HAB MONITORING REPORT

From: 6/4/2018 To: 6/4/2018

Collected by: Volunteer(s) **Collecting agency:** EBAP

Fish and Wildlife Research Institute

Sample condition: Preserved



HAB ID Original ID	Location	County	Lat/Lon (DD.dddd	Time)	Depth (m)	Temp (C)	Sal (ppt)	DO (mg/L	pH)	Species	cells/liter
Sample Date			-								
HABW180605-072 FDEP EBV001 6/4/2018	Matanzas Pass (Estero Bay)	Lee	26.4577 -81.9532	06:22	0.5	28.60	25.12	4.74	7.96		
Analyzed by: V	/illac, M.C. on 6/6/2018									Karenia brevis	0
Comments: Winds W @ 4 - 7 mph, partly cloudy, air temp 25.5 C; t		tide								Pseudo-nitzschia spp.	2,667
Ir	ncoming; secchi = 1.5 m; water color yellow-green									Pyrodinium bahamense	0
HABW180605-073 FDEP EBV003 6/4/2018	Estero River; mouth of (Estero Bay)	Lee	26.4294 -81.8580	06:40	0.5	28.70	25.27	8.32	7.98		
Analyzed by: V	/illac, M.C. on 6/6/2018									Karenia brevis	0
	Vinds 2 - 3 mph, partly cloudy, air temp 26.8 C; tide	high								Pseudo-nitzschia spp.	5,333
S	lack; secchi = 1.1 m; water color med-brown									Pyrodinium bahamense	0
HABW180605-074 FDEP EBV004 6/4/2018	Carl Johnson Park Boat Ramp (Estero Bay)	Lee	26.3936 -81.8655	06:50	0.5	28.60	29.83	4.08	8.04		
Analyzed by: ⊢	lenschen, K. on 6/6/2018									Karenia brevis	0
Comments: Winds W @ 2 - 3 mph, partly cloudy, air temp 25.3		tide								Pseudo-nitzschia spp.	111,667
n	igh slack; secchi = 1.5 m; water color green-brown									Pyrodinium bahamense	0
HABW180605-075 FDEP EBV005 6/4/2018	Pelican Bay Nature Park Pier (Estero Bay)	Lee	26.3584 -81.8375	06:38	0.5	27.90	27.25	2.44	8.03		
Analyzed by: ⊢	lenschen, K. on 6/6/2018									Karenia brevis	0
	Vinds W @ 4 - 7 mph, partly cloudy, airt temp 24.5 C	; tide								Pseudo-nitzschia spp.	0
h	igh slack; secchi = 1.0 m; water color yellow-brown									Pyrodinium bahamense	0
HABW180605-076 FDEP EBV006 6/4/2018	Coon Key; N of (Estero Bay)	Lee	26.4287 -81.8832	06:20	0.5	29.00	29.81	5.28	7.97		
Analyzed by: K	CellerAbbe, S. on 6/6/2018									Karenia brevis	0
	Vinds NW @ 4 - 7 mph, partly cloudy, air temp 25.7	C; tide								Pseudo-nitzschia spp.	180,333
h	igh slack; secchi = 1.05 m; water color green									Pyrodinium bahamense	. 0

HAB ID	Location	County	Lat/Lon (DD.dddd		Depth	Temp (C)	Sal (ppt)	DO (mg/L)	рH	Species	cells/liter
Original ID			(DD.dddc	'')	(m)	(C)	(ppt)	(mg/L)	'		
Sample Date											
HABW180605-077 FDEP EBV007 6/4/2018	Mound House Dock (Estero Bay)	Lee	26.4462 -81.9272	06:34	0.5	29.20	26.32	5.05	8.01		
Analyzed by: Kelle	erAbbe, S. on 6/6/2018									Karenia brevis	0
	ds NE @ 2 - 3 mph, partly cloudy, air temp 24.									Pseudo-nitzschia spp.	17,667
inco	ming tide; secchi = 1.5 m; water color yellow-l	prown								Pyrodinium bahamense	0
HABW180605-078 FDEP EBERS2 6/4/2018	Estero River; upstream	Lee	26.4386 -81.8400	07:10	0.5	28.20	1.13	3.29	7.45		
Analyzed by: Hen	schen, K. on 6/6/2018									Karenia brevis	0
	ds W @ 2 - 3 mph, partly cloudy, air temp 25.6 ming; secchi = 1.0 m; water color medium bro	•								Pseudo-nitzschia spp.	0
		MA/FI									

NOTE: Blank field = not measured

HAB MONITORING REPORT

From: 6/4/2018 To: 6/4/2018

Collected by: Patterson, M. Collecting agency: PC

Sample condition: Preserved

Fish and Wildlife Research Institute



HAB ID	Location	County	Lat/Lon		Depth	Temp	Sal	DO	рН	Species	cells/liter
Original ID			(DD.dddc	(DD.dddd)		(C)	(ppt)	(mg/L)			
Sample Date											
HABW180606-033	Southeast 23rd Avenue; SW of (Caloosahatchee River)	Lee	26.5999 -81.9226	08:45	0.5	29.10					
6/4/2018											
Analyzed by: Hen	schen, K. on 6/7/2018									Karenia brevis	0
Comments:										Pseudo-nitzschia spp.	0
										Pyrodinium bahamense	0
HABW180606-034	Givney Key; NE of (Matlacha Pass)	Lee	26.5176 -82.0502	12:00	0.5	30.00					_
6/4/2018											
Analyzed by: Hen	schen, K. on 6/7/2018									Karenia brevis	0
Comments:										Pseudo-nitzschia spp.	0
										Pyrodinium bahamense	0

Description	Karenia brevis 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 ≥ 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 *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 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.

