HAB MONITORING REPORT

From: 9/5/2017 To: 9/5/2017

Fish and Wildlife Research Institute



Collecting agency: EBAP **Sample condition:** Preserved

Collected by: Volunteer(s)

HAB ID Original ID Sample Date	Location	County	Lat/Lon (DD.dddd	Time)	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	рН)	Species	cells/liter
HABW170906-052 FDEP EBV001 9/5/2017	Matanzas Pass (Estero Bay)	Lee	26.4577 -81.9532	06:45	0.5	30.30	18.41	4.30	7.70		
	c, M.C. on 9/6/2017									Karenia brevis	0
Comments: Wate	er color red-brown; Wind E @ 4 - 5 mph									Pseudo-nitzschia spp.	0
										Pyrodinium bahamense	0
HABW170906-053 FDEP EBV003 9/5/2017	Estero River; mouth of (Estero Bay)	Lee	26.4294 -81.8580	07:15	0.5	29.10	8.30	3.79	8.09		
Analyzed by: Hens	schen, K. on 9/6/2017									Karenia brevis	0
Comments: Water color dark brown; Winds E @ 2 - 3 mph										Pseudo-nitzschia spp.	0
										Pyrodinium bahamense	0
HABW170906-054 FDEP EBV004 9/5/2017	Carl Johnson Park Boat Ramp (Estero Bay)	Lee	26.3936 -81.8655	06:35	0.5	29.70	22.56	3.96			
Analyzed by: Hens	schen, K. on 9/6/2017									Karenia brevis	0
Comments: Wate	er color green-brown; Wind NE @ 4 - 7 mph									Pseudo-nitzschia spp.	0
										Pyrodinium bahamense	0
HABW170906-055 FDEP EBV005 9/5/2017	Pelican Bay Nature Park Pier (Estero Bay)	Lee	26.3584 -81.8375	07:09	0.5	30.50	17.17	2.05	8.08		
Analyzed by: Hens	schen, K. on 9/7/2017									Karenia brevis	0
Comments: Wate	er color red-brown; Wind NE @ 2 - 3mph									Pseudo-nitzschia spp.	0
										Pyrodinium bahamense	0
HABW170906-056 FDEP EBV006 9/5/2017	Coon Key; N of (Estero Bay)	Lee	26.4287 -81.8832	06:48	0.5	29.50	15.62	4.48	7.76		
	schen, K. on 9/7/2017									Karenia brevis	0
Comments: Wate	er color med-brown; wind SE @ 4- 7 mph									Pseudo-nitzschia spp.	0
											0

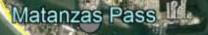
HAB ID	Location	County	Lat/Lon	Time	Depth	Temp	Sal	DO	рН	Species	cells/liter
Original ID			(DD.dddd)	(m)	(C)	(ppt)	(mg/L)			
Sample Date											
HABW170906-057 FDEP EBV007 9/5/2017	Mound House Dock (Estero Bay)	Lee	26.4462 -81.9272	07:15	0.5	29.90	14.73	4.18	7.87		
Analyzed by: Hens	schen, K. on 9/7/2017									Karenia brevis	0
Comments: Wate	er color yellow-brown; Winds NE @ 0 - 1 mph									Pseudo-nitzschia spp.	0
										Pyrodinium bahamense	0
HABW170906-058 FDEP EBERS2 9/5/2017	Estero River; upstream	Lee	26.4386 -81.8400	07:20	0.5	28.40	0.16	3.14	8.31		
	schen, K. on 9/7/2017									Karenia brevis	0
Comments: Wate	er dark-brown; Winds E @ 0 - 1 mph									Pseudo-nitzschia spp.	667
										Pyrodinium bahamense	0

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							
нідн	> 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 *Pseudonitzschia* 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 <u>Department of Health Aquatic Toxins Program</u>.

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.



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Mound House Dock

Estero River; upstream

Coon Key; N of

Estero River; mouth of

Carl Johnson Park Boat Ramp

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)

Data SIO, NOAA, U.S. Navy, NGA, GEBCO Image © 2017 TerraMetrics Pelican Bay Nature Park Pier

