

Pacific Islands Climate Change Cooperative



Incorporating science and traditional knowledge in Moloka'i to prepare fishponds for climate change

How will local communities prepare infrastructure for climate change? To answer this question, this project brings together climate change scientists, Moloka'i's traditional fishpond managers, and other natural resource managers to share scientific and cultural knowledge and work together as a team to identify adaptive management strategies for two of Moloka'i's ancient fishponds.

Moloka'i is a small, rural, culturally rich Hawaiian island with much of its human infrastructure (including culturally critical ancient fishponds) located on the coast. It also protects some of the best native coastal plant communities in Hawai'i. Yet, predicted ecosystem response to climate change has not yet been a major topic of discussion.

In order to explore and discuss the impact of climate change upon the local fishponds, this project pursued a short series of workshops that include field trips, presentations, brainstorming sessions, shared meals, and cultural protocol. This formed new and strengthened existing partnerships between and among workshop participants so resources can be pooled and the island can respond as one in the face of climate change. The workshop results will be incorporated into the strategic plan for the ponds and upland

areas. In addition, the K-6 educational curriculum will be revised, a climate change video featuring Moloka'i kūpuna will be created, a community meeting will be held, a "community engagement protocol" will be created to help scientists work with other small communities throughout Hawai'i Nei (and the Pacific), and experiences will be shared with others in the scientific and cultural management communities.

This project has several goals. The first is to bring Hawaii's climate change scientists, Molokai's traditional fishpond managers, and other coastal natural resource managers together to share scientific and cultural knowledge about predicted ecosystem response due to climate change, and work together as a team to identify adaptive management strategies to protect two of Molokai's ancient fishponds. The aim is to create new, and strengthen existing, partnerships between scientists and cultural resource managers, so we can better respond to predicted ecosystem changes and protect cultural and ecological resources.

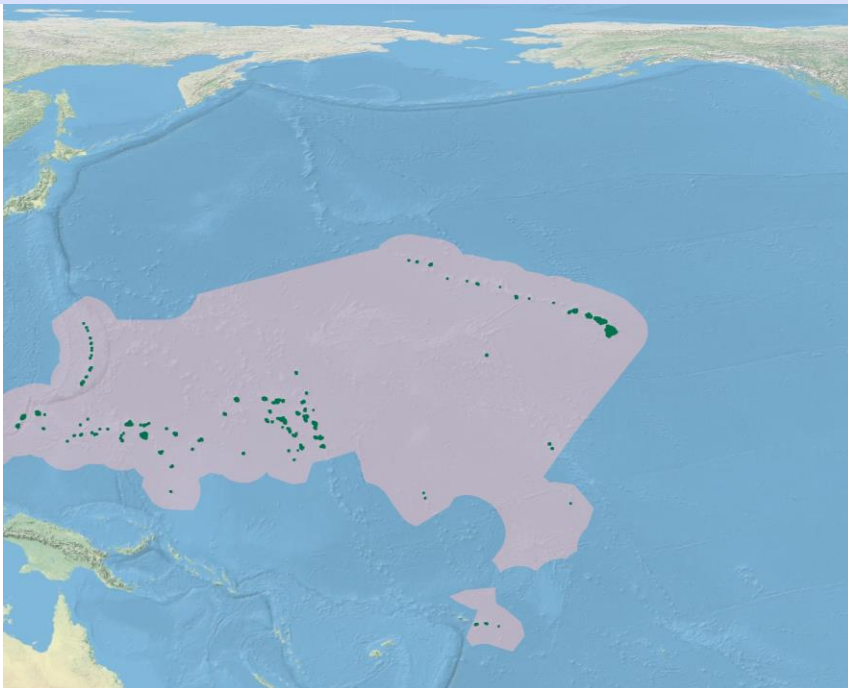
Additionally, the project has the goal of starting the community of Moloka'i thinking about how to respond to climate change, as individuals and as an island, by sharing what we have learned.

The project aims to improve the ability of scientists to engage traditionally based communities to address climate change. Through climate change workshops and the development of community engagement protocol, this project helps to enable scientists to engage traditionally based communities in order to more effectively address on-the-ground impacts of climate change.

For more details about this project, visit the PICCC projects page: piccc.net/our-projects.



The map below depicts the PICCC geography, which includes Hawai'i, American Sāmoa, Guam, the Northern Mariana Islands, the Marshall Islands, the Federated States of Micronesia, Palau and 4 Marine National Monuments.



Principal Investigators

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Project Partners

US National Park Service

University of Hawai'i, Mānoa

USGS

The Pacific Islands Climate Change Cooperative (PICCC)

was established in 2009 to assist those who manage native species, island ecosystems, and key cultural resources in adapting their management to climate change for the continuing benefit of the people of the Pacific Islands. The PICCC provides a range of services and tools to help managers in Hawai'i, the Mariana Islands, American Sāmoa, and other Pacific Island groups make informed decisions for conservation of natural and cultural resources including climate models at the scale of islands and archipelagos, ecological response models, and implementation and monitoring strategies for island species, resources, and communities. Our goal is to help managers reach explicit biological and cultural conservation objectives in the face of climate change and ongoing threats such as fire, land conversion, and invasive species.

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