

HAB MONITORING REPORT

From: 12/4/2017 To: 12/4/2017

Fish and Wildlife Research Institute



Collected by: Staff

Collecting agency: 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
HABW171205-027 FDEP EBV001 12/4/2017	Matanzas Pass (Estero Bay)	Lee	26.4577 -81.9532	08:44	0.5	22.80	26.95	65.80	7.82		
Analyzed by: KellerAbbe, S. on 12/6/2017 Comments: Winds NE @ 4 - 7 mph; partly cloudy, air temp 20.5 C; tide low slack; secchi 0.8 m; water color medium brown										<i>Karenia brevis</i>	333
										<i>Pseudo-nitzschia spp.</i>	6,333
										<i>Pyrodinium bahamense</i>	0
HABW171205-028 FDEP EBV003 12/4/2017	Estero River; mouth of (Estero Bay)	Lee	26.4294 -81.8580	07:10	0.5	22.30	27.31	4.78	7.65		
Analyzed by: KellerAbbe, S. on 12/6/2017 Comments: Winds NE @ 2 - 3 mph; partly cloudy, air temp 21.5 C; tide outgoing; secchi 0.6 m; water color medium brown										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	3,667
										<i>Pyrodinium bahamense</i>	0
HABW171205-029 FDEP EBV004 12/4/2017	Carl Johnson Park Boat Ramp (Estero Bay)	Lee	26.3936 -81.8655	06:20	0.5	22.50	43.52	3.88	7.96		
Analyzed by: Henschen, K. on 12/6/2017 Comments: Winds NE @ 4 - 7 mph; sunny, air temp 18.2 C; tide outgoing; secchi 0.6 m; water color green brown; low tide 7:12										<i>Karenia brevis</i>	4,333
										<i>Pseudo-nitzschia spp.</i>	417,620
										<i>Pyrodinium bahamense</i>	0
HABW171205-030 FDEP EBV005 12/4/2017	Pelican Bay Nature Park Pier (Estero Bay)	Lee	26.3584 -81.8375	07:00	0.5	22.70	24.02	4.59	8.17		
Analyzed by: Henschen, K. on 12/6/2017 Comments: Winds N @ 4 - 7 mph; air temp 22.3 C; tide outgoing; secchi 6.5 m; water color yellow-brown										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	48,000
										<i>Pyrodinium bahamense</i>	0
HABW171205-031 FDEP EBV006 12/4/2017	Coon Key; N of (Estero Bay)	Lee	26.4287 -81.8832	06:23	0.5	23.00	30.56	5.60	7.88		
Analyzed by: KellerAbbe, S. on 12/6/2017 Comments: Winds SE @ 4 - 7 mph; sunny, air temp 20.4 C; water color green										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	26,000
										<i>Pyrodinium bahamense</i>	0

NOTE: Blank field = not measured

HAB ID	Location	County	Lat/Lon (DD.dddd)	Time	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pH	Species	cells/liter
HABW171205-032 FDEP EBV007 12/4/2017	Mound House Dock (Estero Bay)	Lee	26.4462 -81.9272	07:21	0.5	22.80	28.11	4.78	7.58		
Analyzed by: KellerAbbe, S. on 12/6/2017										<i>Karenia brevis</i>	1,667
Comments: Winds NE @ 7 mph; partly cloudy, air temp 21.9 C; tide outgoing; secchi 0.9 m; water color red-brown										<i>Pseudo-nitzschia spp.</i>	6,000
										<i>Pyrodinium bahamense</i>	0
HABW171205-033 FDEP EBERS2 12/4/2017	Estero River; upstream	Lee	26.4386 -81.8400	07:34	0.5	23.20	19.00	4.42	7.51		
Analyzed by: KellerAbbe, S. on 12/6/2017										<i>Karenia brevis</i>	0
Comments: Winds N @ 4 - 7 mph; partly cloudy, air temp 18.5 C; tide outgoing; secchi 1.2; water color green-brown										<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/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.



Matanzas Pass

Mound House Dock

Estero River; upstream

Coon Key; N of Estero River; mouth of

Lee

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

