The Dalles Dam Fishway Status Report

7/14/24

Inspection Period 7/7 - 7/13, 2024

THE DALLES DAM



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The Dellee Dem	Inspections	Criteria	Total Number of Ins	pections:	14	Temperature:	68.	5		
The Dalles Dam	OOC	Limit	Comments:	Fishways in full operati	on	Weekly Ave	. Secchi:	4.9		
			NORTH FI	SHWAY						
Exit differential	0	≤ 0.5'								
Count station differential	0	≤ 0.3'								
Weir crest depth	0	1.0' ± 0.1'								
Entrance weir N1	0	depth (≥ 8')	Average for the week	10.3						
Entrance Differential	0		Average for the week	1.3						
N2		Closed		•	•					
PUD Intake differential	7	≤ 0.5'	Lots of aquatic weed	accumulating at North	١.					
			EAST FIS	HWAY						
Exit differential	0	≤ 0.5'								
Removable weirs 154-157	0	Per forebay								
Weir 158-159 differential	0	1.1' ± 0.1'								
Count station differential	0	≤ 0.3'								
153 Weir crest depth	0	1' ± 0.1'	1.2' per FPP.							
Junction pool weir JP6	0	> 7.0'	Weekly average	11.2						
ast entrance differential	0	1.0' - 2.0'	Weekly average	1.5						
Entrance weir E1	0	No criteria	Weekly average	5.2						
Entrance weir E2	0	depth (≥ 8')	Weekly average	11.3						
Entrance weir E3	0	depth (≥ 8')	Weekly average	11.3						
Collection channel velocity	0	1.5 - 4 fps	2.68 fps 7/11							
Transportation channel velocity	0	1.5 - 4 fps	3.68 fps 7/12							
North channel velocity	0		2.78 fps 7/12							
South entrance velocity	0	1.5 - 4 fps	4.27 fps 7/12							
West entrance differential	0	1.0' - 2.0'	Weekly average	1.4						
Entrance weir W1	0	depth (≥ 8')	Weekly average	10.4						
Entrance weir W2	0	depth (≥ 8')	Weekly average	10.5						
Entrance weir W3	0	No criteria	Weekly average	-2.2						
South entrance differential	0	1.0' - 2.0'	Weekly average	1.3						
Entrance weir S1	0	depth (≥ 8')	Weekly average	10.4						
Entrance weir S2	0	depth (≥ 8')	Weekly average	10.5						
			JUVENILE	BYPASS						
Sluicegate operation	0	Units 1,8,22	its 1,8,22 22 sluicegate to remain open through the 2024 fish passage season							
Turbine trashrack drawdown	0		7/13/24 all in criteria							
Spill volume/pattern	0	1 to 22	ITS open, spilling gates 1-8							
Turbine Unit Priority	0	per FPP	MU1 and MU22 in criteria							
Gatewells	0	Weekly								

Current Outages

- -MU19 & MU20 FOOS 10/07/2018 1205 10/31/2025 1700 T10 ACETYLENE
- -MU11 OOS 3/25/24 0630 8/22/24 1700 Annual and Thrust Bearing Oil Cooler
- -MU12 OOS 6/24/24 0630 8/15/24 1700 6 YR O/H

Maintenance

Calibrations performed on 7/12, all within limits

Spillway assessment; Spillgates 1-9 rehab 2034. Spillway crane replace first priority. Investigating gate operation frequency reduction.

DC lower guide bearing pump replaced on FU1

Predators

No recent sea lion sightings. Pelicans increasing in numbers along with increasing shad numbers, foraging in SW4, SW3 and PH1.

Declining numbers of pelicans feeding, few arriving and staying in rocks of count zones. Maximum roughly 200.

Tori lines installed at east, west and south. Mobile Bird Gard turned off.

Approx. 15-20 nesting DCCO on BPA towers. ~ 40 DCCO now on Murdock island tower.

Gull take (CAGU) occuring in SW4, displaced by pelicans. ~280 CAGU taken of 400 permitted. 16 DCCO taken on permit, limit 30.

Researchers

USGS temperature link- July

15 new stomachs from gulls taken. Most were adult plumage CAGU and males. 9 DCCO stomachs taken. YN did take of fish GI/Stomachs.

USDA continue lethal gull take in SW4, mostly morning and mid day up to 40 taken this week. 3 DCCO taken this past week.

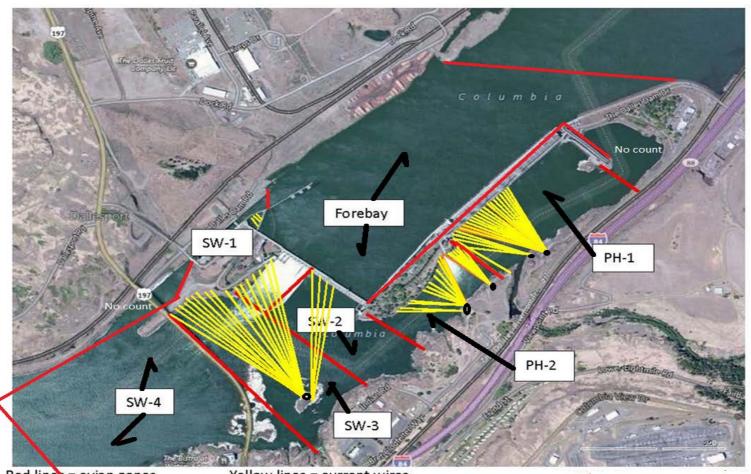
WDFW Dam Angling begin 30 April 2024 10 samples per week taken for predator study.

Operations

Both fishladders in full operation.

Spillway opened 4/10 40%

Bird Count Zones, Avian Lines and Deterrent Sites



Red lines = avian zones

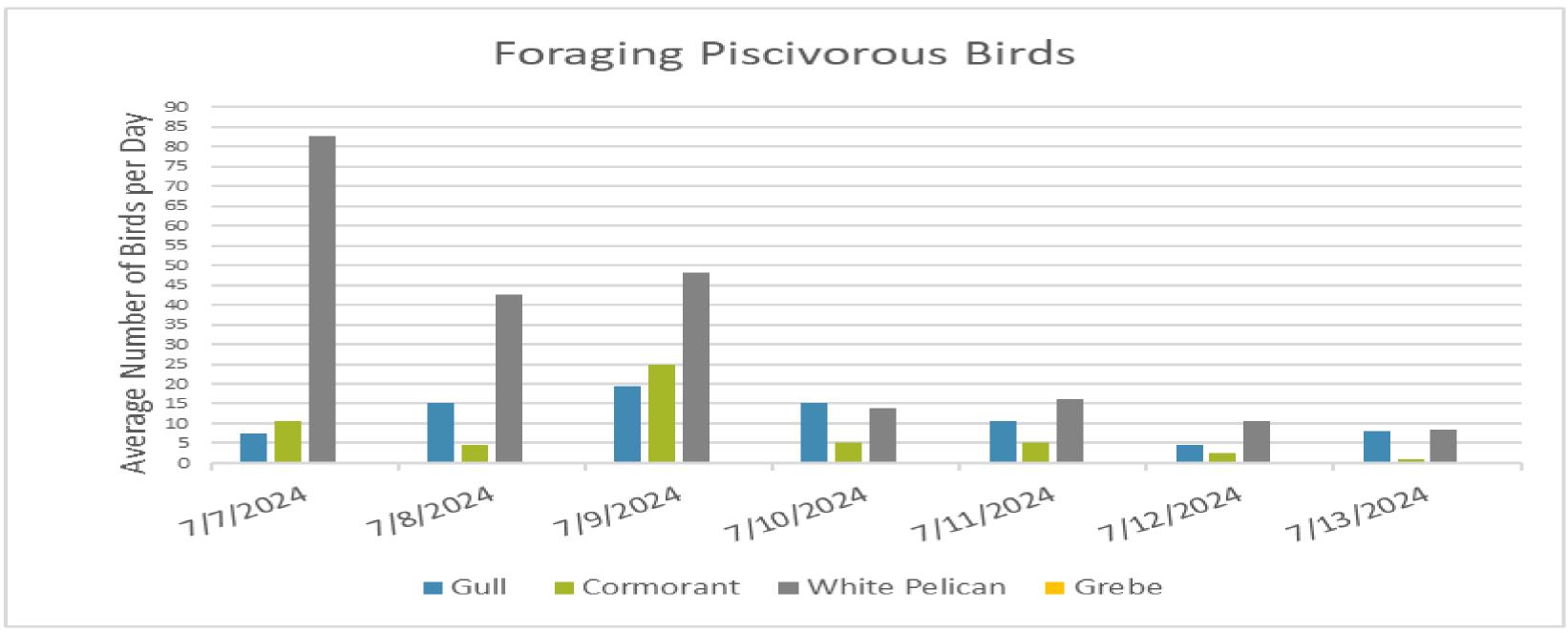
Yellow lines = current wires

Avian predator tori lines and audio distress Bird Gard. 10/2023

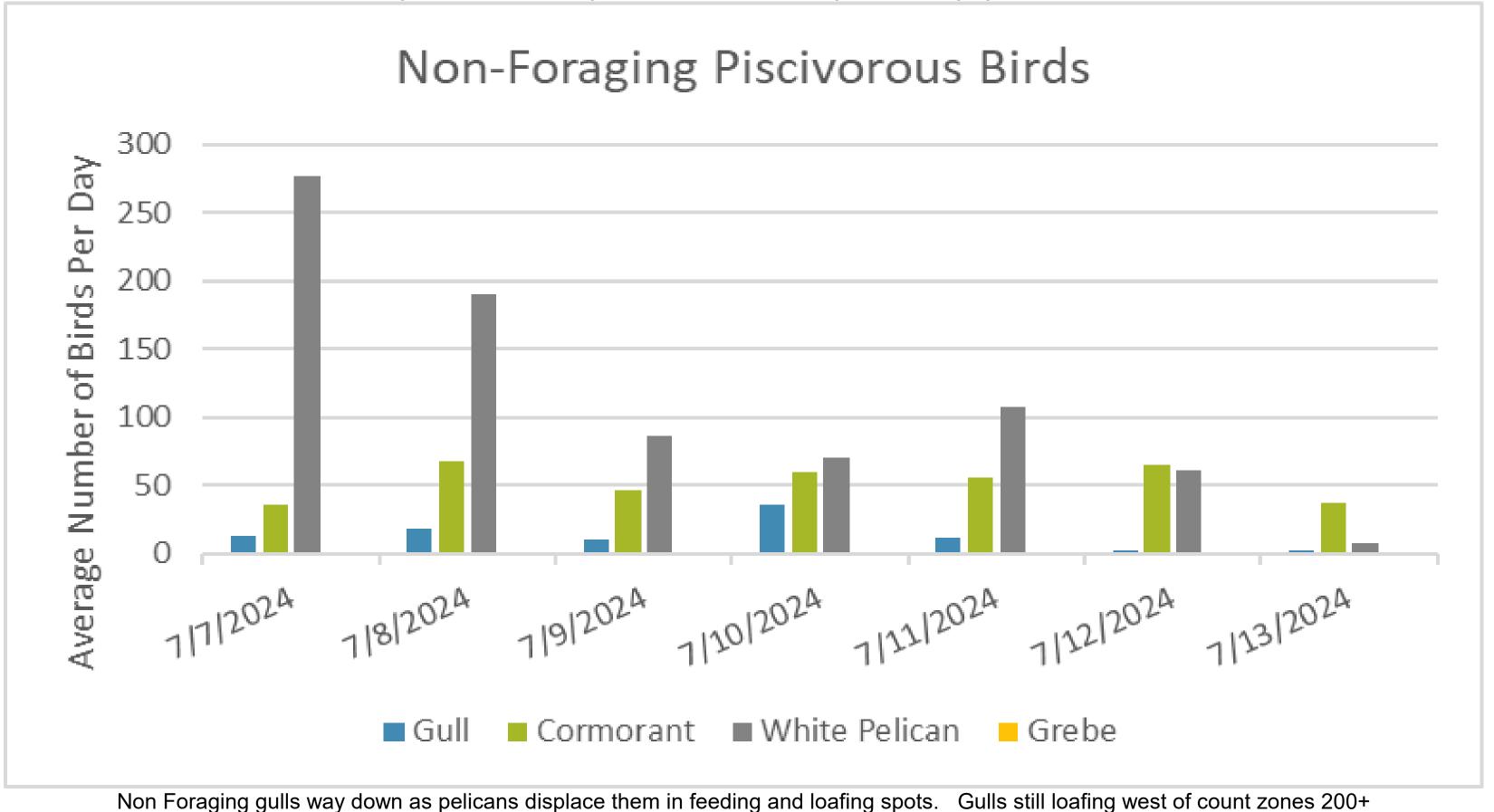
Tori lines at East Ladder entrances.

Bird Gard audio deterrent.

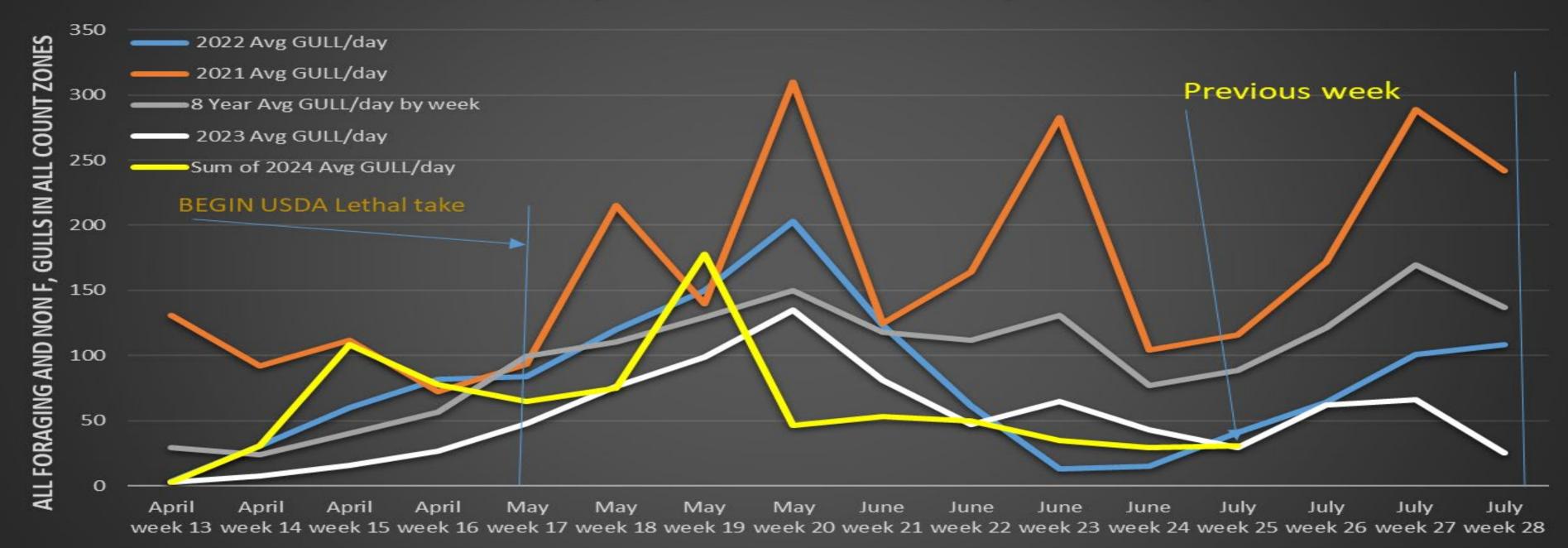




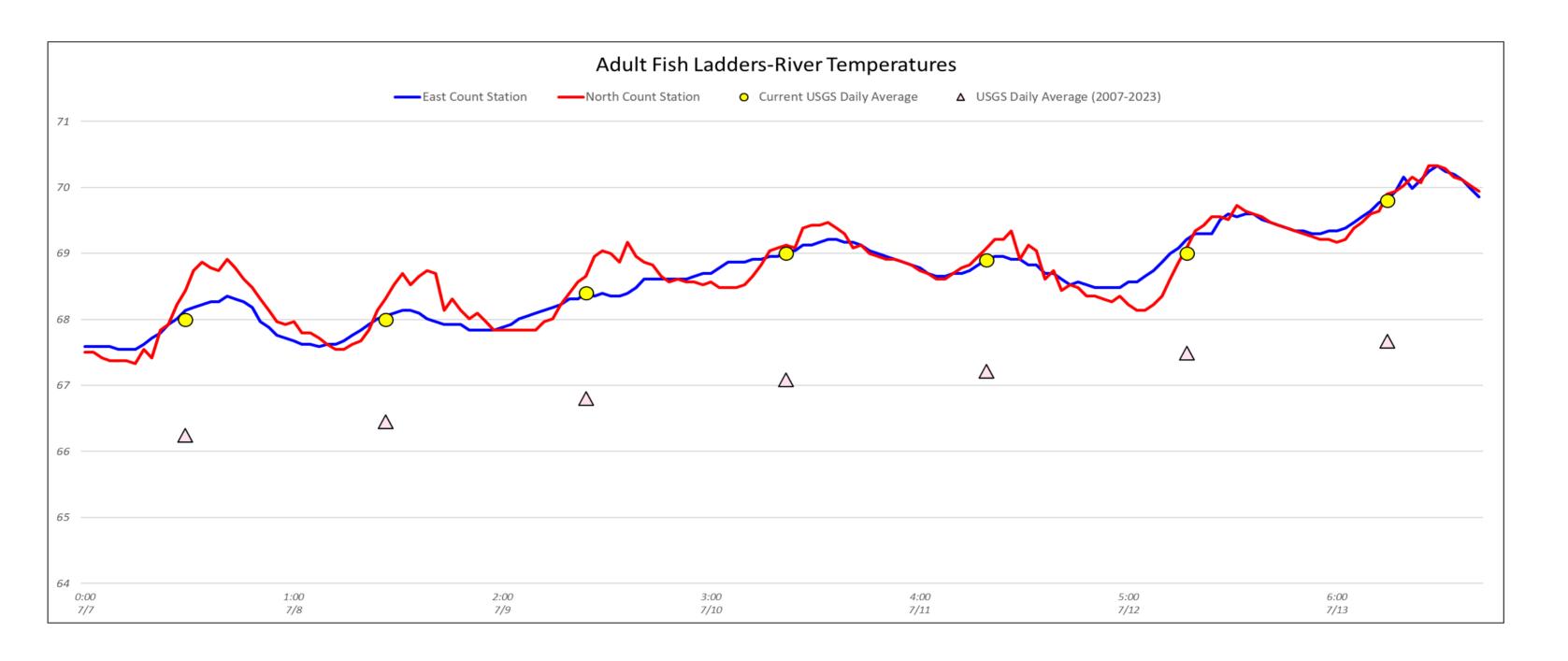
Foraging pelicans declining and gulls way down as pelicans displace them in feeding and loafing spots. Some evening observations being performed to monitor night time foraging. Results inconclusive.



TDA Daily Avg # of GULLs by Week, April to July 2021, 2022, 2023 and 2024 Compared to Previous 8 years Daily Mean.



WEEK OF YEAR APRIL TO JULY



Secchi:		USGS		
4.0	Sun	67.7		
5.0	Mon	67.7		
5.0	Tue	68.1		
5.0	Wed	68.8		
5.0	Thurs	68.6		
5.0	Fri	68.9		
5.0	Sat	69.6		
4.9	AVG	68.5		

Reporting week data

Date:	North Ladder		East Ladder											
			East Entrance				West Entrance				South Entrance			
	Differential	N1 Depth	Differential	E1 Depth	E2 Depth	E3 Depth	JP 6	Differential	W1	W2	W3	Differential	S1	S2
7/7	1.2	10.4	1.5	3.7	11.2	11.5	9.7	1.4	10.0	10.0	-3.6	1.3	10.1	10.2
	1.2	10.5	1.5	5.9	11.3	11.5	11.9	1.4	10.9	11.0	-1.6	1.3	10.8	10.8
7/8	1.3	10.2	1.5	4.8	11.5	11.6	10.8	1.3	10.6	10.7	-2.5	1.4	10.2	10.5
	1.3	10.3	1.3	5.5	11.7	11.8	11.6	1.3	10.8	10.7	-1.9	1.3	10.6	10.6
7/9	1.3	10.3	1.5	5.3	11.4	11.6	11.3	1.5	10.6	10.7	-2.1	1.4	10.4	10.5
	1.3	10.3	1.6	5.3	11.4	11.7	11.4	1.4	10.5	10.6	-2.0	1.3	10.8	10.7
7/10	1.3	10.3	1.4	5.9	11.3	11.6	11.9	1.4	10.6	10.6	-1.5	1.3	10.6	10.6
	1.3	10.2	1.5	5.9	11.4	11.7	12.0	1.4	10.6	10.7	-1.5	1.3	10.6	10.6
7/11														
	1.2	10.3	1.6	5.5	11.2	11.7	11.4	1.5	10.2	10.3	-1.9	1.3	10.3	10.5
	1.2	10.2	1.5	5.4	11.4	10.9	11.4	1.4	10.4	10.4	-2.0	1.3	9.6	9.6
7/12	1.2	10.3	1.6	5.2	11.2	11.7	11.2	1.5	9.9	10.0	-2.0	1.4	10.1	10.2
	1.4	10.2	1.5	4.9	11.1	11.7	10.9	1.5	10.2	10.3	-2.3	1.3	10.6	10.6
7/13	1.2	10.3	1.6	4.5	11.1	11.8	10.5	1.5	9.9	10.0	-2.7	1.4	10.2	10.4
	1.2	10.2	1.4	4.2	11.1	11.9	10.3	1.3	10.6	10.5	-3.1	1.3	10.7	10.5
AVG:	1.3	10.3	1.5	5.2	11.3	11.6	11.2	1.4	10.4	10.5	-2.2	1.3	10.4	10.5

Fishways inspected twice daily



Stomach contents-sampled California gull