

**STATEMENT OF KIM HUM, COASTAL MARINE PROGRAM DIRECTOR
THE NATURE CONSERVANCY OF HAWAII
regarding Reauthorization of the Coral Reef Conservation Act
prepared for the National Ocean Policy Study Subcommittee
United States Senate Committee on Commerce, Science, and Transportation**

June 15, 2005

Mr. Chairman and members of the Committee, *aloha* and *mahalo* for the opportunity to testify on the reauthorization of the Coral Reef Conservation Act of 2000. My name is Kim Hum, and I am the Director of the Coastal Marine Program for The Nature Conservancy of Hawaii. I am honored to have this opportunity to inform you of the work we've been doing with our partners in Hawaii to conserve coral reefs, what more needs to be done, and what it's going to take to ensure that our reef resources are sustainably managed for generations to come.

The mission of The Nature Conservancy is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. With the support of more than 1 million members, The Nature Conservancy has protected more than 120 million acres and 5,000 river miles around the world. We currently have more than 100 marine conservation projects in 21 countries and 22 U.S. states. Through its work with both freshwater and marine species and habitats, the Conservancy helps to connect terrestrial, freshwater and marine conservation efforts by building on the Conservancy's network of partners and innovative approaches developed at sites around the world to pursue integrated coastal conservation.

I would like to start by commending NOAA for the incredible progress they have made identifying, mapping, and protecting coral reefs throughout the U.S. over the past five years. They have exponentially advanced our understanding of the extent and health of U.S. coral reefs, and built unprecedented interagency cooperation through the Coral Reef Task Force in our efforts to protect and restore coral reefs. They deserve our respect and continued support for their work.

Coral Reef Conservation Efforts in Hawaii

NOAA has a big job in Hawaii. The Hawaiian archipelago and associated reefs stretch more than 2,500 kilometers (1,500 miles) from the island of Hawaii in the southeast to Kure Atoll in the Northwest. Hawaii's geographic isolation has resulted in one of the highest levels of marine endemism in the world – 25% of the marine species found in Hawaii are found nowhere else on Earth – so if we lose them in Hawaii, they are gone from the world forever. This isolation also means that the Hawaiian reefs are almost exclusively self-dependent for replenishment. They are not repopulated from other reefs following depletion of their fish stocks or damage from storms and other large scale catastrophes. This raises the stakes on the need to fortify the resilience of

our reefs and to manage them exceptionally well through a series of integrated conservation and management actions.

Hawaii's coral reefs are essential for our islands' physical and economic survival – they protect us from storm waves, create our world famous surf and beaches, provide food and recreation for our residents, and are the basis for the state's \$11 billion¹ tourism industry, including \$800 million annually in marine tourism alone. And yet Hawaii's reefs face many of the threats faced by reef systems around the world – over harvesting, coastal development, polluted runoff, invasive species, bleaching, and disease. NOAA, indeed, has a big job in the islands.

With the support of NOAA's Coral Reef Program, The Nature Conservancy launched a Marine Program in 2002 to begin to address the most urgent threats to Hawaii's coral reefs. We began by commissioning a study of the status of private conservation efforts in Hawaii, and learned that the three biggest needs are to:

1. Identify the most important coral reef systems in Hawaii,
2. Build community capacity to protect and manage reef resources, and
3. Develop sustainable private funding mechanisms to ensure the long term viability of community-based coral reef conservation programs.

These three strategies have guided our program development over the past three years, and with support from NOAA's Coral Reef Conservation Program, we have:

- Worked with NOAA and the State to initiate a marine GAP program to collect and manage information about the location and status of Hawaii's marine resources.
- Identified the top three action sites on each island through a rapid strategic planning process that included a comprehensive literature review, information gathered from the marine GAP database, and extensive expert interviews.
- Brought together more than 80 community members from 15 local communities who are actively engaged in marine conservation projects into a learning network with annual workshops focused on sharing strategies for marine conservation.
- Developed and piloted a *Makai* Watch Program focused on training local community members to provide 1) education and outreach to marine resource users, 2) surveillance and enforcement of marine resource protection laws, and 3) monitoring of coral reef resources. *Makai* Watch is now a priority of the state Department of Land and Natural Resources (DLNR) because they recognize the power of an engaged community committed to natural resource protection.
- Established "Reef Funds" on two islands with local dive and snorkel operators who solicit voluntary donations from their clients to support private coral reef conservation efforts. To date, these funds have supported the repair and installation of mooring buoys on the islands of Lanai and Maui, staffing for the Big Island Reef Fund, and development of an educational website designed to inform ocean users of laws and best practices governing their use of coral reefs and other marine resources.
- Supported more than 15 local community efforts to understand and manage reef resources, including human use surveys on Kauai and the Big Island to determine human

¹ Department of Business, Economic Development & Tourism --Research and Economic Analysis Division

based threats to the resources, surveys of the offshore islets surrounding the main Hawaiian Islands, reestablishment of traditional *opelu* fishing methods at a local community on the Big Island, interviews with *kupuna* (Hawaiian elders) around the state about the status and decline of near shore fisheries, and many other community-based projects.

We have been able to accomplish all of this with \$125,000 each year from NOAA, which has leveraged more than \$350,000 annually from private sources, and hundreds of hours of community volunteer time for coral reef conservation in the islands.

While we are proud of the record of accomplishment and the partnerships we have built over the past three years, and grateful for the support from NOAA and our delegation, it is clear that there is a great deal more to be done. Over the next five years, the Conservancy plans to expand on our past work with partners into three main areas:

- complete an ecoregional assessment for marine areas in Hawaii as a framework for expanding our conservation efforts;
- building on the success of the *Makai Watch* and the results of our ecoregional plan to enhance community engagement in resource conservation and to broaden our partnership with the state.
- Identify opportunities to increase resources for coral reef conservation.

Currently, the Conservancy has identified priority marine sites on each island where we will focus the majority of our efforts. However, we are currently developing a comprehensive ecoregional assessment that will more thoroughly review the status and threats to coral communities in Hawaii. While we have seen some success in coral conservation on a site by site basis – the survival of coral reefs relies upon their health, resilience, and ability to repopulate. This will only be achieved through a series of integrated conservation and management actions. Based on this we plan to work with NOAA and the state to expand our strategic plan from three sites on each island to develop a network of Marine Managed Areas in the main Hawaiian Islands. We will address unique threats at each network site as appropriate.

The Conservancy sees its partnerships with the state and local communities as the most effective means to achieve our conservation objectives. We anticipate that the strategies to address threats identified through our science efforts will be successful only if implemented in partnership with communities. We will work to build upon the success of *Makai Watch* at developing community capacity to protect coral reefs by implementing it in high priority coastal communities around the state in partnership with DLNR.

Finally, while we are grateful for federal support for these efforts, and have good success at raising funds from private sources – the challenge of paying for these efforts is daunting. We will work to develop additional funding sources including expanding the Reef Funds to include a larger sector of the tourism industry on each of the main islands, with the goal of raising \$1 million annually in private funding for coral reef conservation.

Coral Reefs are a Priority for The Nature Conservancy

Across the oceans, The Nature Conservancy is promoting a worldwide effort to conserve coral reefs and the rich diversity of life in tropical waters. By helping create networks of ecologically connected protected areas that are resilient in the face of growing local and global stresses, we can ensure the survival and long-term viability of Earth's invaluable coral reefs.

The Conservancy's marine program in Hawaii is part of a broader effort across the Conservancy to address threats to coral reefs. Drawing on input from the world's experts on coral reefs, The Nature Conservancy has created a vision for tropical marine conservation that enhances the prospect of survival for coral reefs. This vision will catalyze efforts to:

- Expand the area of coral reef and related habitats that is protected;
- Improve the effectiveness and financial security of tropical Marine Managed Areas; and
- Build the principles of resilience into design and stewardship of managed areas.

In the Pacific, together with local communities, non-governmental partners and local, regional, state and federal governments, the Conservancy is currently working to identify and help to manage biologically important marine areas, not only in Hawaii, but in the Freely Associated States - Federated States of Micronesia and Palau, the Republic of the Marshall Islands – as well as Papua New Guinea, Indonesia, and the Solomon Islands. Coral reefs in the Pacific are essential to the food security of the region's coastal population today and their hope for a better future for tomorrow - a future in which reefs continue to provide the fish for protein, and a resource that can form the basis for the increasingly important tourism sector so important to many Pacific nations. The Conservancy and other international NGOs are developing partnership agreements with national governments to assist these countries in developing networks of managed areas to help assure the health and resilience of their coral reef resources.

These efforts have yielded not only conservation results, but have improved our understanding and provide insights to managers in other jurisdictions about the science of coral reef conservation. They have also taught important lessons about the need to work closely with communities to ensure conservation strategies support and are informed by socio-economic realities. The Conservancy has worked closely with the Coral Reef Task Force so that these experiences may inform their efforts, but also to lend our science, capacity and resources to address shared priorities in the U.S. states and territories.

Recommendations:

The Conservancy supports a strong reauthorization of the Coral Reef Conservation Act. NOAA's work on under this Act has been essential to the progress made to date. We look forward to working with the Committee on reauthorization and are pleased to offer some general recommendations today.

Increased funding: Authorization for appropriations under the Act should be increased and the purposes expanded. Increased funding for grants to support mapping, planning, implementation and monitoring is essential. Additionally, the Act should be expanded to include a specific authorization for the Department of Interior – both through the Office of Insular Affairs, which

supports work in the territories and Freely Associated States, and the U.S. Fish and Wildlife, which manages coral reefs under several of its maritime National Wildlife Refuges.

Marine Managed Areas Network. Networks of scientifically-designed managed areas have been shown to increase the health of coral reefs and associated near shore fisheries in more than 80 places around the world. Development of such a network throughout the United States should be a top priority for NOAA's coral program, and funding priority should be given to states and territories for development and implementation of a NOAA-approved Managed Areas plan, and management and enforcement of existing managed areas that are part of a NOAA-approved Managed Areas plan.

Interagency Cooperation. No one agency has the ability to abate all of the threats to coral reef ecosystems in all of the places where they happen. For example, the Fish and Wildlife Service (FWS) is responsible for managing more than 700,000 acres of coral reefs in 10 refuges throughout Hawaii and the Pacific, with minimal funding from the Department of the Interior. Therefore, interagency cooperation is essential to successful implementation of the strategies outlined in this Act and the Coral Reef Action Strategy, and all of the agencies that are responsible for coral reef management should be eligible for funding under the Act. Mechanisms for interagency cooperation, like the Coral Reef Task Force, should be supported through the Act, and include national and international NGOs like The Nature Conservancy which bring a unique perspective and global experience to coral reef conservation.

Regional Coordination and Cooperation. In addition to the national planning and cooperation necessary for successful protection of our nations reef resources, NOAA should be given the authority to coordinate with states, territories, and NGOs for regional, ecosystem-based planning that builds upon the national coral reef action strategy, and addresses multiple threats to coral reefs, such as over-harvesting, coastal runoff, invasive species, and vessel impacts.

With these changes, we believe the Coral Reef Conservation Act will enable us to make tremendous strides towards protecting our nation's coral reefs.

Thank you for the opportunity to provide input on the Coral Reef Conservation Act. I would be happy to answer any questions.