

HAB MONITORING REPORT
From: 8/1/2016 To: 8/1/2016
Fish and Wildlife Research Institute



HAB ID	Location	County	Lat/Lon (DD.ddddd)	Time	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L)	pH	Species	cells/liter
HABW160802-040 FDEP EBV001 8/1/2016	Matanzas Pass (Estero Bay)	Lee	26.4577 -81.9532	06:58	0.5	31.40	27.04	4.03	7.81		
Collected by: Flynn, R. of EBAP; Preserved Analyzed by: Henschen, K. on 8/3/2016 Comments: Wind NE @ 2-3mph; partly cloudy; yellow brown water										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	8,333
										<i>Pyrodinium bahamense</i>	0
HABW160802-041 FDEP EBV003 8/1/2016	Estero River; mouth of (Estero Bay)	Lee	26.4294 -81.8580	06:48	0.5	30.40	22.12	2.42	7.45		
Collected by: Volunteer(s) of EBAP; Preserved Analyzed by: Murasko, S. on 8/3/2016 Comments: Wind E @ 4-7mph; sunny; yellow green water										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	0
										<i>Pyrodinium bahamense</i>	0
HABW160802-042 FDEP EBV004 8/1/2016	Carl Johnson Park Boat Ramp (Estero Bay)	Lee	26.3936 -81.8655	07:10	0.5	29.90	29.83	4.18	8.12		
Collected by: Volunteer(s) of EBAP; Preserved Analyzed by: Murasko, S. on 8/3/2016 Comments: Wind E @ 6mph; fog/haze; yellow brown water										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	1,333
										<i>Pyrodinium bahamense</i>	0
HABW160802-043 FDEP EBV005 8/1/2016	Pelican Bay Nature Park Pier (Estero Bay)	Lee	26.3584 -81.8375	07:08	0.5	29.60	24.37	3.32	7.77		
Collected by: Volunteer(s) of EBAP; Preserved Analyzed by: Henschen, K. on 8/3/2016 Comments: Wind 0-1mph; partly cloudy; yellow brown water										<i>Karenia brevis</i>	0
										<i>Pseudo-nitzschia spp.</i>	0
										<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
HABW160802-044 FDEP EBV006 8/1/2016	Coon Key; N of (Estero Bay)	Lee	26.4287 -81.8832	06:57	0.5	30.20	24.70		6.02		
	Collected by: Franklin, N. of EBAP; Preserved									<i>Karenia brevis</i>	0
	Analyzed by: Henschen, K. on 8/3/2016									<i>Pseudo-nitzschia spp.</i>	0
	Comments: Wind E @ 8-12mph; sunny; medium brown water									<i>Pyrodinium bahamense</i>	0
HABW160802-045 FDEP EBV007 8/1/2016	Mound House Dock (Estero Bay)	Lee	26.4462 -81.9272	08:06	0.5	31.30	26.18	3.23	7.76		
	Collected by: Cain, T. of EBAP; Preserved									<i>Karenia brevis</i>	0
	Analyzed by: Henschen, K. on 8/3/2016									<i>Pseudo-nitzschia spp.</i>	0
	Comments: Wind E @ 4-7mph; partly cloudy; green brown water									<i>Pyrodinium bahamense</i>	333
HABW160802-046 FDEP EBERS2 8/1/2016	Estero River; upstream	Lee	26.4386 -81.8400	07:32	0.5	28.10	0.58	2.73	7.57		
	Collected by: Fretwell of EBAP; Preserved									<i>Karenia brevis</i>	0
	Analyzed by: Henschen, K. on 8/3/2016									<i>Pseudo-nitzschia spp.</i>	0
	Comments: Wind E @ 0-1mph; sunny; medium brown water									<i>Pyrodinium bahamense</i>	0

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

Coon Key; N of

Carl Johnson Park Boat Ramp

Pelican Bay Nature Park Pier

Lee

Estero River; upstream

Estero River; mouth of

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)

