A harmful algal bloom of Karenia brevis (commonly known as Florida Red Tide) is present at the coast of southern Pinellas, Manatee, Sarasota, Charlotte, in the Gasparilla Pass and northern Pine Island Sound regions of Charlotte and northern Lee, and offshore Lee and along- and offshore Collier counties. Bloom concentrations of K. brevis are present offshore southern Pinellas County. In southern Pinellas County, patchy low respiratory impacts are possible today through Monday. In northern Manatee County and the Gasparilla Pass and northern Pine Island Sound regions of Charlotte and northern Lee, patchy moderate respiratory impacts are possible today through Monday. In northern Sarasota County, patchy moderate respiratory impacts are possible today and Friday, with patchy very low respiratory impacts possible Saturday through Monday. In southern Sarasota County, patchy high respiratory impacts are possible today and Friday, with patchy low respiratory impacts possible Saturday through Monday. In Charlotte County, patchy moderate impacts are possible today, with patchy high impacts possible Friday, and patchy low impacts possible Saturday through Monday. In northern Collier County, patchy low impacts are possible today, with patchy moderate impacts possible Friday, and patchy very low impacts possible Saturday through Monday. Over the past few days, reports of respiratory irritation have been received in Sarasota County and fish kills have been reported in southern Sarasota, the Pine Island Sound region of northern Lee, and Collier counties. No impacts are expected elsewhere alongshore southwest Florida today through Monday, October 22.

Analysis
A harmful algal bloom of Karenia brevis (commonly known as Florida Red Tide) is present at the coast of southern Pinellas, Manatee, Sarasota, Charlotte, in the Gasparilla Pass and northern Pine Island Sound regions of Charlotte and northern Lee, and offshore Lee and along- and offshore Collier counties. Bloom concentrations of K. brevis are present offshore southern Pinellas County. One sample collected from offshore Pinellas County identified a ‘low a’ concentration of K. brevis (FWRI; 10/9). Samples collected from Mullet Key (Gulf Pier), Skyway Fishing Pier (north), and offshore St. Pete Beach in southern Pinellas County indicate ‘low a’ concentrations of K. brevis (FWRI; 10/9-15). Sampling continues to indicate ‘medium’ to ‘high’ concentrations of K. brevis along the coastline of Manatee, Sarasota, Charlotte, in the Gasparilla Pass and northern Pine Island Sound regions of Charlotte and northern Lee, and alongshore northern Collier counties (FWRI, MML, CCPCPD; 10/16). Recent samples collected in Manatee County identified ‘medium’ K. brevis concentrations at Anna Maria Island (Rod and Reel Pier), ‘low a’ concentrations at the Skyway Fishing Pier (south) and School Key (lower Tampa Bay), and ‘very low b’ concentrations at Longboat Pass (FWRI; 10/16). Samples collected last week from Lighthouse Beach (Sanibel Island) and Lynn Hall Park alongshore southern Lee County indicated ‘very low a’ and ‘background’ K. brevis concentrations, respectively (FWRI; 10/10). No K. brevis was identified in samples collected from the southern Pine Island Sound region of Lee County, within the Marco Island region of Collier County, or alongshore Pavilion Key in Monroe County (FWRI, MML; 10/9-15).

Recent MODIS Aqua imagery (10/16, shown left) indicates elevated to very high chlorophyll (3 to >20 µg/L) stretching alongshore Southwest Florida from northern Pinellas to southern Collier County and extending up to 25 miles offshore Charlotte and Lee counties. Patches of very high chlorophyll (>20 µg/L) are particularly visible alongshore the...
Gaparilla, Cayo Costa, and Captiva Islands of Charlotte and northern Lee counties from approximately 26°46′43″N 82°17′33″W to 26°33′52″N 82°17′31″W, extending 1-7 miles offshore, as well as along- and offshore northern Collier County from the Vander-built Beach to Naples Pier area. Continued sampling throughout these regions is recommended.

Forecasted onshore winds will promote the potential for increased respiratory impacts along much of the southwest Florida coast today and Friday. Forecasted offshore winds over the weekend will minimize the potential for respiratory impacts, except in the Gasparilla and Pine Island Sound regions of Charlotte and Lee Counties, and reduce the potential for further bloom formation at the coast Saturday through Monday, October 22.

Davis, Derner

Wind Analysis
Southwest Florida: Southeast winds (5 kn, 3 m/s) today becoming southwest winds late. Variable winds tonight becoming southwest to west winds (5-10 kn, 3-5 m/s) Friday. Northwest winds (10-15 kn, 5-8 m/s) Friday night. North to northeast winds (10-15 kn) Saturday through Monday.
Satellite chlorophyll image and forecast winds for October 19, 2012 12Z with cell concentration sampling data from October 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). 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).