

Report on Pacific NGO and Community-based Coral Reef Conservation Activities – November, 2005

Submitted by Dave Raney, Volunteer for Sierra Club and Reef Check Hawai'i



Left and Right photos: Students of Na Pua 'O Maunalua gathering and documenting alien algae removed from Maunalua Bay on O'ahu. Center photo: The Hokule'a, provided by the Polynesian Voyaging Society, is used as a classroom at sea for Na Pua 'O Maunalua students.

A PARTIAL LISTING OF NGO AND COMMUNITY BASED PROJECTS IN THE U.S. PACIFIC REGION:

The following projects are but a sampling of the many community-based projects planned or underway throughout the islands of the U.S. Pacific region. Many are conducted by Non-Governmental Organizations (NGOs), often in partnership with communities, government agencies and the private sector. I acknowledge the very Hawai'i-centric nature of this report and apologize to those whose projects were overlooked in these listings. Most of the references to NGO activities outside of Hawai'i are found in the NOAA report "[The State of Coral Reef Ecosystems of the United States and Pacific Freely Associated States](#)," and I appreciate the help of those who contributed to that excellent document. I am hopeful that representatives from other Pacific island entities will be able to inform the Task Force of their activities in person and will be able to expand on the very limited documentation of NGO activities I have been able to provide. I will be visiting Kosrae and Yap on my way back to Honolulu after the Task Force meeting and look forward to learning much more about coral reef conservation efforts there.

AMERICAN SAMOA

The American Samoa Community College is an NGO member of the Coral Reef Advisory Group formed by the American Samoa government. **Reef Check** has a coordinator in American Samoa.

THE MARSHALL ISLANDS

The Marine Science Program at the College of the Marshall Islands is studying the status of marine resources in the Marshall Islands and collaborating with others to design community-based fishery management plans.

THE FEDERATED STATES OF MICRONESIA

The Federated States of Micronesia include Kosrae, Pohnpei, Chuuk, and Yap. **Reef Check** has a coordinator on Kosrae and Reef Check methods and protocols are used by the government agencies in Kosrae. **The University of Guam** has assisted in monitoring of hard coral cover on Kosrae. The **Peace Corps** and **KCSO** are also active in marine conservation on Kosrae. Resource uses in Yap are managed under traditional systems wherein villages own the reefs and have authority over resource use. **The Conservation Society of Pohnpei** is a major conservation NGO based on Pohnpei and is assisting with other programs in the FSM. **The Nature Conservancy (TNC)** is also active in the FSM.

THE COMMONWEALTH OF THE NORTHERN MARIANAS ISLANDS

The status of CNMI reefs is extensively documented in the NOAA report, but I did not find references to NGO activities there.

GUAM

The University of Guam has a strong marine sciences program and has supported the use of **Reef Check** for long term monitoring. The **Guam Watershed Planning Committee** includes NGOs, and the **Guam Visitors Bureau** has been identified in the NOAA report as a crucial stakeholder group.

THE REPUBLIC OF PALAU

Key NGOs on Palau include **The Palau International Coral Reef Center**, which also acts as the **Reef Check** coordinator for Palau, and **The Palau Conservation Society**. TNC also supports conservation activities in Palau. I look forward to learning about NGO activities on Palau directly from their representatives.

HAWAII

BULLETIN: HAWAII ESTABLISHES MARINE REFUGE IN STATE WATERS OF THE NORTHWESTERN HAWAIIAN ISLANDS – URGES EQUALLY STRONG PROTECTIONS IN FEDERAL WATERS

On September 29, 2005, Governor Linda Lingle signed rules creating a marine refuge in all state waters in the Northwestern Hawaiian Islands and announced that the state will pursue designation of the 1,200 mile long chain of tiny islands and atolls as a UNESCO World Heritage Site. At the press conference announcing the rules, Peter Young, Director of the Department of Land and Natural Resources stated “The public input on these proposed rules has been overwhelming. . . . We heard loud and clear from the public that they feel that the Northwestern Hawaiian Islands is a special place worthy of the highest levels of protection.” Young also announced that the State of Hawaii had contacted the federal government to request that federal waters in the NWHI also be closed to fishing, with a phasing out of the present commercial fishing activities there. Many NGOs have been active on this issue and have welcomed these actions by the State of Hawaii. These include **Kahea**, the Hawaiian-Environmental Alliance, **Earthjustice**, **Environmental Defense**, **Hawaii Audubon Society**, **Ilio‘ulaokalani Coalition**, **Marine Conservation Biology Institute**, **Polynesian Voyaging Society**, **Sierra Club**, and **The Ocean Conservancy**.

ALIEN ALGAE REMOVAL AT WAIKIKI APPROACHES 100 TONS

Since my last update in July, 2004, an additional eighteen tons of alien algae (*Gracilaria salicornia*) have been removed by community efforts at two sites in Waikiki, bringing the cumulative total to nearly 100 tons. Testing of a “super sucker” pump designed to help accelerate the removal rate of the algae is underway and appears promising. A broad coalition of groups continues to participate in the ‘**Aohe Lime E** (No Alien Algae) project. Direction of this project is now under the **Coordinating Group on Alien Pest Species (CGAPS)**. Signe Opheim is the coordinator for the marine element of CGAPS, including the A‘ohe Limu E project. Supporting NGOs include **Island Divers**, **Reef Check**, **The Nature Conservancy**, and **Waikiki Aquarium**. A community-based project to remove a second type of alien algae (*Avrainvillea amadelpha*) is underway at Maunaloa Bay on Oahu. That species of algae is threatening an endemic species of sea grass.

HAWAII LIVING REEF PROGRAM INITIATES ANNUAL LIVING REEF AWARDS PROGRAM

The number of individuals, NGOs, private sector operators, and government agencies involved in coral reef conservation in Hawaii continues to grow, making it difficult to adequately acknowledge them all in a summary report such as I am submitting. In an effort to publicly recognize these entities, the Hawaii Living Reef Program has inaugurated an annual Living Reef Awards Program. The first such event, held this June, filled a large ballroom at the Ala Moana Hotel near Waikiki. In what resembled a high school reunion in some ways, the event brought together nominees from across the State, many of whom had worked together previously on various projects. It was a very successful event.

In a related effort, the Aquatic Resources Division of the Department of Land and Natural Resources is developing a guidebook of community programs to assist communities in organizing for marine resources conservation. It includes detailed case studies of several community-based projects on different islands as well as a directory of NGOs and agencies active in coral reef conservation.

HAWAI'I LAUNCHES MAKAI WATCH PROGRAM

Makai (towards the sea) Watch is a partnership program of the Hawai'i Department of Land and Natural Resources and several non-governmental organizations including **Community Conservation Network (CCN)**, **The Nature Conservancy (TNC)**, and **Hawai'i Wildlife Fund**. Makai Watch is focused on involving local communities in reducing inappropriate use of marine resources by raising awareness, encouraging compliance, and in cases of severe or persistent violations helping to collect information that the Division of Conservation and Resource Enforcement (DOCARE) can use to identify and cite violators.

STATEWIDE NGO PROJECTS IN HAWAI'I

The Community Conservation Network (CCN) is supporting numerous programs to advance coral reef conservation in Hawai'i. These include the Makai Watch program described above, and the following:

- **Community-based Conservation Projects:** CCN is supporting several communities including Miloli'i, Hookena, Honaunau on the Big Island, Pupukea on Oahu, North Shore Kaua'i, and others to strengthen their role in management of coral reef resources. This includes assisting them to set up Makai Watch Programs and other projects that are important to them including collecting and using traditional knowledge, teaching traditional fishing, and establishing "pono" (responsible) fishing practices for their area.
- **Community-Learning Network:** CCN is facilitating a Hawai'i wide learning network of 20 coastal communities that are working to improve the management of marine resources in their areas. We have held three workshops each designed to address a priority skills need by the communities themselves. The next workshop will focus on teaching Makai Watch and other techniques for communities to be directly involved in marine management.
- **Fisherman Outreach Project:** CCN is working with a broad range of fisherman from Maui and the Big Island to collect their opinions on the status of marine resources in the state and how best to improve management of these resources. The hope is to identify management solutions that can garner the support of the fishing community.
- **Reef Fund:** CCN is one of the founders and advisors to the Reef Funds on Maui and Big Island. These Reef Funds are working with marine recreation operators to solicit donations from their guests to improve coral reef conservation. In 2006, CCN plans to expand to include other recreation and visitor industries.

The Hawai'i Audubon Society, in cooperation with the **Pacific Fisheries Coalition** provides

- **forums** for the fishing community and Hawaii's Division of Aquatic Resources personnel to exchange views and work together to achieve sustainable fisheries;
- **research papers, reports, and briefings by experts** on the status and management needs of Hawaii's fisheries to the Hawai'i State Legislature and Hawaii's congressional delegation.
- **educational tools** such as a comprehensive webpage, reference brochure, cdrom, classroom materials, and videos to provide information about our marine resources.
- **volunteers** to visit schools and community groups to talk about the need to conserve and responsibly manage Hawaii's marine resources.

The large-scale posters by Ellen Tong of PFC, which depict the sizes at which popular fish species become capable of reproduction and which emphasize that larger fish produce many times the number of eggs than smaller individuals of the same species, have been very effective educational tools.

The Nature Conservancy (TNC) and its partners, with support from NOAA's Coral Reef Conservation Program over the past three years, have accomplished the following over the course of the past three years:

- 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.
- In cooperation with CCN, 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 raised more than \$25,000 each to support the repair and installation of mooring buoys on the islands of Lana’i 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 Kaua’i and the Big Island to determine human 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.

Reef Check has active community-based coral reef monitoring programs on Maui, Oahu, and Kaua’i, and is seeking to expand its program to additional islands.

Sierra Club conducts its Blue Water Campaign statewide to boost public awareness of the damage caused by storm-water runoff. Blue Water Campaign works with state and federal agencies to train volunteers to provide agencies with information on runoff events and proactively report instances where protective measures at construction sites do not appear to meet required standards.

In addition to these statewide projects, there are other coral conservation projects unique to one or more of the Hawaiian islands. These are listed by island.

HAWAI’I (THE BIG ISLAND)

On the Big Island, **ReefWatchers** volunteers perform coral reef monitoring under the direction of **Sea Grant** Extension Agent Sara Peck, who also does education and outreach to both locals and tourists with her **ReefTeach** and **ReefTalk** programs. The **Kohanaiki ‘Ohana**, based on the Kona side of the Big Island, has received numerous awards for its work in preserving environmental, historic and cultural treasures, including wetlands protection and anchialine pond restoration. **Jack’s Dive Locker** in Kona was the winner of this year’s Living Reef Award for Ocean Recreation.

KAHO‘OLAWE

Once the target of Navy bombing, the island of Kaho‘olawe suffered from severe land erosion that smothered some of its coral reefs with sediment. The island is now under the stewardship of the **Kaho‘olawe Island Reserve Commission**, with strict protections on access to the island and its fishing resources. Projects restoring native vegetation appear to be reducing the amount of sediment now entering the coastal waters. Kaho‘olawe is also considered a pu‘uhonua (refuge) and wahi pana (sacred place) where Native Hawaiian cultural practices are honored.

KAUA’I

The Hanalei River Project on Kaua’i has been recognized previously by the Task Force. It is one of the projects funded under the **Hawai’i Local Action Strategy for Land-based Sources of Pollution**. Its partners include the **Hanalei Watershed Hui** and **Waipa Foundation**. This past summer Hanalei Watershed Hui collaborative efforts

included research/monitoring by CRAMP, Dr. Eric Brown- coral recruitment, Dr. Alan Friedlander - long term trends in benthic community, Dr. Amy Draut and Dr. Mike Field - sedimentation in Hanalei Bay, Dr. Curt Storz - circulation and sedimentation, Dr. Scott Carr and Dr. Marion Nipper - sediment porewater toxicity, Dr. Alexandria Boehm and Dr. Adina Paytan - groundwater contamination, and HWH - nutrients, sediment, bacteria and surface currents. The **Pahio Resort** on Kaua'i was the winner of this year's Living Reef Award for the Visitor Industry. **Save Our Seas** has several projects underway on Kaua'i, including the following: **Ocean Pulse**, a comprehensive study of coral reefs and the marine environment that uses the ocean and beaches as living classrooms; **Ocean Pulse at Sea**, a drug-free marine education program that teaches young persons how to utilize the same techniques as professional marine biologists on research boats, an Ahupua'a Restoration and Research Project at Limahuli Valley, in partnership with **National Tropical Botanical Gardens (NTGB)**; and community based efforts to create Marine Protected Areas on Kaua'i (there are none such at present). Author's note: "ahupua'a" refers to the traditional Hawaiian system for managing the natural resources of watersheds and their adjacent coastal waters. **SOS** works with **Reef Check** volunteers to perform coral reef monitoring on Kaua'i.

MAUI

Hawai'i Wildlife Fund works with **CCN**, **TNC**, and others to implement Makai Watch and other projects on Maui – including the Honolua Bay project, funded as a **Hawai'i Local Action Strategy for Land-based Sources of Pollution**. **HWF** also operates the Maui Monk Seal Watch and the Hawksbill Sea Turtle Recovery Project. Donna Kahiwaokawailani Kahakui, founder of **Kai Makana**, was the winner of the Living Reef Award in the Non-Profit category. **The Maui Coral Reef Network** serves as a coordinating body for coral reef projects on Maui. **Pacific Whale Foundation** and **Trilogy Excursions** were nominees for the Living Reef Award in the Ocean Recreation Category. **Project S.E.A.-Link** conducts community workshops on Maui to train "roving marine naturalists," and is currently coordinating a community stewardship program supported by Hawai'i DLNR to focus efforts at Honolua Bay. These efforts include educational outreach, an information station at the Bay, regular **REEF** surveys, and community cleanups. A team of coral reef scientists conducts **Reef Check** surveys on Maui.

MOLOKA'I

Hui Malama O Moloka'i conducts a successful community based subsistence fishing and resource management project at Mo'omomi. A project to improve the watersheds from Kawela to Kapualei on the south shore of Moloka'i is included in the **Hawai'i Local Action Strategy for Land-based Sources of Pollution**. Project partners within the East Moloka'i Watershed Partnership include **TNC** and several federal agencies.

O'AHU

The **A'OHE LIMU Ē** Alien Algae Control Project at Waikīkī, mentioned above, has received a Coastal America Partnership Award, and other national recognition. **Reef Check** conducts coral reef monitoring with community volunteers, using both Reef Check and REEF methodologies in partnership with **Oceanwide Science Institute**, **The Surfrider Foundation**, **the University of Hawai'i Marine Options Program**, **Hawai'i Pacific University**, **Leeward Community College**, and **Windward Community College**, and **the Waikiki Aquarium**. **The Ala Wai Canal Watershed Improvement Project**, **the Kalihi Valley Watershed Project**, and **the Kailua Bay Advisory Council** conduct stream bank restoration and other projects to restore water quality in highly urbanized portions of the island. **Hawaii's Thousand Friends** and **the Ahupua'a Action Alliance** are among the NGOs involved in these projects. The **Mālama Maunaloa Initiative** is a recently-launched community-based initiative dedicated to creating a more culturally and ecologically healthy Maunaloa region in Southeast O'ahu. The region, which includes the large Maunaloa Bay and 12 adjacent watersheds, has undergone extensive urbanization and is the focus of a variety of commercial, recreational and tourism activities. In Maunaloa Bay, fish stocks are depleted, reefs are degraded from pollution and sedimentation, and significant areas of alien algae are established. **Mālama Maunaloa** is working in partnership with the **Polynesian Voyaging Society**, **Mālama Hawai'i**, **Hui Nalu Canoe Club**, **Navigating Change program**, **Community Conservation Network**, **Reef Check**, various public and private schools in the region, and many committed individuals to improve the overall environmental quality and associated quality of life for residents in the area. Principal tools are outreach and education, emphasizing connections between the land and the water, between people and the 'āina. **Mālama Maunaloa** helps students and community members to create and share new knowledge and actively care for the environment, thus instilling responsibility and pride in their surroundings. **Na Pua 'O Maunaloa** is a pilot educational program of **Mālama Maunaloa**, focused on cultural and ecological preservation and voyaging. It involves students in learning about the health and threats of the ahupua'a, in particular the Bay, through in-ocean activities and observations done in conjunction with experiences

on the voyaging canoe, Hōkūle`a. Groups of 10 students and their teachers engage in 24-hour on-board activities including sailing/navigation, biological monitoring, water quality monitoring, reef mapping, and invasive limu control.

There are numerous other community based projects on O`ahu.

CONCLUSION

Although undoubtedly incomplete, the above listing of projects undertaken by NGOs in Hawai`i and the Pacific Freely Associated States shows the widespread support for conservation of coral reef ecosystems in this region. Virtually all the governmental entities in the region also report shortages of local financial support for management actions needed to protect and restore coral reefs, and many cite the need for capacity building at the local level. The continuing support, including financial and technical resources, made available through the U.S. Coral Reef Task Force and supporting legislation is vital for meeting the many challenges facing those who work to protect and restore coral reef ecosystems here and elsewhere on the Planet.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Dave Raney". The signature is fluid and cursive, with the first name "Dave" being more prominent than the last name "Raney".

Dave Raney

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