



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

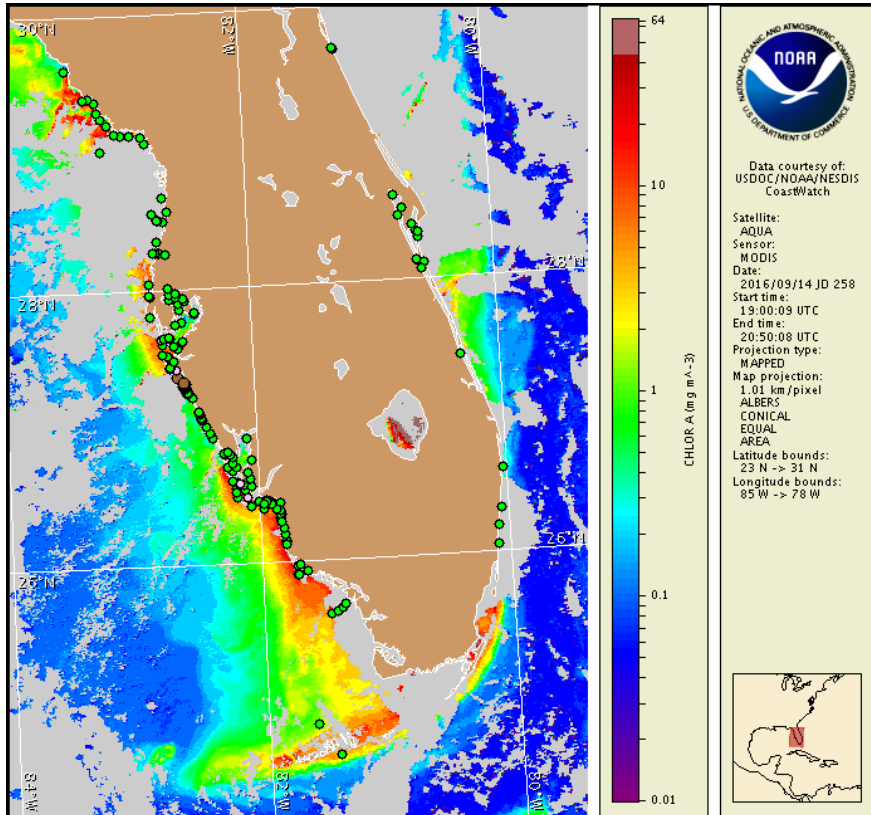
Thursday, 15 September 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, September 12, 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 5 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

Conditions Report: *Karenia brevis* (commonly known as red tide) ranges from not present to low 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 Thursday, September 15 through Monday, September 19 is listed below:

**County Region: Forecast (Duration)**

**Northern Sarasota:** Very Low (Th-Su), None expected (M)

**Northern Sarasota, bay regions:** 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).

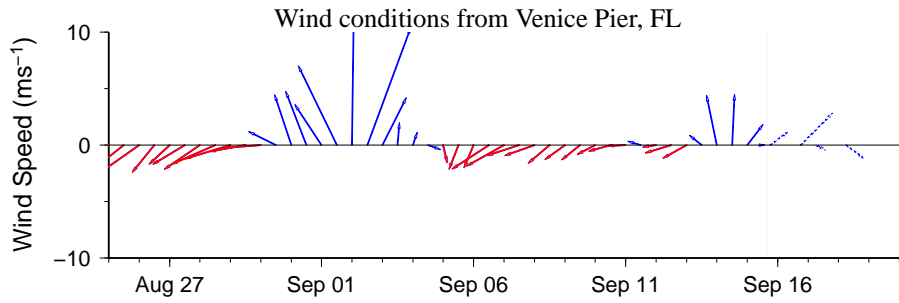
## Analysis

Recent samples collected along- and offshore the coast of southwest Florida from Pinellas to Monroe counties, including the Florida Keys, have confirmed the presence of up to 'low b' concentrations of *Karenia brevis*. Water samples collected from several locations around Quick Point and City Island in the bay regions of northern Sarasota County have confirmed up to 'low b' concentrations of *K. brevis* (MML, SCHD, FWRI; 9/4-9/13). Up to 'low a' concentrations are present at Longboat Key, Lido Key, and Siesta Beach alongshore northern Sarasota County (SCHD; 9/13). Up to 'very low a' concentrations are present in the bay regions of southern Manatee County (FWRI; 9/6). Background concentrations are present alongshore in southern Pinellas County, in the bay regions of southern Charlotte County, and northern and central Lee County (FWRI; 9/6-9/13). All other sampling along- and offshore southwest Florida, from Pinellas to Monroe County, including the Florida Keys, indicates that *K. brevis* is not present (FWRI, SCHD, CCENRD, MML; 9/4-9/14).

Recent ensemble imagery (MODIS Aqua, 9/14) is partially obscured by clouds along- and offshore Monroe County, but patches of elevated to high chlorophyll (2 to >20  $\mu\text{g/L}$ ) with the optical characteristics of *K. brevis* are visible along- and offshore southwest Florida from Pinellas to central Monroe counties, extending up to 18 miles offshore.

Northeast to northwest winds forecast today through Sunday, September 18 may increase the potential for harmful algal bloom formation at the coast of southwest Florida.

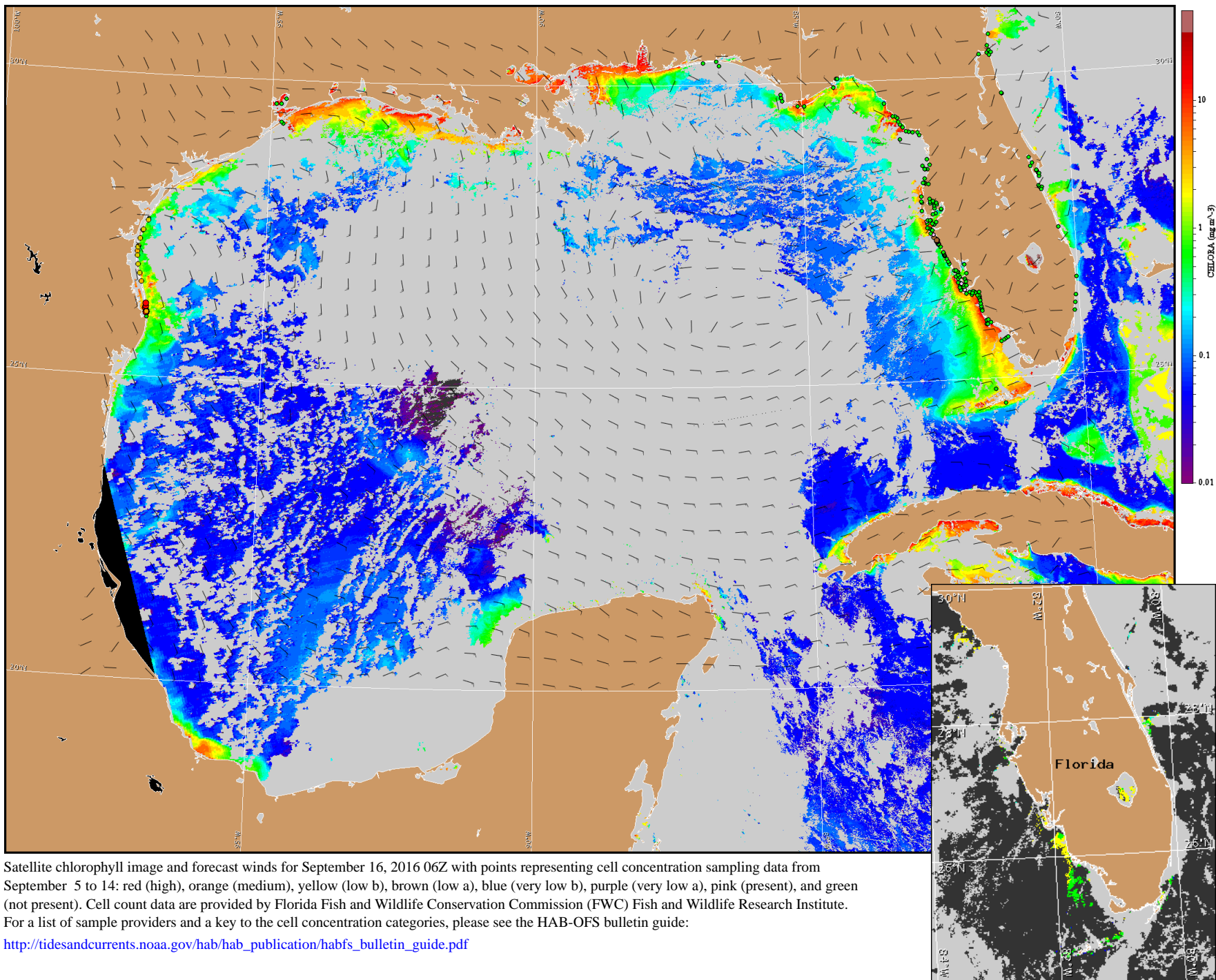
Keeney, Urizar



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):** West to northwest winds (5-10 kn, 3-5 m/s) today. Southeast winds (5-10 kn) Friday will become northwest winds (5-10 kn) in the evening. Northeast to northwest winds (5-10 kn) Saturday. North to northeast winds (5-10 kn) Sunday. North winds (5-10 kn) Monday.



Satellite chlorophyll image and forecast winds for September 16, 2016 06Z with points representing cell concentration sampling data from September 5 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).