



## **Hawai'i Coral Reef Management Fellowship 2013-2014 Position Description**

### **Project Location**

As one of the most isolated archipelagos on earth, Hawai'i has estimated rates of endemism of 25% or greater for most coral fish and invertebrate species. This unique marine life is found nowhere else in the world. This isolated island chain consists of two regions: the Main Hawaiian islands (MHI) and the Northwestern Hawaiian Islands (NWHI). The MHI, where the state's 1.3 million residents reside, consists of high volcanic islands with nonstructural reef communities and fringing reefs abutting the shore. In contrast, the NWHI consists of mostly uninhabited atolls, islands and banks that span over 2,000 kilometers (km) northwest of the MHI.

According to the *Status of Coral Reefs in the World* report, the condition of marine resources has generally degraded in the MHI over the past 20 years. While Hawaii's reefs are still in fair to good condition, many near-shore ecosystems adjacent to urban areas and popular destinations have suffered from land-based sources of pollution, fishing pressure, recreational overuse and invasive species. These threats are detailed in the Hawaii Coral Reef Strategy document. The host agency for the 2013 - 2014 Coral Management Fellowship in Hawai'i is the Division of Aquatic Resources (DAR) located within the Department of Land and Natural Resources. DAR has offices in Honolulu on the island of Oahu, Maui, Kauai, and Hawaii. The fellow will be based at the Oahu island office.

### **Program/Agency Background**

The mission of the State of Hawaii Department of Land and Natural Resources (DLNR) is to preserve, protect, conserve and manage Hawaii's unique and limited natural, cultural and historic resources. Within the DLNR, the Division of Aquatic Resources (DAR) manages the State's marine, estuarine and freshwater aquatic resources and ecosystems. DAR's responsibilities are divided into three main programs: Aquatic Resources and Environmental Protection, Commercial Fisheries and Resources Enhancement, and Recreational Fisheries. Major program areas include projects to manage or enhance fisheries for long-term sustainability of the resources, protect and restore the aquatic environment and native and resident aquatic species and their habitat, and provide facilities and opportunities for recreational fishing. DAR is responsible for the management of Hawai'i's Marine Protected Areas, locally called Marine Life Conservation Districts. DAR also supports Hawaii's membership on the U.S. Coral Reef Task Force and the U.S. All Islands Committee.

The DAR is the primary agency responsible for coordinating Hawaii's reef management efforts in the Main Hawaiian Islands. The Coral Reef Working Group (CRWG), made up of state and federal agency partners involved in coral reef management, is facilitated by DAR to provide guidance for the State of Hawaii's Coral Program (Coral Program).

In order to provide a cohesive strategy for coral reef management in Hawaii, the CRWG developed a framework for coral reef management activities titled, *Hawaii's Coral Reef Strategy: Priorities for management in the Main Hawaiian Islands, 2010-2020 (HCRS)*. The

HCRS was informed by multiple interviews and workshops with resource managers, biologists and stakeholders, as well as by reviews of plans, and studies of comments from public meetings held around the state.

#### **HCRS PRIORITY OBJECTIVES FOR THE NEXT TEN YEARS:**

- Reduce key anthropogenic threats to two priority nearshore coral reef sites by 2014 and five by 2020 using ahupuaa based management.
- Prevent new aquatic invasive species (AIS) introductions and minimize the spread of established AIS populations by 2020.
- Increase the abundance and average size of ten targeted coral reef fisheries species critical to reef health and ecological function by 2020.
- Designate a sufficient area of marine waters under effective conservation by 2020 to ensure sustainable and resilient coral reef ecosystems.
- Reduce anchor damage and trampling on coral reefs through the implementation of no-anchor zones, utilization of day-use mooring buoys and other means by 2020.

More information about coral reef monitoring and management, LAS projects and advisory groups, as well as additional project descriptions and reports can be found online at: [www.hawaiicoralreefstrategy.com](http://www.hawaiicoralreefstrategy.com).

### **Project Goals and Objectives**

The fellowship will help address key objectives from the Hawaii Coral Reef Strategy:

1. Creation or expansion of Makai Watch program.
2. Document activities implemented in the priority sites and measure their success.
3. Enhance coordination, communication, and support of local state managers, federal partners, non-governmental organizations and community stakeholders to respond to events of sedimentation, bleaching and disease.

### **Project Description**

As a participating member of the DAR staff and the coral program, the fellow will work with a team of coordinators and network with partner organizations and agencies to complete this multifaceted project. Some of these tasks will be accomplished concurrently. The fellow could be based at the Oahu office.

#### **Task 1: Orientation (2 months)**

The fellow will be introduced to staff and management of DAR and partner agencies, and will review background information regarding Hawai'i's coral reef program and other coastal management issues. The fellow will also participate with program staff in field visits, interagency meetings, and outreach activities. The fellow will review and become familiar with the Hawaii Coral Strategy and the LAS's. After participating in these activities, the fellow, with input from their mentor, will draft a work plan that will be reviewed and revised after the first six months of the fellowship.

#### **Outcomes/Deliverables:**

- Familiarity with staff, operations, and resources of state coastal and aquatic resource management programs

- Familiarity with priority coral program sites and projects
- Integration into DAR and clarification of role in project
- Introduction to the DAR Coral Reef Working Group (CRWG)
- Development of project work plan

**Task 2: Makai Watch Point of Contact for the State (35 percent of time)**

The goal of the Makai Watch Program is to enhance the management of near-shore marine resources by providing community members opportunities for direct involvement in management activities. Through recent discussions, members of the Makai Watch Steering Committee and several supporters have identified the need to review and clarify the definition, standards, and strategy for Makai Watch in the State of Hawaii. Makai Watch in different forms is being pursued by several communities; however, at this stage there are no fully agreed to and approved State standards and Strategy for the Makai Watch Program. As a result, a strategic planning workshop is scheduled for August 2012 to update the products of the previous Makai Watch review and standardization project and to develop, approve, and disseminate a complete Makai Watch Strategy.

Currently there is no point of contact from the Department of Land and Natural Resources, a key partner in the Makai Watch program. The fellow will serve as the State's Makai Watch coordinator, implement the new strategy, work with the various communities, conduct trainings with the communities on the new protocols, and maintain coordination between the different divisions within DLNR. The fellow will increase the profile of the Makai Watch program at the DLNR.

**Outcomes/Deliverables**

- Implement recommended actions in the Makai Watch Strategy
  - Coordinate steering committee meetings, record meeting notes, pursue next steps
  - Coordinate an annual meeting between Makai Watch communities to share lessons learned.
- Increase communication and lessons learned between communities throughout the year**
- Identify and work with other already established community groups that have duplicative roles as Makai Watch and strategize how to avoid duplication and increase efficiency
  - Determine role and expectations of data collection by communities. Implement avenue for sharing data with the State and with other community groups
  - Work with DLNR's Public Information Officer on press releases about Makai Watch

**Task 3: Mirati Training and Implementation (20 percent of time)**

The Nature Conservancy (TNC), Hawaii Division of Aquatic Resources (DAR), and the NOAA facilitated workshops in the priority sites to develop Conservation Action Plans (CAP). The goal of these CAPs are to develop priority strategies for implementation to address existing and future threats facing coral reef ecosystems in these regions. All CAP documents are scheduled for completion by August 2012. Once completed, the reports will be used by the community, agencies, and partners as a guiding document to implement actions in the area to promote healthy reefs.

To help organize the actions and document the success of each action, the fellow will be trained how to use the Mirati system. This tool was used by TNC to create the CAP and can continue to

be used to document measureable outcomes. This task advances the Hawaii Coral Reef Strategy by providing a tool to measure success. If successful, the fellow can train other managers in this tool and use it to measure success at additional sites.

#### **Outcomes/Deliverables**

- Gain knowledge and experience using the Mirati tool
- Pilot the tool in one CAP site, by documenting the implemented actions and measuring the success rate of each action
- Share lessons learned with resource managers as a tool to measure success
- Train managers how to use this tool (if applicable)

#### **Task 4: Rapid Response Contingency Plan (RRCP) (10 percent of time)**

In 2008, Hawaii's Rapid Response Contingency Plan (RRCP) was developed to organize timely response to unusual events of coral bleaching and disease and Crown of Thorns outbreaks. The project established protocols to investigate these events and developed and trained a local team of responders. Similarly, in 2010 a Draft Notification Framework for Sedimentation Events was developed through an interagency workshop. The fellow will continue to serve the Point of Contact for the Rapid Response team role.

#### **Outcomes/Deliverables**

- Coordinate response for events of coral bleaching and disease according to protocols set forth in the RRCP and sediment events
- Updated response notification framework
- Updated response list-serve
- Identify challenges to the RRCP and work with partners to find solutions for effective plan implementation

#### **Task 5: Monitoring Field Work (15 percent of time)**

Assist with established field data collection in the water for marine monitoring and assessment projects.

#### **Outcomes/ Deliverables**

- Coral damage assessment report(s)
- Rapid Response Contingency Plan assessment report(s) for coral damage incidents, bleaching events, or crown of thorn outbreaks

#### **Task 6: Grants and Contracts (10 percent of time)**

The fellow will assist the DAR planner in coordinating and managing projects related to the previously described HCRS objectives. The fellow will learn the procedures and practices for writing site specific grant proposals, applying for grants, tracking expenditures, managing grant projects. Duties include:

1. Grants research and writing
2. Research funding opportunities for implementation of previously describe HCRS objectives, draft grant proposals, edit proposals and reports, and generate supplementary information for pending proposals and existing grants
3. Assist with the organization of letters of intent and final proposals submitted to the CRWG during the HCRS request for proposal stage.

4. Compilation of bi-annual progress reports for projects under this Scope of Work.

**Outcomes/ Deliverables**

- Familiarity with grant and contract procedures
- Completion of bi-annual progress reports for this SOW
- Completion of bi-annual accomplishment report (2-page summary) on priority site projects

**Task 7: USCRTF Efforts (10 percent of time)**

The fellow will begin to learn about the goals, initiatives, and people involved with the USCRTF. The fellow may be asked to review reports pertinent to Hawaii's coral program implementation, or provide information for USCRTF accomplishment reports.

**Outcomes/ Deliverables**

- Familiarity with USCRTF
- Completion of bi-annual accomplishment report for projects to be shared at the CRTF meeting
- Attendance at required meetings