



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

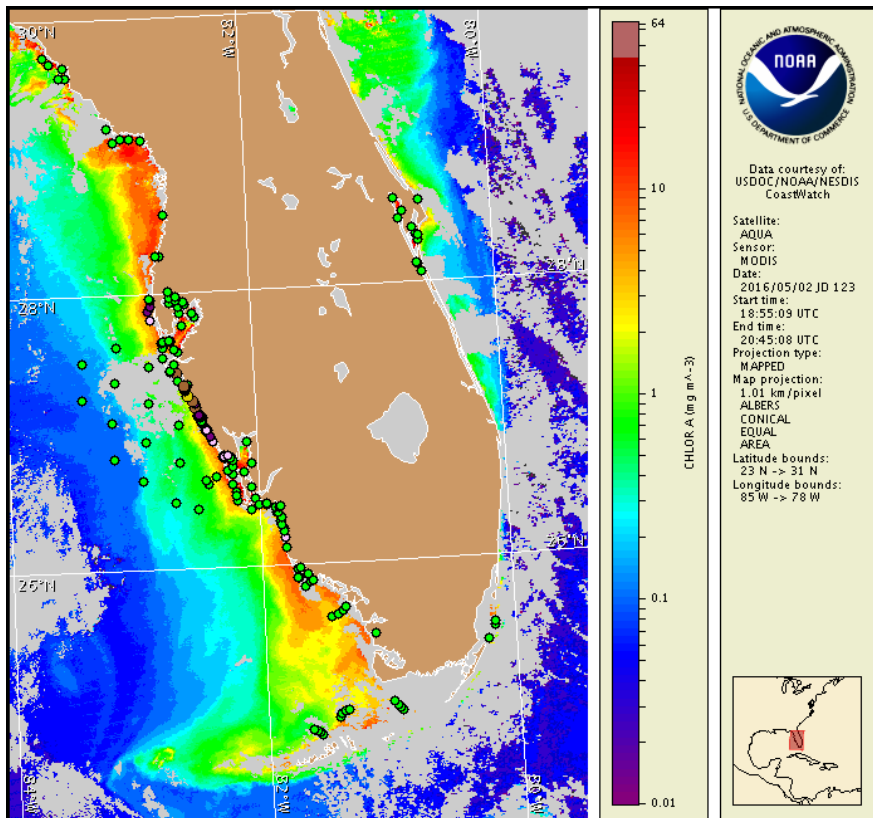
Thursday, 05 May 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, May 2, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from April 25 to May 3: 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/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## 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 Thursday, May 5 to Monday, May 9 is listed below:

### County Region: Forecast (Duration)

**Northern Pinellas, bay regions:** Very Low (Th-M)

**Southern Pinellas, bay regions:** Very Low (Th-M)

**Northern Manatee, bay regions:** Very Low (Th-M)

**Southern Manatee, bay regions:** Very Low (Th-M)

**Northern Sarasota, bay regions:** Very Low (Th-Sa), Low (Su-M)

**Northern Sarasota, bay regions:** Low (Th-M)

**Southern Sarasota, bay regions:** Very Low (Th-M)

**Northern Charlotte, bay regions:** Very Low (Th-M)

**Southern Charlotte, bay regions:** Low (Th-Sa, M), Very Low (Su)

**Northern Lee, bay regions:** Very Low (Th-M)

**All Other SWFL County Regions:** None expected (Th-M)

Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://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 [http://tidesandcurrents.noaa.gov/hab/hab\\_health\\_info.html](http://tidesandcurrents.noaa.gov/hab/hab_health_info.html).

## Analysis

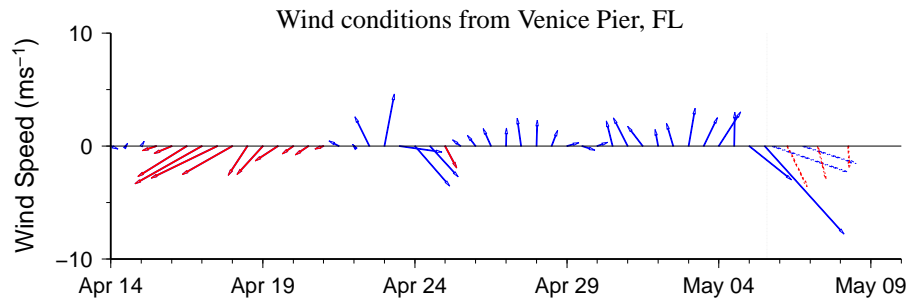
Recent sampling indicates that *Karenia brevis* concentrations range from not present to 'low b' along- and offshore the coast of southwest Florida from southern Pinellas to Collier counties, and is not present in the Florida Keys (FWRI, MML, SCHD, CCENRD; 4/25-5/3). Sampling along- and offshore southern Pinellas County late last week and this week identified not present to 'very low a' *K. brevis* concentrations (FWRI; 4/25-5/3). In Sarasota County, recent sampling indicates that *K. brevis* concentrations range from not present to 'low b', with the highest concentrations detected at Siesta Beach in northern Sarasota County (SCHD; 5/2). Samples collected from southern Charlotte to Collier counties identified not present to background *K. brevis* concentrations (FWRI, CCENRD; 4/27-5/3). No reports of dead fish or respiratory irritation have been received over the last several days (FWRI, MML; 5/2-5). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

Recent ensemble imagery is obscured by clouds alongshore southwest Florida, limiting analysis. In MODIS Aqua imagery from 5/2 (shown left), patches of elevated chlorophyll (2-10 $\mu$ g/L) with some of the optical properties of *K. brevis* are visible along- and offshore southwest Florida from Pinellas to Lee Counties.

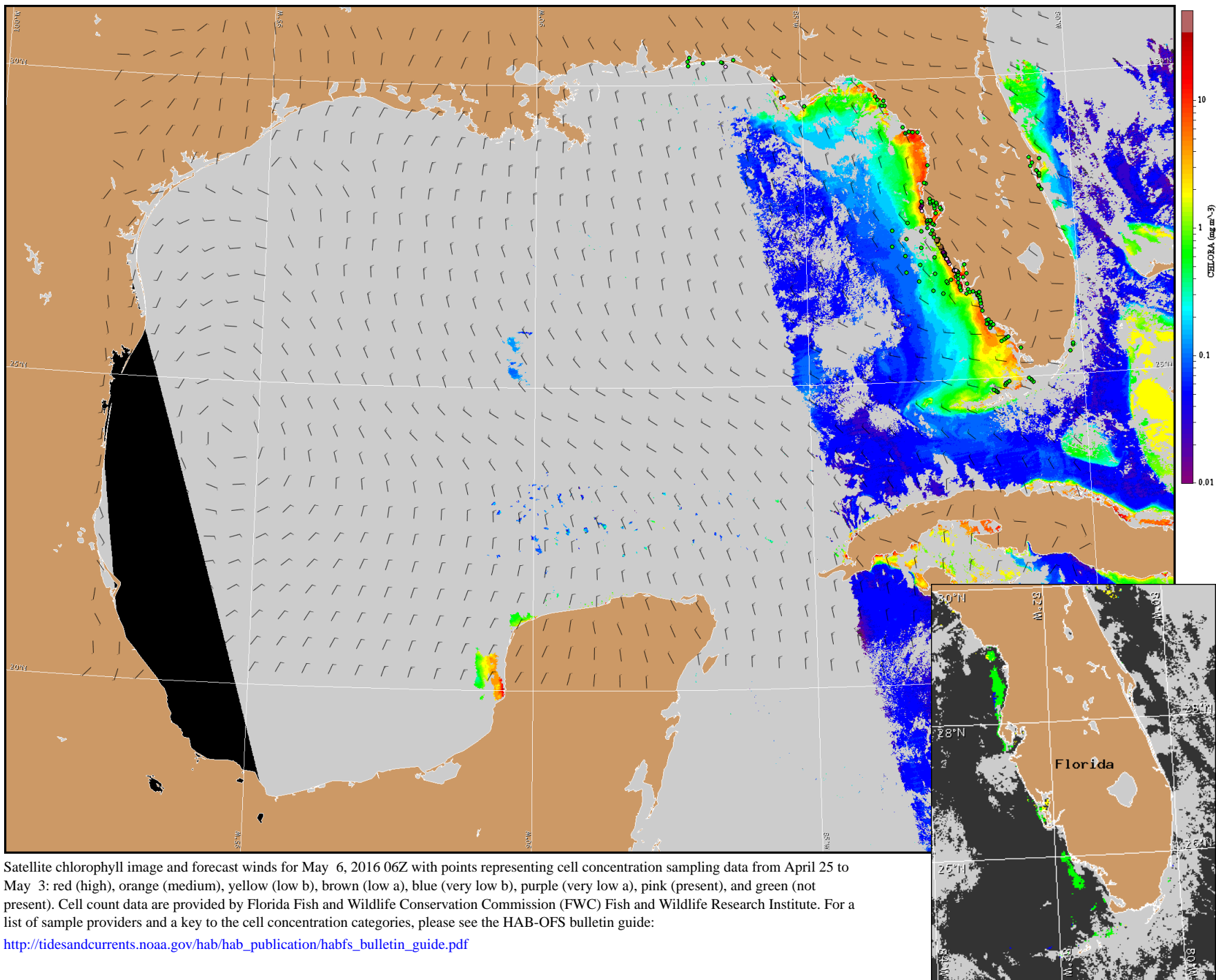
Northerly winds forecast today through Saturday will increase the potential for southward transport of surface *K. brevis* concentrations along the coast of southwest Florida.

## Wind Analysis

**Englewood to Tarpon Springs (Venice):** Northwest to north winds (10-20kn, 5-10m/s) today through Saturday. Variable winds (5kn, 3m/s) Sunday through Monday.



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



Satellite chlorophyll image and forecast winds for May 6, 2016 06Z with points representing cell concentration sampling data from April 25 to May 3: 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:

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