aug	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Aug	PH3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Aug	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Aug	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29-Aug	SW3	15	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	30
Avg/Survey		8		10		0		5		0		0		8		0		10		0		79

Totals	Gulls		Cormorant		Caspian tern		White Pelican		Grebe		Total
	F	NF	F	NF	F	NF	F	NF	F	NF	
Weekly Total	67	130	0	69	0	0	67	66	50	0	449
Avg/Survey	5	9	0	5	0	0	5	5	4	0	32



Intake crane demolition



Intake crane loaded on barge to be recycled