

Collected by: Volunteer(s)
 Collecting agency: EBAP
 Analysis date: 4/7/2015
 FWRI analyst: Markley, L.
 Sample condition: Preserved

HAB MONITORING REPORT

Fish and Wildlife Research Institute



HAB ID	Location	County	Lat/Lon (DD.dddd)	Time (GMT)	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pH	Species	cells/liter	Comments
HABW150407-006	Matanzas Pass (Estero Bay)	Lee	26.4577 -81.9532	07:25	0.5	25.00	30.30	5.90	8.18			
										<i>Karenia brevis</i>	0	
										<i>Pseudo-nitzschia spp.</i>	507500	
										<i>Pyrodinium bahamense</i>	0	
HABW150407-007	Estero River; mouth of (Estero Bay)	Lee	26.4294 -81.8580	07:17	0.5	24.40	33.90	4.30	8.14			Secchi depth = 0.65 m
										<i>Karenia brevis</i>	0	
										<i>Pseudo-nitzschia spp.</i>	975000	
										<i>Pyrodinium bahamense</i>	0	
HABW150407-008	Carl Johnson Park Boat Ramp (Estero Bay)	Lee	26.3936 -81.8655	07:15	0.5	25.50	33.00	6.20	8.16			Secchi depth = 0.75 m
										<i>Karenia brevis</i>	0	
										<i>Pseudo-nitzschia spp.</i>	4375000	
										<i>Pyrodinium bahamense</i>	0	
HABW150407-009	Pelican Bay Nature Park Pier (Estero Bay)	Lee	26.3584 -81.8375	07:42	0.5	25.40	32.13	3.66	7.98			Secchi depth = 0.55 m
										<i>Karenia brevis</i>	0	
										<i>Pseudo-nitzschia spp.</i>	5305778	
										<i>Pyrodinium bahamense</i>	0	
HABW150407-010	Coon Key; N of (Estero Bay)	Lee	26.4287 -81.8832	07:40	0.5	25.40	31.70	6.60	8.01			Secchi depth = 0.5 m
										<i>Karenia brevis</i>	0	
										<i>Pseudo-nitzschia spp.</i>	9107556	
										<i>Pyrodinium bahamense</i>	0	

NOTE: Blank field = not measured

HAB ID	Location	County	Lat/Lon (DD.dddd)	Time (GMT)	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pH	Species	cells/liter	Comments
HABW150407-011	Estero River; upstream	Lee	26.4386 -81.8400	07:40	0.5	25.20	14.00		7.69			Secchi depth = 1.7 m
4/6/2015												
										<i>Karenia brevis</i>	0	
										<i>Pseudo-nitzschia spp.</i>	7667	
										<i>Pyrodinium bahamense</i>	0	

NOTE: Blank field = not measured

Collected by: Volunteer(s)
Collecting agency: FDEP
Analysis date: 4/7/2015
FWRI analyst: Henschen, K.
Sample condition: Preserved

HAB MONITORING REPORT

Fish and Wildlife Research Institute



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HABW150407-004	Punta Gorda Boat Ramp (Charlotte Harbor)	Charlotte	26.9092 -82.0953	07:27	0.5	25.50	24.82	4.95	7.71			Secchi depth = 1.45 m
										<i>Karenia brevis</i>	0	
										<i>Pseudo-nitzschia spp.</i>	0	
										<i>Pyrodinium bahamense</i>	0	
HABW150407-005	Burnt Store Marina (Charlotte Harbor)	Lee	26.7614 -82.0611	07:35	0.5	23.80	30.60	4.00	7.92			
										<i>Karenia brevis</i>	0	
										<i>Pseudo-nitzschia spp.</i>	1000	
										<i>Pyrodinium bahamense</i>	0	

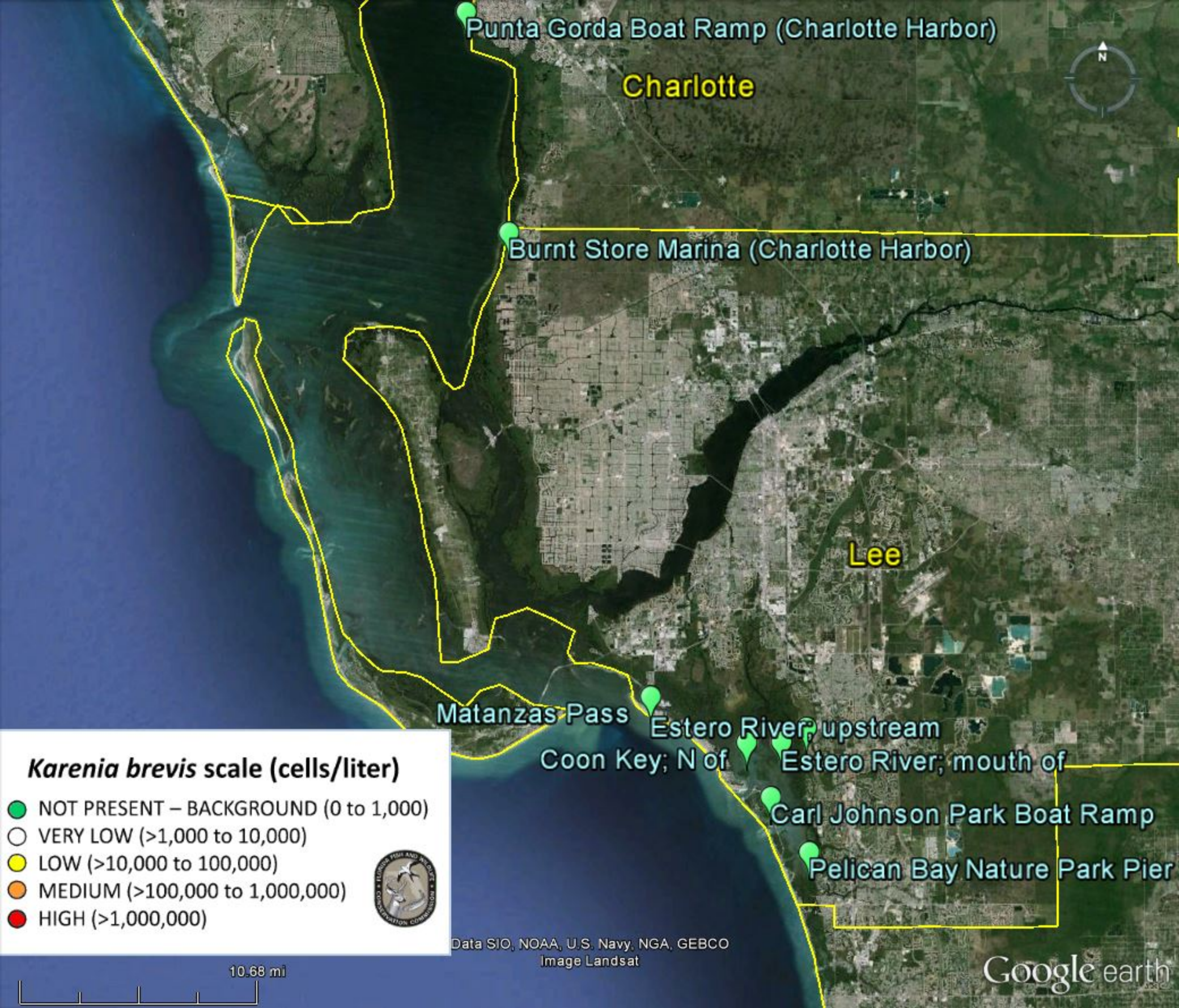
NOTE: Blank field = not measured

Description	<i>Karenia brevis</i> abundance	Possible effects (<i>Karenia brevis</i> 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 \geq 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. (\geq 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.

DISCLAIMER: While every practical step has been taken to provide accurate information in these reports, the need for rapid distribution precludes extensive review. Further, reports are generated with limited interpretation and do not necessarily reflect all scientific observations.



Punta Gorda Boat Ramp (Charlotte Harbor)

Charlotte

Burnt Store Marina (Charlotte Harbor)

Lee

Matanzas Pass

Estero River, upstream

Coon Key; N of

Estero River; mouth of

Carl Johnson Park Boat Ramp

Pelican Bay Nature Park Pier

***Karenia brevis* scale (cells/liter)**

- NOT PRESENT – BACKGROUND (0 to 1,000)
- VERY LOW (>1,000 to 10,000)
- LOW (>10,000 to 100,000)
- MEDIUM (>100,000 to 1,000,000)
- HIGH (>1,000,000)



Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat

10.68 mi

Google earth