



Environmental Program Strategy Development

In 2010 Hau'oli Mau Loa Foundation commissioned Dr. Makena Coffman to help inform its development of environmental grantmaking strategies. Dr. Coffman convened a study team which provided a comprehensive report to the Foundation. The study team conducted research on environmental stressors and indicators in the areas of land conservation, marine conservation and climate change adaptation. As part of this research, nearly fifty experts in the fields of environmental management, grantmaking, and the non-profit sector were interviewed. Participants identified high-priority environmental issues, proposed a number of community and policy-based solutions, and provided recommendations on target areas and strategies for environmental grantmaking.

After reviewing and discussing the findings of the study, the Foundation decided to pursue two areas of focus:

- **Invasive Species Prevention in the State of Hawai'i; and**
- **Environmental Leadership Pathways – Developing the Next Generation of Environmental Resource Professionals in Hawai'i**

Overview: Invasive Species Prevention in the State of Hawai'i

Following the completion of Dr. Coffman's report, the Foundation began exploring opportunities to support the prevention of invasive species in the State of Hawai'i. With help from The Nature Conservancy Hawai'i, the Foundation was introduced to the Coordinating Group on Alien Pest Species (CGAPS). Formed in 1995, the CGAPS partnership is comprised primarily of management-level staff from every major agency and organization involved in Hawai'i-based invasive species work; including federal, state, county and private entities. In 2011, Hau'oli Mau Loa Foundation initiated its support for CGAPS by funding invasive species prevention projects tied to their 2009 strategic plan. In addition, Hau'oli Mau Loa Foundation provided funding to support key CGAPS staff. In 2015, CGAPS worked with Dr. Makena Coffman and Dr. Kimberly Burnett to produce a new, four-year strategic plan. Going forward, the Foundation hopes to deepen its funding relationship with CGAPS, targeting prevention projects identified in its strategic plan, and continuing to support the coordinating body in being an essential resource in invasive species prevention in Hawai'i.



Overview: Environmental Leadership Pathways – Developing the Next Generation of Environmental Resource Professionals in Hawai‘i

The premise underlying the environmental leadership development initiative is that the long-term effectiveness of environmental conservation work and organizations in Hawai‘i depends on a new generation of environmental resource managers who mirror the local demographic and come from the communities in which conservation work is needed or taking place. In other words, Hawai‘i youth from a diverse cross-section of Hawai‘i communities are critical to the future leadership and advancement of environmental conservation efforts in Hawai‘i. The assumptions are that local youth working and taking leadership roles will:

- Bring more nuanced understanding of complex cultural dynamics and place-based knowledge
- Have greater chance of sustained, long-term commitment to live and work here in Hawai‘i
- Have the intangible skills to develop and maintain effective dialogues with local communities that are key to the long-term success of environmental conservation initiatives
- Develop policies and conduct research that will be more accessible and responsive to local communities

Because the pathways to environmental resource management careers occur across a broad continuum (from early childhood development through doctorate level study and beyond) with a complex interplay between education and the workplace, the Foundation enlisted the assistance of a consultant, Wei Fang in 2011 to help clarify how the Foundation might be most impactful. She coordinated two surveys: a general survey soliciting feedback about the current state of environmental careers and opportunities for advancement in Hawai‘i, and an in-depth survey tailored for feedback from large conservation organizations, representing major employers. Overall, 130 people submitted general survey responses, representing 92 unique organizations.



Key findings from the 2011 “general survey:”

- The top three “barriers and limitations to strengthening the pipeline of Hawai’i youth from pursuing careers in environmental resource management:”
 - Low pay (either real or perceived), and limited opportunities for upward mobility in conservation jobs
 - Limited accessibility to quality post-secondary education and training programs
 - A limited number of full-time positions; or entry level openings
- According to survey respondents, the top three resources that exist in the State of Hawai’i to help train or develop young environmental resource management professionals are:
 - Internships/fellowships
 - Mentorship programs
 - Specialized training programs
- According to survey respondents, the top three most important resources to help train or develop young environmental resource management professionals are:
 - Paid internships and fellowships
 - Financial support (e.g. scholarships and/or program support)
 - Mentorship programs
- Although a large number of post-secondary internship and fellowship opportunities exist in Hawai’i, there is a wide gap in terms of the quality and intensity of those opportunities. In order to remain competitive, internship/fellowship programs should be paid opportunities, tied to school credit (where applicable), and offer participants clear alternatives for next steps either in education or career advancement. Additional beneficial program characteristics include: mentoring, opportunities to network with professionals in the field, and access to job placement and job fairs.
- Based on survey responses and a review of existing environmental resource management job openings, organizations are largely looking for candidates with bachelor’s degrees in Science. Masters of Science degrees were described as essential to remain competitive for Federal job opportunities.



In an effort to gather data about the characteristics of the environmental resource management sector in Hawai'i, the Foundation partnered with The Nature Conservancy and the University of Hawai'i Economic Research Organization (UHERO) to produce an unprecedented report on the sector. The report's 2012 survey data revealed that there were at least 3,278 full-time jobs in the environmental resource management sector in the State of Hawai'i. Additional findings in the report have proved very helpful in providing important data and background information on this specialized sector in Hawai'i. An updated report was completed in 2015 and revealed more than 3,543 full-time jobs in the environmental resource management sector in Hawai'i, an increase of 8% from the 2012 report.

Current Environmental Leadership Pathways Programs and Partners

Hau'oli Mau Loa Foundation has identified and partnered with key organizations that support and raise awareness about the importance of engaging and preparing the next generation of environmental leaders in Hawai'i.

Key Organizations and Partnerships:

1. *Emerging Professionals*

Expand opportunities for Hawai'i students and emerging professionals to develop their networks and knowledge through venues, such as the annual Hawai'i Conservation Conference, and increase awareness of job and networking opportunities by expanding the capacity of the Hawai'i Conservation Alliance.

2. *Early Connections*

The goal of Early Connections is to engage Hawai'i high school students in stimulating, educational and hands-on activities and curriculum that will broaden participants' knowledge of conservation, engage them in service, and help to inspire the beginning of a career in conservation or a related field. In partnership with Kupu, the Hawai'i Department of Education and other partners, the Kupu E2U program currently places E2U leaders (graduate level teaching assistants) in select O'ahu public high schools. These E2U leaders assist teachers and their students by supporting relevant instruction, special projects, field trips, and after school co-curricular activities.



The Foundation also partners with the Hawai'i Environmental Education Alliance (HEEA) to support the HEEA Symposium, a daylong conference for environmental educators and stakeholders. HEEA's mission is to promote and develop high quality Environmental Education by building relationships to improve networking and professionalism throughout Hawai'i.

3. *Internships & Fellowships*

Grow opportunities for post-secondary students to train and develop in the Environmental Resource Management field by supporting organizations offering high quality/high performing paid internships with strong science components. Hau'oli Mau Loa Foundation has partnered with four internship and fellowship programs to support this component: Kupu, Nā Hua Ho'ohuli i Ka Pono, The Nature Conservancy Hawai'i – Marine Fellowship Conservation Program, and the University of Hawai'i at Hilo Pacific Internship Program for Exploring Science (PIPES).

4. *Graduate Assistantships*

Increase the number of qualified Hawai'i students pursuing resource management careers by offering masters level scholarships to students enrolled in field related degree programs at the University of Hawai'i at Hilo – Department of Tropical Conservation Biology and Environmental Science (TCBES) and the University of Hawai'i at Mānoa – Department of Natural Resources & Environmental Management (NREM), College for Natural Sciences (CNS), and School of Ocean, Earth Science, and Technology (SOEST).