Conditions Report

There is currently no indication of a harmful algal bloom onshore southwest Florida including the Florida Keys. A harmful algal bloom has been identified offshore central Monroe County and north of the Lower Florida Keys. No impacts are expected at the coast in southwest Florida today through Sunday, March 21.

Analysis

**This supplementary bulletin is being issued to report the identification of a bloom offshore central Monroe County and north of the Lower Florida Keys.**

There is currently no indication of a bloom at the coast in southwest Florida including the Florida Keys; however a harmful algal bloom has been identified offshore central Monroe County and north of the Lower Florida Keys. Three out of ten samples taken offshore Cape Sable in central Monroe County on 3/11 indicated, 'very low a', 'very low b' and 'medium' concentrations of *Karenia brevis* (FWRI); all other samples indicated that *K. brevis* was not present. In all ten samples, numerous other species of algae were also identified. Three out of four samples taken 2-6 n mi north of Sawyer Key in the Lower Florida Keys indicated one ‘very low b’ and two ‘low a’ concentrations of *K. brevis* (MML 3/17). Due to persistent cloudiness in this region over the past few weeks, satellite imagery cannot be used to determine the size, extent or patchiness of the harmful algal bloom. Continued sampling in this region is recommended.

Southward transport of the harmful algal bloom is possible due to persistent northwesterly and northerly winds over the past few days as well as forecasted northwesterly and northerly winds today and tomorrow.

Samples taken alongshore Pinellas, Sarasota, Charlotte, Lee, Collier and northern Monroe counties as well as south of the Lower Florida Keys all indicate that *K. brevis* is not present (SCHD 3/15; FWRI 3/10-17). Cloud cover over most of southwest Florida prevents the analysis of satellite imagery.

As of today, March 18, southwest Florida bulletins will be issued twice per week on Mondays and Thursdays due to identification of a harmful algal bloom.

Due to technical difficulties SeaWiFS imagery is currently unavailable for display.

Urizar, Derner
Wind conditions from Vaca Key, FL

Wind conditions from Sand Key, FL

Wind Analysis
Florida Keys: Northwesterly winds (10-15 kn, 5-8 m/s) today and Friday becoming northerly to northeasterly (5-10 kn, 3-5 m/s) Friday night. Easterly to southeasterly winds (10 kn) Saturday. Southeasterly to southerly (15 kn, 8 m/s) winds Sunday.

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).

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA CoastWatch bulletin archive: http://coastwatch.noaa.gov/hab/bulletins_ns.htm
Satellite chlorophyll image and forecast winds for March 19, 2010 06Z with Cell concentration sampling data from March 8 to 17 shown as red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).