



## The PICCC's Hawaiian Islands Terrestrial Adaptation Initiative

It is clear that climate change will result in cascading impacts to ecosystems, species, and ecosystem services, which will exacerbate current resource challenges for the Hawaiian Islands. Resource managers and conservation planners must address this challenge to their long-term goals by revising current plans and practices with increased attention on potential climate impacts to natural resources, communities, and socioeconomic values to better meet long-term goals.

The PICCC has recently begun a transition to a new approach which will better assist our members in planning and coordination for the impacts of climate change. Through **Adaptation Initiatives (AIs)**, the PICCC is aiming to better assist planning and coordination efforts by provide the appropriate information, expertise, training, and collaboration opportunities to resource managers or decision-makers, enabling the integration of climate change adaptation in conservation. As opposed to past research-driven efforts to deploy climate change information, PICCC AIs will be driven by management needs and developed in conjunction with resource managers in order to help member organizations adapt current decision-making and planning processes to more effectively respond to climate threats.

**The Hawaiian Islands Terrestrial Adaptation Initiative**, the PICCC's first AI, will integrate two terrestrial Vulnerability Assessments (VAs) that were completed by a team comprised of PICCC staff and other researchers. The first VA estimated the vulnerability of native Hawaiian plants over the 21<sup>st</sup> century as a result of climate change, while the second revealed the vulnerability of Hawaiian forest birds (see attached factsheets). The results of this research highlight the urgent need for new conservation actions to prevent forest bird and plant extinctions, including the exploration of alternative management strategies.

In implementing the HITAI, we will work with key management and research partners to meet their needs for adaptation planning in the Main Hawaiian Islands. We envision that this will provide resource managers and decision-makers with shared strategies, tools, and information necessary to address current climate change stressors and prepare for significant changes yet to come. We envision the PICCC as acting as the facilitator for these discussions, due to our technical capabilities and understanding of both the scientific and political issues involved in pursuing conservation and recovery actions.

### Developing Climate Syntheses in Support of the HITAI



In order to place the HITAI on a firm scientific foundation, the PICCC has contracted with EcoAdapt to develop comprehensive, science-based syntheses of current and projected future climate change and impacts on, and adaptation options for, terrestrial and freshwater resources within each of the main Hawaiian Islands. The goal is to provide resource managers and planners with information that will improve understanding and capacity to reduce climate vulnerabilities. By developing information that is actionable and useful, this project will support the goal of the HITAI to better integrate climate change research and information into resource management and decision-making in Hawai'i.

The project's objectives and activities include:

1. Convening an effective **science-management partnership** through a Stakeholder Advisory Committee comprised of scientists, land and resource managers, and conservation practitioners from federal agencies, state agencies, NGOs, and other partners, to ensure project products meet the decision-making needs of the focal region;

