**Gulf of Mexico Harmful Algal Bloom Bulletin**

Region: Southwest Florida  
Monday, 20 March 2017  
NOAA National Ocean Service  
NOAA Satellite and Information Service  
NOAA National Weather Service  
Last bulletin: Thursday, March 16, 2017

---

**Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable.**

Points represent cell concentration sampling data from March 10 to 17: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/hab_publication/habfs_bulletin_guide.pdf](http://tidesandcurrents.noaa.gov/hab/hab_publication/habfs_bulletin_guide.pdf)

Detailed sample information can be obtained through FWC Fish and Wildlife Research Institute at:

[http://myfwc.com/redtitestatus](http://myfwc.com/redtitestatus)

---

**Conditions Report**

Not present to low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of southwest Florida and not present in the Florida Keys. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for Monday, March 20 through Thursday, March 23 is listed below:

**County Region:** Forecast (Duration)

- **Southern Pinellas:** Low (M-W), Very Low (Th)
- **Northern Manatee, bay regions:** Very Low (M-Th)
- **Southern Manatee:** Very Low (M-Th)
- **Southern Manatee, bay regions:** Very Low (M-Th)
- **Northern Sarasota:** Very Low (M, Th), Low (Tu-W)
- **Northern Sarasota, bay regions:** Low (M-Th)
- **Southern Charlotte:** Moderate (M-W), Low (Th)
- **Southern Charlotte, bay regions:** Moderate (M-Th)
- **Northern Lee:** Moderate (M-W), Low (Th)
- **Northern Lee, bay regions:** Low (M-W), Very Low (Th)
- **Central Lee:** Very Low (M-Th)
- **Central Lee, bay regions:** Very Low (M-Th)
- **All Other SWFL County Regions:** None expected (M-Th)

Check [https://tidesandcurrents.noaa.gov/hab/beach_conditions.html](https://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at [https://tidesandcurrents.noaa.gov/hab/hab_health_info.html](https://tidesandcurrents.noaa.gov/hab/hab_health_info.html). Over the past several days, there have been no reports of respiratory irritation. Reports of dead fish have been received from Sarasota and Lee counties.

**Analysis**

Recent samples collected alongshore the coast of southwest Florida from Pinellas to Collier counties indicate a decrease in concentrations of *Karenia brevis*. Samples from Sarasota and Charlotte counties indicate a decrease from ‘medium’ concentrations of *K. brevis* to ‘low a’ in the bay regions of northern Sarasota and to ‘low b’ in the bay regions of southern Charlotte County (FWRI, MML, SCHD, CCPCD; 3/10-3/17). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: [http://myfwc.com/redtitestatus](http://myfwc.com/redtitestatus).

In recent ensemble imagery (MODIS Aqua, 3/18), patches of elevated chlorophyll (2-8 µg/L) are visible with some of the optical characteristics of *K. brevis* are present from Pinellas to Lee counties.

Variable winds observed over the weekend decreased the potential for transport of surface *K. brevis* concentrations alongshore southwest Florida. Onshore winds forecasted Tuesday and Wednesday have the potential to increase respiratory irritation at the coast.

Keeney, Ludema
Wind Analysis

Englewood to Tarpon Springs (Venice): East to north winds (5-15kn, 3-8m/s) today, becoming north to northeast winds (5-15kn) tonight. Southeast winds (5-10kn, 3-5m/s) Tuesday morning. Northwest to north winds (5-10kn) Tuesday evening through Wednesday. Northeast winds (10kn, 5m/s) Thursday.
Satellite chlorophyll image and forecast winds for March 21, 2017 06Z with points representing cell concentration sampling data from March 10 to 17: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:
http://tidesandcurrents.noaa.gov/hab/hab_publication/habfs_bulletin_guide.pdf

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).