# Manager Climate Corps – “Collaboration across Worldviews”

## Who We Are: The Manager Climate Corps (MCC)

The Manager Climate Corps (MCC) is a manager-driven research program developed by the Pacific Islands Climate Adaptation Science Center (PI-CASC) and the University of Hawai‘i at Hilo. The MCC functions as a boundary organization, connecting university and federal researchers with community leaders, natural resource managers, cultural practitioners, and policy professionals in order to strengthen place-based adaptive capacity from the ground up. We identify existing manager networks on Hawai‘i Island and support them through collaborative research projects and interactive forums (1). The research projects encompass a diversity of ecological and social science disciplines, but all share a commitment to an iterative method of knowledge co-production and manager involvement at every stage of the project (2, 3). Because local managers are empowered to co-lead each research project from idea inception to completion, they develop a vested interest in the research outputs and increase awareness of these products within local natural and cultural resource networks - significantly increasing the utility of research products tailored to practitioner communities on the ground that need them most (Fig. 1).

## Our Approach

Extensive research in cognitive science has made clear that our choices are typically more rooted in complex affective (emotional), implicit, and intrinsic factors than reason and rational analysis. In other words, human behavior is profoundly driven by person-to-person and person-to-nature experiences that involve the interaction of group norms and values, individual values, emotions, instincts, intuitions, and related visceral factors that collectively define one's identity or worldview (1, 4, 5, 6). In order to build adaptive capacity through unprecedented socio-ecological shifts and develop increasingly sustainable lifestyles, it is imperative to account for and directly engage the full breadth of these capacities (i.e., diverse knowledge forms) that drive human behavior. Thus, our research program is designed to build upon long-term, place-based relational networks (i.e., relationality/kinship; 7) through the process of knowledge co-production, in accordance with **four foundational elements**:

- **Recognizing and engaging multiple knowledge forms (1)**
- **Supporting trust by building upon long-term, place-based practitioner relationships (7, 8)**
- **Rekindling notions of “community” that include more-than-human relationships sustained through daily experience (8)**
- **Employing the process of knowledge co-production (community-driven research)**

Knowledge co-production can be utilized at any geographic, organizational, or political scale. In the MCC, we focus on a specific spatial scale – Hawai‘i Island (1, 2). Within Hawai‘i Island, participating local managers can be site-specific, focused on larger watershed or moku (district) scales, or island wide. The central requirement for these practitioners is direct and regular involvement within and, therefore, accountability to natural elements within a well-defined landscape or seascape; as well as accountability to the human communities (e.g., group norms and values) that engage the “more-than-human” communities in a given location (8).

Embodying long-term relationality and often passing down experiential knowledge over generations, many of these local practitioners function as “custodians of context” (1, 7). They hold place-based knowledge within the socio-ecological systems in which they are rooted. Informed by their regular experiences in the places they influence and are influenced by, field managers (e.g. farmers, ranchers, fire managers, cultural practitioners, county planners, native ecosystem managers, invasive species managers, etc.) are directly accountable to explicit extents of land, water, air, and communities of people. By embedding research projects within such experiential networks, the MCC develops actionable science products readily utilized by local managers. The MCC, thereby, empowers place-based, cultural adaptation amid change by strengthening our species’ relational skills; capacities that are fundamental to our ability to adapt through evolutionary and ancestral time.

**“Information, in itself, is not knowledge, nor do we become any more knowledgeable through its accumulation. Our knowledgeability consists, rather, in the capacity to situate such information, and understand its meaning within the context of direct perceptual engagements with our environments.” (4)**

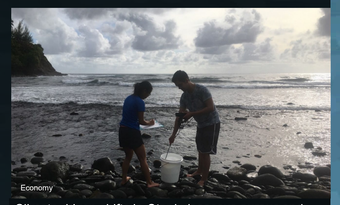
PACIFIC ISLANDS CLIMATE ADAPTATION SCIENCE CENTER

## MCC in Motion: Manager-Driven Graduate Research Projects

Mulching non-native albizia to support climate change mitigation and sustainable agricultural practices.

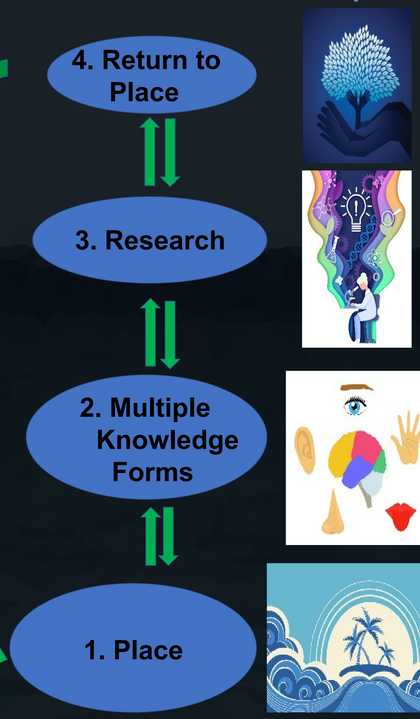
Impacts of climate change and ground water shifts on loko i‘a management (traditional Hawaiian fishponds).

Estimating coastal erosion rates on Hawai‘i Island in relation to SLR to inform coastal development setbacks.



Climate driven shifts in *Staphylococcus aureus* and MRSA in near shore waters.

## MCC’s Relational Approach to Engaging Place through the Practitioner’s Experiential Lens (7)






**Local practitioner networks put the research output into action and then reset the process as guided by their regular, holistic immersion within local landscapes or seascapes.**



**Collaborative research networks employ cutting edge analytical knowledge and the scientific method in direct support of manager needs. Cultural practitioners, community leads, and natural and cultural resource managers co-lead the research process with researchers.**



**Local practitioners are custodians of context. Their direct and regular experience within a specific place integrates diverse knowledge forms, while also sustaining connection and accountability to the cultural norms/values of human communities utilizing the space.**



**More-than-human elements, species, forces, processes, and ecosystems host, root, and guide interactions within an explicit landscape or seascape.**

https://pi-casc.soest.hawaii.edu/pi-casc-programs/center-programs/mcc/
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## References

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