



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

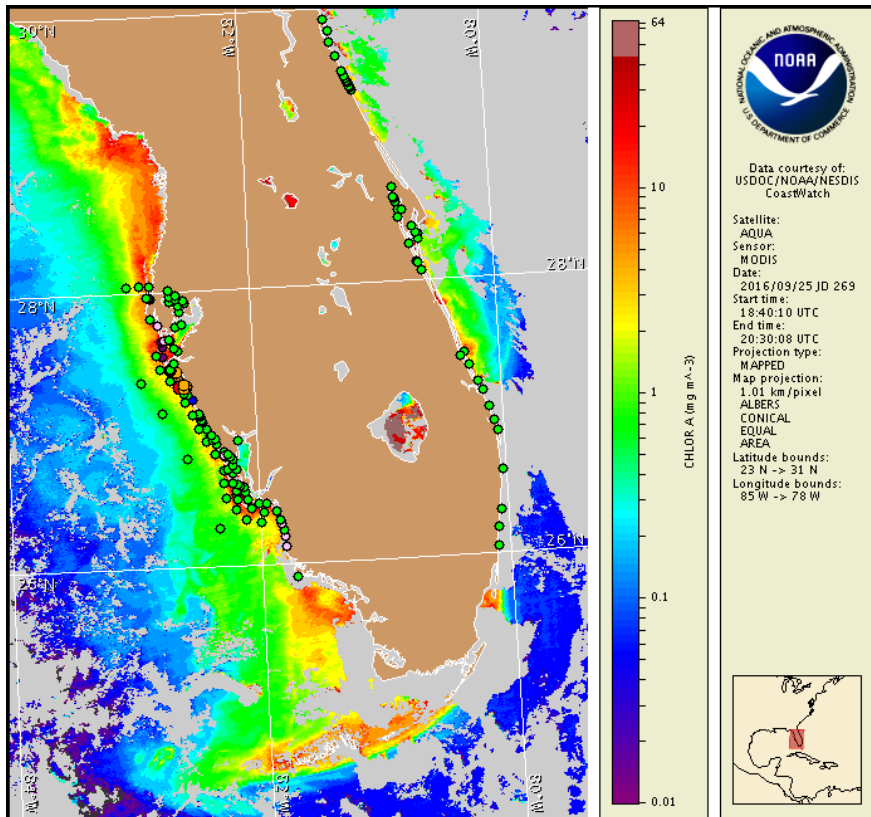
Monday, 26 September 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, September 22, 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 16 to 23: 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 high 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 26 to Thursday, September 29 is listed below:

**County Region: Forecast (Duration)**

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

**Southern Manatee: High (M-Th)**

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

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

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

**Southern Sarasota: Moderate (M-Th)**

**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). Reports of fish kills and respiratory irritation have been received from southern Manatee, northern Sarasota, and southern Sarasota counties.

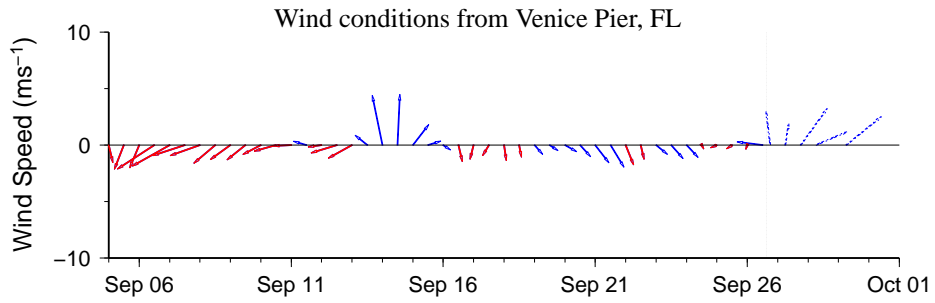
## Analysis

Samples collected along- and offshore the coast of southwest Florida from Pinellas to Collier counties identified not present to 'high' concentrations of *Karenia brevis*, with the highest concentrations present just south of Bradenton Beach alongshore southern Manatee County and offshore Lido Key in northern Sarasota County (FWRI, MML, SCHD, CCENRD; 9/16-9/25). Up to 'medium' concentrations of *K. brevis* are present in the bay regions of southern Manatee County and northern Sarasota County (FWRI; 9/19-9/25). Background to 'very low' concentrations are present alongshore southern Pinellas County at Treasure Island, Shell Key, and Fort Desoto (FWRI; 9/19-9/25). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>. Reports of slight to intense respiratory irritation and up to heavy associated fish kills have been reported from Coquina Beach alongshore northern Manatee County; Lido Key, Siesta Key, Nokomis, Venice North Jetty, and Venice Beach, in northern Sarasota County; and Manasota Beach alongshore southern Sarasota County (FWRI, MML; 9/23-9/26).

Recent ensemble imagery (MODIS Aqua, 9/25) indicates the presence of elevated to high (2 to 18  $\mu\text{g/L}$ ) patches of chlorophyll with the optical characteristics of *K. brevis* along- and offshore from Pinellas to Lee County extending up to 13 miles offshore.

Variable westerly winds forecast today through Thursday, September 29 may increase the potential for harmful algal bloom intensification at the coast of southwest Florida.

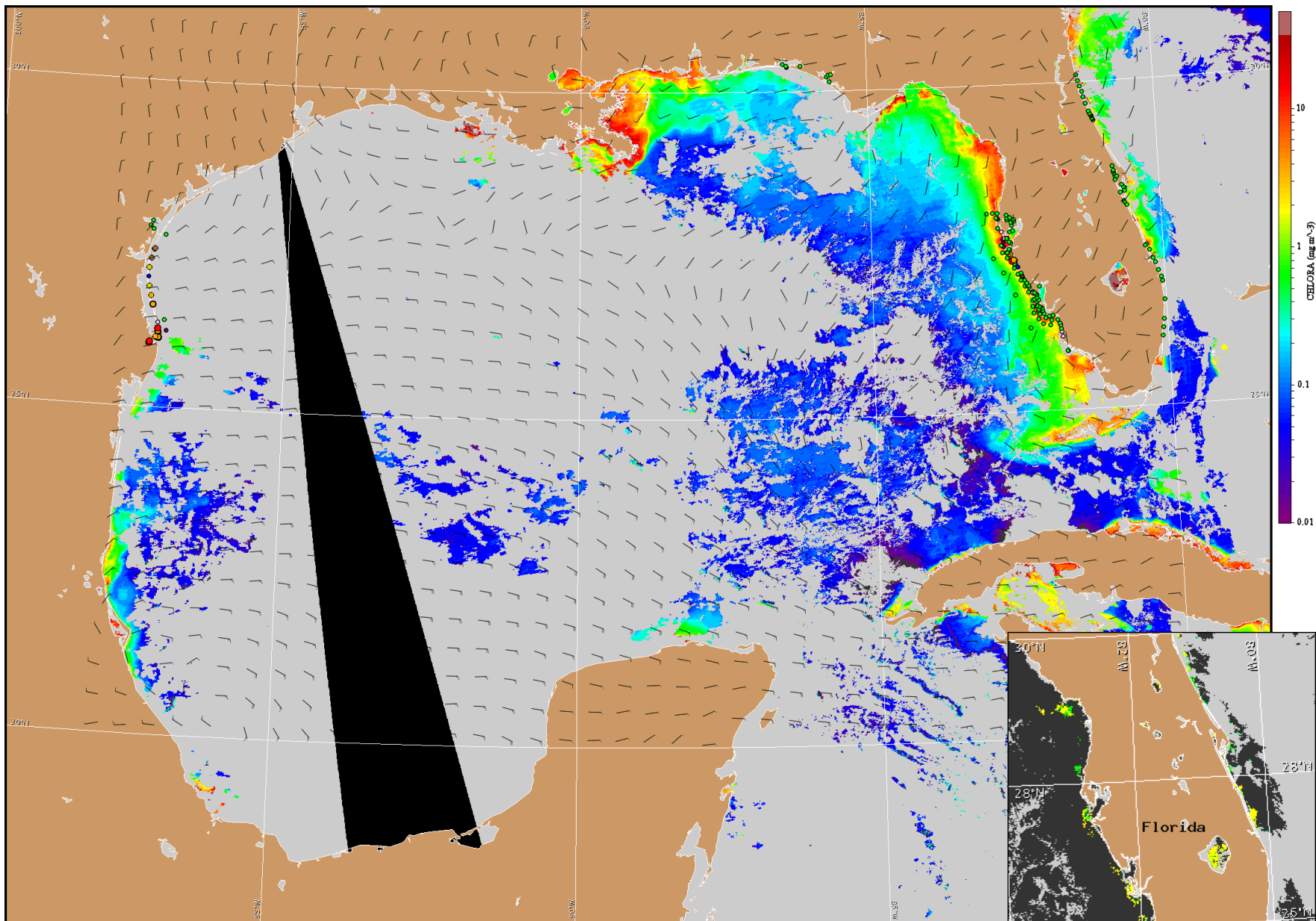
Keeney, Davis



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):** Southeast winds (5 kn, 3 m/s) today, becoming northwest winds (5 kn) tonight. Southeast winds (5-10 kn, 3-5 m/s) Tuesday will shift to West winds (5-10 kn) Tuesday evening through Wednesday. North to northwest winds (5-10 kn) Thursday.



Satellite chlorophyll image and forecast winds for September 27, 2016 06Z with points representing cell concentration sampling data from September 16 to 23: 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 with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).