



# Florida Department of Environmental Protection Coral Reef Conservation Program **SEAFAN BleachWatch Program** **Current Conditions Report #20160606**



**June 6, 2016**

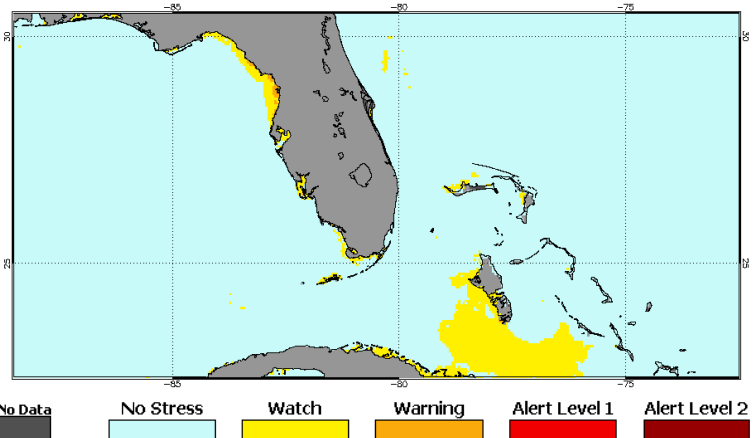
**Summary:** Based on climate predictions and field observations, the threat for mass coral bleaching in southeast Florida between Miami-Dade and Martin counties is **LOW** as of June 6, 2016.

## Environmental Monitoring

Climate predictions for this current conditions report are based on NOAA's Coral Reef Watch (CRW) satellite imagery products, which summarize sea surface temperature (SST) data and provide an indication as to when conditions are favorable for coral bleaching. Current CRW experimental 5 kilometer (km) daily coral bleaching Alert Area indicates that the southeast Florida region is presently experiencing no thermal stress (Figure 1):

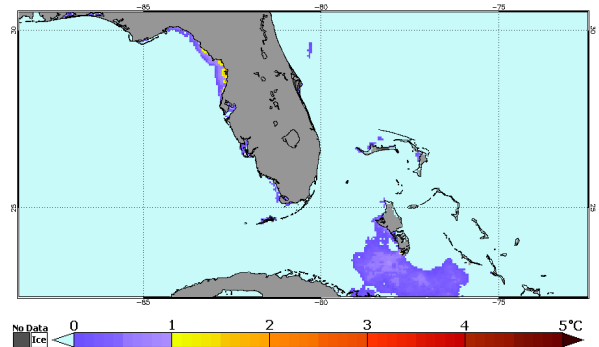
- NOAA's experimental 5km Bleaching Hotspot Map (Figure 2) compares current SST to the maximum monthly mean, which is the average temperature during the warmest month of the year. Corals start to become stressed when SST is 1°C greater than the highest monthly average. Currently, SST is below the 1°C Hotspot bleaching threshold and does not appear elevated.
- Coral bleaching risk increases if the temperature stays elevated for an extended period of time. NOAA's experimental 5km Degree Heating Weeks (DHW) Map (Figure 3) shows the accumulation of temperature stress over the previous 12 weeks, with 1 DHW equal to one week at 1°C greater than the maximum monthly mean. Currently, this map indicates that there is no accumulated temperature stress in the southeast Florida region.
- Near real-time data from CRW's new 5-km Satellite Regional Virtual Station for southeast Florida indicates that SST in the region is currently above the monthly average, although it remains below the bleaching threshold (Figure 4).

The Florida Department of Environmental Protection's Coral Reef Conservation Program staff will continue to monitor NOAA's Hotspot, DHW and Alert Area maps, as well as Virtual Station data for the remainder of the summer bleaching season.



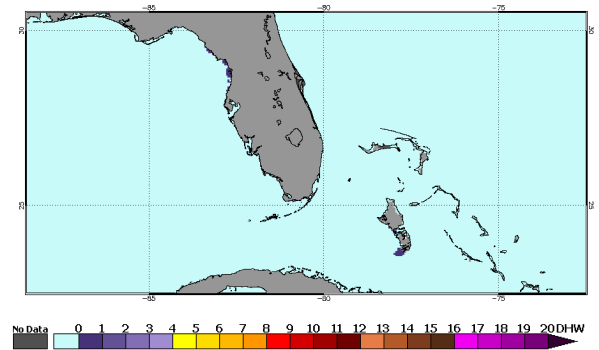
**Figure 1.** NOAA Coral Reef Watch Daily 5-km Geo-Polar Blended Night-Only Bleaching Alert Area; June 4, 2016.

<http://coralreefwatch.noaa.gov/satellite/bleaching5km/index.nhn>



**Figure 2.** NOAA CRW Daily 5-km Geo-Polar Blended Night-Only Hotspots for June 4, 2016.

<http://coralreefwatch.noaa.gov/satellite/bleaching5km/index.php>

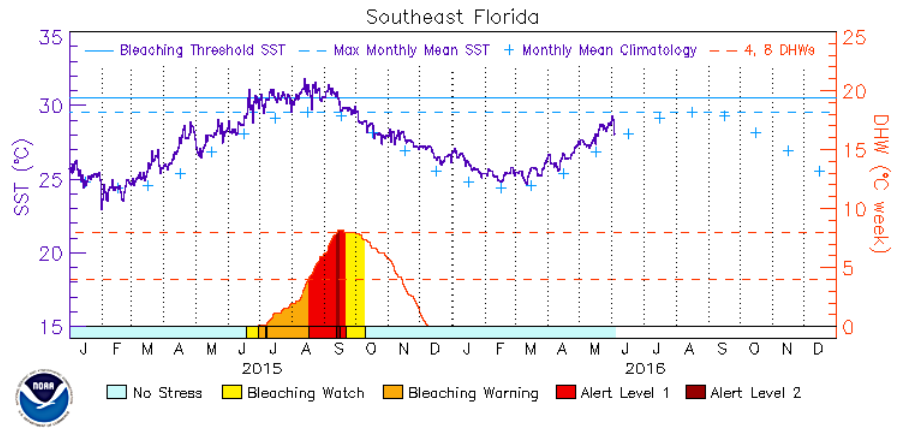


**Figure 3.** NOAA CRW Daily 5-km Geo-Polar Blended Night-Only Degree Heating Weeks for June 4, 2016.

<http://coralreefwatch.noaa.gov/satellite/bleaching5km/index.php>

## Observer Network

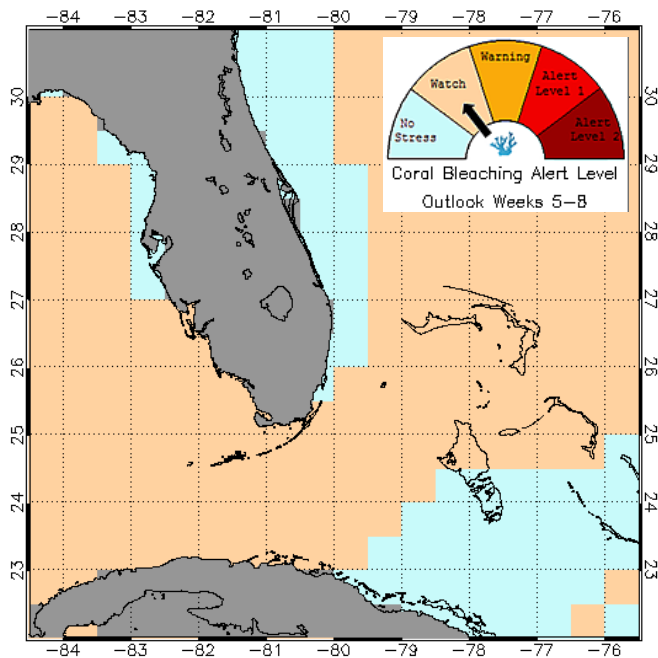
While current NOAA CRW satellite data indicates that the coral reefs in southeast Florida are not experiencing thermal stress, the Southeast Florida Satellite Coral Bleaching Alert Area Outlook indicates that conditions favorable for bleaching are likely develop throughout southeast Florida within the next 5 to 8 weeks (Figure 5). The 12 week outlook indicates that bleaching conditions may intensify from a warning to an Alert level 1 by the end of August (Figure 6).



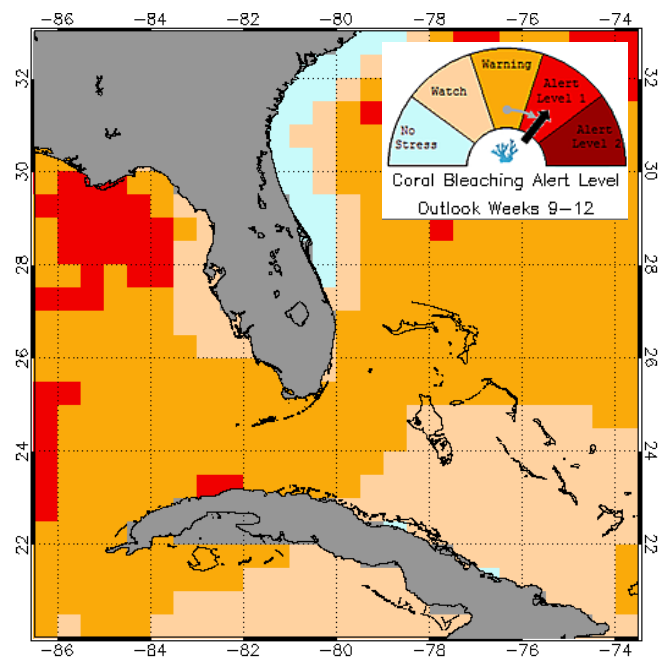
**Figure 4.** NOAA CRW Virtual Station Data; January 1, 2015 – June 4, 2016.  
[http://coralreefwatch.noaa.gov/vs/gauges/southeast\\_florida.php](http://coralreefwatch.noaa.gov/vs/gauges/southeast_florida.php)

The BleachWatch Observer Network is encouraged to start submitting observations on coral condition after every visit to the reef for the duration of the summer season. **Remember, reports of ‘No Bleaching’ are just as important as bleaching reports!** To submit a report on coral condition in southeast Florida, or for more information on the SEAFAN BleachWatch Program, please visit [www.SEAFAN.net](http://www.SEAFAN.net) and click “BleachWatch.”

*For more information about SEAFAN BleachWatch or to organize a training session for your group to become a part of the Observer Network, please contact the Program Coordinator below.*



**Figure 5.** NOAA CRW Southeast Florida Satellite Coral Bleaching Alert Level Outlook for June 4, 2016 (8 Week Outlook).  
[http://coralreefwatch.noaa.gov/vs/gauges/southeast\\_florida.php](http://coralreefwatch.noaa.gov/vs/gauges/southeast_florida.php)



**Figure 6.** NOAA CRW Southeast Florida Satellite Coral Bleaching Alert Level Outlook for June 4, 2016 (12 Week Outlook).  
[http://coralreefwatch.noaa.gov/vs/gauges/southeast\\_florida.php](http://coralreefwatch.noaa.gov/vs/gauges/southeast_florida.php)

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### Program Partners:

