

Current Conditions Report #20170612

June 12, 2017

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 12, 2017.

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. The current CRW 5-kilometer (km) Coral Bleaching Alert Area indicates that the southeast Florida region is presently experiencing no thermal stress (Figure 1):

- NOAA’s experimental 5-km 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 to be elevated.
- Coral bleaching risk increases if the temperature stays elevated for an extended period of time. NOAA’s experimental 5-km 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 slightly above the monthly average, although it remains below the bleaching threshold (Figure 4).

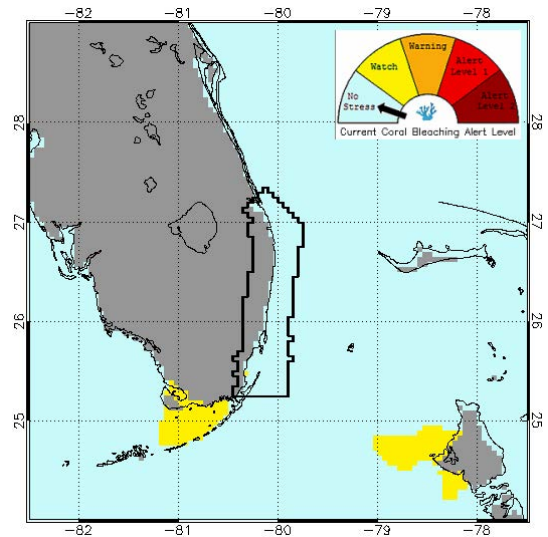


Figure 1. NOAA Coral Reef Watch Bleaching Alert Area for June 10, 2017.

https://coralreefwatch.noaa.gov/vs/gauges/southeast_florida.php

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.

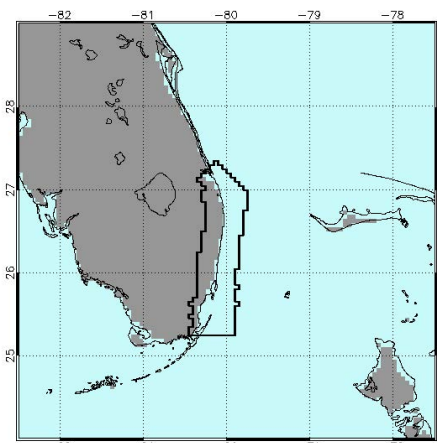


Figure 2 (left). NOAA CRW Hotspots for June 10, 2017.
<http://coralreefwatch.noaa.gov/satellite/bleaching5km/index.php>

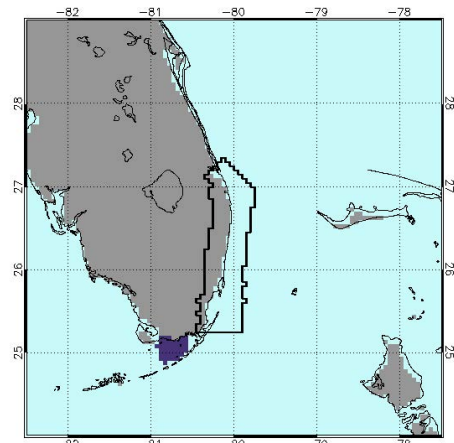
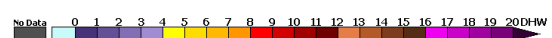


Figure 3 (right). NOAA CRW Degree Heating Weeks for June 10, 2017.
<http://coralreefwatch.noaa.gov/satellite/bleaching5km/index.php>



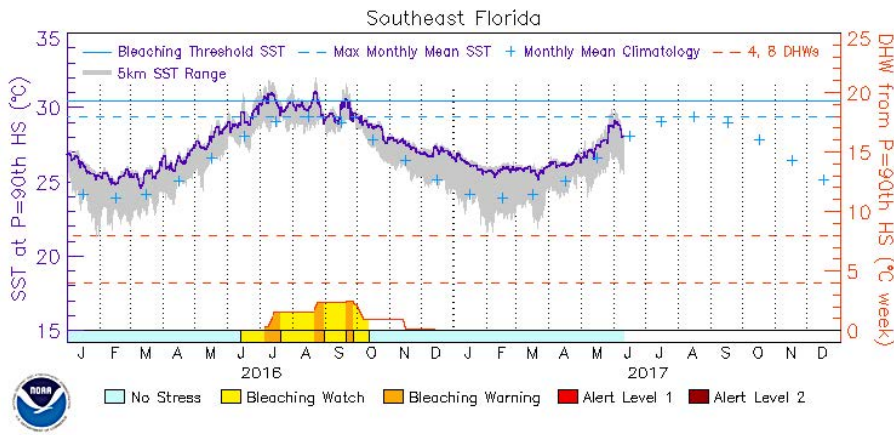


Figure 4. NOAA CRW Virtual Station Data; January 1, 2016 – June 10, 2017.
http://coralreefwatch.noaa.gov/vs/gauges/southeast_florida.php

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 warmer conditions within the next 5-8 weeks (Figure 5). The 12 week outlook indicates conditions may intensify from a watch to an Alert Level 1 by the end of August (Figure 6).

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! Given the severity of the southeast Florida coral disease outbreak, it is also encouraged to report any signs of coral disease. To learn more about coral disease or the SEAFAN BleachWatch Program and to submit a report on coral condition in southeast Florida, please visit 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.

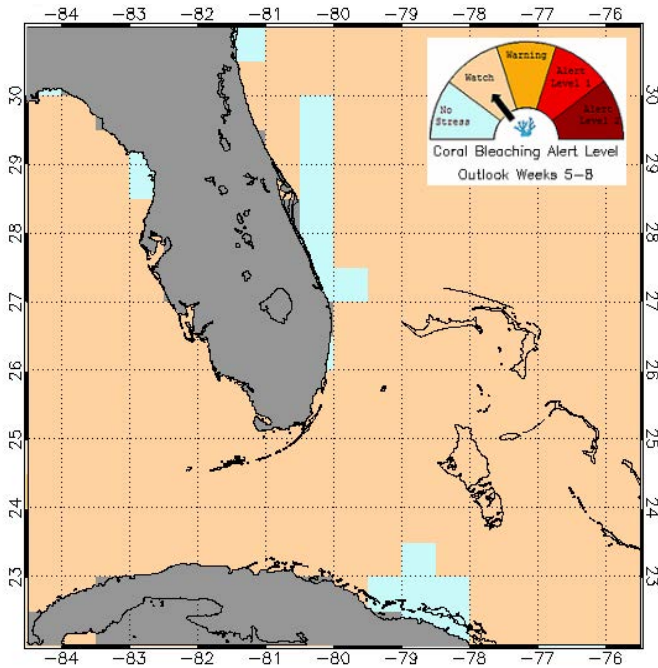


Figure 5. NOAA CRW Southeast Florida Satellite Coral Bleaching Alert Level Outlook for June 10, 2017 (8-Week Outlook).
http://coralreefwatch.noaa.gov/vs/gauges/southeast_florida.php

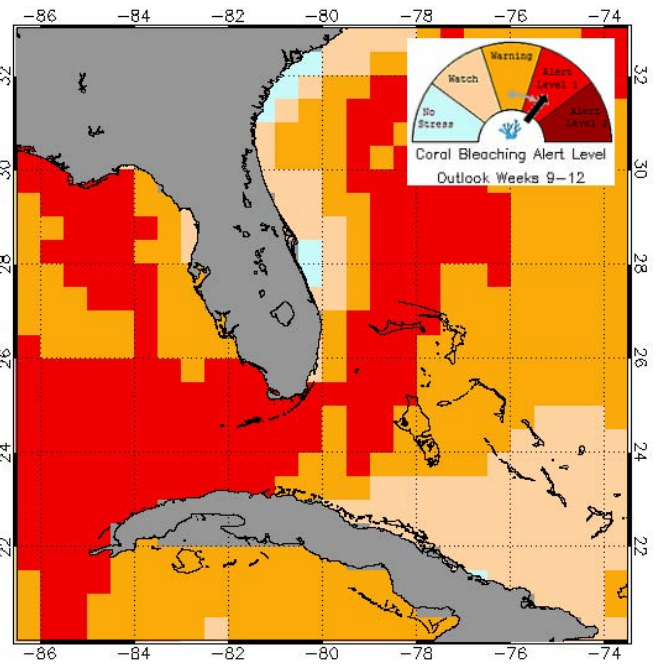


Figure 6. NOAA CRW Southeast Florida Satellite Coral Bleaching Alert Level Outlook for June 10, 2017 (12-Week Outlook).
https://coralreefwatch.noaa.gov/vs/gauges/southeast_florida.php

Kristi Kerrigan
 Program Coordinator
 FDEP Coral Reef Conservation Program
 Phone: (305) 795-1204
 Email: kristi.kerrigan@dep.state.fl.us
www.SEAFAN.net

Program Partners

