

National Fish and Wildlife Foundation
 Coral Reef Conservation Fund 2010 - Submit Final Programmatic Report (Activities and Outcomes)
 Grantee Organization: Maui Nui Marine Resources Council
 Project Title: Coral Reef Recovery Team for Maui, Hawaii

Project Period 07/01/2010 - 06/30/2012
Award Amount \$50,000.00
Matching Contributions \$50,000.00
Project Location Description (from Proposal) Maui, Hawaii with primary focus on Maui Island and secondary focus on the islands of Molokai and Lanai, within the jurisdiction of Maui County (see project map).

Project Summary (from Proposal) Establish a Coral Reef Recovery Team for Maui, Hawaii to provide local, science-based solutions for coral reef protection and recovery.

Summary of Accomplishments Our key accomplishments are: (a) formation of a highly respected and diversified Coral Reef Recovery Team which convened for five all-day workshops to develop a Maui Coral Reef Recovery Plan over a period of twenty months; (b) completion of a peer and community reviewed interagency coral reef recovery plan (MCRP); (c) successful community outreach and education efforts, especially our Community Managed Marine Areas (CMMA) program, public forums, guest speakers and interactions at all levels within the community.

Maui Coral Reef Team (MCRT) members also completed the technical document and non-technical summary of the status, trends and threats to Maui’s coral reefs and an analysis of existing management efforts and plans.

In-kind and cash match contributions exceeded the grant requirements

Lessons Learned A small group of dedicated individuals can accomplish far more than any one can imagine through vision, dedication and the synergy of working together for a common goal. As scientists and community representatives took time from their busy lives to participate in the development of a coral reef recovery plan the momentum and commitment to the vision grew. While at first it was difficult to find time to meet, it later became difficult to stop meeting. The same phenomenon occurred with our “Training the Trainers” CMMA workshops. At first people wondered if they could set aside a 3-day weekend for training; then they wondered how soon we could do it again. In two years this mostly volunteer organization held 5 MCRT all day workshops, 4 CMMA 3 day trainings, 1 3 day weekend CMMA Network workshop (attended by the Chairman of Hawaii’s Department of Land and Natural Resources), monthly CMMA events at each of 2 CMMA sites, monthly MNMRC meetings for both the council and each of its 2 major committees, a weekend Reef Resilience training, 2 major Flood Forums and numerous other special events. All were well attended by both MNMRC members and the community.

What seems to happen in the process of working together is that more people of like-mind and like-heart are attracted to the effort, the groundswell of local support grows, NGOs, businesses and government agencies notice and participate, and accomplishments greater than imagined are achieved.

Conservation Activities	Evaluation of existing information on coral reef status, trends, threats
Progress Measures	Other (technical document and non technical summary)

Value at Grant Completion	1 technical document and 1 non-technical summary
Conservation Activities	Analysis of existing management efforts and plans
Progress Measures	Other (written document)
Value at Grant Completion	1
Conservation Activities	Progress toward interagency recovery plan/program
Progress Measures	Other (formal agreement or MOU; standards for recovery; level of institutional and community buy-in)
Value at Grant Completion	1; set of; positive assessment
Conservation Activities	Providing information and team expertise for community outreach work
Progress Measures	Other (compilation; related presentations)
Value at Grant Completion	1; ~4
Conservation Activities	Recovery team development
Progress Measures	Other (balanced level of expertise)
Value at Grant Completion	~12 work group + advisory panel members
Conservation Activities	Recovery team development
Progress Measures	Other (funding proposals completed for plan/program development)
Value at Grant Completion	est. \$100,000

Conservation Outcome(s)	White paper on coral reef status, management efforts, conservation requirements
Conservation Indicator Metric(s)	Other (1)
Baseline Metric Value	no previous compendium of information
Metric Value at Grant Completion	a completed report
Long-term Goal Metric Value	prelude to full recovery program
Year in which Long Term Metric Value is Anticipated	2011
Conservation Outcome(s)	Curtailed sediment and nutrient loading
Conservation Indicator Metric(s)	Other (multiple metrics)
Baseline Metric Value	site variable
Metric Value at Grant Completion	site variable
Long-term Goal Metric Value	levels allowing reef recovery & sustainability
Year in which Long Term Metric Value is Anticipated	2015
Conservation Outcome(s)	Restored reef fish populations
Conservation Indicator Metric(s)	# of overfished stocks assessed at stable or increasing levels
Baseline Metric Value	site variable
Metric Value at Grant Completion	site variable
Long-term Goal Metric Value	levels ensuring reef sustainability
Year in which Long Term Metric Value is Anticipated	2015
Conservation Outcome(s)	Coral cover consistent with natural conditions
Conservation Indicator Metric(s)	% live coral cover
Baseline Metric Value	site variable
Metric Value at Grant Completion	site variable
Long-term Goal Metric Value	optimal to offset climate-related stress
Year in which Long Term Metric Value is Anticipated	2020
Conservation Outcome(s)	Interagency coral reef recovery plan & program
Conservation Indicator Metric(s)	Other (1)
Baseline Metric Value	currently without
Metric Value at Grant Completion	agreed upon framework for
Long-term Goal Metric Value	effective program for coral reef conservation
Year in which Long Term Metric Value is Anticipated	2012
Conservation Outcome(s)	Successful community outreach/education efforts
Conservation Indicator Metric(s)	Other (program with multiple partners)
Baseline Metric Value	insufficient
Metric Value at Grant Completion	enhanced
Long-term Goal Metric Value	adequate institutional/community support

Year in which Long Term Metric Value is Anticipated	2011
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Final Programmatic Report Narrative

Instructions: Save this document on your computer and complete the narrative in the format provided. The final narrative should not exceed ten (10) pages; do not delete the text provided below. Once complete, upload this document into the on-line final programmatic report task as instructed.

1. Summary of Accomplishments

In four to five sentences, provide a brief summary of the project's key accomplishments and outcomes that were observed or measured.

Our key accomplishments are: (a) formation of a highly respected and diversified Coral Reef Recovery Team which convened for five all-day workshops to develop a Maui Coral Reef Recovery Plan over a period of twenty months; (b) completion of a peer and community reviewed interagency coral reef recovery plan (MCRP); (c) successful community outreach and education efforts, especially our Community Managed Marine Areas (CMMA) program, public forums, guest speakers and interactions at all levels within the community.

Maui Coral Reef Team (MCRT) members also completed the technical document and non-technical summary of the status, trends and threats to Maui's coral reefs and an analysis of existing management efforts and plans.

In-kind donations that were recorded totaled \$68,090. Matching cash funds of \$78,000 were provided by The Harold K L Castle Foundation (\$45,000) and Maui County's Office of Economic Development (\$33,000).

2. Project Activities & Outcomes

Activities

- Describe and quantify (using the approved metrics referenced in your grant agreement) the primary activities conducted during this grant.
- Briefly explain discrepancies between the activities conducted during the grant and the activities agreed upon in your grant agreement.

Outcomes

- Describe and quantify progress towards achieving the project outcomes described in your grant agreement. (Quantify using the approved metrics referenced in your grant agreement or by using more relevant metrics not included in the application.)
- Briefly explain discrepancies between what actually happened compared to what was anticipated to happen.
- Provide any further information (such as unexpected outcomes) important for understanding project activities and outcome results.

There are no discrepancies between activities or outcomes conducted and those agreed upon for completion by 2012 in our grant proposal.

Primary activities and outcomes conducted during the grant are as follows:

- * Evaluation of existing information on coral reef status, trends and threats is recorded in two technical documents:
 - ~ "The State of Coral Reef Ecosystems of Maui Island, Hawai'i" by MCRT member, Dr. Eric Brown (National Park Service), and MCRT Adviser, Ku'ulei Rodgers (University of Hawaii's Institute of Marine Biology)
 - ~ "Maui and Lanai Monitoring Report" by MCRT members Russell Sparks, Darla White (DAR) and their associate Kristy Stone (DAR)

The documents are attached.

* A non-technical summary on the Status of Maui's Reefs was written and updated by MCRT members Russell Sparks (Hawaii's Department of Aquatic Resources (DAR)) and Celia Smith, (UH Manoa, Dept of Botany), and MCRT advisor, Ivor Williams (Hawaii DAR & Hawaii Coral Reef Initiative Research Program). The non-technical summary and updated graph are attached.

* A 50-page analysis of existing management efforts and plans was written by MCRT member Dr. Tony Povilitis (Life Net Nature and author of our NFWF proposal); the paper is attached.

* A Maui Coral Reef Recovery Team (MCRT) was assembled during summer, 2010, and convened five times. The first all day workshop was held in November 2010; the second and third were held in spring, 2011. Two additional workshops were held in spring, 2012.

The MCRT was comprised of 15 members and 2 advisors including eleven highly respected and widely recognized coral reef scientists from academia and professional State and Federal management agencies; a planning officer with the Maui County Planning Department; a Maui water quality researcher and specialist; two professional marine educators; a master fisherman from Maui who also chairs the MNMRC "Abundance of Fishes" Committee; and a leading Native Hawaiian cultural practitioner from Maui. Professor Robert Richmond of the Kewalo Marine Laboratory at the University of Hawaii at Manoa chaired the MCRT; Dr. Richmond is also President of the International Society for Reef Studies and a Pew Fellow in Marine Conservation. John Parks (Marine Management Solutions) facilitated the team's efforts. Biographies of team members are attached.

Prior to the first meeting team members completed online surveys designed to poll group opinions and perspectives regarding coral reef ecosystem health and recovery for Maui Island. MCRT members worked toward the creation of a draft Maui Coral Reef Recovery Plan by providing individual and small group written content, including status, threats, and trends information on Maui's coral reefs, synthesis of scientific study and applied research findings, and best practices in active and passive coral recovery methods.

Between meetings in 2010 and 2011 team members reviewed and commented on draft strategic plan content within summary output documents generated after each workshop; in 2012 MCRT members studied and provided written comments on peer and community reviews and suggestions for implementation of the MCRP.

* By June 2011, the first draft Maui Coral Reef Recover Plan was complete. This interagency coral reef recovery program includes standards and recommendations for restoring fish populations and reducing near shore pollution. Expected long-term outcomes include state-of-the art planning, technologies, and management policies and programs adequate to safeguard coral reefs.

The aim of the recovery plan is to ensure that Maui retains biologically intact, ecologically functional, and sustainably managed coral reef ecosystems to attain the greatest possible benefit for present and future generations. To do this, the recovery plan focused on achieving four goals: (1) demonstrate coral ecosystem recovery at selected sites around Maui; (2) conduct science to improve understanding of the status and trends of Maui's coral reef ecosystems and document recovery progress at demonstration sites; (3) strengthen public awareness regarding the status, threats and trends facing Maui's coral reefs; and (4) strengthen the capacity for effective coral reef management on Maui.

During year 2 of this grant the MCRT sent the draft recovery plan to both peers and community members for comment and review. The MCRT convened two more times at all-day workshops to discuss and integrate reviewer's suggestions into the plan and outline an implementation strategy.

An Executive Summary of the MCRP was prepared and taken to Maui County Council members and long term planners for incorporation by reference into Maui County's 20 year "Maui Island Plan". The final report was given to a professional editor, layout designer and printer.

MNMRC and the MCRT are optimistic that the Maui Coral Reef Recovery Plan will serve as a model for other Hawaiian Islands and possibly other Pacific Island nations to follow in terms of the design, development, and adoption of island-specific recovery plans.

* Community outreach and education efforts included several larger projects in late 2010 through 2012, and many smaller ones. These projects were partially supported with matching funds from the Harold K.L. Castle Foundation and Maui County's Office of Economic Development. Examples of some of the activities and outcomes are summarized below. More details and photos are available in the Final Reports to Maui County Office of Economic Development and the Harold K.L. Castle Foundation. Both reports are attached.

Summary: Community education and outreach efforts resulted in three active community managed marine areas (CMMAs); two successful flood forums; a Palau-Hawaii community learning exchange; progress on formation of a CMMA Network for Maui County; a co-management promise from DLNR's Chairman; monthly council and committee meetings which often included guest speakers and focused on action; Reef Resilience Training seminars and field work; multiple guest speakers on a variety of marine resource issues; extensive participation throughout 2011 on NOAA's Water Quality Working Group plan for the National Marine Sanctuary's Advisory Council; development of working relationships with County, State and Federal agency personnel, Hawaii businesses, individuals and NGOs; meeting with Maui County officials on critical issues and participating in the Maui Island Planning process through testimony and public comment.

A few more specific details on some of the above-mentioned community outreach activities and outcomes follow. More details and photos may be found in the 4th quarter and final report to Maui County's Office of Economic Development, attached hereto.

~ Community Managed Marine Areas (CMMAs) are part of the implementation strategy of the Maui Coral Reef Recovery Plan. At the request of MNMRC, John Parks and The Nature Conservancy (TNC) staff presented a series of three 3-day workshops and one 2-day workshop for 18 volunteers willing to help Maui communities establish community managed marine areas (CMMAs). All 18 graduated from the series. The weekend trainings took place between October 2010 and November 2011. The outcome is three successful CMMAs on Maui.

Two of those community groups applied for and received \$50,000 each from Conservation International to expand their efforts. One CMMA, which chose to work without funding, has held community meetings monthly since 10/10/10 and has (a) developed a comprehensive plan to protect and replenish their community's marine resources; (b) worked with scientists from The Nature Conservancy to conduct in-water surveys of their area; and (c) begun restoration efforts under the guidance of the curator and staff of Maui Ocean Center along with native Hawaiian practitioners. Community members have learned how to transplant coral and native seaweed (limu), and create a native Hawaiian moon calendar.

With support from The Nature Conservancy staff, MNMRC is helping Maui communities form a CMMA Network for communities engaged in this more traditional style of resource management. Emily Fielding (TNC) facilitated four conference calls with multiple representatives from five Maui Nui CMMAs to plan the first 2.5 day workshop, which took place Sept 7-9, 2012.

~ MNMRC's chair, leaders of the three CMMAs, the mayor's Environmental coordinator, Chairman Aila (DLNR) and other ambassadors from Hawai'i conservation groups throughout the state participated in a Hawaii-Palau learning exchange held in Palau for a week in February, 2012. During the exchange Palau government officials, high chiefs, conservation leaders, educators, scientists and community members shared with Hawai'i representatives their efforts to reverse decline of their marine resources. We all returned with an abundance of ideas on what works and what does not, and a renewed commitment to community education and outreach efforts on our respective islands.

During the Hawaii-Palau learning exchange Chairman Aila committed to support co-management of marine resources between the State and local CMMAs; he encouraged CMMAs to submit their requests soon. This is a significant boost to the effort.

~ In partnership with Maui Tomorrow and with support from 18 local businesses and NGOs, MNMRC sponsored a series of Flood Forums to address flooding issues in North Kihei. MNMRC's Clean Water Committee is working with various community and agency personnel to implement strategies discussed during these forums. (More information below and in the Maui County OED final report)

~ MNMRC members partnered with representatives from a variety of county, state and federal agencies to address local marine resource issues from watersheds to fishing regulations, shoreline erosion, development, and sand replenishment.

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~ MNMRC invited Reef Resilience experts to present a 2 day workshop to learn Reef Resilience techniques to quickly assess the health of coral reefs at five sites around Maui. The workshop included both classroom and time underwater. * Matching funds for community education and outreach activities were provided by the Harold K. L Castle Foundation (\$45,000), Maui County's Office of Economic Development (\$33,000). They total \$78,000. Omidyar 'Ohana Fund promised a \$25,000 cash donation.

In-kind contributions for three of the four CMMA Train the Trainers events and three of the five MCRT workshops efforts are recorded on spreadsheets attached hereto. They total \$68,090.

Among the many individuals who donated significant amounts of time to the above mentioned projects:

Jay Carpio, chair of the Abundance of Fishes committee, started and leads the CMMA program in the Wailuku ahupua'a. He secured \$50,000 of funding from Conservation International to support their daily efforts of outreach and education to fishers, families and youth. The progress and accomplishments made in Kahului Harbor are remarkable.

Mia Charleston, MNMRC's part time Administrative Assistant throughout this period, donated untold hours to insure that all details of the MCRT workshops, the Train the Trainers workshops, all MNMRC meetings, guest speakers, and other Council business were thoroughly covered.

Emily Fielding, Maui Marine Program Coordinator for The Nature Conservancy (TNC), coordinated all details of the CMMA trainings, participated as a trainer and facilitated all TNC support of MNMRC outreach and education efforts mentioned above.

Ekolu Lindsey and the Lindsey ohana provided their family home site for all Train the Trainers workshops and for the monthly CMMA meetings that began in October 2010, and continue to the present. The notable progress and impressive accomplishments of the Polanui community are a direct result of his prodigious leadership skills.

John Parks donated all his time to prepare for and preside over the four weekend "Train the Trainers" workshops for the CMMA program, significant amounts of his time to prepare for and follow-up on the five MCRT meetings, which he skillfully facilitated, and production of all drafts of the Maui Coral Reef Recovery Plan.

Tony Povilitis donated significantly more than half the time required to write the thorough "Analysis of Existing Management Efforts" paper.

Ku'ulei Rodgers donated all her time spent writing the technical paper titled "The State of Coral Reef Ecosystems of Maui Island, Hawai'i".

Russell Sparks and Darla White at Hawaii's Division of Aquatic Resources provided the technical paper titled "Maui and Lanai Monitoring Report" and, along with Russell's co-authors and MCRT members, Celia Smith and Ivor Williams, Russell provided the non-technical summary on the "Status of Maui's Reefs" along with the updated graph.

Some of the other in-kind contributions were as follows: The Nature Conservancy provided staff and supplies for CMMA trainings, CMMA Network facilitation, and a substantial amount of the Hawaii-Palau learning exchange; Pacific Whale Foundation provided monthly meeting space for the council and its committees; NOAA's National Marine Sanctuary personnel provided meeting space for small working groups, public forums and MCRT workshops; Maui Ocean Center provided expert staff for consultation and participation in field work at CMMA sites; Reef Resilience and Nature Conservancy scientists conducted scientific surveys and trainings at CMMA sites; MCRT member, Dr. Alan Friedlander (UH Manoa), provides on-going scientific support to the Kahului CMMA; MCRT scientists donated their time to attend all MCRT meetings and work in between meetings; guest speakers donated their time to talk with MNMRC members and guests at monthly meetings and field events; MNMRC leadership and members donated untold hours overseeing MCRT and community education and outreach activities; cultural practitioners participated in CMMA events to teach traditional approaches to *malama* (care for) the reefs. Community cash donations totaled \$3000. Numerous MNMRC members and our chair donated tremendous amount of their time, office space, mileage and supplies.

3. Lessons Learned

Describe the key lessons learned from this project, such as the least and most effective conservation practices or notable aspects of the project's methods, monitoring, or results. How could other conservation organizations adapt their projects to build upon some of these key lessons about what worked best and what did not?

* A lesson learned: A small group of dedicated individuals can accomplish far more than any one can imagine through vision, dedication and the synergy of working together for a common goal. As scientists and community representatives took time from their busy lives to participate in the development of a coral reef recovery plan the momentum and commitment to the vision grew. While at first it was difficult to find time to meet, it later became difficult to stop meeting. The same phenomenon occurred with our "Training the Trainers" CMMA workshops. At first people wondered if they could set aside a 3-day weekend for training; then they wondered how soon we could do it again. In two years this mostly volunteer organization held 5 MCRT all day workshops, 4 CMMA 3 day trainings, 1 3 day CMMA Network workshop (which also attracted the Chairman of Hawaii's Department of Land and Natural Resources), monthly CMMA events at each of two CMMA sites, monthly MNMRC meetings for both the council and each of its two major committees, a weekend Reef Resilience training, 2 major Flood Forums and numerous other special events. All were well attended by both MNMRC members and the community.

What seems to happen in the process of working together is that more people of like-mind and like-heart are attracted to the effort, the groundswell of local support grows, NGOs, businesses and government agencies notice and participate, and accomplishments greater than imagined are achieved.

* Another lesson learned: We promised to complete more than was reasonably possible in two years with a limited budget and only one part time staff. Fortunately dedicated volunteers supported the effort.

* Our most effective conservation practice has been our community managed marine areas (CMMAs) program. The process takes time and patience but gathers momentum as even the most unlikely community members participate and take on a sense of stewardship, responsibility and dedication.

* Recommendations to other volunteer organizations: Surround yourself with successful and dedicated people and tap them often for advice and support. Build partnerships with a wide variety of community members, organizations, NGOs, businesses, and government agency personnel. Study the challenges and dynamics of running an organization with volunteers and plan accordingly in advance. Try to have a fundraising person to write, manage, report and account for grants. Don't give up. Show your appreciation and express your gratitude to all involved. Welcome a broad cross-section of your community to participate. Always remember: "the fish come first"; it is not about the success of your organization but about the progress we make toward reversing the decline of our resources.

4. Dissemination

Briefly identify any dissemination of lessons learned or other project results to external audiences, such as the public or other conservation organizations.

Examples of such efforts are as follows:

MNMRC and its two committees, the Clean Water Committee (CWC) and the Abundance of Fishes Committee, held public monthly meetings throughout the grant period and frequently invited guest speakers to discuss pertinent conservation issues.

MNMRC members have appeared regularly at county council meetings, on public radio, and at State hearings to discuss and testify on both clean water and coral reef issues.

MNMRC's chair, Robin Newbold, serves on the HIHWNMS's Advisory Council (SAC) and on the Governor's Natural Area Reserves System Commission where she's able to represent conservation issues of concern to Maui residents.

MNMRC developed working relationships with personnel from local, state and federal agencies, Hawaii business, universities and NGOs. Many representatives from these groups now attend MNMRC council or committee meetings,

CMMA activities, and are available to provide help on MNMRC conservation efforts. The views and conclusions contained in this report are those of the authors and do not constitute their endorsement by the National Fish and Wildlife Foundation. Mention of trade names or commercial products does not constitute their endorsement by the National Fish and Wildlife Foundation.

MNMRC solicited 21 co-sponsors and donors to support the “Malama Ka’ono’ulu” Flood Forum at the HIIHWNMS in November 2011. More than 100 residents listened as a panel of experts from a broad cross-section of government agencies and private businesses discussed potential solutions to severe flooding in north Kihei.

MNMRC taped our Malama Ka’ono’ulu” Flood Forum and aired it multiple times on public radio.

During a second flood-related community workshop offered jointly with Maui Tomorrow, over 50 community members worked in small groups to develop recommendations to reduce flooding in their ahupua’a. Maui County representatives from various departments offered their expertise and listened to community concerns. Four more workshops are scheduled and a team of experts convened to develop a plan to reduce impacts of flooding on Maui’s reefs.

MNMRC Chair, Robin Newbold, chaired the SAC’s Water Quality Working Group (WQWG), which convened bi-monthly for 10 months in 2011. During that time nineteen MNMRC CWC members and participants statewide developed a series of recommendations designed to improve near-shore water quality. In January 2012, Robin presented the group’s recommendations to the SAC and interested members of the public. The SAC voted to accept the recommendations as presented. Along with other working group reports the recommendations were sent to National Marine Sanctuary management for consideration.

MNMRC is currently working with NOAA’s National Marine Sanctuary personnel to establish a No Dump Zone in sanctuary waters.

An Executive Summary of the MCRP was prepared and taken to Maui County Council members and long term planners for incorporation by reference into Maui County’s 20 year “Maui Island Plan”.

MNMRC and its members have repeatedly submitted testimony on the 20-year Maui Island Plan (MIP) and discussed conservation concerns with the mayor, his environmental coordinator and county council members. MIP original language and maps appear to be re-instated; concerns over re-zoning at Olowalu are still being addressed, and the coral reef recovery plan will be referenced.

The Maui Coral Reef Recovery Plan has been professionally edited and will be printed and distributed by mid-November.

5. Project Documents

Include in your final programmatic report, via the Uploads section of this task, the following:

- 2-10 representative photos from the project. Photos need to have a minimum resolution of 300 dpi and must be accompanied with a legend or caption describing the file name and content of the photos;
- report publications, GIS data, brochures, videos, outreach tools, press releases, media coverage;
- any project deliverables per the terms of your grant agreement.

POSTING OF FINAL REPORT: *This report and attached project documents may be shared by the Foundation and any Funding Source for the Project via their respective websites. In the event that the Recipient intends to claim that its final report or project documents contains material that does not have to be posted on such websites because it is protected from disclosure by statutory or regulatory provisions, the Recipient shall clearly mark all such potentially protected materials as “PROTECTED” and provide an explanation and complete citation to the statutory or regulatory source for such protection.*