



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

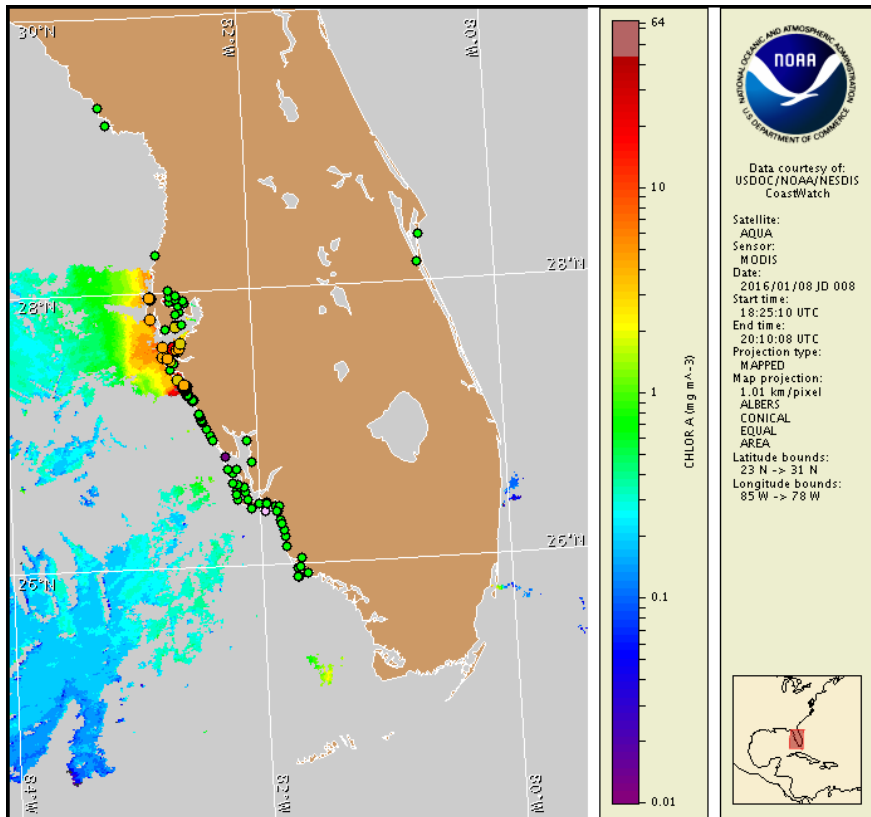
Monday, 11 January 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, January 7, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from January 1 to 8: 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/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/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

*Karenia brevis* (commonly known as Florida red tide) ranges from not present to high concentrations along the coast of southwest Florida, and is 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, January 11 through Thursday, January 14 is listed below:

**County Region: Forecast (Duration)**

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

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

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

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

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

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

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

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

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

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

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

**All Other NWFL County to Louisiana Parish Regions:** Visit <http://tidesandcurrents.noaa.gov/hab/#nwfl>

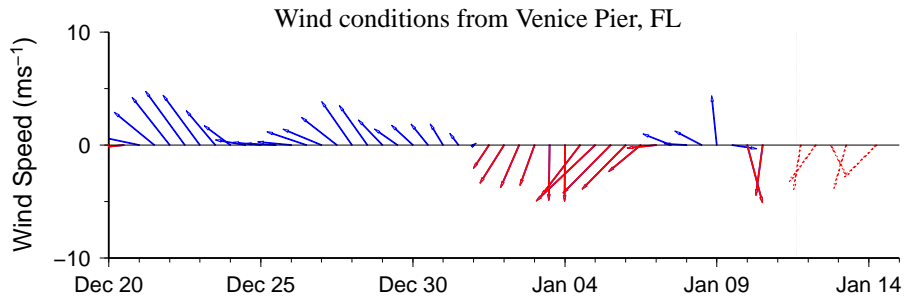
Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at [http://tidesandcurrents.noaa.gov/hab/hab\\_health\\_info.html](http://tidesandcurrents.noaa.gov/hab/hab_health_info.html). Respiratory irritation has been reported in Manatee and Sarasota counties. Dead fish have been reported in Pinellas and Sarasota counties.

## Analysis

Recent samples collected along- and offshore southwest Florida indicate background to 'high' *Karenia brevis* concentrations from Pinellas to southern Lee County, with the 'low b' to 'high' concentrations present from northern Pinellas to northern Manatee counties (FWRI; 1/4-6). Respiratory irritation has been reported from Manatee Beach in Manatee County, and Lido Key and Venice North Jetty in Sarasota County (MML; 1/9-10). Dead fish have been reported in Pinellas and Sarasota counties (FWRI, MML; 1/6-10). 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, 1/8, shown left) is almost completely obscured by clouds, limiting analysis. In MODIS Aqua imagery from early last week (1/4, not shown), patches of elevated to high chlorophyll (3-15  $\mu\text{g/L}$ ) with the optical characteristics of *K. brevis* were visible along- and offshore southwest Florida from Pinellas to Collier counties.

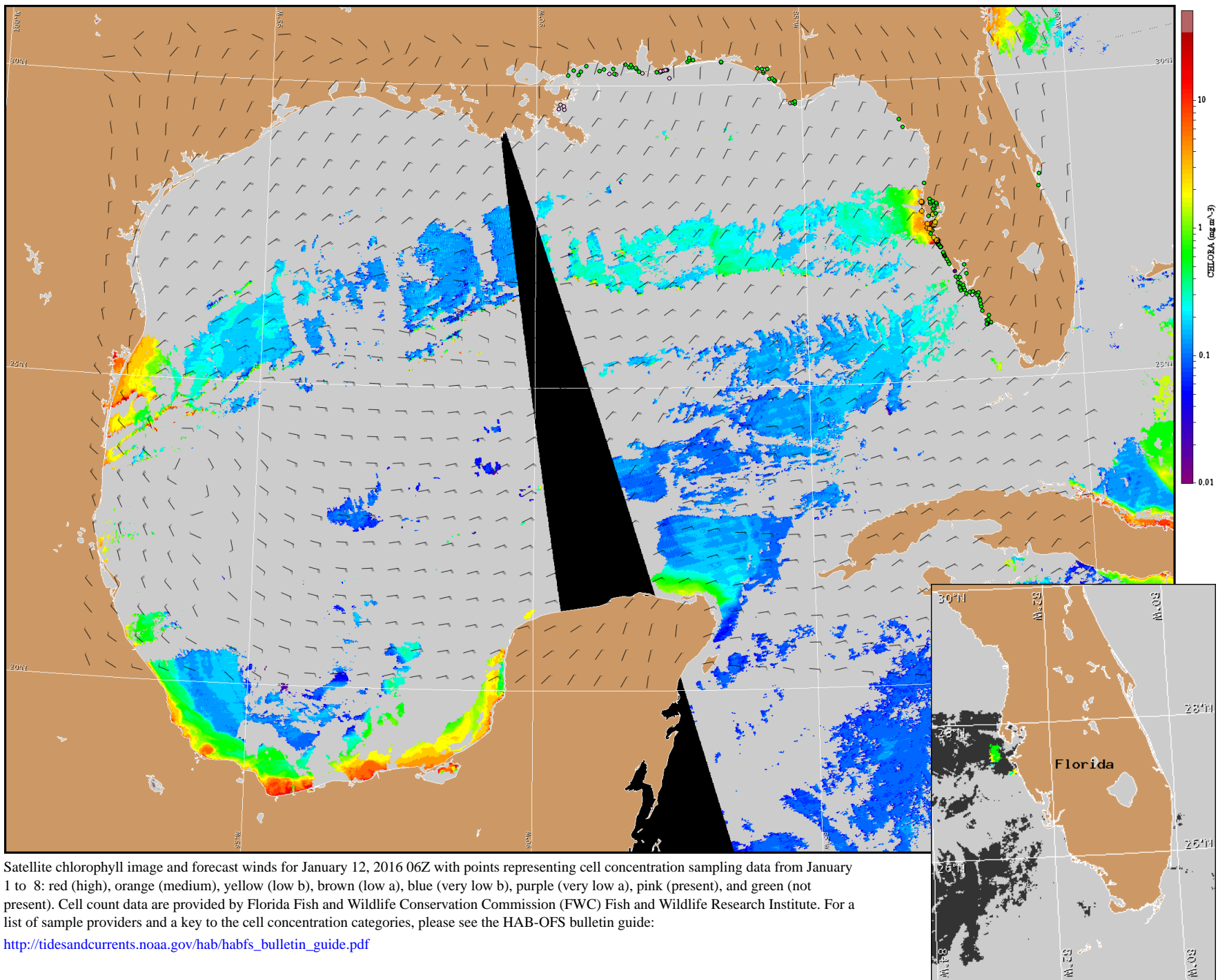
Northerly winds forecasted today through Thursday may increase the potential for southerly transport of surface *K. brevis* concentrations. ~Dermer, Davis



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):** North winds (5-15kn, 3-8m/s) today becoming northeast (5-10kn, 3-5m/s) tonight through Tuesday. North winds (5-15kn) Tuesday afternoon through Tuesday night. Northeast winds (5-15kn) Wednesday. East winds (10kn, 5m/s) Thursday.



Satellite chlorophyll image and forecast winds for January 12, 2016 06Z with points representing cell concentration sampling data from January 1 to 8: 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).