



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

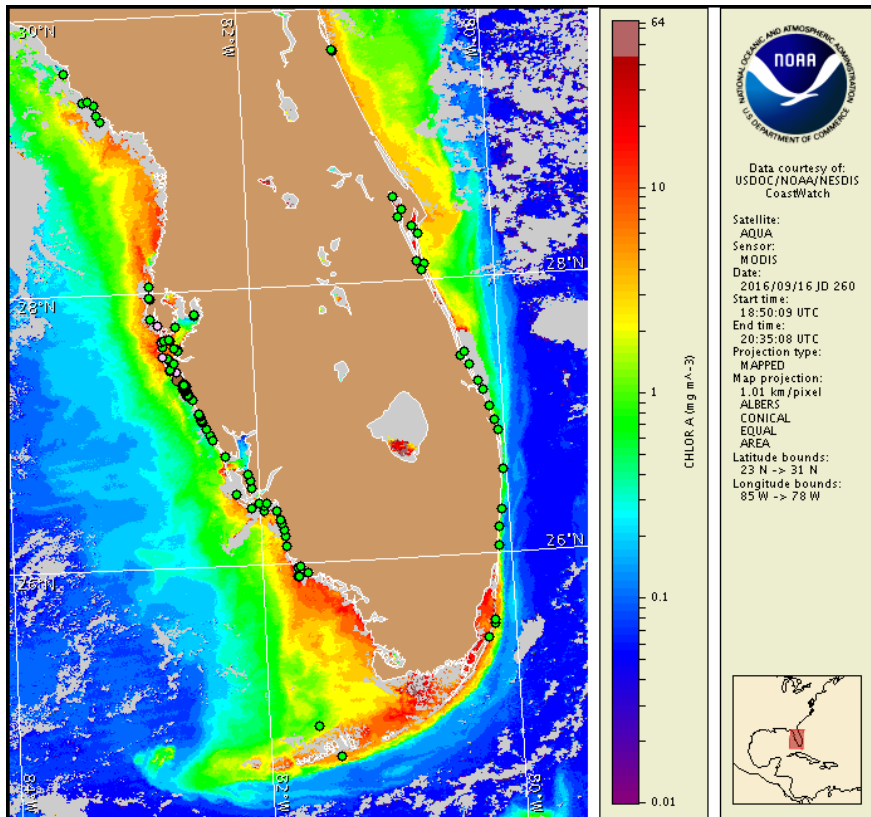
Monday, 19 September 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, September 15, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 9 to 16: 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, September 19 to Thursday, September 22 is listed below:

**County Region: Forecast (Duration)**

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

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

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

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).

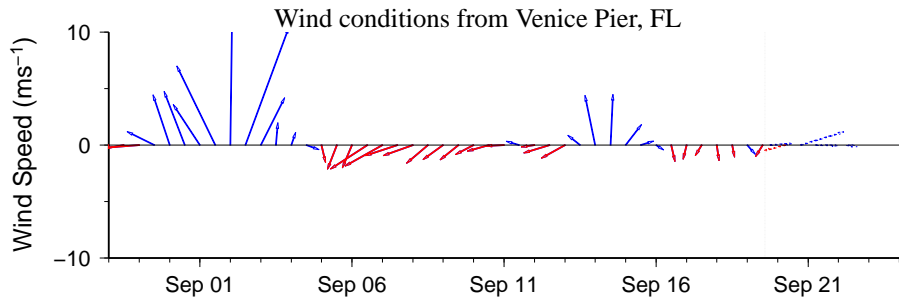
## Analysis

Samples collected along- and offshore the coast of southwest Florida from Pinellas to Monroe counties, including the Florida Keys, identified not present to 'low b' concentrations of *Karenia brevis*, with the highest concentrations collected from Quick Point and City Island in the bay regions of northern Sarasota County (FWRI, MML, SCHD, CCENRD; 9/9-9/14). Samples collected from Longboat Key, Lido Key, and Siesta Beach alongshore northern Sarasota County indicate up to 'low a' concentrations of *K. brevis* (SCHD; 9/13). 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 (MODIS Aqua, 9/16) indicates the presence of elevated to high (2 to 13  $\mu$ g/L) patches of chlorophyll with the optical characteristics of *K. brevis* along- and offshore Pinellas and northern Manatee counties and from Charlotte to Monroe counties. Elevated chlorophyll is likely associated with blooms of various algal species that have been detected alongshore southwest Florida (FWRI; 9/12-14).

Variable south to northeast winds are forecasted today through Thursday, September 22, decreasing the potential for harmful algal bloom intensification at the coast of southwest Florida.

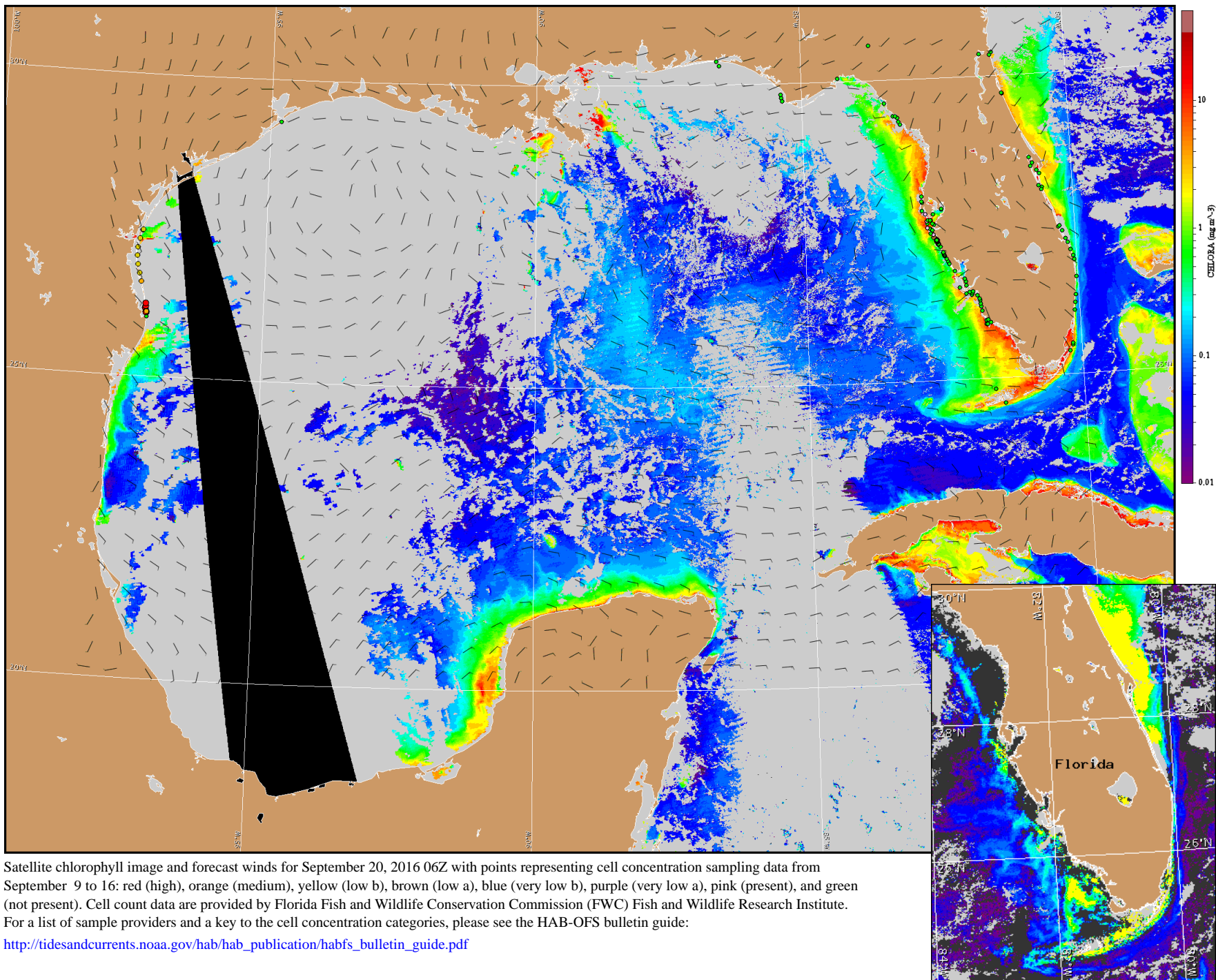
Urizar, Keeney



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):** South to west winds (5-10 kn, 3-5 m/s) today. Northwest winds tonight (5-10 kn). North to west winds Tuesday and Wednesday (5-10 kn). Northeast to north winds (5 kn) Thursday.



Satellite chlorophyll image and forecast winds for September 20, 2016 06Z with points representing cell concentration sampling data from September 9 to 16: 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)

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).