SUMMIT COUNTY CITIZEN VOICE

66 coral species to get Endangered Species Act protection Primary threats all linked to greenhouse gases and global warming



A coral reef at the Palmyra Atoll National Wildlife Refuge. Photo courtesy Jim Maragos/USFWS.

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FRISCO — Federal scientists say that at least 66 species of coral in the Caribbean and Pacific are in danger of going extinct because of threats linked to global warming caused by greenhouse gas emissions.

Announcing a proposal to list those species under the Endangered Species Act, the National Oceanic and Atmospheric Administration identified 19 specific threats including rising ocean temperatures, ocean acidification, disease, ecological effects of fishing, and poor land-use practices. NOAA scientists said three of the major threats — rising ocean temperatures, ocean acidification, and disease — are all directly or indirectly linked to greenhouse gas emissions and a changing climate.

In the Pacific, seven species would be listed as endangered and 52 as threatened. In the Caribbean, five

would be listed as endangered and two as threatened. Two other Caribbean species — elkhorn and staghorn corals — would be reclassified from threatened to endangered.

The proposal notes that coral cover in the Caribbean has declined from 50 percent in the 1970s to less than 10 percent now, and similarly from 50 percent to 20 percent in the Indo-Pacific.

The federal proposal to list the species came in response to a 2009 petition filed by the Center for Biological Diversity. Subsequently, NOAA followed a science-based process, including a status review and several rounds of public input, before making the listing proposal.

A listing under the ESA gives resource managers more tools to try and protect and restore threatened and endangered species. While the primary threats are global in nature, science shows that protecting corals from local impacts like over-fishing can improve resiliency of many coral species.

In addition to the scientific assessment, the proposed listing will include a full analysis of economic impact, as well as public comments on the proposal. The final listing decision will take place in December 2013. A list of public hearings on this proposal is online here.

"Nothing in the world matches the wonder of a healthy coral reef ... rich, colorful and even more fantastical than Dr. Seuss," said said Miyoko Sakashita, oceans director with the Center for Biological Diversity. "It's a wake-up call telling us our coral reefs are dying and need federal protection. If we're going to save corals, and lots of other animals in the ocean as well as on land, we have to make rapid cuts in greenhouse gas pollution to stop global warming and ocean acidification," Sakashita said.

"This proposal to list these corals will help to draw attention to the sensitivity of global corals and coral reefs to 'The Big Four' of human disturbances in the oceans—over-fishing; pollution; climate change; and acidification," said University of South Florida biologist John Ogden "It will also provide a powerful way to engage the public and convince policy-makers to develop the tools that will advance ocean resource conservation, management and governance and energy policy."

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"Corals are a critical component of the ocean, yet they are dying at an alarming rate and so gaining protection for 66 species of corals is a big step toward a healthier marine environment," said Dawn M. Martin, President of SeaWeb. "With increasing threats to corals from ocean acidification to ocean warming, measures like this are essential to help buffer coral from other threats and help them better cope to changing environmental conditions — we applaud NOAA's proposal."

Corals play a critical role in the marine environment by sheltering fish, protecting coastal areas from storms and surges, and serving as nursery grounds and areas for reproduction.

Many species of coral take years or decades, even centuries to recover from a disturbance, further intensifying the effects of environmental or human-induced impact. In addition to the important biological and environmental benefits of coral, it has been estimated that coral reefs provide up to \$483 million in domestic economic benefits annually, according to NOAA.

SeaWeb has been working with leaders in the jewelry industry to raise awareness about and urge stricter protection for coral through its Too Precious to Wear campaign. The extraction of coral for use in the

jewelry or curio trade is a prominent threat to coral globally, and one that can be managed through trade protections and listings such as the Endangered Species Act.

Through communication and science trainings, Sea-Web is engaging communities in local efforts to protect their coral resources, including through its 'Our Laolao' campaign in Saipan. SeaWeb recently joined 2,000 scientists, journalist and community managers in Cairns, Australia for the International Coral Reef Symposium to increase media attention for and seek solutions to threats facing corals.

"This great news from the tireless efforts of NOAA is so exciting," said Kimberlin Brown, independent jeweler and Too Precious to Wear supporter. "Knowing 66 species of coral will be listed as threatened or endangered, I am hoping it will make it more difficult for designers who refuse to stop using coral to obtain it. Also it will lead to educating consumers about why not to purchase this amazing living creature our world desperately needs in the oceans. Bravo NOAA."

According to the proposed rule, more than 97 percent of reefs will, by 2050, experience severe thermal stress, which can cause massive bleaching and mortality. One recent study documented that the Great Barrier Reef has lost half of its coral cover in 27 years, and other reefs are on a similar course, with those in Florida and the Caribbean being the most critically imperiled.

"It's a bittersweet victory to declare these animals endangered — I'm deeply saddened by the fact that our extraordinary coral reefs are on the brink of extinction, but there's hope in the fact that our endangered species law is powerful and effective," Sakashita concluded.