



**Malama Kai Foundation
Final Report To
NOAA's Coral Conservation Program**

1. Organization Title:

Malama Kai Foundation

2. Project Title:

Conserving Coral Reefs on the Big Island of Hawaii through Community Involvement and Strategic Partnerships.

3. Award Number:

NA04NMF4630340

4. Report Period:

October 1, 2004 – March 31, 2006

5. Introduction:

This project built on several recent actions along the Kona Coast that are improving the management of coral reefs. In a landmark management initiative, the entire Kona coast has been declared a Regional Fisheries Management Area (RFMA) and a citizen-based process has designated nine areas on the coastline as Fishery Replenishment Areas (FRAs). As a result, over 32% of the Kona coast is now off limits to aquarium fish collecting. In addition, several communities are currently or would like to be working in cooperation with the Hawaii Department of Land and Natural Resources (DLNR) to improve coral reef management along their coasts. For example, with funding from NOAA and support from State and non-governmental partners, the Miloli'i community has initiated an effort to improve management of coral reef ecosystems along its coastline. Having seen the progress that Miloli'i is making, other communities would now like to pursue similar initiatives in their areas. This project continues to support conservation activities at Miloli'i and will also support the expansion of these successful activities to two new communities: Hookena and possibly Kealakekua or Honaunau. This initiative includes a Makai Watch Program to enhance compliance with resource regulations, marine monitoring, and revival of traditional fishing stewardship with elders from the community. Sea Grant, The

Nature Conservancy, and the Community Conservation Network are the main organizations supporting this effort and they have requested the involvement of Malama Kai Foundation, which has extensive experience in the fiscal management of coral conservation projects.

6. Purpose:

The project's primary goal is to:

Conserve Coral Reefs Along the Kona Coast by Supporting Communities to Build the Awareness, Capacity, and Partnerships They Need to Engage in Multi-Stakeholder Coral Reef Management Efforts.

The components of this project include:

1. To Help Communities Organize and Build Capacity for Coral Reef Management;
2. To Expand the Conservation Awareness and Involvement Program including Community Monitoring of Coral Reef Ecosystems;
3. To Continue Efforts to Pilot Community-Based Enforcement Program at Miloli'i and Expanding this Effort, as Feasible, to at Least One of the New Communities;
4. To Collect Historical Stewardship Knowledge and Information from *Kupuna* and Applying this to Contemporary Management Efforts.

7. Results / Accomplishments:

This project has proven to be very successful at building the capacity of communities to protect their marine resources, developing community-based Makai Watch programs, building community awareness and documenting traditional knowledge. As a result of these community efforts, the State has recognized and sanctioned the Makai Watch programs. The State feels that this program will assist with their under-resourced enforcement division (DOCARE), by creating a cadre of trained community participants that care for their marine resources and increasing the amount of coverage and compliance for each community. Not only has this program assisted the State and communities with the preservation of their marine resources, it has created a renewed sense of stewardship, pride, and respect within local Hawaiian communities. The success of the Makai Watch program is a direct result of funding received from NOAA's Coral Program. The results of this grant were disseminated at the International Marine Protected Area Congress in Melbourne Australia in October, 2005. A presentation was given on community-based management and the Makai Watch program and a poster was presented on the Traditional Knowledge component. Also, several members of the Miloli'i community presented their traditional knowledge and capacity building efforts at a Youth Leadership seminar at the World's Indigenous Peoples Conference in New Zealand. Finally, the Hawaii DLNR's Division of Aquatic Resources is publishing a guidebook on community

involvement in establishing marine resource management projects. Several chapters of this guidebook were authored by CCN staff and include case studies from Miloli`i and Wai `Opae.

Through our partnerships, we have been working with or have engaged several communities on Hawaii (Big Island) over the term of this project. One community (Miloli`i) has progressed from an introductory stage to a project implementation stage. Through further funding from NOAA and several private foundations, the Miloli`i community will strengthen their implementation efforts, expand their efforts, and develop organizational and financial sustainability mechanisms. A second community (Ho`okena) has progressed through the project development stage and is ready to begin an implementation phase. While the Ho`okena community is in the project development phase in relation to the Makai Watch program, they have formally documented traditional knowledge from their community with cultural resource specialist Kepa Maly and as part of their youth program. They have also developed a Summer Youth Education program that focuses on documenting cultural knowledge, learning about their marine ecosystem, and practicing traditional resource management techniques. Ho`okena is still in the development stage because they decided to prioritize efforts to establish a community center. They have now received funding for the community center and are ready to begin implementing a Makai Watch project. We have also attempted to engage several other communities including Kawaihae, Honaunau, and Kealakekua. Although the Kawaihae community felt that they were not ready to implement any of the formal project components, they are still hosting marine working groups along with West Hawaii Sea Grant. By continuing to have regular meetings to discuss the state of their marine resources and maintaining connections with the other projects, the community will be ready to quickly develop and begin implementing their programs. Several community members in the Honaunau-Kealakekua area have also expressed concern over the state of their marine resources. To address this concern, we have recently contracted a community organizer for the area. The community organizer has been conducting youth activities in Honaunau in collaboration with the Hawaiian Immersion School at the Konawaena School and has held two informational meetings for local fishermen and concerned citizens. The youth participants have been involved in several components of the Makai Watch program, including biological monitoring, human use monitoring, and traditional knowledge documentation.

The specific accomplishments of this project will be reported by component.

Component 1: To Help Communities Organize and Build Capacity for Coral Reef Management

1. In October 2004, Community Conservation Network (CCN) sponsored a community learning exchange workshop, hosted by the Ewa Beach, Oahu community, which was attended by approximately 80 people from 12

- Hawaiian coastal communities. Each of these communities is somehow involved in the management of marine resources in its area. The workshop was entitled “Traditional Knowledge for Marine Resource Management.” This workshop trained community members in their highest expressed priority: the collection and use of traditional knowledge to enhance marine management. The participants also discussed their ongoing concerns related to their marine resources and planned future actions they can take collectively to help better manage these resources.
2. The Miloli'i community has formed a Marine Working Group (MWG), which meets regularly (approximately once per month) to discuss issues related to Miloli'i's marine resources. The MWG has completed a conceptual model identifying its goals, threats and obstacles to achieving the goals, and activities it can take to overcome these threats and obstacles. This conceptual model has been adapted to be the foundation for the development of a marine management plan. The MWG members are now in the process of recruiting volunteers to assist with their activities.
 3. Members of Miloli'i Makai Watch have visited Wai Opae on the Eastern side of the Big Island to observe and learn from their well-developed Makai Watch program on several occasions (>3).
 4. In May 2005, Community Conservation Network (CCN) sponsored a community representatives exchange meeting, hosted by Kimokeo Kapahulehua and the 'Ao'ao O Na Loko I'a O Maui, Kumu Keli'i Tau'a, and Hawaii Wildlife Fund (HWF). The meeting was held at the Humpback Whale National Marine Sanctuary in Kihei, Maui. The main goal of the community representatives meeting was to increase communication among the network members by bringing together key knowledgeable community members. The meeting was attended by approximately 30 people representing 10+ coastal Hawaiian communities.
 5. CCN has met with Damien Kennison, the volunteer community representative for the Ho'okena community on a monthly basis.
 6. Malama Kai Foundation has contracted a part-time Miloli'i Community Coordinator to assist with the implementation of activities in Miloli'i. This coordinator is responsible for organizing and coordinating the various activities and projects underway in Miloli'i, including Makai Watch, Traditional Knowledge, and Youth Projects.
 7. Malama Kai Foundation has contracted a community organizer for the Honaunau community.
 8. In November 2005, CCN sponsored a community learning workshop on the Makai Watch program for communities in the More Better Together Learning Network. The workshop was held on the Big Island, and included Makai Watch communities Wai 'Opae and Miloli'i. This event was attended by 16 different coastal communities, representatives from DLNR, DOCARE, and DAR, and NOAA. There were approximately 100 attendees during the 3 day workshop.

Component 2: To Expand the Conservation Awareness and Involvement Program including Community Monitoring of Coral Reef Ecosystems

1. Over 20 Traditional Fishing Project events were held over the course of this grant. These events focused on teaching the sustainability concepts associated with traditional fishing. These events reached approximately 20-30 youth in Miloli'i and 20 youth at the local Hawaiian immersion school. Traditional fishing included taking youth out in traditional canoes, teaching techniques that Hawaiians used to help ensure sustainable stocks of fish, tending *koas* (aggregation sites) and fishing for opelu. *Kupuna* Uncle Walter Paulo led the youth activities, which were coordinated by Healani Cahill.
2. Four youth exchange events took place between Miloli'i, Big Island and Waipa, Kauai. Waipa youth demonstrated to Miloli'i youth various community traditional projects, including poi making and watershed management. Miloli'i youth and Uncle Walter Paulo demonstrated traditional opelu fishing techniques and the concepts of sustainability associated with these techniques.
3. A Miloli'i Marine Working Group meeting was held to discuss marine monitoring protocol for both adult and youth marine monitoring. A protocol and activities for marine resource management for Miloli'i were established.
4. Approximately 10 youth marine monitoring events at Miloli'i, including tide pool monitoring, fish identification and butterfly fish monitoring, were held.
5. Marine monitoring events at Miloli'i were conducted, approximately once a month when weather permitted, including fish transects and timed swim in both Miloli'i and Honomolino bays.
6. 2 Miloli'i Summer Fun Programs for youth were held during the summer school breaks in 2004 and 2005 (and will be conducted again in 2006). Approximately 30 youth participated in activities including marine monitoring, interviewing village *kupunas*, creating video documentaries and public service announcements, and developing best-practices for harvesting marine resources in Miloli'i during the 6-week program. Student ages ranged from 6 – 16 years old.
7. Six ReefWatcher events were held at Ho'okena.
8. The project supported the Ho'okena Summer Fun Traditional Knowledge in Marine Resource Management program. Approximately 10 youth participated in activities including marine monitoring, interviewing village *kupunas*, creating video documentaries and public service announcements, and developing best-practices for harvesting marine resources in Ho'okena during the 6-week program. The Ho'okena program differed slightly from the Miloli'i program in that it concentrated on older high school students; therefore, the activities focused on a higher level of technical knowledge. Student ages ranged from 14- 16 years old.
9. High School science credit was given by Konawaenae High School for 8

- youth involved in the Miloli'i and Ho'okena Summer Fun programs.
10. Reef Steward events presented by West Hawaii Sea Grant and supported by this grant included 2 events at Kahalu'u, 5 training events in Hilo, 3 training events at local hotels, and 3 training events for the West Hawaii Fisheries Council Youth Council.

Component 3: To Continue Efforts to Pilot Community-Based Enforcement Program at Miloli'i and Expanding this Effort, as Feasible, to at Least One of the New Communities

1. The Miloli'i Makai Watch program continues to be supported through community involvement and monthly meetings.
2. CCN and Malama Kai have contracted a Makai Watch Coordinator at Miloli'i who is continuing to patrol, educate ocean users, and undertake surveillance to help deter violators of marine resource regulations.
3. CCN and partners have developed a formal statewide Makai Watch program that is supported by the state.
4. Several communities have asked for support in developing Makai Watch programs. We are pursuing the option of developing Makai Watch in these communities, including Kealakekua and Honaunau. The Kealakekua community has presented the potential for a sustainable financing opportunity through the support of local kayak tour operators for a Makai Watch program in Kealakekua Bay.
5. Makai Watch observation and compliance training took place for 4 new members of the Miloli'i Makai Watch program.
6. Ho'okena community has expressed interest in fully developing a Makai Watch Program and is beginning to take steps to start implementing the project. We are in the process of hiring a coordinator for the Ho'okena project.

Component 4: To Collect Historical Stewardship Knowledge and Information from Kupuna and Applying this to Contemporary Management Efforts

1. 80+ people from 12 Hawaiian coastal communities were trained in multimedia techniques and how to document and use traditional knowledge in marine management, including 12 participants from involved Big Island communities. This training established an island-wide effort for coastal communities to collect and use traditional knowledge to improve the condition of marine resources in their area. Youth interview their elders about the past condition of specific important marine species and how they were managed, undertake assessments of the current condition, discuss reasons for any change, and work together to develop best practices for improving species populations.
2. Multi-media kits were distributed to participating communities, including Apple iBook notebooks and digital video camera.

3. A summary newsletter from the Traditional Knowledge Workshop was developed.
4. Technical working teams were established, specializing in multi-media technology and marine science. These technical teams will work with Big Island communities to assist with any traditional knowledge project-related issues.
5. A set of worksheets were developed that will serve as a guide and curriculum for the Traditional Knowledge Project and includes a project timeline.
6. Traditional resource management knowledge was recorded from 5+ *kupuna* from Miloli'i village, 5 *kupuna* from Ho'okena, and several *kupuna* from Honaunau.
7. An exchange visit took place between the Miloli'i, Big Island Traditional Knowledge project and Waipa, Kauai Traditional Knowledge project. Twelve youth and youth mentors from Miloli'i visited Waipa during winter intersession. Activities included recording traditional knowledge on Poi making and the *ahupua'a* mauka to makai traditional management practices.
8. An exchange visit occurred between Miloli'i and Ho'okena on the Big Island. Several Ho'okena youth and their project coordinator visited Miloli'i youth during winter intersession to conduct video interviews with *kupuna* and learn from the advanced Miloli'i youth.
9. Technical working teams, specializing in multi-media technology and marine science, were assisting communities document traditional knowledge in marine management. These technical teams are working with Big Island communities to assist with any traditional knowledge project related issues.
10. During the Miloli'i and Hookena Summer Fun program, several short films were created highlighting traditional knowledge and marine management.
11. Several *kupuna* in Miloli'i were interviewed to learn about their recommendations about how to best currently manage their marine resources. Youth put together Public Service Announcement videos outlining some of these practices.
12. Exchange visits between the Miloli'i, Big Island Traditional Knowledge project and Ho'okena Traditional Knowledge project took place. Youth and youth mentors from Ho'okena and Miloli'i conducted several cross-site visits during their Summer Fun programs. Activities included recording traditional knowledge and marine monitoring activities.

Overall accomplishments:

- # of youth trained and educated in marine ecosystems: approximately 125
- # of youth trained in documenting traditional knowledge: approx. 125
- # of adults trained in Makai Watch techniques: approx. 80
- # of marine working groups created: 3
- # of Big Island communities with active Makai Watch programs: 3

of *kupuna* interviewed on Big Island: >10
of marine monitoring events in associated communities: >40
of community exchange visits: approx. 10

8. Changes/Problems Encountered:

The first aspect of this grant that we changed was the name of the program. The program was originally referred to as “Coast Watch.” We were informed that there is an existing government program with the same name. After consultation, we decided to change the name to Makai (Ocean) Watch.

As part of the implementation of this grant and to garner both community and government support, we have changed Local Resource Councils (LRC) to Marine Working Groups (MWG). LRCs were initially designed to develop and recommend rules and regulations from within the involved communities. It was decided that we should focus more on building the capacity within the communities so that they may make more informed and supported management decisions, before suggesting new rules and regulations to the State. The MWGs will focus on developing Makai Watch within the community, including outreach/education, marine monitoring, and surveillance. This will provide communities with the opportunity to take a more prominent role in the management of their resources.

We also initially indicated that Kawaihae would be one of the three participating communities. After meeting with the Kawaihae community, it was decided that although they were interested in several components of the Makai Watch program, they were not yet ready to implement the project. During this time, members of the Kealakekua and Honaunau communities approached us to express their interest in started a Makai Watch program. Kealakekua and Honaunau have strong community support for the program and key community personnel who are willing to take the lead in the establishment of Makai Watch. We, therefore, focused on the establishment of Makai Watch in these communities.

We also experienced problems in certain communities finding volunteers to support the Makai Watch programs. Our volunteers based in Miloli'i have increased by 3 volunteers but we still need to further expand the program to approximately 10 – 12 volunteers. To address this, we are now going to provide a small stipend to Makai Watch volunteers.