ʻAha ʻIke Pāpālua
2020 Report

Hawai‘i Sea Grant
Ulana ʻIke Center of Excellence
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**Cover Photo:** Michael Na ho’opi’i

**Jacket Photo:** Deb Nystrom

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For more information about Hawai‘i Sea Grant and the Ulana ‘Ike Sea Grant Center of Excellence, please visit:

seagrant.soest.hawaii.edu/ulana-ike

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Executive Summary

The Ulana ‘Ike Sea Grant Center of Excellence (Ulana ‘Ike Center of Excellence) was established in response to a growing need for increased coordination of Hawai‘i Sea Grant projects involving Indigenous knowledges and communities. In recognition of the central importance of community- and place-based knowledge to extension, research, and education, an ‘Aha ‘Ike Pāpālua (visioning meeting) was convened in 2020 to ask community partners:

How can the Center most effectively advance our common goals by weaving multiple knowledge systems through research, extension, and education?

The ‘Aha convened participants from across disciplines with kuleana to specific places and communities in which the Ulana ‘Ike Center of Excellence operates. Participants were asked to identify areas of need that the Ulana ‘Ike Center of Excellence should address, and how these needs are informed by the various organizations, places, practices, ways of thinking, and knowledge spaces in which the Center works. Participants were asked to employ their unique expertise and community connections to articulate the role of the Ulana ‘Ike Center of Excellence and guide priorities in both the short and long term.
Of those identified, the top five priorities for the Ulana ‘Ike Center of Excellence were:

1. Model and make *pono* co-production of knowledge

2. Fund community-led research, spotlight scholarship, and communicate out impactful work

3. Improve local food production through understanding of historical methods and strategies

4. Support Indigenous social enterprises and cultivate Indigenous entrepreneurs

5. Translate ‘ike Hawai‘i related to historical fishing practices in Hawaiian-language newspapers and other repositories

The priorities identified by community partners demonstrate that there is a strong need for community-led research, targeted to improve resource management and food production, bolster cultural practices, and foster Indigenous innovation in Hawai‘i. We are deeply grateful for the guidance, support, and *aloha* of our partner communities, and of this ‘āina that we share.

Much has happened since the ‘Aha took place: mere weeks after the gathering, the global COVID-19 pandemic caused a fundamental change in our working conditions and a shift in our priorities, leading many of us to redefine our daily lives and reassess the importance of our work. As we navigate changes to our partnerships with each other and the places in which we work, we ask our community partners to reflect on the following questions in order to help us reassess our goals:

- Do the priorities outlined in the 2020 ‘Aha still remain relevant for participants, partner institutions, and our communities?
- Has the urgency of priorities changed?
- Have the timescales on which priorities should be addressed shifted?
- Are ‘Aha participants willing to serve as part of a hui to help advise the Ulana ‘Ike Center of Excellence in achieving its mission?

The communal visions that were created during the ‘Aha are the foundation upon which the work of the Ulana ‘Ike Center of Excellence will be built. These are works in progress and we welcome your continued input as we refine and refocus these guiding statements.
Our Center of Excellence is committed to engaging multiple knowledge systems as a mechanism for directing power and decision-making toward customary and local practitioners.

Place-based stewardship requires drawing from multiple knowledge systems in order to achieve authentic co-management. What constitutes “legitimate knowledge” for the purposes of decision-making can be limited. The work of the staff and faculty within this Center are deeply aligned with the values, communities and knowledge of Hawai‘i and the Pacific (Moananuiākea), and are motivated to advance Indigenous cultural survival, restoration, self-determination, and healing. This is necessary because too often, customary beliefs, values, and practices are not viewed as a valid basis for action.

The Center is situated within multiple nested communities: as a program based at the University of Hawai‘i, which aspires to be a Native Hawaiian place of learning; within the network of Sea Grant organizations spanning Maine to Puerto Rico, and Alaska to the Republic of the Marshall Islands; and as a partner to communities across Hawai‘i and the Pacific.

We support all Indigenous peoples. **However, our primary accountability is to Hawai‘i and Moananuiākea.** These obligations emplace specific kuleana on Native Hawaiian customs and practices. Rooting ourselves in Hawai‘i life ways constitutes an “ethic of incommensurability” (Tuck and Yang, 2012), enabling distinct knowledge systems to be brought more clearly into “conversation without papering over their differences, but also without maintaining false dichotomies.”
Naming is an explicit and ideologically powerful way to center the cultures and languages of Moananuiākea, establishing clear connections and relationships between people and places.

Within Hawai‘i lifeways, names are bestowed to people and objects as their roles and functions evolve and shift. As our Center has grown and assumed new kuleana, we have sought to embody our growth through the articulation of an inoa Hawai‘i, inspired by customs and practices shared by the peoples of Moananuiākea.

In re-naming to Ulana ʻIke (Knowledge Weaving), we engaged and received guidance from other Indigenous scholars in our center, Pelika Andrade, Mehana Vaughan, and Punihei Lipe. We drew upon the archetypal imagery of weaving or braiding together distinct knowledge systems. Across Moananuiākea, the hala plant (Pandanus tectorius) is foundational to the Pasifika identity, featuring prominently in cosmogonic origin stories and mythologies. Ulana, or weaving leaves of the hala tree for canoe sails, building materials, and mats, is a practice shared by the people of Moananuiākea.

Embracing this imagery and metaphor connects the scholarship and work of this Center to a broader community of Indigenous scholars and activists dedicated to elevating Indigenous knowledge who also utilize weaving metaphors and images in their work. The practice of weaving together knowledges can be uncomfortable and challenging especially when applied across knowledge systems that occupy different positions of privilege and power. However, in this place of discomfort, there is also a tremendous opportunity for growth.
History & Context

Hawai‘i Sea Grant and the Centers of Excellence

The University of Hawai‘i Sea Grant College Program (Hawai‘i Sea Grant) was established in 1968 to provide research, extension, and educational opportunities that serve to increase understanding and wise stewardship of Hawai‘i’s coastal and marine resources. We strive to promote thriving and resilient ecosystems and communities supported by an engaged and informed citizenry across the islands. Hawai‘i Sea Grant supports a diversity of individual projects and collaboration spaces within the university and in the communities within which these programs operate.

Hawai‘i Sea Grant’s Centers of Excellence reflect the breadth of interdisciplinary expertise represented by the organization, and serve to promote enhanced collaboration between Hawai‘i communities and university researchers, students, faculty, and staff. These Centers are poised to allow for enhanced connection between university- and Sea Grant-based projects and the communities most impacted by this work.

University of Hawai‘i: Toward a Hawaiian Place of Learning

Since 2002, UH Mānoa has positioned Hawaiian Place of Learning as a fundamental element of the campus vision. This concept centers Hawaiian values of kaiāulu, ʻohana, and ʻāina as core values relevant to all parts of the University.

The path to becoming a Hawaiian Place of Learning was further clarified in the Hawai‘i Papa o Ke Ao (2012) and Ka Hoʻokō Kuleana (2016) reports, which articulate Native Hawaiian student and faculty success, Hawaiian language parity, and community engagement as key metrics for progress.

Laying the Groundwork for the Ulana ʻIke Center of Excellence

Over 15 years ago, former Hawai‘i Sea Grant extension leader Richard Brock and environmental education extension agent Elizabeth Kumabe Maynard initiated a pilot project to investigate the accessibility of fisheries-related articles in the Hawaiian language newspaper archive. Unfortunately, this archive was virtually inaccessible due to the storage media (paper, microfilm, and microfiche), a lack of funding, and most importantly, the scarcity of qualified translators. As the need to develop capacity in Hawaiian language proficiency became clear, Hawai‘i Sea Grant developed a close partnership with Puakea Nogelmeier, a professor of Hawaiian language at the Hawai‘inuiākea School of Hawaiian Knowledge and Director of Awaiaulu, to
Institute for Hawaiian Language Research and Translation (IHLRT): Provides access to the Hawaiian language repository for university researchers, government agencies, nonprofit institutions, and the community; offers professional training and innovative learning experiences for Hawaiian language graduate students. IHLRT projects have included assessments of historic fisheries abundances and fishing methods, historic hurricane trends and their implications for disaster preparedness, and climate and natural phenomena reconstruction.

In parallel to this effort, key hires of Native Hawaiian faculty and extension agents in 2013 (Mehana Vaughan, Oceana Francis, Rosie Alegado, Pelika Andrade) catalyzed new Sea Grant projects focusing on co-production with Hawai‘i community partners. These include:

- **Nā Kilo ʻĀina**: Increases awareness of place-based natural cycles through monthly monitoring activities and training based in pilinakai (conservation) and care of islands through relationships.
- **Community-Based Resource Management**: Supports community-based resource management on Kaua‘i including a community-based subsistence fishing area in Ha‘ena ahupua‘a to reaffirm and protect Native Hawaiian fishing practices.
- **Loko ʻa**: Increases capacity for Loko ʻa practitioners across the state by supporting biocultural restoration of Hawaiian fishpond systems, investigating the impact of climate change on these systems, and supporting Hui Mālama Loko ʻa gatherings.
- **Kūlana Noi‘i**: Together with Kua‘āina Ulu ʻAuamo, stewards a process wherein researchers build and sustain equitable partnerships with the community. Hundreds of University of Hawai‘i students, faculty, and staff have participated in workshops focused on the best practices outlined in the Kūlana Noi‘i. Hawai‘i Sea Grant has formally incorporated these practices into the process of funding research.

The critical mass of Native Hawaiian faculty and extension agents solidified the deep connections between local communities and extension services. Collectively, these works exemplified emerging and innovative approaches to community engagement and knowledge co-production. Together with the Hawaiian language newspaper translation project, these projects laid the groundwork for the formation of the Ulana ‘Ike Sea Grant Center of Excellence in 2017.

This Center was envisioned as a collaboration hub, a Sea Grant Center of Excellence dedicated to meeting the need for coordination among the growing number of Sea Grant faculty and extension agents who work on projects involving multiple knowledge systems.
The ʻAha ‘Ike Pāpālua (visioning meeting) was convened in 2020 with the goal of solidifying the role of Ulana ʻIke Center of Excellence in the Hawaiʻi marine and coastal conservation and co-production space. The ʻAha brought together participants from across disciplines and with intimate knowledge of and kuleana to the spaces in which the Center operates to shape a cohesive mission and vision for the center and identify potential collaborations and partnerships.

The purpose of the 2020 ʻAha was to foster deeper pilina among participants and to develop an understanding of how participant organizations, places, practices, ways of thinking, and knowledge might align with Center goals and define the spaces in which the Center could operate. Participants were asked to employ their unique expertise and community connections to articulate the role of the Ulana ʻIke Center of Excellence and guide its priorities in both the short and long term. In addition, participants were asked to consider providing input and advice to help shape the Center’s activities in the long term. This informal advisory relationship, articulated as a guiding hui, would help to shape and reshape the goals of the Ulana ʻIke Center of Excellence to adapt to and reflect the constantly changing physical and social landscape in which the Center and the communities it serves operates.
Participants
36 participants from Hawai‘i, Guam, Puerto Rico, and Louisiana were invited to gather at Waiwai Collective in Mō‘ili‘ili, adjacent to the University of Hawai‘i at Mānoa, to participate in envisioning the future direction of the Ulana ʻIke Center. Each participant was able to provide a perspective from Ulana ʻIke partner institutions, which include Sea Grant projects, nonprofit institutions, land and natural resource managers from both the private and public sectors, Hawaiian cultural practitioners, university faculty and administration, representatives from regional non-profit organizations, and leadership from partner Sea Grant College Programs engaged in relevant work. Participants were:

- Austin Shelton, Guam Sea Grant
- Bill Thomas, NOAA Office for Coastal Management
- Brad Wong, Office of Hawaiian Affairs
- Brian Taylor, School of Ocean and Earth Science and Technology, Mānoa
- Darcy Yogi, Pacific Island Climate Adaptation Science Center
- Darren Lerner, Hawai‘i Sea Grant, Pacific Islands Climate Adaptation Science Center
• Davianna Pōmaika‘i McGregor, Center for Oral History, Dept. of Ethnic Studies, Biocultural Initiative of the Pacific, Protect Kaho‘olawe ‘Ohana, Ho‘ōla Waiale’e
• Denise Konan, College of Social Sciences, Mānoa
• Kamuela Enos, Department of Urban and Regional Planning; MA‘O Farms
• Katy Hintzen, Hawai‘i Sea Grant
• Kawika Winter, He‘eia National Estuarine Research Reserve
• Kelson “Mac” Poepoe, Lawai‘a pono, Hui Malama o Mo‘omomi
• Kevin Chang, Kua‘āina Ulu ‘Auamo
• Luka Mossman, Edith Kanaka‘ole Foundation
• Luna Kekoa, Hawai‘i Division of Aquatic Resources
• Mahina Paishon-Duarte, Waiwai Collective, Nā Kālai Wa’a
• Makena Coffman, Institute for Sustainability and Resilience; UHERO; Department of Urban Regional Planning
• Malia Nobrega-Olivera, Hawai‘inuiākea School of Hawaiian Knowledge; Lo‘i Pa‘akai practitioner
• Maya Walton, Hawai‘i Sea Grant
• Mehana Vaughan, Hawai‘i Sea Grant, Dept. of Natural Resources and Environmental Management
• Melanie Ide, Bishop Museum
• Michael Bruno, University of Hawai‘i at Mānoa
• Natalie Kurashima, Kamehameha Schools
• Nick Kawelakai Farrant, Ho‘ōla Waiale’e; North Shore Community Land Trust
• Noe Puniwai, Kamakūokalani Center for Hawaiian Studies; Ho‘ōla Waiale’e
• Rosie Alegado, Hawai‘i Sea Grant, Department of Oceanography; Center for Microbial Oceanography, Ho‘ōla Waiale’e
• Pelika Andrade, Hawai‘i Sea Grant
• Punihei Lipe, Institute for Hawaiian Language Research and Translation; Chancellor’s Office, University of Hawai‘i
• Rob Toonen, Hawaii Institute of Marine Biology; He‘eia National Estuarine Research Reserve
• Roberto Chaparro, Puerto Rico Sea Grant
• Manuel Mejía, The Nature Conservancy of Hawai‘i
• Ulu Ching, Conservation International
The space
The gathering was held at Waiwai Collective Mōʻiliʻili. From their first moments in the space, participants were invited to embrace it as a Hawaiian place of being. The ‘Aha itself was structured to best embody Waiwai Collective's goals of cultivating community by putting values into practice. Both information posted in the room and participant breakout groups were arranged in concentric circles to promote fluid relationship-building. Information sharing, talk-story time, and brainstorming sessions benefitted from this lateral fluidity and from the foundation laid by the Hawaiian space cultivated by Waiwai. Food was provided by a local chef, providing participants an opportunity to share a meal together.

Planning and Facilitation
We recognize and give gratitude to an amazing collective of colleagues, partners, and friends that contributed to the planning and facilitation of conversations throughout the ‘Aha including:

Darcy Yogi, Pacific Island Climate Adaptation Science Center
Darren Lerner, Hawai‘i Sea Grant, Pacific Islands Climate Adaptation Science Center
Katy Hintzen, Hawai‘i Sea Grant
Maya Walton, Hawai‘i Sea Grant
Mehana Vaughan, Hawai‘i Sea Grant, Dept. of Natural Resources and Environmental Management
Miwa Tamanaha, Kuaʻaina Ulu ‘Auamo
Rosie Alegado, Hawai‘i Sea Grant, Deptartment of Oceanography; Center for Microbial Oceanography, Ho‘ala Waiale‘e
Pelika Andrade, Hawai‘i Sea Grant
The first half of our day together focused on laying the context and understanding for the position of the Ulana ʻIke Center of Excellence within Sea Grant and UH Mānoa as well as sharing examples of Center projects through an interactive “gallery walk” that allowed participants to talk story with project leads. Through a series of facilitated small group discussions, participants were asked to identify needs and gaps in their work, organizations, and places that the Ulana ʻIke Center of Excellence could address as well translate those ideas into a thoughtfully articulated role for the Center. Facilitators then organized notes from small group discussions into bulleted ideas on flip charts for participants to review and prioritize.
‘Aha Outcomes

Kūkākūkā: What niches can the Ulana ‘Ike Center of Excellence fill?

To build a foundation for visioning, participants were asked to identify the gaps, needs or challenges in their work, organization, or places, and how the Center might be able to meet those needs. The suggestions offered can be broadly grouped into five categories:

1. University of Hawai‘i Issues: Expand undergraduate education, keep local students home.

Participants identified a lack of undergraduate education experiences that allow for integration of ‘ike Hawai‘i and community-centered work, as well as a strong need for training and education that allow Hawaiian and Hawai‘i-born students to remain or return home.

2. Community partnership and coordination issues: Improve support for existing partnerships, build synergies.

Long-term stable sources of funding for community partnerships is needed, as well as knowledge of how to leverage partnerships to increase capacity for community initiatives. There is also a need for synergies across disparate efforts. This could include greater coordination among Hawai‘i-based projects, as well as coordination among Indigenous practitioners around the globe. Examples included expanding the Ōiwi Climate Collective to global partners, and connecting with practitioners in Canada and across the Pacific.

3. Framework and network issues: Increase co-management, indigenize existing structures.

As Indigenous practices are living and dynamic, there may be strong differences between these practices and more static governance structures. Participants identified a need for restructuring of management agencies’ frameworks, and for embracing decentralized governance structures in the interest of returning to a system of local management informed by place-based knowledge. In addition, they highlighted a need for expanding research or projects that could directly lead to legislative changes. Examples included suggestions to shift the Division of Aquatic Resources (DAR) framework of resource management and the process for creating a community-based subsistence fishing area (CBSFA).
4 Institutional resource and capacity issues: More people power, Indigenous connections in existing institutions.
Participants identified a need for more capacity-building in existing institutions, in the form of additional personnel who are from Indigenous communities and trained in co-production. Examples included the need for community-based island coordinators at DAR, as well as for an extension agent based out of Ulana ʻIke that could assist in indigenizing resource management agencies like the DAR and Department of Land and Natural Resources (DLNR).

5 Place-based management issues: Promote Indigenous knowledge and place-based management strategies.
Participants noted that management rules and regulations are not always place-based, and thus are not appropriate for every use case. Because of this, practical, place-based, Indigenous-led management is needed. Suggestions for meeting this need included promoting place-based Indigenous knowledge at all levels, and creating monitoring and management structures that are appropriate, realistic, and work for each local community.
Kūkākūkā: Opportunities and priorities

The kūkākūkā identifying areas of need created a foundation upon which suggestions for future directions could be made. After some time to talk story, digest, and replenish, the ‘āha was reconvened. Participants were asked to examine the broad categories they had identified, and shape their suggestions into more granular actions that could be carried out as projects, activities, or areas of focus by the Center. These discussions spawned numerous ideas for opportunities and priorities; these can be crudely organized into six main themes, which are outlined below. Note that the majority of these suggestions can easily fit into multiple categories, and many work together to enhance goals that may be outside of the scope of the present document. We invite readers to view the categories outlined here as living, growing, and evolving, as is the nature of this work.

1 Hub/Connecting: Ulana ‘Ike as a hub for people-centered, place-based knowledge generation and preservation.

Many viewed an integral function of Ulana ‘Ike as being a place for the activation of networks and the promotion of pono practices within the research-extension-education space. In discussions, coordination of political, economic, research, and practitioner efforts were a focus point, and improved networks were seen as essential to improving policy outcomes and increasing the political and economic capital of Indigenous and place-based knowledge holders in Hawai‘i and globally. In addition, the retention of Hawai‘i-born and Hawaiian people was a significant theme, and participants identified both engaging local students by creating opportunities for work in meaningful Maoli-centered careers as well as keeping kānaka on ‘āina as central goals. Pono knowledge-generation was also outlined as a priority, with participants...
identifying the need for guiding practices to improve the ability of Hawai‘i organizations to appropriately utilize or integrate Indigenous knowledge into their work, as well as the need for platforms through which multiple knowledge systems can be discussed. Importantly, participants noted that the knowledge co-production process needed to be stewarded to ensure that it subverts entrenched power disparities, and works on behalf of the communities involved. Scientific practice was focused on throughout; suggestions included encouraging Hawaiian language terms in science, as well as promoting and regularizing Indigenous data practices. Finally, participants noted the importance of uplifting the value of IHLRT by giving the institution a formal name, as well as providing recognition via co-authorship to IHLRT translators on projects utilizing Hawaiian language resources.

2 Institute for Hawaiian Language Research and Translation: Integrate ‘ike Hawai‘i to guide research, management, and training, stewarded by the IHLRT.

A main theme in participant ideas pertaining to Hawaiian language research was the need to increase opportunities for Hawaiian language in Sea Grant research. Discussions included the desire for better integration of Hawaiian language translations into projects examining past climate and ecosystem trends or building baselines, as well as for increasing the opportunities for Sea Grant affiliates to learn ‘ōlelo Hawai‘i. In addition, the importance of indigenizing scientific practice was focused on throughout; suggestions included encouraging Hawaiian language terms in science, as well as promoting and regularizing Indigenous data practices. Finally, participants noted the importance of uplifting the value of IHLRT by giving the institution a formal name, as well as providing recognition via co-authorship to IHLRT translators on projects utilizing Hawaiian language resources.

3 Economics and Source Sustainability: Employ Hawaiian knowledge for self-sustainability; the Center as a hub for Indigenous enterprise and innovation.

As a boundary organization, the Ulana ‘Ike Center of Excellence was recognized as being aptly situated to uplift Indigenous enterprise and grow and perpetuate self-sustainability. The importance of an “economy with nature” was a central theme, and participants highlighted initiatives to increase Hawaiian-led decision-making about ‘āina and natural resource management, indigenizing policy efforts, long-term planning at all levels. Of similar importance was the need to grow and perpetuate sustainability, through efforts such as supporting practitioners in their perpetuation of a Hawaiian lifestyle and culture, increasing connections between ‘āina practitioners and kūpuna, and enhancing support networks for community-led and community-supporting resource management efforts.
4 Education: Share intergenerational and place-based knowledge.

Place-based learning and intergenerational knowledge transmission were viewed as essential to the educational mission of the Center. Participants noted the importance of learning on and with ʻāina and integrating this practice into the UH curriculum, with the longer-term goal of changing the university's research and teaching framework to make caring for and understanding ʻāina a central value. Central to this work is the need for strong intergenerational knowledge transmission, including through the creation of pathways for knowledge sharing between kupuna, mākua, and ʻōpio, and enhanced support structures for exchange between kupuna and ʻāina practitioners.

5 Help UH and Hawai‘i Understand and Adapt to Changing Cycles of Nature: Build capacity for understanding and adapting to the climate crisis and its impacts on Hawai‘i people and places.

Underlying much of the suggestions throughout the ‘Aha was the importance of taking the climate crisis into account. Participants viewed as a priority the need to understand the natural environment through community perspectives, as well as the need to create adaptation plans for multiple climate crisis scenarios. The integration of community perspectives could be achieved by supporting efforts to use kilo and kupuna knowledge to create baselines for pre-contact natural resource health and track seasonal shifts. In addition, the importance of incorporating kupuna knowledge into climate crisis outlooks was highlighted, as was the need to prepare for the future via adaptation plans, which could be used to create hope among affected communities, support the longevity of fishponds and other important cultural and source sustainability sites, and inspire the propagation of sustainable resource-use practices among the younger generation.

6 Positions (Extension Agents, Staff, Students and Trainees): Build capacity for increased people power on priority projects.

The success of the initiatives outlined during the ‘Aha can only occur if there is enough personnel capacity to implement the project goals. Participants noted the need for increased people power at central institutions (e.g. IHLRT, Ulana ʻIke Center of Excellence), via the creation of recurring graduate research assistant opportunities and place-based extension agent positions. In addition, the importance of making employment, internship, and volunteer opportunities more readily available and accessible was seen as critical for capacity-building, which necessitates seeking out long-term financial and institutional support for these positions.
**Highest-priority projects identified during the 2020 ‘Aha**

Project ideas are organized by theme and arranged in order of importance to participants. See Appendix for energy maps summarize the number of votes each project idea received as "short-term" and "long-term priorities.

<table>
<thead>
<tr>
<th>IDEA</th>
<th>TIME FRAME</th>
<th>THEME</th>
<th>TOTAL VOTES</th>
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<tbody>
<tr>
<td>Model and make foundational pono co-production of knowledge (relationships, co-authorship, funding) Fix institutional fiscal barriers.</td>
<td>Short &amp; Long Term</td>
<td>Hub/Connecting</td>
<td>12</td>
</tr>
<tr>
<td>Fund community led research, spotlight scholarship, communicate out good work</td>
<td>Short &amp; Long Term</td>
<td>Hub/Connecting</td>
<td>11.5</td>
</tr>
<tr>
<td>Improving local food production through understanding of historical methods/strategies</td>
<td>Long Term</td>
<td>Economic &amp; Source Sustainability</td>
<td>9</td>
</tr>
<tr>
<td>Indigenous social enterprise support, framework, entrepreneur cultivation.</td>
<td>Short &amp; Long Term</td>
<td>Economic &amp; Source Sustainability</td>
<td>9</td>
</tr>
<tr>
<td>Translating nūpepa fishing ‘ike</td>
<td>Short Term</td>
<td>IHLRT</td>
<td>9</td>
</tr>
<tr>
<td>External outreach to aggregate efficacy and impacts of Maoli centered approaches to access political/economic capital</td>
<td>Long Term</td>
<td>Economic &amp; Source Sustainability</td>
<td>6</td>
</tr>
<tr>
<td>Intergenerational ‘ike transmission program</td>
<td>Long Term</td>
<td>Education</td>
<td>6</td>
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<tr>
<td>Ho‘ala Waiale’e Extension Agent to guide community stewardship with Sea Grant management assumed from CTAHR</td>
<td>Short Term</td>
<td>Positions/Extension Agents/Staff</td>
<td>6</td>
</tr>
<tr>
<td>Increased people power at IHLRT</td>
<td>Short Term</td>
<td>IHLRT</td>
<td>6</td>
</tr>
<tr>
<td>Integrated curriculum taught in place</td>
<td>Short Term</td>
<td>Understand and Adapt to Changing Cycles of Nature</td>
<td>5</td>
</tr>
<tr>
<td>Huli ‘Ia facilitation workshops</td>
<td>Short Term</td>
<td>Education</td>
<td>4</td>
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Measuring Progress: 2020-2022

Much has changed since the 2020 ‘Aha took place. Not long after our meeting, we transitioned into a time that requires us to be more physically distant from our communities, yet one that has served to highlight areas of need more sharply than ever before. The COVID-19 pandemic caused a both fundamental shift in our working conditions and a shift in our priorities: many of us have had to redefine our daily lives and reassess the importance of our work. During this period of change, the Ulana ‘Ike Center of Excellence focused on building out existing projects and expanding the scope of the Center in a number of ways.

Resource Pursuits
Over the past two years, the Ulana ‘Ike Center of Excellence has been active in seeking out new partnerships and resources to support and expand Center projects. We have pursued funding from a variety of sources, including the National Science Foundation, National Oceanic and Atmospheric Administration, Kamehameha Schools, Pacific Islands Climate Adaptation Science Center, and the Sea Grant National Law Center, submitting proposals totaling over $650,000.

Indigenous Aquaculture Hub
As part of a broader effort to catalyze a cross-Pacific regional collaborative hub integrating research, outreach, and education to advance sustainable Indigenous Aquaculture practices. The Ulana ‘Ike Center of Excellence partnered with Hui Mālama Loko ‘Ia, Washington Sea Grant, and Alaska Sea Grant to convene a cross-regional summit bringing together diverse experts, knowledge holders, practitioners, Native Hawaiian, Pacific Islander, and Northwest tribal leaders, senior and youth community members and Sea Grant outreach staff to learn about local and regional examples of traditional Indigenous Aquaculture systems. The summit was held on O‘ahu in February 2020. Over 125 Indigenous aquaculture practitioners came together representing a dozen tribal nations from the Pacific Northwest as well as Indigenous communities in Alaska, California, the Republic of the Marshall Islands, Hawai‘i, and Aotearoa. The gathering fostered relationship building and space to share knowledge and advance Indigenous aquaculture practice and methodologies.
**Kūlana Noʻiʻi**

During COVID-19 the Ulana ʻIke Center of Excellence team was challenged to adapt Kūlana Noʻiʻi training and workshops into a virtual format, a difficult task given the inherently place-based nature of Kūlana Noʻiʻi. We conducted fourteen virtual training workshops including two series for researchers funded through Hawaiʻi Sea Grant and the Pacific Islands Climate Adaptation Science Center and graduate students funded through Hawaiʻi Sea Grant, the Pacific Islands Climate Adaptation Science Center, and the Heʻeia National Estuarine Research Reserve.

In collaboration with Kuaʻāina Ulu ʻAuamo and the University of Hawaiʻi at Mānoa Center for Teaching Excellence, the Ulana ʻIke Center of Excellence authored a book chapter detailing the methodology, process, and lessons learned from the development and dissemination of the Kūlana Noʻiʻi which will be included in a forthcoming book titled IGNITE: A Justice-Forward Approach to Decolonizing Higher Education through Space, Place, and Culture.

We also collaborated with Kuaʻāina Ulu ʻAuamo to update the Kūlana Noʻiʻi. This new version, *Kūlana Noʻiʻi Version 2.0*, includes an enhanced introduction with guidance on using the Kūlana Noʻiʻi in the correct context, as a “starting place intended to spark deeper conversation that considers place-based circumstances and needs.” Version 2.0 also includes updates to each of the kūlana to reflect “lessons learned” in previous/ongoing partnerships, with a large update to the Knowledge Stewardship kūleana (formerly “Knowledge Ownership and Access”).

**Knowledge Stewardship**

Hawaiʻi Sea Grant supported a Peter J. Rappa Fellow focused on research and analysis of intellectual property rights, practices, and agreements in the context of rural and Indigenous communities partnering with research and management institutions for natural resources stewardship. The Fellow was jointly mentored by the Ulana ʻIke Center of Excellence and Kuaʻāina Ulu ʻAuamo. The fellow produced a Data Accountability and Stewardship teaching tool drawing from research on data sovereignty practices and policies used by Indigenous communities globally. This teaching tool is intended to support communities in issues spotting around knowledge stewardship and access; support researchers to engage in ethical practice; and build capacity for both community and researchers to be more sophisticated in their understanding of intellectual property rights and issues. The Center has also worked to deepen partnerships with Conservation International in this area and plans to continue to pursue opportunities to identify and address intellectual property practices within research and resource management institutions that perpetuate inequities and overlook community ownership and needs.
**Loko I’a Climate Needs Assessment**

The Ulana ‘Ike Center of Excellence collaborated with Hui Mālama Loko I’a, Kua'aina Ulu ‘Au‘au, and the Pacific Islands Climate Adaptation Science Center to facilitate, assess and synthesize the research needs and information gaps of loko i’a across the Hawaiian Islands. The end result was a [Loko I’a Needs Assessment Report](#) which represents the first comprehensive compilation of the research ideas and needs within the community of fishpond managers, landowners, and stewardship organizations to inform adaptation of fishpond practices toward their resilience and sustainability in the face of a changing climate. The Loko I’a Needs Assessment has already been disseminated among place-based stewards, researchers, and policy makers in Hawai‘i. Efforts continue to utilize this report and its findings to activate new and richer collaborations between organizations that directly care for loko ia and auxiliary supporters such as academic institutions, policy advocates, funders, food system workers, and volunteer organizations.

**Tropical Medicine Clinical Lab**

During the early months of the COVID-19 pandemic testing capacity in Hawai‘i was limited with private diagnostic labs often sending samples to the continental U.S. for processing resulting in long wait times for results. Responding to an immediate need of the community during a crisis the Ulana ‘Ike Center of Excellence played a leadership role in establishing the [first public diagnostic laboratory in Hawai‘i](#), partnering with the John A. Burns School of Medicine at the University of Hawai‘i at Mānoa. With the Center leading the community outreach team, the lab was successful in securing $3.9 million in funds from the City and County of Honolulu. The lab provided free COVID-19 testing services across O‘ahu for underserved and uninsured community members and front-line workers. This effort was part of an emergency response to the COVID-19 pandemic but will yield long-term benefits for community resilience in Hawai‘i by responding to infectious disease threats that are projected to worsen with climate change.

**Na ‘Ono o Ka ‘Āina Indigenous Foods Course Featuring the Ahupua’a of He‘eia**

The Ulana ‘Ike Center of Excellence partnered with the He‘eia NERR and Paepae o He‘eia to develop a seven week course for employees in the food industry facing unemployment or reduced hours as a result of the COVID-19 pandemic. The course piloted distance-learning techniques, and focused on the Indigenous foods of He‘eia including history, ecology, cultural practices, cultivation and harvesting techniques, and methods for preparing and preserving. Training instructors included Hawaiian agriculture and aquaculture practitioners from He‘eia. Evaluation feedback from the course was highly positive with participants emphasizing that they feel more knowledgeable about Indigenous foods and comfortable working with them. 100% of course participants were interested in staying connected to He‘eia after the course including through volunteering and sourcing ingredients.
Marine Biology Graduate Student Orientation Course

The Ulana ‘Ike Center partnered with the Marine Biology Graduate Program at UH Mānoa and the He‘eia National Estuarine Research Reserve to develop and lead an intensive three week graduate course Kūlana Noi‘i: Introduction to Place-based Research Methodologies in Hawai‘i. The course was mandatory for all incoming Marine Biology Graduate students in the 2021 cohort and was aimed at providing students with a grounding in what constitutes a research paradigm and the knowledge and skills necessary to conduct place-based research in Indigenous spaces with a focus on Hawai‘i. Through readings and lectures from experts students were exposed to multiple disciplines and knowledge frameworks for approaching scientific inquiry. The course used the Kūlana Noi‘i as an ethical framework to explore reciprocal, place-based research methodologies. Students also gained first-hand experience in building connections with local community organizations that implement Indigenous management practices. They worked alongside place-based stewards, researchers, and cultural practitioners to learn about conservation issues and practices in Hawai‘i. In addition to place-based activities and panels, a series of self-directed learning broadened students’ skill sets and critical thinking as well as provided space for self-reflection towards integrating place-based dimensions in their graduate research. The course culminated with students developing a set of individual place-based research ethics, or their personal Kūlana Noi‘i, to inform their graduate work.
Neʻe Imua: Visioning the future of the Ulana ‘Ike Center

Based on the advice, ideas, and needs articulated in the ‘Aha and all that we learned in the past two years, we developed a draft mission and vision for the Center. These are works in progress and we welcome your continued input as we refine and refocus these guiding statements.

**Mission:**
Serve as a collaborative hub coordinating Sea Grant faculty and partners who work on projects that engage multiple knowledge systems.

**Vision:**
Customary practitioners from multiple knowledge systems hold decision-making power and direct co-management of coastal and marine resources.

**Questions for Re-engagement**
In addition to your feedback on the vision and mission, we humbly ask for your thoughts on a few key questions that have emerged as we consider next steps for growing the Ulana ‘Ike Sea Grant Center of Excellence.

1. Do priorities outlined in ‘Aha still remain relevant for participants, partner institutions, or our communities?
2. Has the order of importance of priorities changed?
3. Have the timescales on which priorities should be addressed shifted?
4. Are ‘Aha participants willing to serve as part of a hui to help advise the Ulana ‘Ike Center in achieving its mission?

Please share feedback through [this online survey](#) or contact the Ulana ‘Ike Sea Grant Center of Excellence via email at uhsg.ulanaike@hawaii.edu with any comments you may have.

**Mahalo piha!**
Works Cited

1. Achieving Our Destiny - The University of Hawai‘i at Mānoa 2011–2015 Strategic Plan. 25.


Appendix

The following energy Maps below show the distribution of topics that ‘Aha participants selected as key priorities for the Ulana ‘Ike Center. Maps are organized by the number of participants that voted for each priority and whether they thought they should be addressed on a short- or a long-term basis. Highest priority projects are summarized on page 18 of this report.
Positions, Extension Agents, and Staff

- **5 short-term**
  - Hire a Ho‘ōla Waiale‘e Extension Agent to guide community stewardship with Sea Grant management of Waiale‘e assumed from CTHAR

- **1 long-term**
  - Create facilitation teams with communities for skill-building and to serve as a resource

- **2 short-term**
  - Create GRA positions for students

- **1 long-term**

- **1 long-term**
  - Create GRA positions for students

Partner with the Hau‘oli Mau Loa Foundation to create career pathways for students

**Total: 7 short-term votes, 4 long-term votes**
Hub/Connecting

- **6.5 short-term**
  - Fund and spotlight community-led research

- **5 long-term**
  - Model and make foundational pono co-production of knowledge (relationships, co-authors, funding)

- **1 short-term**
  - Prioritize and coordinate grants and requests for proposals (RFPs)

- **1 long-term**
  - Position leading ahupua’a as kīpuka for community network hubs

- **3 long-term**
  - Create space for dialogue and conversation; connect communities to research and scholarship

**Total:** 15 short-term votes, 17 long-term votes
Education

6 long-term

Create an intergenerational ʻike transmission program that includes relearning ancestral knowledge and exchange with other islands

1 short-term

2 short-term

Provide field course support

Facilitate educational programming:

4 short-term

Huli ʻIa facilitation workshops

2 short-term

Papakū Makawalu workshops

2 short-term

Kūlana Noiʻi introductory courses

Total: 11 short-term votes, 6 long-term votes
Institute for Hawaiian Language Research and Translation

- **9 short-term**
  - Translate nūpepa fishing ‘ike

- **6 short-term**
  - Increase IHLRT capacity with additional personnel, including through GRA positions

- **1 long-term**
  - Incorporate Hawaiian terms into publications

- **1 long-term**
  - Rename IHLRT to better reflect the institute's mission

**Total: 16 short-term votes, 3 long-term votes**
Help UH & Hawai‘i Understand and Adapt to Changing Cycles of Nature

5 short-term
Create an integrated curriculum taught in place

3 long-term
Understand the spectrum of community needs regarding severe climate forecasts

2 long-term
Create a climate change hui to document and develop coastline baselines through mapping and oral histories

2 short-term
Bring additional Hawaiian voices to the Rising Voices Network on climate change and its impacts on communities

1 short-term
Create a working group focused on ways to indigenize Sea Grant research processes

Total: 8 short-term votes, 6 long-term votes
Economics and Source Sustainability

- **7 long-term**
  - Improve local food production through an understanding of historical methods and strategies

- **2 short-term**
  - Grow and cultivate Indigenous enterprises via entrepreneur frameworks and networks

- **5 short-term**
  - Do external outreach to aggregate the efficacy and impacts of Maoli-centered approaches to access political and economic capital

- **4 long-term**

**Total:** 7 short-term votes, 10 long-term votes