To Whom It May Concern:

<u>NOAA Coral Reef Watch (CRW)</u> is undertaking an effort to determine the severity and distribution of recent coral bleaching and mortality, and compare these with satellite measurements of bleaching thermal stress. We are contacting you to request any coral bleaching data you might have from 2014-present and to seek further collaboration for upcoming events.

As you know, global scale bleaching events have occurred frequently in recent years. More and more coral reef areas have experienced severe bleaching, sometimes in back-to-back events. For instance, elevated ocean temperatures in 2010 resulted in a major coral bleaching event in many parts of the world. In 2014, record thermal stress and bleaching were observed in the Northern Mariana Islands (for the second year in a row), the Northwestern Hawaiian Islands, the main Hawaiian Islands, and the Marshall Islands. A widespread 2015-2016 global bleaching event continues to be likely, as the British Indian Ocean Territory and the Maldives are already experiencing bleaching, and warming has begun in the Caribbean. Hopefully this event will not be as severe as the 2010 or 1998 bleaching events; however, some locations may suffer worse bleaching this year/next year than in the past.

This bleaching event provides an opportunity for comparison of bleaching observations from the field with the new <u>CRW 5-km satellite product suite</u>, released in May 2014. The new satellite products offer higher spatial (5 km) and temporal (daily) resolutions, and presently include sea surface temperature (SST), SST Anomaly, Coral Bleaching HotSpot, Degree Heating Week, and a 7-Day Maximum Bleaching Alert Area (<u>http://coralreefwatch.noaa.gov/satellite/bleaching5km/index.php</u>).

At this time, we are collecting information on bleaching from 2014 onwards for comparison with satellite data and for publication in a peer-reviewed journal. We will endeavor to invite everyone who provides data as an author on resulting paper(s) -- see Eakin *et al.* (2010) as an example. Publications are expected to be primarily meta-analyses of the global and/or regional data, which will be accompanied by publication of summaries of any data you provide. We hope that each of our collaborators will publish more detailed national or local analyses to further document the event.

Please email coral bleaching observations since 2014 (including reports of 'no bleaching') to coralreefwatch@noaa.gov. Observations of both bleaching and no bleaching on your reefs are very important for the calibration/validation of CRW's satellite products. Please complete and submit both the qualitative and quantitative bleaching report forms developed by CRW (available at http://coralreefwatch.noaa.gov/satellite/research/coral\_bleaching\_report.php) if you wish to contribute bleaching data to this effort.

Andrea Gomez, a NOAA Graduate Research and Training Scholarship Program Fellow, is coordinating the collection of these data and may follow-up with you as we proceed with the analysis.

You are welcome to forward this email to colleagues who you feel may have data to contribute to this effort. We look forward to collaborating with you in assessing this widespread event. Please contact us (coralreefwatch@noaa.gov) with any follow-up questions.

Warm Regards,

C. Mark Eakin Coordinator – NOAA Coral Reef Watch