



# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

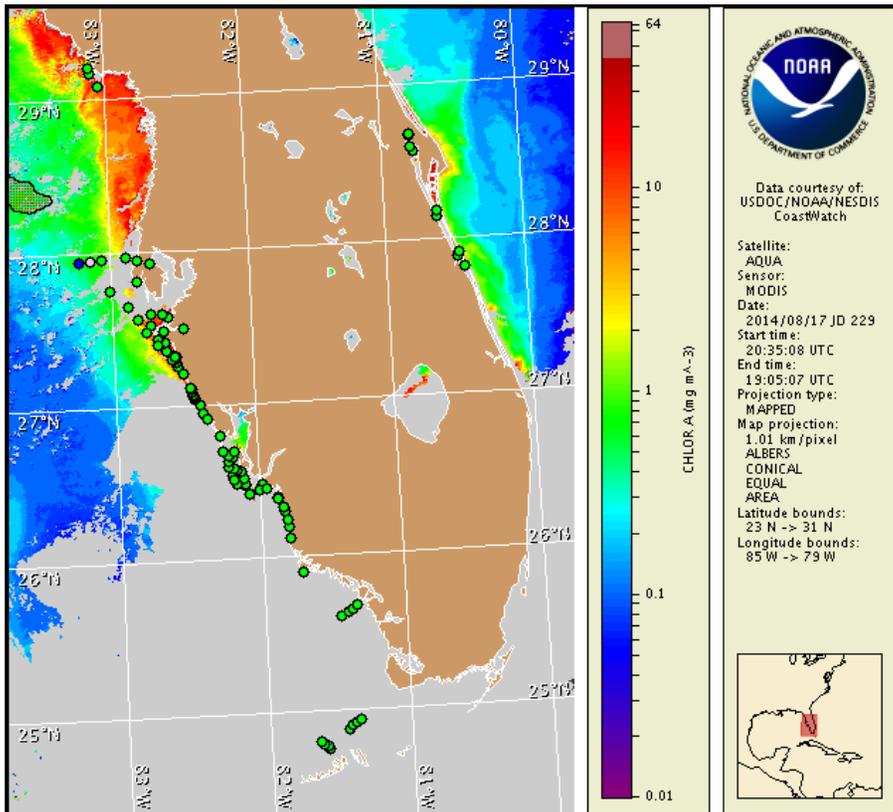
Monday, 18 August 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, August 11, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from August 8 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/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 background concentrations along the coast of southwest Florida and is not present in the Florida Keys. *K. brevis* ranges from not present to very low concentrations offshore the coast of southwest Florida. No respiratory irritation is expected alongshore west Florida Monday, August 18 through Monday, August 25. If field observations confirm *K. brevis* concentrations at the coast, this forecast will be updated prior to August 25.

Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations. Over the past several days, reports of dead fish have been received from offshore northern Pinellas County .

## Analysis

**Dixie to Pinellas County:** Samples collected along- and offshore west Florida over the past week identified not present to 'very low b' concentrations of *Karenia brevis* 20-25 miles offshore Clearwater Beach in northern Pinellas County (FWRI; 8/13). Samples collected alongshore Pinellas and Levy counties continue to indicate that *K. brevis* is not present (FWRI; 8/11-14). No samples were reported over the last week from the bloom area offshore Dixie, Citrus, Hernando, or Pasco counties, where previous sampling identified up to 'medium' *K. brevis* concentrations 23-80 miles offshore Hernando to northern Pinellas counties (FWRI; 8/1-5).

Recent MODIS Aqua imagery along- and offshore west Florida has been partially obscured by clouds over the past several days, limiting analysis. MODIS Aqua imagery from 8/17 (shown left) indicates that chlorophyll values in the vicinity of the previously reported feature of elevated chlorophyll may have decreased over the past week (1-4  $\mu\text{g/L}$ ). This feature is currently visible offshore Florida from Dixie to Pinellas counties approximately 20-80mi west of the coast.

Dead fish, continue to be observed in the sampling area of the bloom, 20-25 miles offshore from Pinellas County (FWRI; 8/11-17). No reports of respiratory irritation have been received alongshore from Dixie to Pinellas counties in the past week (FWRI, MML; 8/11-18).

Over the past few days, winds observed from the northwest to southwest may have continued to promote transport of the offshore surface *K. brevis* concentrations south and towards the coast. Forecasted westerly winds over the next several days may continue to promote transport of *K. brevis* concentrations south and east of their current location August 18 through August 22.

**Manatee to Monroe County:** Samples collected over the past week along- and offshore the coast of southwest Florida from Manatee to Monroe County, including the Florida Keys, indicate that *K. brevis* is not present, with the exception of 'background' concentrations identified in samples collected 2 miles offshore Longboat Key and 3 miles offshore Holmes Beach in Manatee County, and from one sample collected within Sarasota Bay at the Long Boat Pass boat ramp (FWRI, MML, SCHD, CCPCPD; 8/11-14).

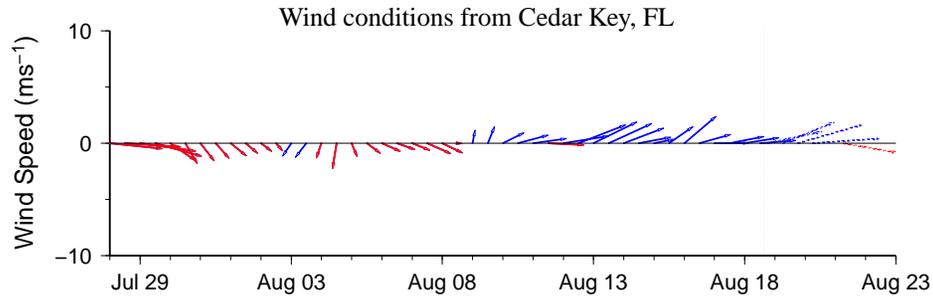
MODIS Aqua imagery from 8/17 (shown left) is obscured by clouds along- and offshore southwest Florida from southern Sarasota County to the Florida Keys, limiting analysis. Patches of elevated to high chlorophyll ( $2-12\mu\text{g/L}$ ) are visible along- and offshore Manatee and northern Sarasota counties. Elevated chlorophyll along the coast may be the result of various algal species that have been reported throughout the region and not due to *K. brevis*.

Davis, Derner

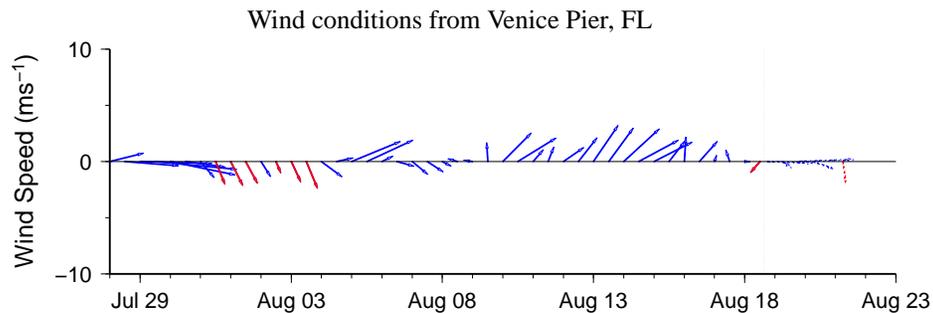
## Wind Analysis

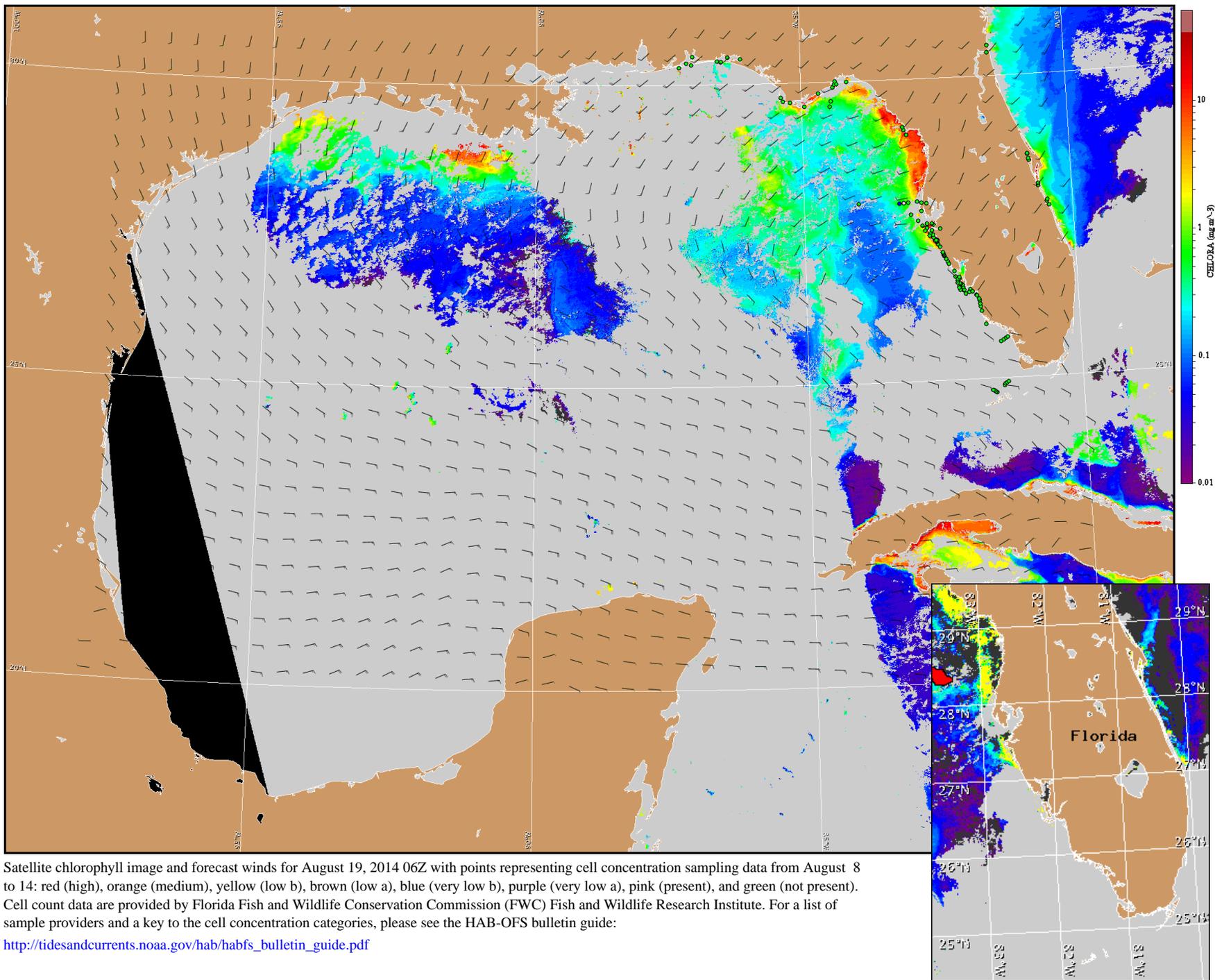
**Cedar Key** : West winds (10kn, 5m/s) today through Wednesday night becoming northwest winds (5kn, 3m/s) after midnight. West winds (5kn) Thursday through Friday.

**Venice**: Southwest winds (5kn, 3m/s) today becoming west winds (5-10kn, 3-5m/s) this afternoon through Tuesday. Northwest winds (10kn, 5m/s) Wednesday becoming north winds (5kn) after midnight. North winds (5-10kn) Thursday. Northwest winds (5kn) Friday.



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).





Satellite chlorophyll image and forecast winds for August 19, 2014 06Z with points representing cell concentration sampling data from August 8 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 of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).