

HAB MONITORING REPORT

From: 9/8/2015 To: 9/8/2016

Fish and Wildlife Research Institute



| HAB ID | Location | County | Lat/Lon (DD.dddd) | Time | Depth (m) | Temp (C) | Sal (ppt) | DO (mg/L) | pH | Species | cells/liter |
|---|---|--------|----------------------|-------|--------------|-------------|--------------|--------------|------|------------------------------|-------------|
| HABW150909-013 FDEP EBV001 9/8/2015 | Matanzas Pass (Estero Bay) | Lee | 26.4577 -81.9532 | 07:05 | 0.5 | 29.70 | 27.63 | 5.19 | 7.88 | | |
| | Collected by: Volunteer(s) of EBAP; Preserved | | | | | | | | | <i>Karenia brevis</i> | 0 |
| | Analyzed by: Henschen, K. on 9/9/2015 | | | | | | | | | <i>Pseudo-nitzschia spp.</i> | 134,333 |
| | Comments: Wind NW @ 0-1 mph; Partly cloudy; Secchi depth 0.9 m; Green brown water | | | | | | | | | <i>Pyrodinium bahamense</i> | 0 |
| HABW150909-014 FDEP EBV003 9/8/2015 | Estero River; mouth of (Estero Bay) | Lee | 26.4294 -81.8580 | 07:18 | 0.5 | 29.40 | 21.21 | 3.17 | 7.86 | | |
| | Collected by: Sims, C. of EBAP; Preserved | | | | | | | | | <i>Karenia brevis</i> | 0 |
| | Analyzed by: Henschen, K. on 9/9/2015 | | | | | | | | | <i>Pseudo-nitzschia spp.</i> | 22,000 |
| | Comments: Wind SE @ 4-7 mph; Partly cloudy; Secchi depth 0.675 m; Yellow brown water | | | | | | | | | <i>Pyrodinium bahamense</i> | 0 |
| HABW150909-015 FDEP EBV004 9/8/2015 | Carl Johnson Park Boat Ramp (Estero Bay) | Lee | 26.3936 -81.8655 | 07:10 | 0.5 | 29.30 | 27.25 | 3.69 | 8.12 | | |
| | Collected by: Volunteer(s) of EBAP; Preserved | | | | | | | | | <i>Karenia brevis</i> | 0 |
| | Analyzed by: KellerAbbe, S. on 9/9/2015 | | | | | | | | | <i>Pseudo-nitzschia spp.</i> | 1,333 |
| | Comments: Wind E @ 0-1 mph; Partly cloudy; Secchi depth 1.55 m; Green water | | | | | | | | | <i>Pyrodinium bahamense</i> | 0 |
| HABW150909-016 FDEP EBV006 9/8/2015 | Coon Key; N of (Estero Bay) | Lee | 26.4287 -81.8832 | 07:05 | 0.5 | 29.30 | 24.00 | 4.70 | 7.72 | | |
| | Collected by: Franklin, N. of EBAP; Preserved | | | | | | | | | <i>Karenia brevis</i> | 0 |
| | Analyzed by: KellerAbbe, S. on 9/9/2015 | | | | | | | | | <i>Pseudo-nitzschia spp.</i> | 78,000 |
| | Comments: Wind S @ 2-3 mph; Partly cloudy; Secchi depth 0.6 m; Medium brown water | | | | | | | | | <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 |
|---|--------------------------------------|--------|----------------------|-------|--------------|-------------|--------------|--------------|------|------------------------------|-------------|
| HABW150909-017 | Mound House Dock (Estero Bay) | Lee | 26.4462 -81.9272 | 07:05 | 0.5 | 29.80 | 25.46 | 2.72 | 7.67 | | |
| FDEP EBV007 | | | | | | | | | | | |
| 9/8/2015 | | | | | | | | | | | |
| Collected by: Cain, T. of EBAP; Preserved | | | | | | | | | | <i>Karenia brevis</i> | 0 |
| Analyzed by: Markley, L. on 9/9/2015 | | | | | | | | | | <i>Pseudo-nitzschia spp.</i> | 18,333 |
| Comments: Wind E @ 2-3 mph; Overcast; Secchi depth 0.51 m; Green brown water | | | | | | | | | | <i>Pyrodinium bahamense</i> | 0 |

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|---|--|--------|----------------------|-------|--------------|-------------|--------------|--------------|------|--|-----------------|
| HABW150909-012 FDEP CHV009 9/8/2015 | Burnt Store Marina (Charlotte Harbor) | Lee | 26.7614 -82.0611 | 08:11 | 0.5 | 29.20 | 4.80 | 2.00 | 7.65 | | |
| Collected by: Lough, B. of FDEP; Preserved Analyzed by: Henschen, K. on 9/9/2015 Comments: Wind E @ 4-7 mph; Partly cloudy; Secchi depth 0.8 m; Yellow brown water | | | | | | | | | | <i>Karenia brevis</i> <i>Pseudo-nitzschia spp.</i> <i>Pyrodinium bahamense</i> | 0 1,667 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.

Burnt Store Marina (Charlotte Harbor)



Lee

***Karenia brevis* scale (cells/liter)**

- NOT PRESENT – BACKGROUND (0 to 1,000)
- VERY LOW (>1,000 to 10,000)
- LOW (>10,000 to 100,000)
- MEDIUM (>100,000 to 1,000,000)
- HIGH (>1,000,000)



Matanzas Pass

Mound House Dock

Coon Key; N of

Estero River; mouth of

Carl Johnson Park Boat Ramp

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

10.6 km



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Google earth