Gulf of Mexico Harmful Algal Bloom Bulletin
Region: Southwest Florida
Monday, 17 April 2017
NOAA National Ocean Service
NOAA Satellite and Information Service
NOAA National Weather Service
Last bulletin: Thursday, April 13, 2017

Satellite chlorophyll image with possible *Karenia brevis* HAB areas shown by red polygon(s), when applicable.
Points represent cell concentration sampling data from April 7 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

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 17 through Thursday, April 20 is listed below:

**County Region:** Forecast (Duration)
**Southern Manatee:** Very Low (M-W), None (Th)
**Southern Manatee, bay regions:** Very Low (M-Th)
**Northern Sarasota:** Low (M-W), Very Low (Th)
**Northern Sarasota, bay regions:** Very Low (M-Th)
**Southern Sarasota:** Very Low (M-Th)
**Southern Charlotte:** Very Low (M-Th)
**Northern Charlotte:** Very Low (M-Th)
**Northern Lee, bay regions:** Very Low (M-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. Dead fish have been reported in Lee County.

Analysis
Recent samples collected alongshore the coast of southwest Florida from Pinellas to Monroe counties indicate *Karenia brevis* is present in up to ‘very low a’ concentrations along the coast of southwest Florida, with the highest concentrations present in the bay regions of northern Sarasota County (FWRI, MML, SCHD, CCPC; 4/10-14). Samples collected in the bay regions of southern Manatee County and the bay regions of northern and central Lee County indicate that *K. brevis* has decreased to between not present and ‘background’ concentrations (FWRI; 4/11). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at:

Recent satellite imagery has been completely obscured by clouds along the coast of southwest Florida, preventing analysis (MODIS Aqua, 4/16; shown left).

Variable winds forecasted today through Thursday may minimize the transport of *K. brevis* concentrations.

Kavanaugh, Keeney
Wind Analysis

**Englewood to Tarpon Springs (Venice):** Variable winds (5-15kn, 3-8m/s) today through Wednesday night. Southeast winds (10kn, 5m/s) Thursday becoming southwest winds (5kn, 3m/s) in the afternoon. Northwest winds (10kn) Thursday night.
Satellite chlorophyll image and forecast winds for April 18, 2017 06Z with points representing cell concentration sampling data from April 7 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

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