



Mote Marine Laboratory / Florida Keys National Marine Sanctuary  
**Coral Bleaching Early Warning Network**  
**Current Conditions Report #20150602**



Updated June 2, 2015

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

**NOAA Coral Reef Watch 60% Probability Coral Bleaching Thermal Stress Outlook June 2015-Sept. 2015 (experimental)**

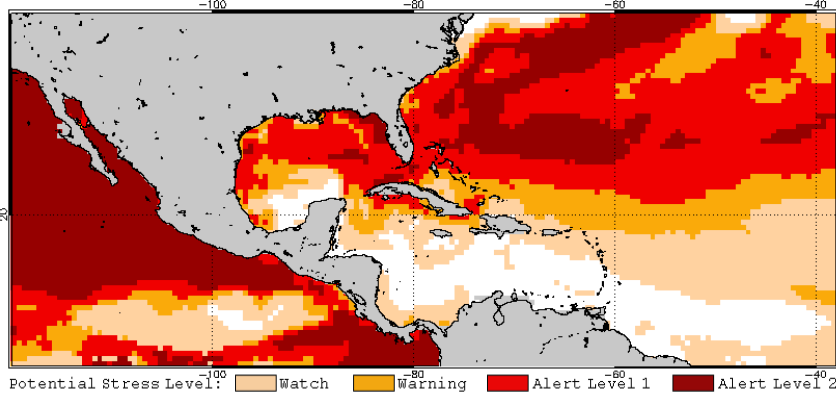


Figure 1. NOAA's Experimental Coral Bleaching Thermal Stress Outlook for June 2015- Sept. 2015

[http://coralreefwatch.noaa.gov/satellite/bleachingoutlook\\_cfs/outlook\\_cfs.php](http://coralreefwatch.noaa.gov/satellite/bleachingoutlook_cfs/outlook_cfs.php)

**Weather and Sea Temperatures**

According to the newly released 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 Caribbean for the remainder of the summer of 2015 (Fig.1).

Recent remote sensing analysis by NOAA's CRW program indicates that the Florida Keys region is presently experiencing minimal thermal stress. NOAA's new experimental 5 km Coral Bleaching HotSpot Map (Fig.2), which illustrates current sea surface temperatures compared to the average temperature for the warmest month, shows that sea surface temperatures are not elevated above normal in the Florida Keys. Similarly, NOAA's experimental 5 km Degree Heating Weeks (DHW) map, which illustrates how much heat stress has built up over the past 12 weeks (Fig.3), indicates no accumulated temperature stress is currently evident in the Florida Keys region. NOAA's Integrated Coral Observing Network (ICON) monitoring stations, which provide near real time *in-situ* sea temperature data along the outer reef tract throughout the Florida Keys, confirm that temperatures are still below 30°C over the past four weeks (Fig.4), likely due in part to breezy conditions observed during this time frame (Fig. 5). *In-situ* sea temperature data is currently only available at Molasses Reef. Fowey Rocks 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.

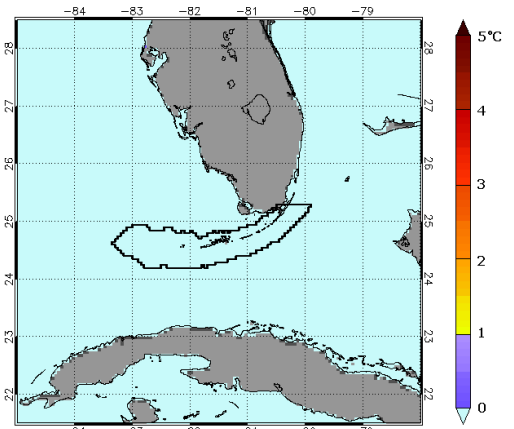


Figure 2. NOAA's Experimental 5km Coral Bleaching HotSpot Map for Florida May 31, 2015.

<http://coralreefwatch.noaa.gov/regions/florida.php>

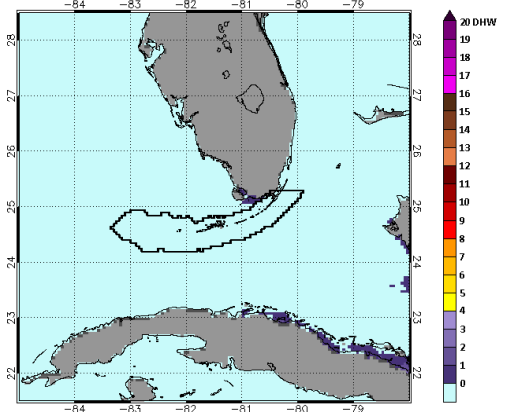


Figure 3. NOAA's Experimental 5km Degree Heating Weeks Map for Florida May 31, 2015.

<http://coralreefwatch.noaa.gov/regions/florida.php>

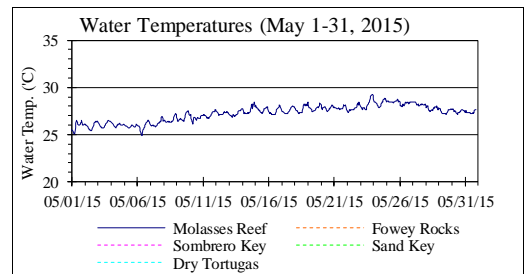


Figure 4. *in-situ* sea temperature from NOAA/ICON monitoring stations (May 1-31, 2015).

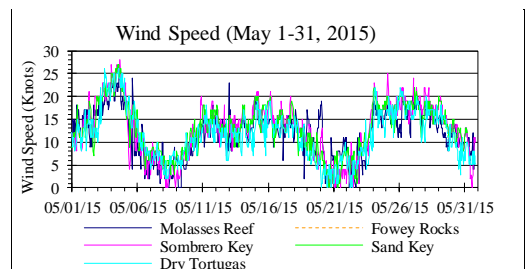


Figure 5. Wind speed data from NOAA/ICON monitoring stations (May 1-31, 2015).



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**Conditions of Corals**

NOAA's CRW experimental 5km Coral Bleaching Alert Area (Fig. 6) currently indicates no alert levels for the Florida Keys reef areas. However, BleachWatch observers are encouraged to start submitting your observations after every visit to the reef, **even if NO bleaching was observed**. Frequent coral conditions 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](http://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, 2015**

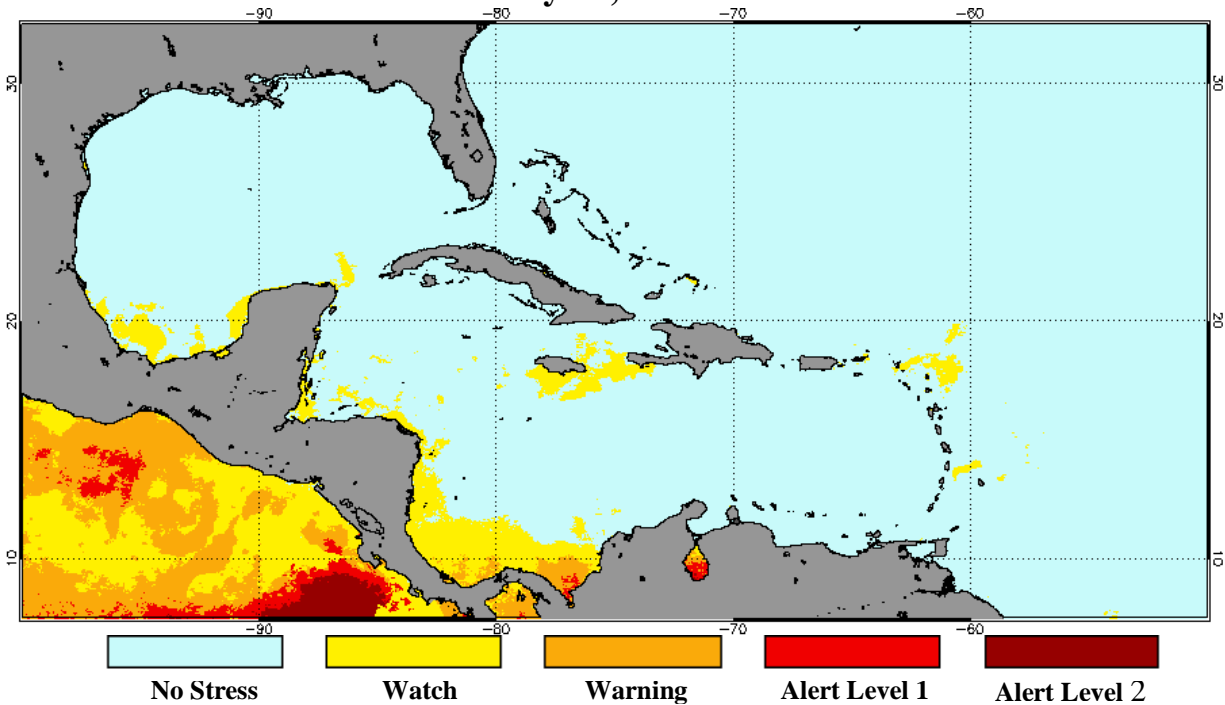


Figure 6. NOAA's Experimental 5Km Coral Bleaching Alert Area for May 31, 2015  
<http://coralreefwatch.noaa.gov/satellite/bleaching5km>

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

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<http://www.mote.org/bleachwatch>

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