



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

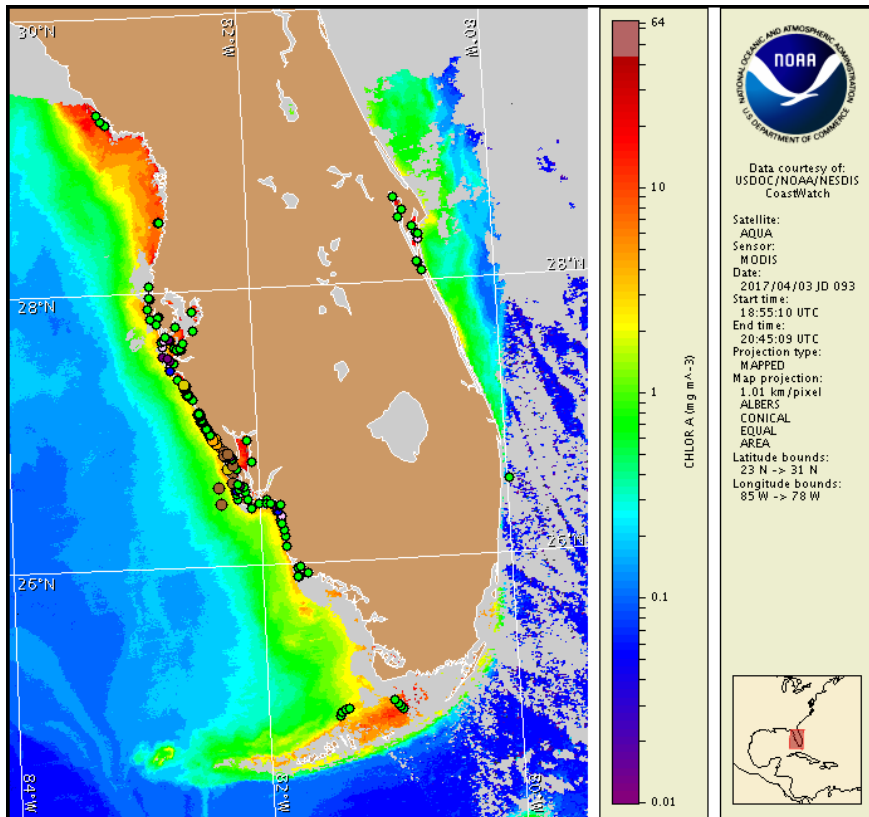
Thursday, 06 April 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, April 3, 2017



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from March 27 to April 5: 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

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 medium 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 Thursday, April 6 through Monday, April 10 is listed below:

County Region: Forecast (Duration)

Southern Pinellas: Very Low (Th-M)

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

Southern Manatee: Very Low (Th-M)

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

Northern Sarasota: Moderate (Th-F), Low (Sa-M)

Northern Sarasota, bay regions: Moderate (Th-F), Low (Sa-M)

Southern Sarasota: Moderate (Th-F), Low (Sa-M)

Southern Sarasota, bay regions: Low (Th-M)

Northern Charlotte: Moderate (Th-F), Low (Sa-M)

Northern Charlotte, bay regions: Moderate (Th-M)

Southern Charlotte: Moderate (Th-F), Low (Sa-M)

Southern Charlotte, bay regions: Moderate (Th-M)

Northern Lee: Moderate (Th-F), Low (Sa-M)

Northern Lee, bay regions: Low (Th-M)

Central Lee: Low (Th-F), Very Low (Sa-M)

Central Lee, bay regions: Very Low (Th-M)

Southern Lee: Low (Th-M)

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

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

Check https://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 https://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Over the past few days, reports of respiratory irritation were received from Sarasota and Lee counties. Reports of dead fish were received from Manatee, Sarasota, and Lee counties.

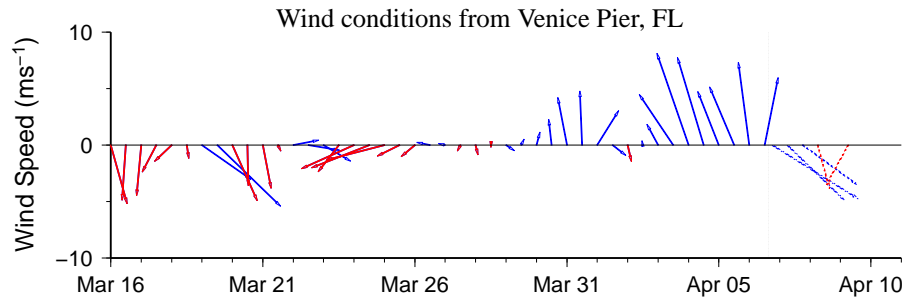
Analysis

Samples collected along- and offshore the coast of southwest Florida from Pinellas to Monroe counties continue to identify not present to 'medium' concentrations of *Karenia brevis*, with the highest concentrations present alongshore and in the bay regions from northern Sarasota to northern Lee counties (FWRI, MML, SCHD, CCENRD; 3/27-4/5). Up to 'very low a' concentrations of *K. brevis* were newly identified in the bay regions of southern Pinellas County (FWRI; 4/4). Samples from northern Lee County show a decrease in concentrations of *K. brevis* from 'medium' to 'low b' alongshore. 'Low a' concentrations were also newly identified 6.9-9.3 miles offshore northern and central Lee County, west of Captiva Island (FWRI; 4/2). 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, 4/3) is partially obscured by clouds from Pinellas to Monroe counties, limiting analysis; however, patches of elevated chlorophyll (2-5 $\mu\text{g/L}$) are visible with some of the optical characteristics of *K. brevis* alongshore southwest Florida in Pinellas County.

West to northwest winds forecasted today through Friday may increase the potential for respiratory irritation at the coast. North to east winds forecasted Saturday through Monday may minimize the potential for respiratory irritation alongshore southwest Florida.

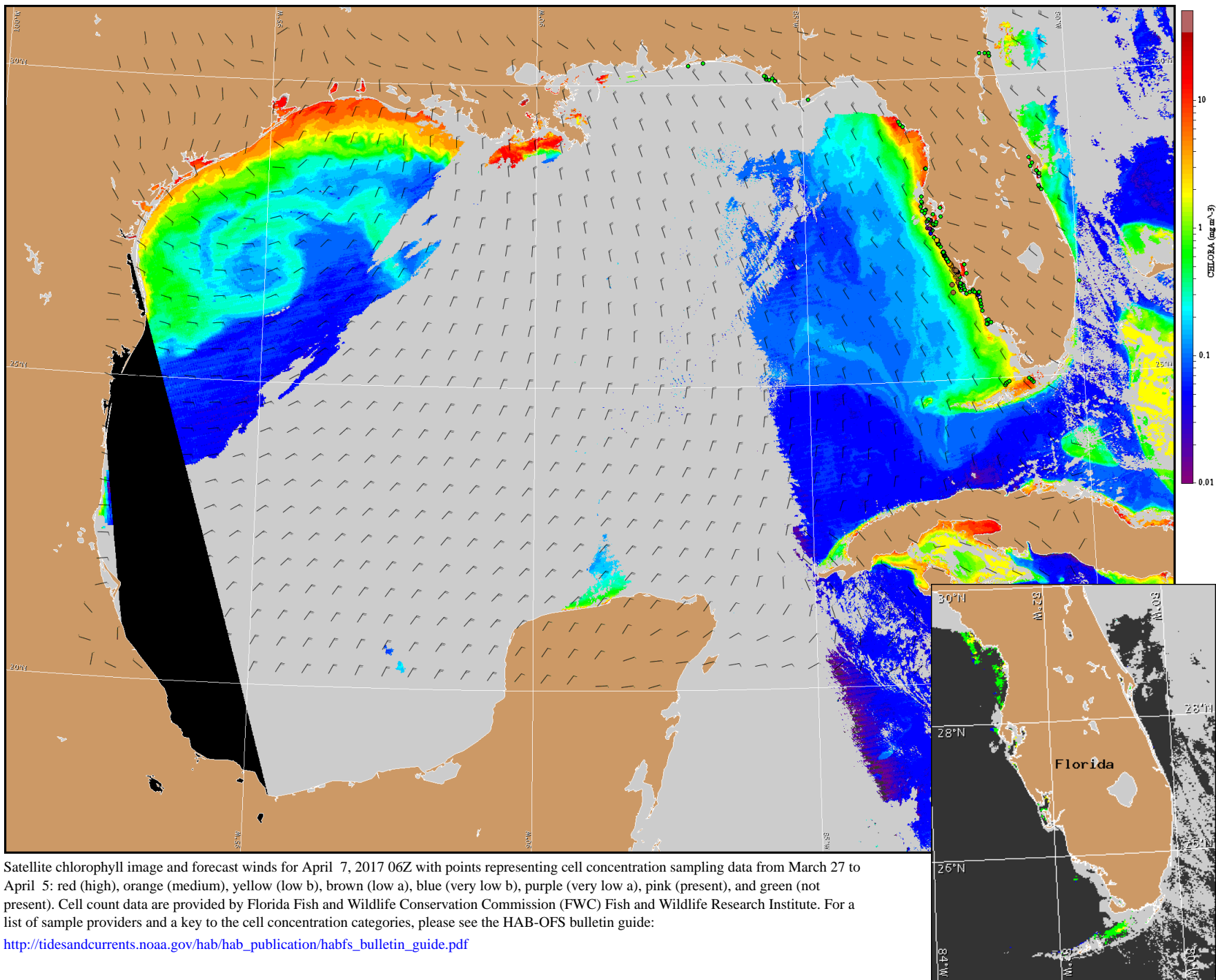
Lalime, Keeney



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): Northwest winds (15-20kn, 8-10m/s) today and Friday. North to northeast winds (10-15kn, 5-8m/s) late Friday evening through Saturday. East to north winds (10-15kn) Sunday and Monday.



Satellite chlorophyll image and forecast winds for April 7, 2017 06Z with points representing cell concentration sampling data from March 27 to April 5: 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).