

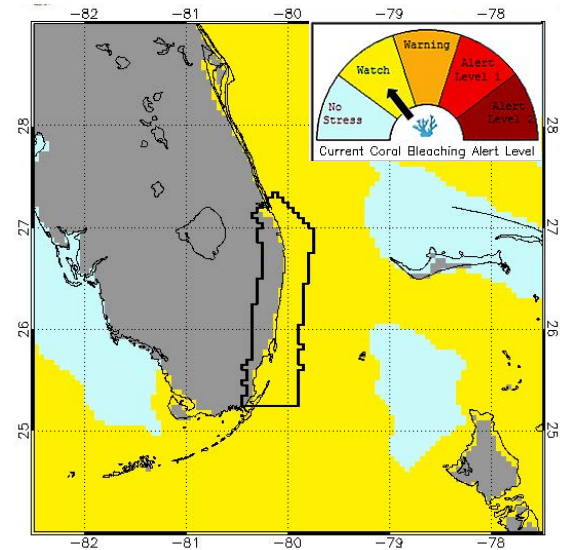
**Summary:** Based on climate predictions and field observations, the threat for mass coral bleaching in southeast Florida between Miami-Dade and Martin counties is **LOW** as of September 29, 2020.

### Environmental Monitoring

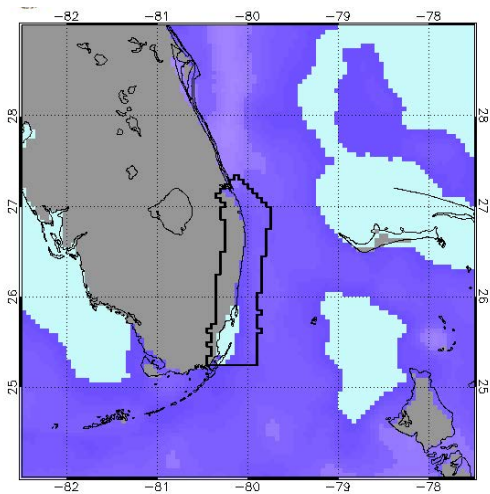
Climate predictions for this current conditions report are based on NOAA's Coral Reef Watch (CRW) satellite imagery products, which summarize sea surface temperature (SST) data and provide an indication as to when conditions are favorable for coral bleaching. The current CRW 5-kilometer (km) Coral Bleaching Alert Area indicates that the southeast Florida region is presently experiencing low-level thermal stress with bleaching somewhat likely (Fig. 1).

- 🌐 NOAA's experimental 5-km Bleaching Hotspot Map (Fig. 2) compares current SST to the maximum monthly mean. Corals start to become stressed when SST is 1°C greater than the highest monthly average. Currently, SST remains below that 1°C threshold.
- 🌐 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 (Fig. 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 slight accumulated temperature stress in lower Miami-Dade County.**
- 🌐 Near real-time data from CRW's new 5-km Satellite Regional Virtual Station for southeast Florida indicates that SST in the region was **below the bleaching threshold** for most of September (Fig. 4).

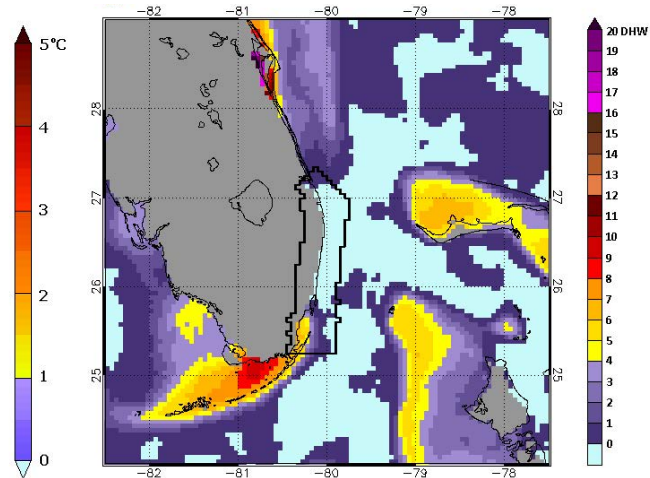
The Florida Department of Environmental Protection's Coral Reef Conservation Program will continue to monitor NOAA's Hotspot, DHW and Alert Area maps, as well as Virtual Station data for the remainder of the bleaching season.



**Figure 1.** NOAA CRW Bleaching Alert Area for September 29, 2020.



**Figure 2.** NOAA CRW Hotspots for September 29, 2020.



**Figure 3.** NOAA CRW Degree Heating Weeks for September 29, 2020.

SSTs have continued to remain high in Southeast Florida, hovering just below the bleaching threshold. The satellite Coral Bleaching Alert Area Outlook for the upcoming 4 weeks predicts a Bleaching Watch for the region (Fig. 5). The 5-8 week outlook indicates there will be no thermal stress.

### Observer Network

Since August 29, 2020, a total of 12 reports were received. Of those, 10 reported coral bleaching and 6 reported coral disease.

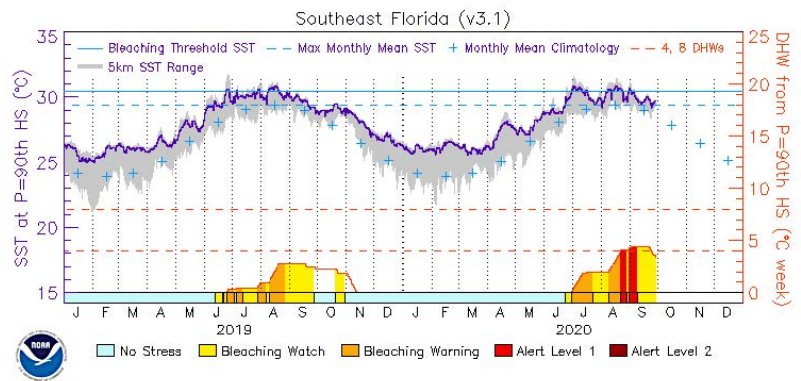


Figure 4. NOAA CRW Virtual Station Data for Southeast Florida; January 1, 2019 - September 29, 2020.

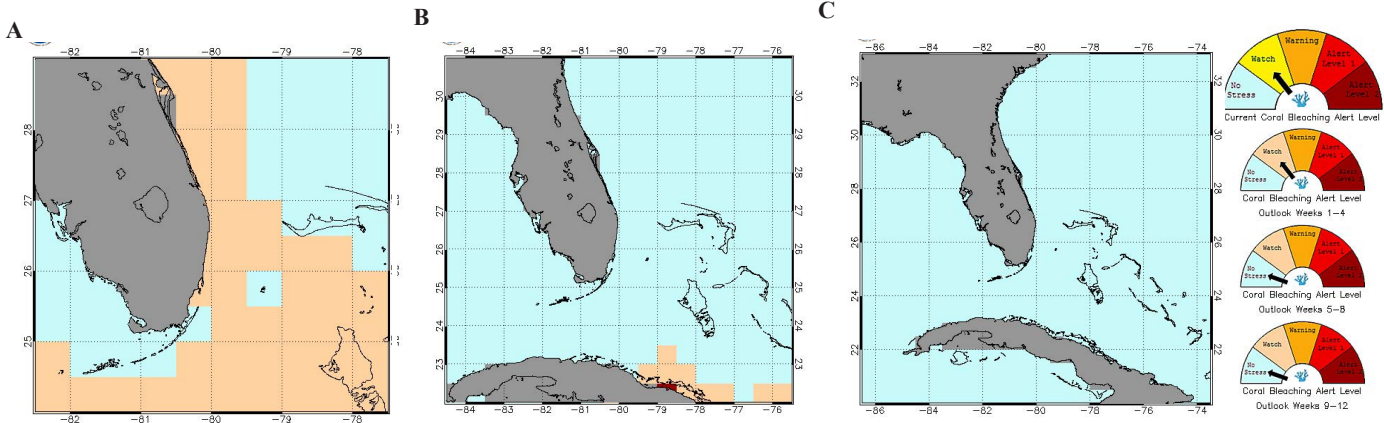


Figure 5. NOAA CRW Southeast Florida Satellite 60% Probability Coral Bleaching Outlook Areas for August 26, 2020 through part of November 2020. A) 1-4 week Outlook for September 29 - October 27, 2020 B) 5-8 week outlook for October 27 - November 24, 2020 C) 9-12 week outlook for November 24 - December 22, 2020. <https://coralreefwatch.noaa.gov/product/5km/index.php>

To break down reports by county: 3 reports came from Palm Beach County, 5 reports came from Broward County, and 4 reports came from Monroe County. We encourage divers in lower Miami-Dade County to submit reports based on the Bleaching Warning. At 2 sites in Broward County and 1 site in Monroe County, palythoa were also reported to be bleaching.

The next Current Conditions Report will be sent at the end of October. Given the warm temperatures over the next 4 weeks, we encourage the SEAFAN BleachWatch network to continue submitting their observations on coral condition after every dive on the reef and to report any unusual marine sightings in southeast Florida to SEAFAN at [www.SEAFAN.net](http://www.SEAFAN.net).

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 6. Bleached star coral observed by William Caffrey in Palm Beach County on August 12, 2020.



Figure 7. Healthy star coral observed by William Caffrey in Palm Beach County on September 10, 2020.

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### Program Partners

