

HAB MONITORING REPORT
From: 9/7/2021 To: 9/7/2021
Fish and Wildlife Research Institute



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
HABW210908-027 FDEP PIV001 9/7/2021	Pelican Bay (Pine Island Sound)	Lee	26.6908 -82.2447	07:30	0.5	29.00	30.84	3.65	7.56		
Collected by: Volunteer(s) of FDEP; Preserved Analyzed by: Henschen, K. on 9/9/2021 Comments: Yellow Green Water. Partly Cloudy. Wind SE at 4-7mph. Air Temp = 24.8 °C.										<i>Karenia brevis</i> <i>Pseudo-nitzschia spp.</i> <i>Pyrodinium bahamense</i>	8,333 27,333 0
HABW210908-028 FDEP GSV002 9/7/2021	Placida Fishing Pier (Gasparilla Sound)	Charlotte	26.8271 -82.2672	06:49	0.5	30.50	32.42	2.54	7.83		
Collected by: Volunteer(s) of FDEP; Preserved Analyzed by: Henschen, K. on 9/9/2021 Comments: Yellow Brown Water. Sunny. Wind SE at 4-7mph. Air Temp = 26 °C. Secchi Depth = 1m.										<i>Karenia brevis</i> <i>Pseudo-nitzschia spp.</i> <i>Pyrodinium bahamense</i>	2,975,016 294,000 0
HABW210908-029 FDEP CHV010 9/7/2021	Bokeelia Fishing Pier (Charlotte Harbor)	Lee	26.7067 -82.1637	06:28	0.5	30.20	25.55	3.35			
Collected by: Staff of FDEP; Preserved Analyzed by: Henschen, K. on 9/9/2021 Comments: Air Temp = 24.7 °C.										<i>Karenia brevis</i> <i>Pseudo-nitzschia spp.</i> <i>Pyrodinium bahamense</i>	333 9,667 0
HABW210908-030 FDEP CHV009 9/7/2021	Burnt Store Marina (Charlotte Harbor)	Lee	26.7614 -82.0611	07:59	0.5	31.00	18.46	1.52	7.17		
Collected by: Volunteer(s) of FDEP; Preserved Analyzed by: Henschen, K. on 9/9/2021 Comments: Medium Brown Water. Partly Cloudy. Wind E at 2-3mph. Air Temp = 23.9 °C. Secchi Depth = 1.3m.										<i>Karenia brevis</i> <i>Pseudo-nitzschia spp.</i> <i>Pyrodinium bahamense</i>	0 0 0

NOTE: Blank field = not measured

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HABW210908-031 FDEP CHV007 9/7/2021	Punta Gorda Boat Ramp (Charlotte Harbor)	Charlotte	26.9092 -82.0953	07:08	0.5	27.80	12.80	3.22	7.28		
	Collected by: Volunteer(s) of FDEP; Preserved									<i>Karenia brevis</i>	0
	Analyzed by: Henschen, K. on 9/9/2021									<i>Pseudo-nitzschia spp.</i>	0
	Comments: Medium Brown Water. Partly Cloudy. Wind E at 2-3mph. Air Temp = 23.2 °C. Secchi Depth = 1.4m.									<i>Pyrodinium bahamense</i>	0
HABW210908-038 FDEP PIV004 9/7/2021	South Seas Island Resort Pier (Pine Island Sound)	Lee	26.5500 -82.1958	08:02	0.5		31.43	48.40	8.24		
	Collected by: Volunteer(s) of FDEP; Preserved									<i>Karenia brevis</i>	0
	Analyzed by: Henschen, K. on 9/9/2021									<i>Pseudo-nitzschia spp.</i>	144,667
	Comments: Medium Brown Water. Partly Cloudy. Wind SW at 2-3mph. Air Temp = 26.5 °C. Secchi Depth = 1.6m.									<i>Pyrodinium bahamense</i>	0
HABW210908-039 FDEP PIV002 9/7/2021	Black Key; NE of (Pine Island Sound)	Lee	26.6623 -82.1702	08:10	0.5						
	Collected by: Volunteer(s) of FDEP; Preserved									<i>Karenia brevis</i>	6,333
	Analyzed by: Henschen, K. on 9/9/2021									<i>Pseudo-nitzschia spp.</i>	19,333
	Comments: Yellow Green Water. Wind SE at 4-7mph. YSI was not working.									<i>Pyrodinium bahamense</i>	0

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HABW210908-032 FDEP GSV006 9/7/2021	Little Gasparilla Island; E of (Placida Harbor)	Charlotte	26.8349 -82.2909	07:00	0.5	30.60	33.12	6.39	7.61		
Collected by: Volunteer(s) of EBAP; Preserved Analyzed by: Henschen, K. on 9/8/2021 Comments: Wind E-SE @ 4-7 mph; sunny; air temp - 25.6 C; outgoing tide; water color - green brown; dread fish in mangroves										<i>Karenia brevis</i> <i>Pseudo-nitzschia spp.</i> <i>Pyrodinium bahamense</i>	216,667 10,667 0
HABW210908-033 FDEP EBERS2 9/7/2021	Estero River; upstream	Lee	26.4386 -81.8400	07:48	0.5	28.70	1.49	2.55	7.72		
Collected by: Volunteer(s) of EBAP; Preserved Analyzed by: Henschen, K. on 9/9/2021 Comments: Medium Brown Water. Partly Cloudy. Wind E at 0-1mph. Air Temp = 23.9 °C. Secchi Depth = 1.6m.										<i>Karenia brevis</i> <i>Pseudo-nitzschia spp.</i> <i>Pyrodinium bahamense</i>	0 0 0
HABW210908-034 FDEP EBV004 9/7/2021	Carl Johnson Park Boat Ramp (Estero Bay)	Lee	26.3936 -81.8655	07:01	0.5	29.90	28.03	4.83	8.18		
Collected by: Volunteer(s) of EBAP; Preserved Analyzed by: Henschen, K. on 9/9/2021 Comments: Green Brown Water. Partly Cloudy. Wind E at 2-3mph. Air Temp = 25.6 °C. Secchi Depth = 1.3m.										<i>Karenia brevis</i> <i>Pseudo-nitzschia spp.</i> <i>Pyrodinium bahamense</i>	0 0 0
HABW210908-035 FDEP LBV005 9/7/2021	Ski Alley (Lemon Bay)	Charlotte	26.9111 -82.3522	07:10	0.5	30.30	30.83	3.70	8.03		
Collected by: Volunteer(s) of EBAP; Preserved Analyzed by: Henschen, K. on 9/8/2021 Comments: Wind SE @ 3mph; partly cloudy; air temp - 25.3 C; outgoing tide; secchi depth - 1.3m; water color - yellow brown										<i>Karenia brevis</i> <i>Pseudo-nitzschia spp.</i> <i>Pyrodinium bahamense</i>	25,667 16,333 0

NOTE: Blank field = not measured

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HABW210908-036 FDEP EBV001 9/7/2021	Matanzas Pass (Estero Bay)	Lee	26.4577 -81.9532	07:18	0.5	30.70	27.07	4.94	7.91		
	Collected by: Staff of EBAP; Preserved									<i>Karenia brevis</i>	0
	Analyzed by: Henschen, K. on 9/9/2021									<i>Pseudo-nitzschia spp.</i>	0
	Comments: Medium Brown Water. Partly Cloudy. Wind E at 4-7mph. Air Temp = 25.9 °C. Secchi Depth = 1.0m.									<i>Pyrodinium bahamense</i>	0
HABW210908-037 FDEP GSV001 9/7/2021	Coral Creek Fishing Pier	Charlotte	26.8339 -82.2650	07:10	0.5	31.20	26.43	1.99	7.60		
	Collected by: Volunteer(s) of EBAP; Preserved									<i>Karenia brevis</i>	13,000
	Analyzed by: Henschen, K. on 9/8/2021									<i>Pseudo-nitzschia spp.</i>	37,333
	Comments: Wind SE @ 2-3mph; partly cloudy; air temp - 25.5 C; outgoing tide; secchi depth <1m; water color - med brown									<i>Pyrodinium bahamense</i>	0
HABW210908-040 FDEP LBV006 9/7/2021	Placida Road; E of (Buck Creek)	Charlotte	26.8904 -82.3091	07:47	0.2	28.90	0.04	7.01	7.86		
	Collected by: Volunteer(s) of EBAP; Preserved									<i>Karenia brevis</i>	0
	Analyzed by: Henschen, K. on 9/8/2021									<i>Pseudo-nitzschia spp.</i>	0
	Comments: Wind NE @ 4-7mph; partly cloudy; air temp - 27.0 C; low slack tide; secchi depth - >0.3m; water color - green brown									<i>Pyrodinium bahamense</i>	0
HABW210908-044 FDEP LBV007 9/7/2021	Don Pedro Island State Park (Kettle Harbor)	Charlotte	26.8558 -82.3031	07:30	0.5	31.20	39.37	3.49	7.72		
	Collected by: Volunteer(s) of EBAP; Preserved									<i>Karenia brevis</i>	29,667
	Analyzed by: Henschen, K. on 9/8/2021									<i>Pseudo-nitzschia spp.</i>	8,333
	Comments: Wind SW @ 0-1mph; partly cloudy; air temp - 27 C; outgoing tide; secchi depth >1.8m; water color - yellow brown									<i>Pyrodinium bahamense</i>	0
HABW210908-047 FDEP PIV006 9/7/2021	Buck Key; SE of (Pine Island Sound)	Lee	26.4950 -82.1664	07:23	0.5	30.10	29.43	3.52	8.14		
	Collected by: Volunteer(s) of EBAP; Preserved									<i>Karenia brevis</i>	0
	Analyzed by: Henschen, K. on 9/8/2021									<i>Pseudo-nitzschia spp.</i>	0
	Comments: Wind E @ 4mph; partly cloudy; air temp - 25.0 C; outgoing tide; secchi depth - 1.2m; water color - green brown									<i>Pyrodinium bahamense</i>	0

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HAB ID	Location	County	Lat/Lon (DD.dddd)	Time	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pH	Species	cells/liter
HABW210908-051 FDEP EBV005 9/7/2021	Pelican Bay Nature Park Pier (Estero Bay)	Lee	26.3584 -81.8375	07:15	0.5	30.10	28.45	2.00	7.80		
	Collected by: Volunteer(s) of EBAP; Preserved									<i>Karenia brevis</i>	0
	Analyzed by: Henschen, K. on 9/8/2021									<i>Pseudo-nitzschia spp.</i>	0
	Comments: Wind E @ 2-3mph; partly cloudy; air temp - 25.4 C; outgoing tide; secchi depth - 0.7m; water color - yellow brown									<i>Pyrodinium bahamense</i>	0
HABW210908-057 FDEP EBV006 9/7/2021	Coon Key; N of (Estero Bay)	Lee	26.4287 -81.8832	07:16	0.5	29.80	25.88	4.99	8.00		
	Collected by: Volunteer(s) of EBAP; Preserved									<i>Karenia brevis</i>	0
	Analyzed by: Henschen, K. on 9/8/2021									<i>Pseudo-nitzschia spp.</i>	0
	Comments: Wind E @ 4.3mph; partly cloudy; air temp - 26.9 C; low slack tide; secchi depth - 1.2m; water color - red brown									<i>Pyrodinium bahamense</i>	0
HABW210908-065 9/7/2021	Woodings Point; E of (San Carlos Bay)	Lee	26.4736 -82.0464	07:48	0.5	29.80	27.10	5.19	8.07		
	Collected by: Volunteer(s) of EBAP; Preserved									<i>Karenia brevis</i>	0
	Analyzed by: Henschen, K. on 9/8/2021									<i>Pseudo-nitzschia spp.</i>	0
	Comments: Wind SE @ 4-7mph; partly cloudy; air temp - 27.7 C; outgoing tide; secchi depth - 2.0m; water color - green brown									<i>Pyrodinium bahamense</i>	0

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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.



Ski Alley

Placida Road: E of

Punta Gorda Boat Ramp

Charlotte

Don Pedro Island State Park

Little Gasparilla Island: E of

Coral Creek Fishing Pier

Placida Fishing Pier

Burnt Store Marina

Pelican Bay

Bokeelia Fishing Pier

Black Key: NE of

Lee

South Seas Island Resort Pier

Buck Key: SE of

Woodings Point: E of

Matanzas Pass

Estero River: upstream

Coor Key: N of

Carl Johnson Park Boat Ramp

Pelican Bay Nature Park Pier

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

Image Landsat / Copernicus

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



10 mi