



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

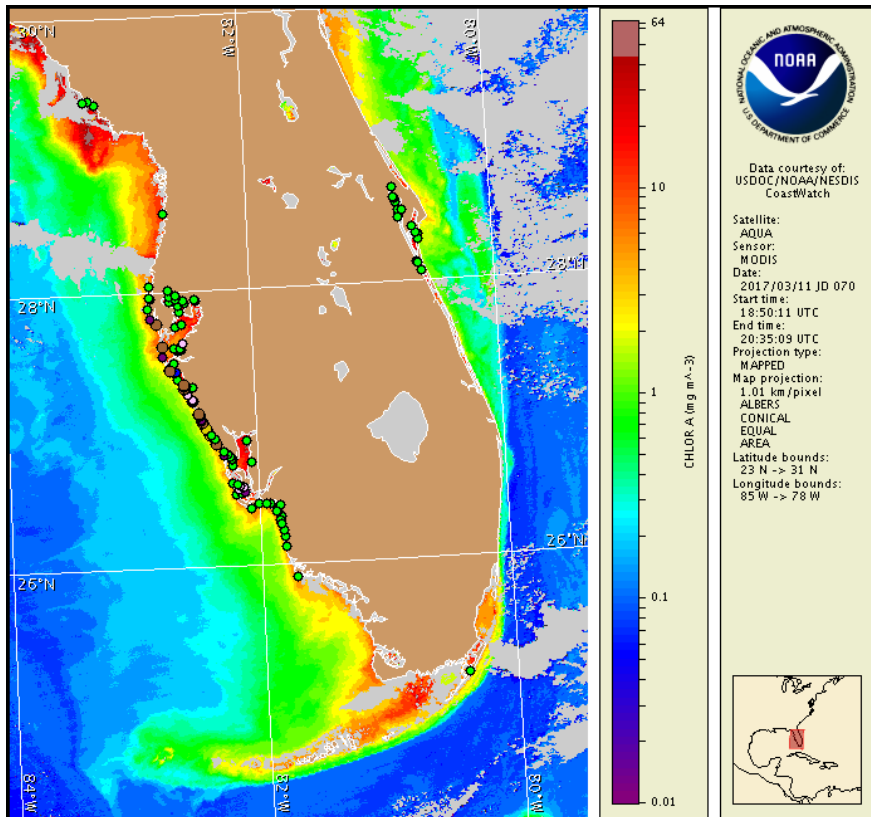
Monday, 13 March 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, March 9, 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 3 to 10: 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, March 13 through Thursday, March 16 is listed below:

County Region: Forecast (Duration)

Southern Pinellas: Low (M-Tu), Very Low (W-Th)

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

Southern Manatee: Low (M-Tu), Very Low (W-Th)

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

Northern Sarasota: Low (M-Tu), Very Low (W-Th)

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

Southern Sarasota: Moderate (M-Tu), Low (W-Th)

Northern Charlotte: Low (M-Tu), None (W-Th)

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

Southern Charlotte: Very Low (M-Tu), None (W-Th)

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

Northern Lee: Low (M-Tu), Very Low (W-Th)

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

Central Lee: Low (M-Tu), Very Low (W-Th)

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

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

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 several days, reports of respiratory irritation were received from Sarasota and Lee counties. Reports of dead fish were received Lee County.

Analysis

Recent samples collected along- and offshore the coast of southwest Florida from Pinellas to Collier counties identified not present to 'low b' concentrations of *Karenia brevis*, with the highest concentrations collected at Manasota Beach and Blind Pass Beach in southern Sarasota County (FWRI, MML, SCHD, CCPCD; 3/3-3/10). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

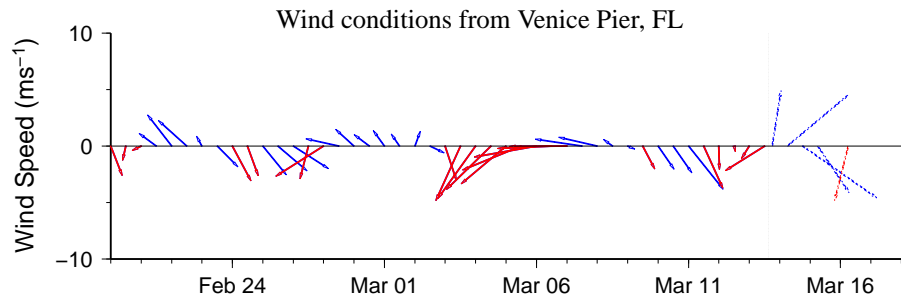
In recent ensemble imagery (MODIS Aqua, 3/11), patches of elevated chlorophyll (2-7 $\mu\text{g/L}$) are visible with some of the optical characteristics of *K. brevis* alongshore southern Pinellas and Lee counties.

Northwest to northeast winds forecasted Tuesday through Thursday night may minimize the potential for respiratory irritation at the coast and may promote the potential for southerly transport of surface *K. brevis* concentrations alongshore southwest Florida.

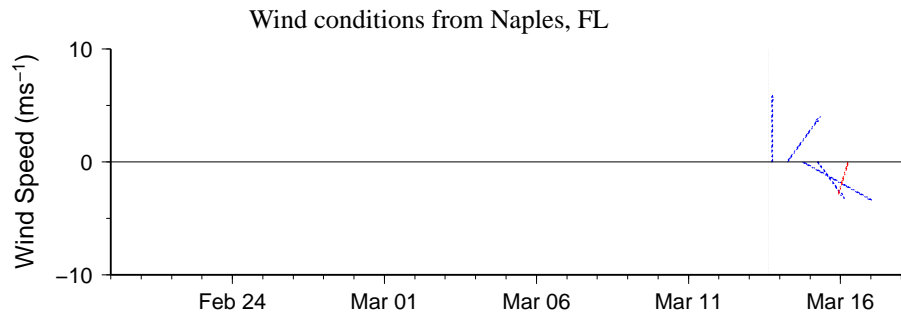
Wind Analysis

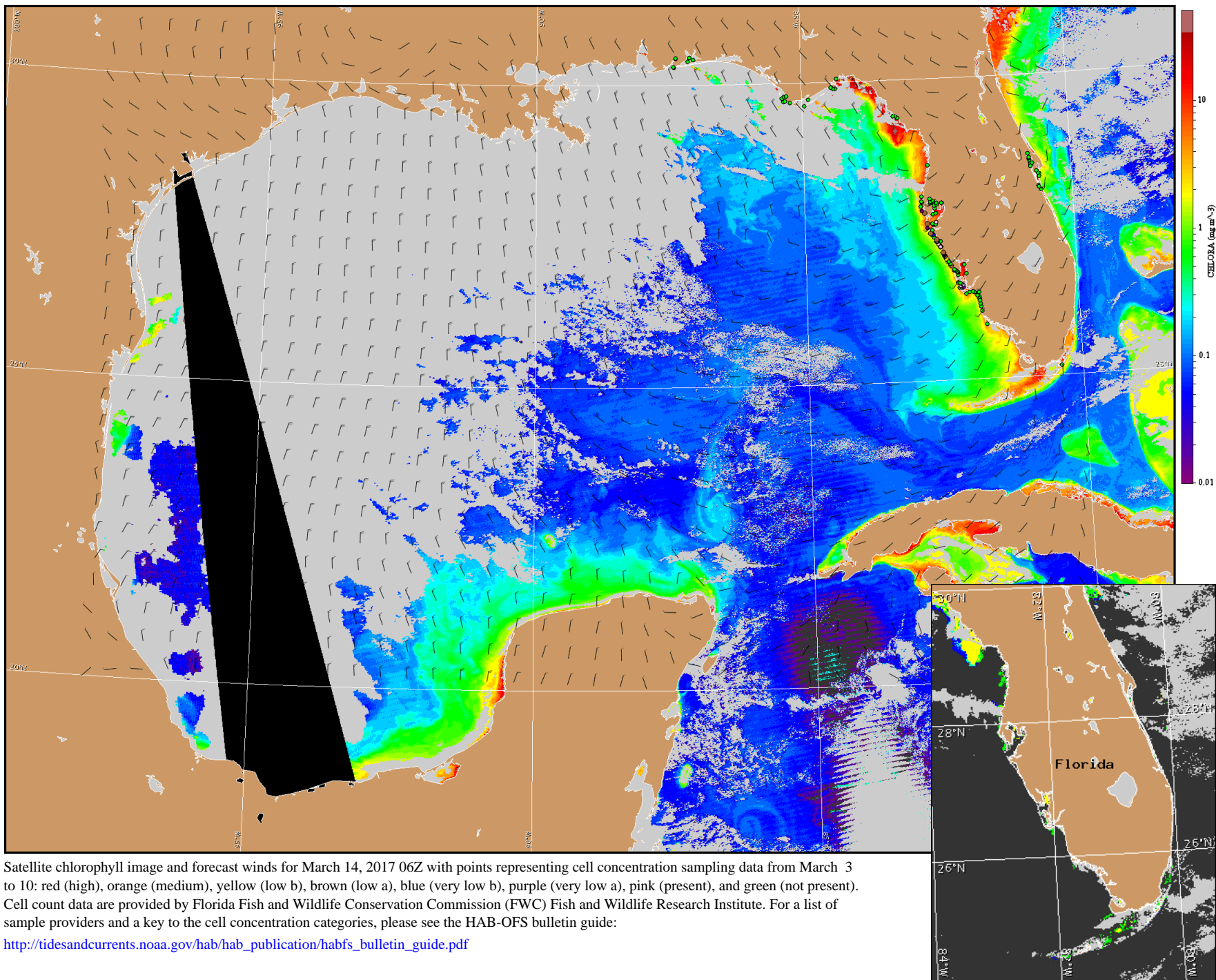
Englewood to Tarpon Springs (Venice): Variable winds (10-15kn, 5-8m/s) today. Northwest winds (15-20kn, 8-10m/s) overnight through Tuesday. North winds (20kn, 10m/s) Tuesday night through Wednesday becoming (15kn) Wednesday evening. North winds (10-15kn) Thursday.

Chokoloskee to Bonita Beach: Variable winds (10-15kn, 5-8m/s) through tonight. Northwest winds (15kn, 8m/s) Tuesday increasing to (20kn, 10m/s) in the afternoon. North winds (20kn) Tuesday night through Wednesday decreasing to (15kn) in the afternoon. North winds (10-15kn) Wednesday night through Thursday.



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 March 14, 2017 06Z with points representing cell concentration sampling data from March 3 to 10: 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).