Conditions Report

Background to very low concentrations of Karenia brevis (commonly known as Florida red tide) are present along- and offshore southwest Florida. No respiratory impacts are expected alongshore southwest Florida, including the Florida Keys, today through Thursday, May 23.

Analysis

Samples collected along- and offshore southwest Florida throughout last week indicate that Karenia brevis concentrations continue to dissipate and may no longer be present. Other than three ‘background’ concentrations identified in Lee County alongshore Bokeelia Island (FWRI; 5/14) and south of Sanibel Island (FWRI; 5/10), all other samples collected over the past week along- and offshore Lee County, including within the Pine Island Sound region, indicate that K. brevis is not present (FWRI; 5/10-5/16). Several ‘background’ concentrations were identified alongshore southern Pinellas and Manatee counties early last week, as well one ‘very low a’ K. brevis sample identified at Palma Sola Bay Bridge in Manatee County (FWRI; 5/13-14). All other samples collected along- and offshore Pinellas to Collier counties indicate that no K. brevis is present (FWRI; 5/9-5/16). Continued sampling throughout the Pine Island Sound region is recommended to confirm the dissipation of K. brevis concentrations. No dead fish or respiratory irritation associated with K. brevis have been reported in the past several days (FWRI, MML; 5/16-5/20).

Over the past few days, MODIS Aqua imagery has been partially obscured by clouds in patches alongshore southwest Florida, limiting analysis. In MODIS imagery from May 18 (shown left), elevated to high chlorophyll (2-16 µg/L) is visible stretching along- and offshore Pinellas County, and elevated chlorophyll (2-8 µg/L) is visible stretching along- and offshore central to southern Lee County. Imagery also indicates that the anomalously high patch of elevated chlorophyll noted in previous bulletins, once visible along- and offshore Lee and Charlotte counties, has dissipated, as also confirmed by sampling over the past week (FWRI; 5/14-15). Imagery is obscured by clouds alongshore much of the remainder of the coastline, limiting analysis, however these regions will continue to be monitored as imagery becomes available.

Derner, Burrows
Wind conditions from Fort Meyers, FL

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

**Southwest Florida:** Northwest winds (5-10kn, 3-5m/s) this afternoon. North winds (5-10kn) tonight becoming east overnight. East winds (10kn, 5m/s) Tuesday becoming northwest Tuesday afternoon. East winds (10kn) Tuesday night becoming southeast (5kn, 3m/s) after midnight. South winds (5kn) Wednesday becoming west (10kn) in the afternoon. Northwest winds (10kn) Wednesday night. West winds (10kn) Thursday.
Satellite chlorophyll image and forecast winds for May 21, 2013 06Z with points representing cell concentration sampling data from May 10 to 16: 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/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).