



## Experimental Gulf of Mexico Harmful Algal Bloom Bulletin

21 July 2003

National Ocean Service/NCCOS and CSC

NESDIS/CoastWatch and NDBC

Last bulletin: July 18, 2003

### Analysis SW Florida:

Imagery indicates a large flagged area from north of Clearwater to Charlotte Harbor (chlorophyll levels have reached 5 ug/L). Medium cell counts and respiratory irritation were observed south of Clearwater on July 17 and are consistent with imagery. The state also reported fish kills offshore. These were most likely transported from a nearshore bloom, as a result of northeasterly winds from the preceding days. Dead fish and low-medium levels of *K. brevis* were observed from Tampa Bay to Sarasota on July 11, in addition to medium levels of *Trichodesmium*. Dead fish were also reported at Venice on July 14. Therefore, the entire area from Clearwater to Charlotte Harbor should continue to be monitored.

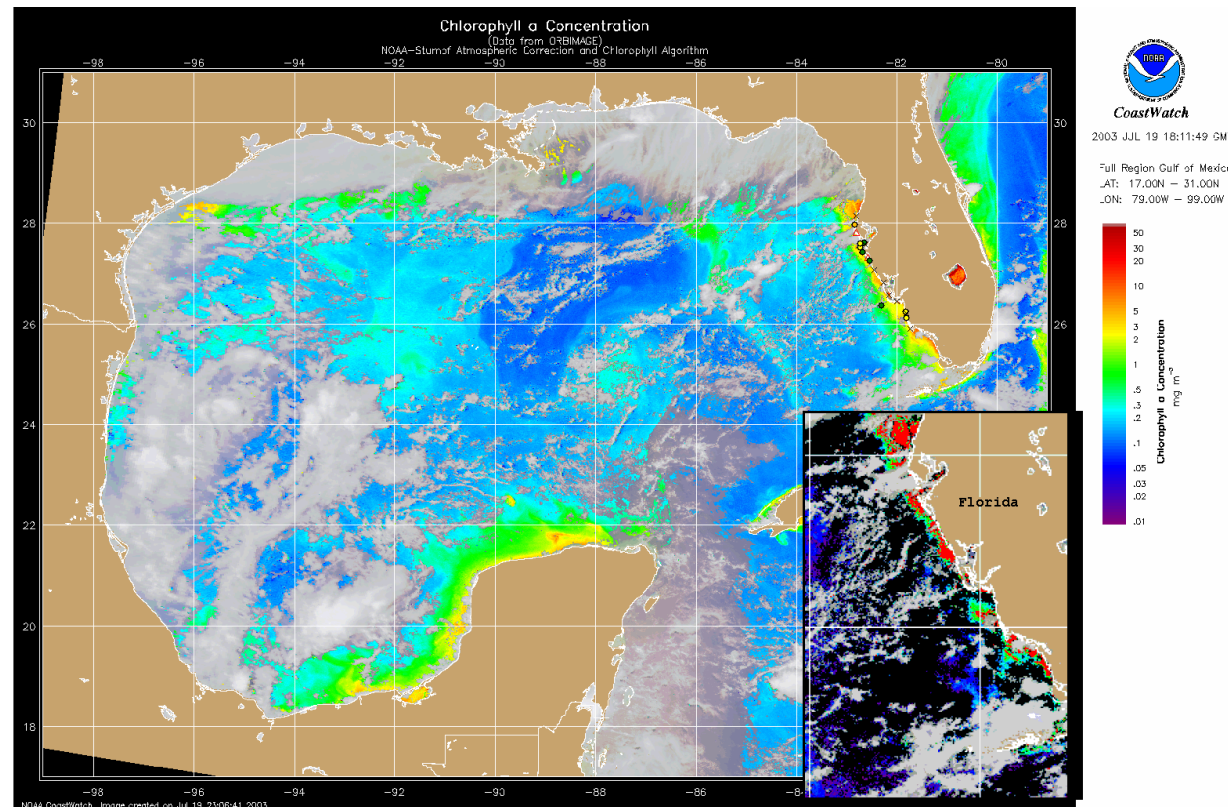
According to imagery, there is no indication that a *K. brevis* bloom is occurring in the area south of Charlotte Harbor to Ft. Meyers. However, an additional flagged region is observed around Naples. Dead fish and respiratory irritation were reported on July 12, indicating that a *K. brevis* bloom is likely.

Southeasterly winds are expected through Thursday which should minimize impacts at the coast.

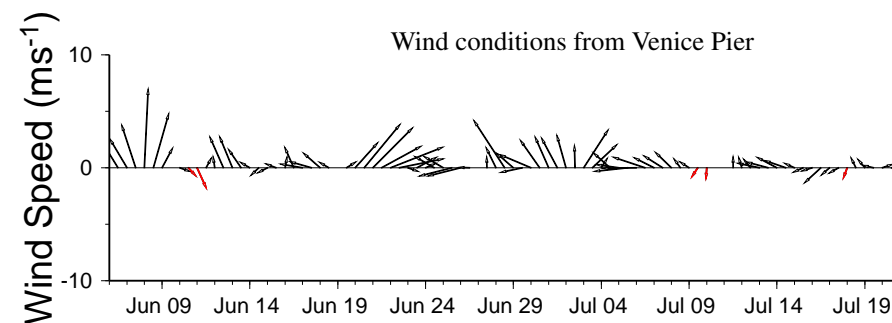
-Tomlinson

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1. These data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
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Chlorophyll concentration (above) and possible HAB areas shown in red (inset). Cell concentration sampling data from July 17, 2003 shown as red squares (high), red triangles (medium), red circles (low), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on NOAA buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast.

Northeasterly winds persisted from July 15-17. Southerly winds are predicted for the next few days, and are expected to turn southeasterly by Thursday.