



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

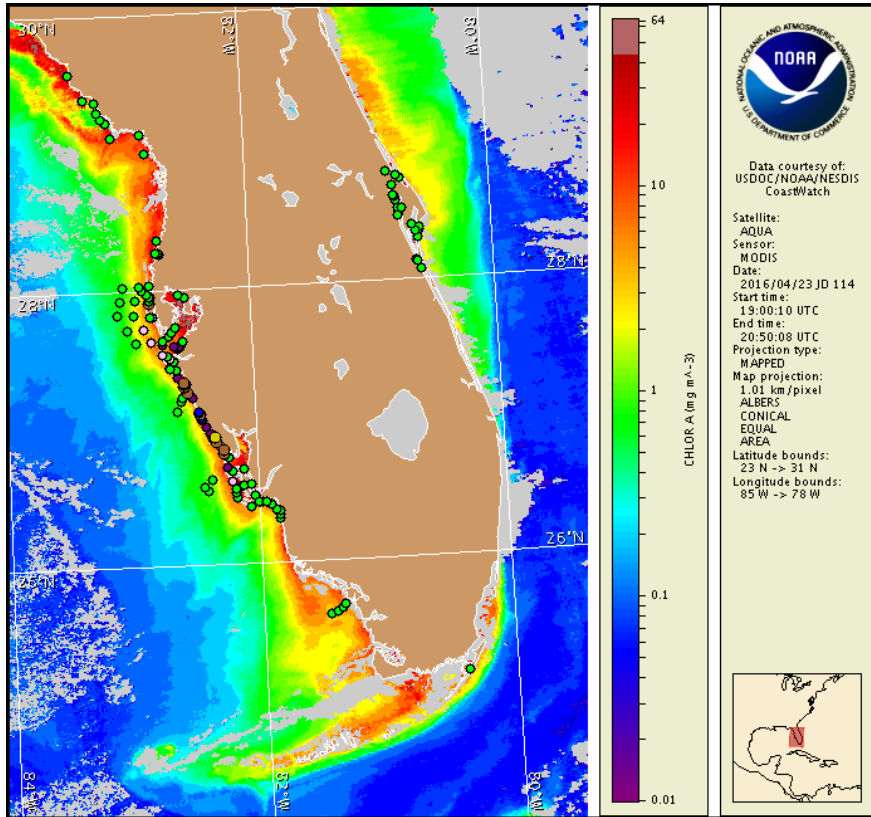
Monday, 25 April 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, April 21, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from April 15 to 22: 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 low 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, April 25 to Thursday, April 28 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: Very Low (M-Th)

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

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

Northern Sarasota: Low (M-Th)

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

Southern Sarasota: Very Low (M-Th)

Northern Charlotte: Very Low (M-Th)

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

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

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

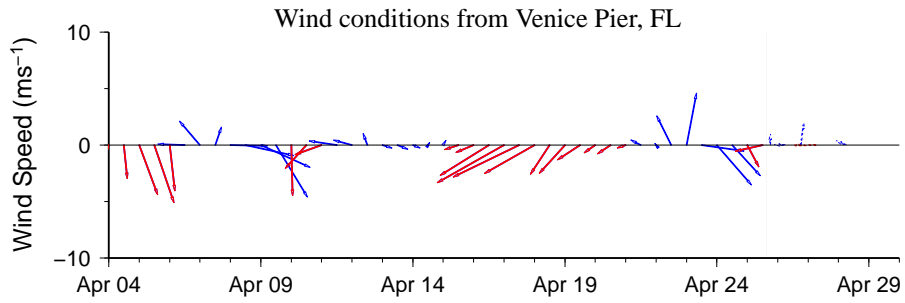
Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html.

Analysis

Recent sampling indicates that *Karenia brevis* concentrations range from not present to 'low b' along- and offshore the coast of southwest Florida from northern Pinellas to southern Lee counties, and is not present in the Florida Keys (FWRI, MML, SCHD; 4/15-22). In the bay regions of Charlotte County, samples collected over the past week indicated *K. brevis* concentrations increased to 'low b' from 'very low b' (FWRI; 4/20-21). In Lee County, samples collected offshore Captiva, alongshore from Captiva to Bonita Beach, and within the Estero Bay region all indicated not present to background *K. brevis* concentrations with the exception of a single 'very low a' concentration identified at Boca Grande Pass (FWRI; 4/18-20). No reports of dead fish or respiratory irritation have been received over the last several days (FWRI, MML; 4/21-25). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

In recent ensemble imagery (MODIS Aqua, 4/23), patches of elevated to high chlorophyll (3-12 µg/L) with some of the optical properties of *K. brevis* are visible along- and offshore southwest Florida from Pinellas to Lee County.

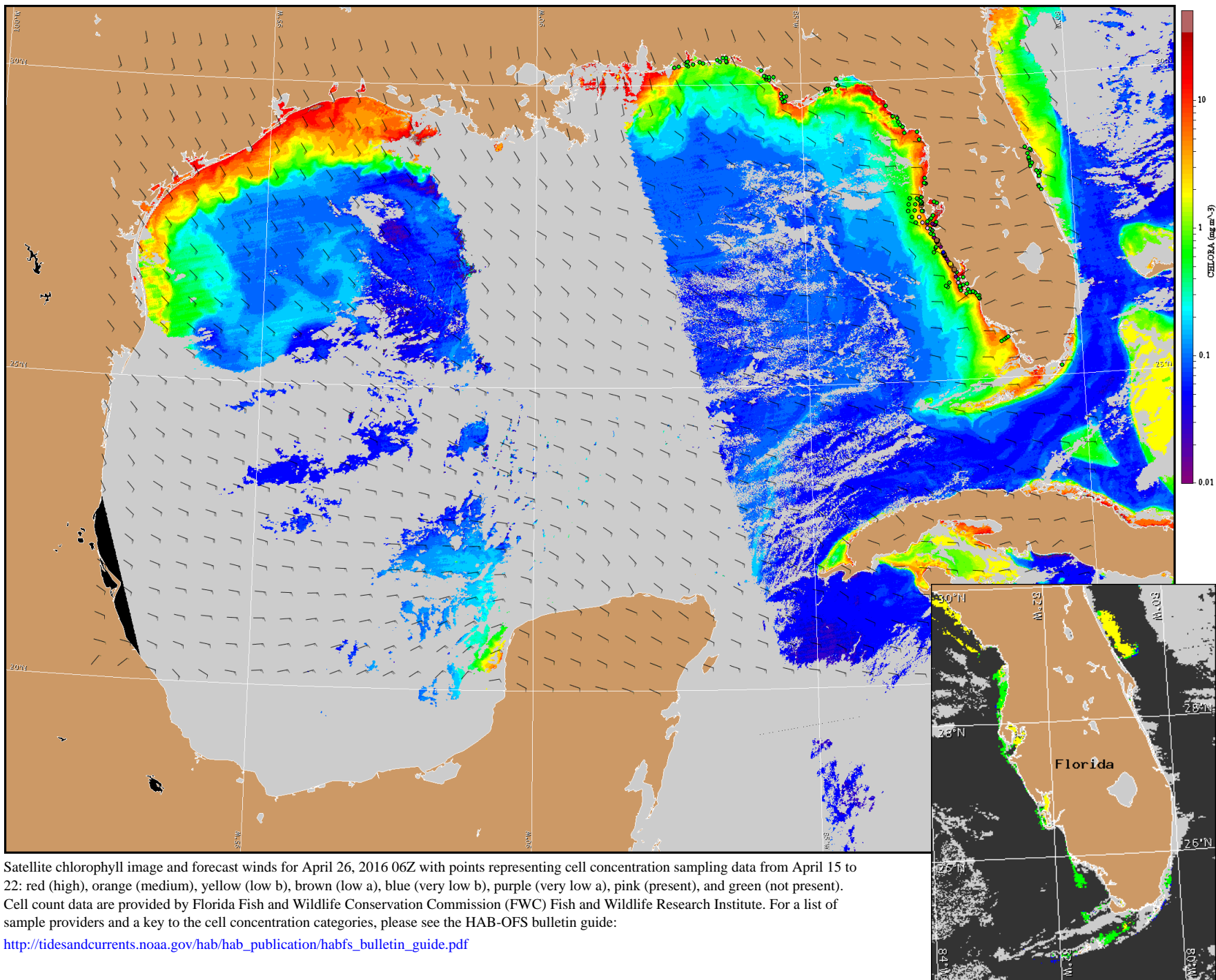
Variable winds forecast today through Thursday will decrease the potential for transport of surface *K. brevis* concentrations along the coast of southwest Florida. Davis, Yang



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): Variable winds (10-15kn, 5-8m/s) today. Southeast winds becoming southwest to west winds (10kn, 5m/s) in the afternoon Tuesday and Wednesday. Southeast to southwest winds (5-10kn, 3-5m/s) Thursday, becoming northeast winds (5kn, 3m/s) Thursday evening.



Satellite chlorophyll image and forecast winds for April 26, 2016 06Z with points representing cell concentration sampling data from April 15 to 22: 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

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).