



Mote Marine Laboratory / Florida Keys National Marine Sanctuary
Coral Bleaching Early Warning Network
Current Conditions Report #201200601



Updated June 1, 2012

Summary: Based on climate predictions, current conditions, and field observations, the threat for mass coral bleaching within the FKNMS remains **LOW**.

**NOAA Coral Reef Watch Coral Bleaching Thermal Stress Outlook
 June – September 2012 (experimental)**

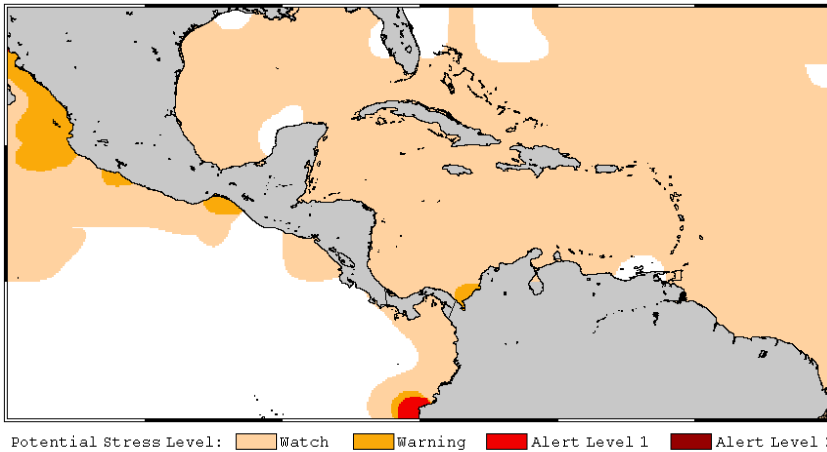


Figure 1. NOAA's Experimental Coral Bleaching Thermal Stress Outlook for June – September, 2012.
<http://coralreefwatch.noaa.gov/satellite/bleachingoutlook/index.html>

Weather and Sea Temperatures

According to the latest NOAA Coral Reef Watch (CRW) experimental Coral Bleaching Thermal Stress Outlook, there is potential for coral bleaching throughout the Florida Keys region in the coming months, as well as the rest of the Caribbean for the remainder of the summer of 2012. (Fig. 1).

Current remote sensing analysis by NOAA's CRW program indicates that the Florida Keys region is currently experiencing minimal thermal stress. NOAA's recent experimental Coral Bleaching HotSpot Map (Fig.2), which illustrates current sea surface temperatures compared to the average temperature for the warmest month, shows no elevated temperatures for the Florida Keys. Similarly, NOAA's latest experimental Degree Heating Weeks (DHW) map, which indicates how much heat stress has built up over the past 12 weeks (Fig.3), indicates no accumulated temperature stress in the Florida Keys region. NOAA's Integrated Coral Observing Network (ICON) monitoring stations confirms that sea temperatures throughout the Florida Keys, at least along the outer reef tract, are still currently below 30°C (Fig.4); however, temperatures appear to be increasing rapidly, likely due to the decreased wind speeds over the past two weeks (Fig 5). *In-situ* sea temperature data is not currently available for Sand Key or Sombbrero Reef. Similarly, the Dry Tortugas station is not recording any data at this time.

Mote Marine Laboratory will continue to monitor the NOAA HotSpot maps, DHW maps, and ICON sea temperature data from NOAA monitoring stations on a weekly basis for the remainder of the bleaching season.

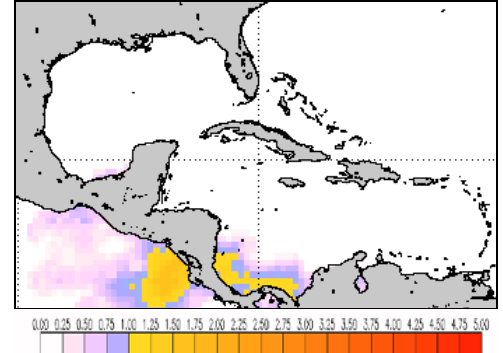


Figure 2. NOAA's Experimental Coral Bleaching HotSpot Map for May 31, 2012.
<http://coralreefwatch.noaa.gov/satellite/e50/>

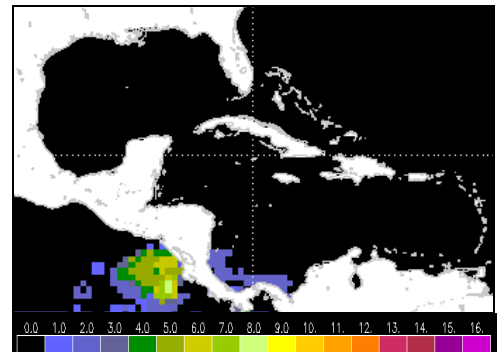


Figure 3. NOAA's Experimental Degree Heating Weeks Map for May 31, 2012.
<http://coralreefwatch.noaa.gov/satellite/e50/>

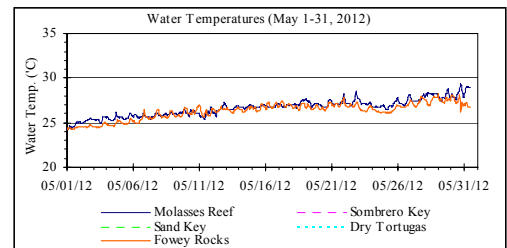


Figure 4. *in-situ* sea temperature from NOAA/ICON monitoring stations (May 1-31, 2012).

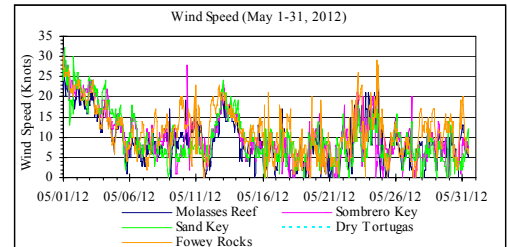


Figure 5. Wind speed data from NOAA/ICON monitoring stations (May 1-31, 2012).



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Observer Network Training



NOAA's CRW experimental Coral Bleaching Alert Area (Fig. 6) currently indicates no alert levels for the Florida Keys area. However, BleachWatch observers are encouraged to start submitting your observations after every visit to the reef, **even if no bleaching was observed**. Frequent coral condition observations from throughout the Florida Keys are needed for the remainder of the summer season. To submit an observation on coral condition, or for more information on the Florida Keys BleachWatch program, please go to www.mote.org/bleachwatch

For information on joining the BleachWatch program, or to organize a training session for your group or organization, please contact the number below.

**NOAA Coral Reef Watch Satellite Coral Bleaching Alert Area
 May 31, 2012**

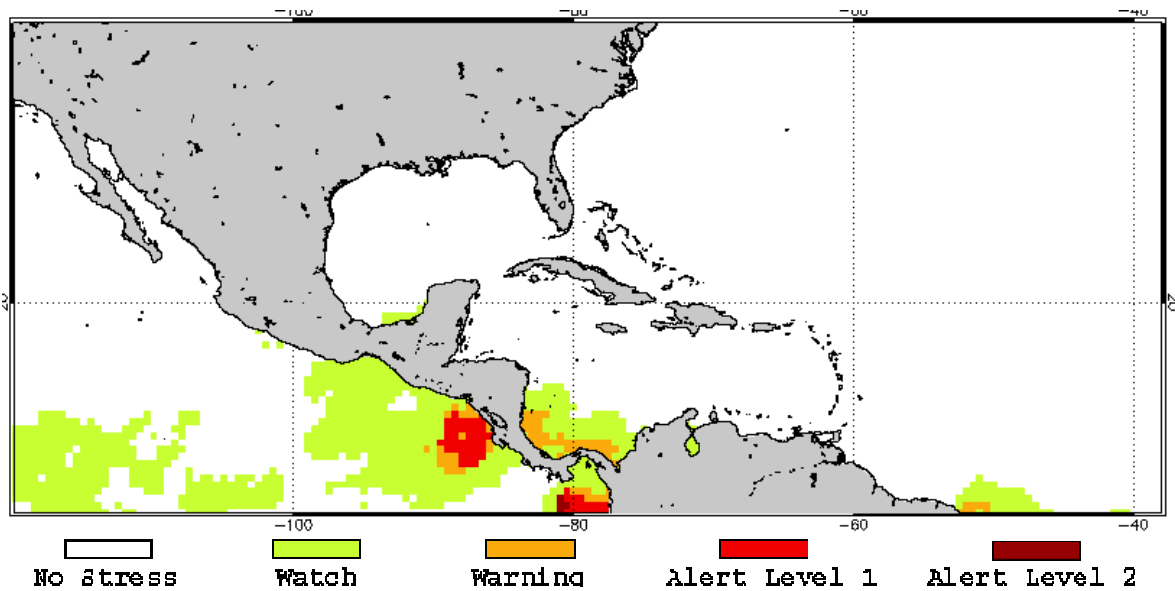


Figure 5. NOAA's Experimental Coral Bleaching Alert Area for May 31, 2012.
<http://coralreefwatch.noaa.gov/satellite/e50/index.html>

*For more information about the BleachWatch program,
 or to submit a bleaching observation, contact:*

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FUNDING THANKS TO....

