PAPAHĀNAUMOKUĀKEA WONDON WON

PRESS RELEASE

Sept. 29, 2010

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MARINE NATIONAL MONUMENT PRESS RELEASE

Northwestern Hawaiian Islands Escape Severe Coral Bleaching Event

(Honolulu, HI) Papahānaumokuākea Marine National Monument, located in the Northwestern Hawaiian Islands (NWHI), narrowly escaped severe mass coral bleaching this season, unlike many other regions and ecosystems around the globe. Scientists aboard the NOAA ship *Hi'ialakai* returned today from the 10th annual NWHI Reef Assessment and Monitoring Program (NWHI RAMP) cruise, which over the past 26 days, among other activities, monitored the reefs for evidence of coral bleaching.

"The science-based management at Papahānaumokuākea is a good example of how we can best sustain our marine ecosystems to ensure they continue to provide us with the resources we care about. By affording a high level of protection to this special ocean wilderness, and monitoring it systematically, we are learning how to best support the resilience of coral reef ecosystems to climate change," said Under Secretary of Commerce and NOAA Administrator, Dr. Jane Lubchenco, "and this understanding can inform our work in a lot of other places."

This year, monitoring for the impacts of climate change was a heightened priority for the NWHI RAMP cruise because NOAA's Coral Reef Watch had issued a bleaching warning for Kure and Midway Atolls based on elevated sea surface temperatures in the region and mass coral bleaching events have been observed this year at many sites around the globe. "We dodged a bullet," said Dr. Peter Vroom, NOAA's Chief Scientist on the NWHI RAMP cruise, "although sea temperatures were above average in the outer atolls, they have not yet triggered any large-scale bleaching events, and our monitoring only found minor, localized bleaching, which is unlikely to result in coral death on a wide scale."

Dr. Rusty Brainard of NOAA's Pacific Islands Fisheries Science Center, points out that reports of coral bleaching globally are increasing with increasing sea surface temperatures. Brainard said, "Although the localized bleaching events recorded here are on par with others observed over the last few years, such bleaching events appear to be occurring much more frequently than in the past. Hence, the 'new normal' conditions that we've observed over the past few years may indeed be a reflection of a shifting baseline." NOAA's Pacific Islands Fisheries Science Center collaborates with NOAA's Office of National Marine Sanctuaries, to conduct NWHI RAMP cruises annually.

PLEASE CONTACT







Dan Dennison NOAA 808.694.3930 Barbara Maxfield USFWS 808.792.9531 Cori Kane State-DLNR 808.397.2646 One of the effects of climate change is to increase the risk of reef damage through mass coral bleaching events. Mass coral bleaching occurs when unusually warm water temperatures disrupt the relationship between corals and the symbiotic microscopic algae that live within their tissues. Temperature stress causes the coral to expel the algae, and the reef appears white or "bleached" as its calcium carbonate skeleton becomes visible. Coral bleaching was first recorded in Papahānaumokuākea Marine National Monument in 2002 and 2004, and is likely to occur again in the future.

"Although research has occurred in the Northwestern Hawaiian Islands since the late 1800s, NWHI RAMP's systematic investigations to characterize the region's shallow water coral reef ecosystems have provided the scientific underpinnings for the unprecedented ecosystem-scale management that now protects this unique World Heritage site," said 'Aulani Wilhelm, NOAA Superintendent for Papahānaumokuākea Marine National Monument.

Papahānaumokuākea is cooperatively managed to ensure ecological integrity and achieve strong, long-term protection and perpetuation of Northwestern Hawaiian Island ecosystems, Native Hawaiian culture, and heritage resources for current and future generations. Three co-trustees – the Department of Commerce, Department of the Interior, and State of Hawai'i – joined by the Office of Hawaiian Affairs, protect this special place. Papahānaumokuākea Marine National Monument was designated as the first mixed (natural and cultural) UNESCO World Heritage Site in the United States in July 2010. For more information on Papahānaumokuākea, visit us at www.papahanaumokuakea.gov

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