

# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

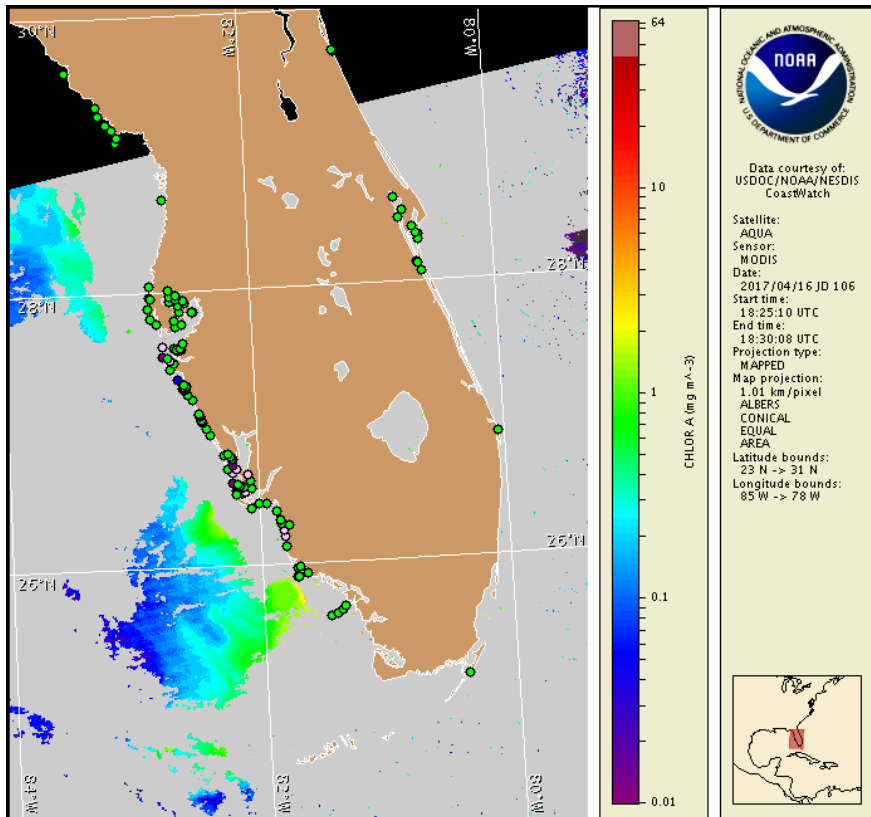
Monday, 17 April 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, April 13, 2017



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from April 7 to 14: 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 Monday, April 17 through Thursday, April 20 is listed below:

**County Region: Forecast (Duration)**

**Southern Manatee: Very Low (M-W), None (Th)**

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

**Northern Sarasota: Low (M-W), Very Low (Th)**

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

**Southern Sarasota: Very Low (M-Th)**

**Northern Charlotte: Very Low (M-Th)**

**Southern Charlotte: Very Low (M-Th)**

**Northern Lee, bay regions: 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). Dead fish have been reported in Lee County.

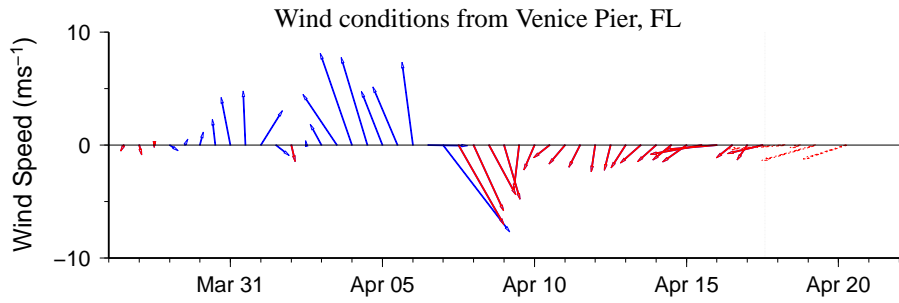
## Analysis

Recent samples collected alongshore the coast of southwest Florida from Pinellas to Monroe counties indicate *Karenia brevis* is present in up to 'very low a' concentrations along the coast of southwest Florida, with the highest concentrations present in the bay regions of northern Sarasota County (FWRI, MML, SCHD, CCPC; 4/10-14). Samples collected in the bay regions of southern Manatee County and the bay regions of northern and central Lee County indicate that *K. brevis* has decreased to between not present and 'background' concentrations (FWRI; 4/11). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

Recent satellite imagery has been completely obscured by clouds along the coast of southwest Florida, preventing analysis (MODIS Aqua, 4/16; shown left).

Variable winds forecasted today through Thursday may minimize the transport of *K. brevis* concentrations.

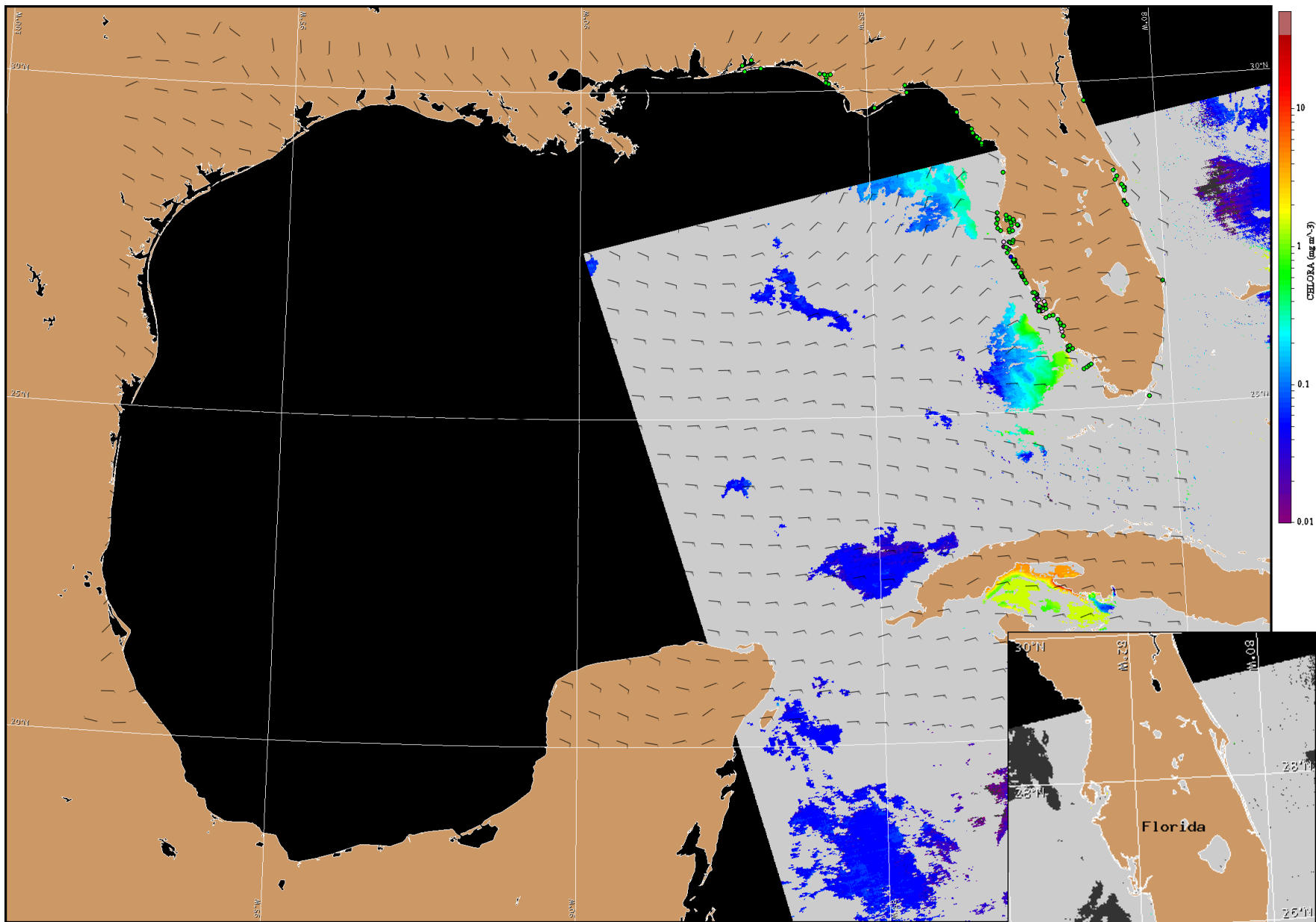
Kavanaugh, Keeney



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).

## Wind Analysis

**Englewood to Tarpon Springs (Venice):** Variable winds (5-15kn, 3-8m/s) today through Wednesday night. Southeast winds (10kn, 5m/s) Thursday becoming southwest winds (5kn, 3m/s) in the afternoon. Northwest winds (10kn) Thursday night.



Satellite chlorophyll image and forecast winds for April 18, 2017 06Z with points representing cell concentration sampling data from April 7 to 14: 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).