

HAB MONITORING REPORT

From: 4/3/2023 To: 4/3/2023

Fish and Wildlife Research Institute



Collected by: Staff

Collecting agency: LCHD

Sample condition: Preserved

HAB ID	Location	County	Lat/Lon (DD.dddd)	Time	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pH	Species	cells/liter
HABW230404-020	Turner Beach	Lee	26.4829 -82.1842	07:45	0.5	25.60			8.00		
4/3/2023											
Analyzed by: Villac, M.C. on 4/4/2023										<i>Karenia brevis</i>	12,667
Comments:										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW230404-021	Bowmans Beach	Lee	26.4587 -82.1579	08:00	0.5	25.60	8.00				
4/3/2023											
Analyzed by: Villac, M.C. on 4/4/2023										<i>Karenia brevis</i>	7,000
Comments:										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW230404-022	Bowditch Point Park Beach	Lee	26.4626 -81.9684	09:20	0.5	25.60			8.00		
4/3/2023											
Analyzed by: Villac, M.C. on 4/4/2023										<i>Karenia brevis</i>	333
Comments:										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW230404-023	Little Hickory Island Beach Park	Lee	26.3583 -81.8600	09:50	0.5	25.60	8.00				
4/3/2023											
Analyzed by: Villac, M.C. on 4/4/2023										<i>Karenia brevis</i>	0
Comments:										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0

NOTE: Blank field = not measured

HAB MONITORING REPORT

From: 4/3/2023 To: 4/3/2023

Fish and Wildlife Research Institute



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

HAB ID	Location	County	Lat/Lon (DD.dddd)	Time	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pH	Species	cells/liter
HABW230404-039 FDEP EBV004 4/3/2023	Carl Johnson Park Boat Ramp (Estero Bay)	Lee	26.3936 -81.8655	07:15	0.5	26.90	37.30	3.79	7.85		
Analyzed by: Conte, Camden on 4/4/2023 Comments: Wind N @ 4-7 mph, sunny skies, air 22.1 C, tide incoming, secchi = 1.0 m, water green blue										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia sp.</i>	1,333
										<i>Pyrodinium bahamense</i>	0
HABW230404-040 FDEP EBV005 4/3/2023	Pelican Bay Nature Park Pier (Estero Bay)	Lee	26.3584 -81.8375	07:11	0.5	27.40	35.45	3.32	7.85		
Analyzed by: Villac, M.C. on 4/4/2023 Comments: Wind NE @ 4-7 mph, partly cloudy air 22.2 C, tide incoming, secchi = 0.9 m, water yellow green										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW230404-041 FDEP EBV007 4/3/2023	Mound House Dock (Estero Bay)	Lee	26.4462 -81.9272	07:30	0.5	27.50	35.29	5.10	7.89		
Analyzed by: Villac, M.C. on 4/4/2023 Comments: Wind NE @ 0-1 mph, sunny skies, air 25.7 C, tide low slack, secchi = 1.45 m, water green brown										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW230404-042 FDEP EBERS2 4/3/2023	Estero River; upstream	Lee	26.4386 -81.8400	07:45	0.5	27.60	29.37	2.17	7.35		
Analyzed by: Villac, M.C. on 4/4/2023 Comments: No wind, foggy, air 22 C, tide outgoing, secchi = 1.6 m, water green brown										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	0
										<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/Research/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.



Turner Beach

Bowmans Beach

Bowditch Point Park Beach

Mound House Dock

Carl Johnson Park Boat Ramp

Little Hickory Island Beach Park

Estero River, upstream

Pelican Bay Nature Park Pier

Lee

***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)

Google Earth

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