HAB MONITORING REPORT

From: 6/5/2017 To: 6/5/2017

Fish and Wildlife Research Institute

Collected by: Volunteer(s)
Collecting agency: EBAP
Sample condition: Preserved

HAB ID / Original ID / Sample Date	Location	County	Lat/Lon (DD.dddd)	Time	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pH	Species	cells/liter
HABW170607-008 FDEP EBV001 6/5/2017	**Matanzas Pass (Estero Bay)**	Lee	26.4577 -81.9532	06:34	0.5	29.40	36.12	4.60	7.59		
Analyzed by: Henschen, K. on 6/7/2017 **Comments:** winds E@4-7mph, overcast, air temp 24.7C, water surface ripples, outgoing tide, secchi 1.35m, yellow green water										*Karenia brevis* *Pseudo-nitzschia spp.* *Pyrodinium bahamense*	0 11,000 0
HABW170607-009 FDEP EBV003 6/5/2017	**Estero River; mouth of (Estero Bay)**	Lee	26.4294 -81.8580	06:40	0.5	27.90	34.24	2.66	7.55		
Analyzed by: Shankar, S. on 6/7/2017 **Comments:** winds SE@5.5mph, drizzling, air temp 25.1C, water surface ripples, incoming tide, secchi 0.5m, medium brown water										*Karenia brevis* *Pseudo-nitzschia spp.* *Pyrodinium bahamense*	0 0 0
HABW170607-010 FDEP EBV004 6/5/2017	**Carl Johnson Park Boat Ramp (Estero Bay)**	Lee	26.3936 -81.8655	05:58	0.5	28.20	36.07	3.01	7.73		
Analyzed by: Shankar, S. on 6/7/2017 **Comments:** winds E/SE@5mph, overcast and drizzling, air temp 25.2C, water surface ripples, outgoing tide, secchi 1.3m, green brown water										*Karenia brevis* *Pseudo-nitzschia spp.* *Pyrodinium bahamense*	0 2,666 0
HABW170607-011 FDEP EBV005 6/5/2017	**Pelican Bay Nature Park Pier (Estero Bay)**	Lee	26.3584 -81.8375	06:34	0.5	28.60	35.12	3.02	8.00		
Analyzed by: Shankar, S. on 6/7/2017 **Comments:** winds SE@4-7mph, drizzling/raining, 6/100 precipitation, air temp 25.3C, water surface ripples, incoming tide, secchi 0.8m, yellow green water										*Karenia brevis* *Pseudo-nitzschia spp.* *Pyrodinium bahamense*	0 3,000 0
HABW170607-012 FDEP EBV006 6/5/2017	**Coon Key; N of (Estero Bay)**	Lee	26.4287 -81.8832	06:11	0.5	28.70	36.06	3.78	7.68		
Analyzed by: Shankar, S. on 6/7/2017 **Comments:** winds SE@8-12mph, drizzling, air temp 25C, water surface ripples, outgoing tide, secchi 0.75m, greenn water										*Karenia brevis* *Pseudo-nitzschia spp.* *Pyrodinium bahamense*	0 667 0

NOTE: Blank field = not measured

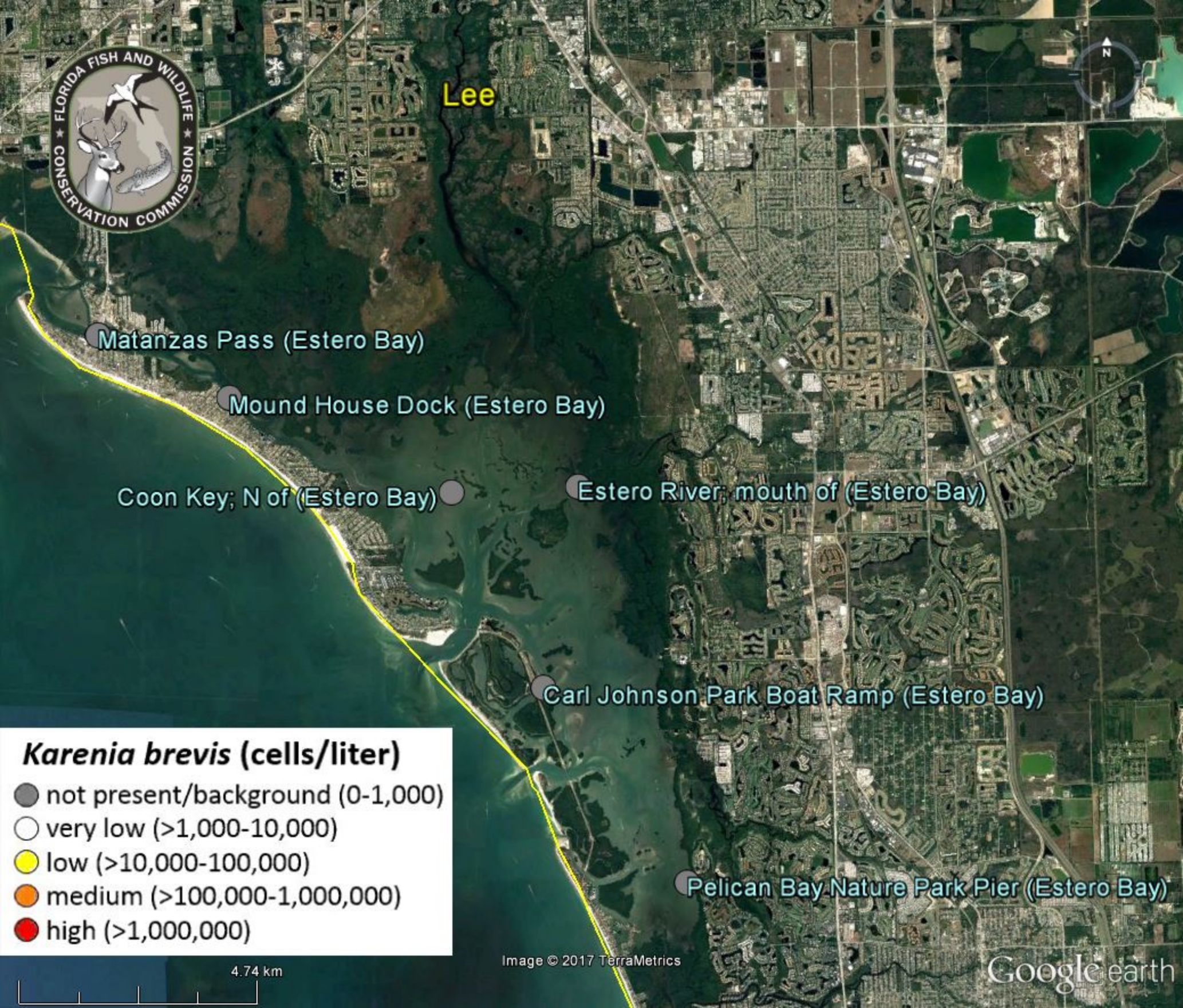
HAB ID Original ID Sample Date	Location	County	Lat/Lon (DD.dddd)	Time	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pH	Species	cells/liter
HABW170607-013 FDEP EBV007 6/5/2017	**Mound House Dock (Estero Bay)**	Lee	26.4462 -81.9272	05:59	0.5	29.30	36.21	3.56	7.64		
Analyzed by: Markley, L. on 6/7/2017 **Comments:** winds SE@4-7mph, partly cloudy/drizzling, 2/5 precipitation, air temp 24.9C, water surface ripples, secchi 1.4m, green brown water										*Karenia brevis* *Pseudo-nitzschia sp.* *Pyrodinium bahamense*	0 1,000 0

NOTE: Blank field = not measured

Description	*Karenia brevis* abundance	Possible effects (*Karenia brevis* only)
NOT PRESENT - BACKGROUND	0 - 1,000 cells/L	no effects anticipated
VERY LOW	> 1,000 - 10,000 cells/L	possible respiratory irritation; shellfish harvesting closures ≥ 5,000 cells/L
LOW	> 10,000 - 100,000 cells/L	respiratory irritation; possible fish kills; probable detection of surface chlorophyll by satellites at upper range of cell abundance
MEDIUM	> 100,000 - 1,000,000 cells/L	respiratory irritation; probable fish kills; detection of surface chlorophyll by satellites
HIGH	> 1,000,000 cells/L	as above, plus water discoloration

The above report is distributed by the Harmful Algal Bloom (HAB) Group at the Fish and Wildlife Research Institute of the Florida Fish and Wildlife Conservation Commission. The report is intended to (1) provide timely information on HABs in Florida waters to partner agencies and (2) facilitate communication among individuals who direct response activities to address public health concerns. We report on the abundance of *Karenia brevis*, *Pyrodinium bahamense* and *Pseudo-nitzschia* species. *Karenia brevis*, the Florida red tide organism, produces neurotoxins called brevetoxins that can kill fish and other marine life. Brevetoxins may cause respiratory irritation in beachgoers and Neurotoxic Shellfish Poisoning in humans that consume contaminated shellfish. *Pyrodinium bahamense* produces saxitoxins that can cause Paralytic Shellfish Poisoning or Saxitoxin Puffer Fish Poisoning in humans if contaminated shellfish or puffer fish are consumed. Some, but not all, species of *Pseudo-nitzschia* produce domoic acid, which can cause Amnesic Shellfish Poisoning in humans if contaminated shellfish are consumed. Blooms of *Pseudo-nitzschia* spp. (≥ 1,000,000 cells/L) frequently occur in Florida's marine and estuarine waters. For information on red tide related human health issues, please refer to the Department of Health Aquatic Toxins Program.

State-wide status reports of *Karenia brevis* abundance including interactive Google Maps are provided weekly by our group. Shellfish harvesting area status maps are provided by the Division of Aquaculture. Gulf Coast beach conditions can be found at Mote Marine Laboratory's Beach Conditions Report. A full list of red tide related hotlines and information sources can be found here. Data for other species can be requested at any time by sending an inquiry to HABData@MyFWC.com. To learn more about HAB monitoring and research in Florida, please visit MyFWC.com/RedTide and Facebook.com/FLHABs.


FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
Lee
N
Matanzas Pass (Estero Bay)
Mound House Dock (Estero Bay)
Coon Key; N of (Estero Bay)
Estero River; mouth of (Estero Bay)
Carl Johnson Park Boat Ramp (Estero Bay)
Pelican Bay Nature Park Pier (Estero Bay)
Karenia brevis (cells/liter)
not present/background (0-1,000)
very low (>1,000-10,000)
low (>10,000-100,000)
medium (>100,000-1,000,000)
high (>1,000,000)
4.74 km
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