Conditions Report

Very low to medium concentrations of Karenia brevis (commonly known as Florida Red Tide) are present alongshore and offshore southwest Florida. Alongshore Sarasota County, patchy moderate respiratory impacts are possible today and tomorrow and patchy very low respiratory impacts are possible Wednesday and Thursday. Alongshore Charlotte County, patchy very low respiratory impacts are possible today, Wednesday and Thursday and patchy moderate respiratory impacts are possible Tuesday. In the bay regions of Charlotte and Lee counties, patchy moderate respiratory impacts are possible today through Thursday. Alongshore central and southern Lee County, southern Collier County, and northern Monroe County, patchy low respiratory impacts are possible today and Tuesday and patchy very low respiratory impacts are possible Wednesday and Thursday. No respiratory impacts are expected elsewhere alongshore southwest Florida, including the Florida Keys, today through Thursday, March 14. Over the last several days, reports of respiratory irritation were received from Charlotte County. Reports of dead fish and discolored water were received from Lee County.

Analysis

Alongshore and offshore southwest Florida from Sarasota to Monroe counties, Karenia brevis concentrations range from ‘not present’ to ‘medium’. Harmful algae is also present at the southern entrance of Sarasota Bay (MML; 3/6-7). Samples from alongshore Sarasota County indicate ‘low a’ to ‘medium’ concentrations of K. brevis (SCHD; 3/4). In the Pine Island Sound region of Charlotte and Lee counties, recent samples indicate not present to ‘very low b’ concentrations of K. brevis (FWRI 3/5). Alongshore central and southern Lee County, where dead fish and discolored water were reported, K. brevis concentrations ranged from not present to ‘very low a’ (FWRI 3/6). Samples from alongshore Collier County continue to indicate that K. brevis is ‘not present’ (FWRI; 3/7).

MODIS Aqua imagery (3/10; shown left) shows elevated chlorophyll alongshore and offshore Sarasota to Charlotte counties (3-5 µg/L) and Lee County (3-10 µg/L) and elevated to high chlorophyll alongshore and offshore northern to central Collier County (3-13 mg/L).

Forecast winds Tuesday through Thursday alongshore southwest Florida may increase the potential for southerly transport of the bloom.

Urizar, Fenstermacher
Wind conditions from Venice Pier, FL

Wind conditions from Fort Meyers, FL

Wind conditions from Naples, FL

Wind Analysis

Pinellas to Sarasota: Southerly winds (10-15kn, 5-8m/s) today. Southwesterly winds (15kn, 8m/s) Tuesday becoming northwesterly in the afternoon and northerly Tuesday night. Northerly winds Wednesday (20kn, 10m/s) and Thursday (10-20kn, 5-10m/s).

Charlotte and Lee: Southeasterly winds (15kn) today around 15 knots. Southerly winds (15kn) Tuesday becoming westerly in the afternoon and northerly on Tuesday night. Northerly winds Wednesday (20kn) and Thursday (10-20kn). Northeasterly winds (15kn) Thursday night.

Collier and northern Monroe: Southeasterly winds (10-15kn) today and south south-easterly winds (11-16kn, 6-8m/s) tonight. Southerly winds (10-15kn) Tuesday becoming southwesterly in the afternoon. West northwesterly winds (12-17kn, 6-9m/s) Tuesday night becoming north northwesterly (15-20 kn). North northeasterly winds (15-22kn, 8-11m/s) Wednesday and Thursday.
Satellite chlorophyll image and forecast winds for March 12, 2013 06Z with cell concentration sampling data from March 1 to 8 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). Cell count data are provided by Florida 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).