



# He'eia Indigenous Knowledge Workshop Key Takeaways

April 2024

# What's Inside

Summary.....	3
Acknowledgements .....	4
Background.....	5
Workshop Overview.....	6
Approach and Planning .....	6
Logistics .....	9
Agenda.....	10
Participants.....	11
Key Takeaways.....	12
Planning and Facilitation.....	12
Participant Feedback.....	13
Post-workshop Action.....	16
Helpful Resources .....	17
Literature Cited .....	18
Appendices.....	19
Appendix A: Follow-up 'Thank you' cards.....	19
Appendix B: Participant feedback survey.....	20
Appendix C: Participant responses .....	25

Ae'o (Hawaiian Stilts) in a restored *lo'i kalo* (taro field), part of the wetland agroecosystem at He'eia.

Photo: Shimi Rii



# Summary

In April 2024, staff from five National Estuarine Research Reserves (NERRs), together with local Indigenous community partners and staff from Pacific Birds Habitat Joint Venture, gathered for a week-long workshop at He'eia, Hawai'i. The goal of the workshop was to bring together project partners to learn about the co-stewardship framework at He'eia NERR, biocultural restoration practices, and perspectives on weaving together conventional and Indigenous Knowledge systems and Indigenizing science. Workshop participants learned from the people of He'eia and each other through stories, shared experiences, and laughter. In total, 41 participants traveled to He'eia from the Chugach Region (Alaska), Salish Sea (Washington), Coos Bay (Oregon), and Lake Superior (Wisconsin).

The workshop was a great success, with participants expressing increased appreciation and understanding of the value of Indigenous Knowledge in resource management, commitment to revive or synthesize new approaches to research and stewardship in collaboration with Indigenous communities, and gratitude for the opportunity to gather in person, share knowledge, and build relationships. The workshop was followed by site-based work at each of the participating reserves, where knowledge and practices from the workshop were explored and co-adapted to meet coastal resource management needs of local ecosystems and communities.

**We are sharing our experiences and lessons learned in the hopes that these takeaways may be useful to others engaging in similar work, now and in the future.**

## Project title

Integrating Indigenous Knowledge and NERRS science and monitoring to improve estuarine stewardship and management, with shared benefits for birds and local communities

## Funding source

2024 NERRS Science Collaborative - [Catalyst Grant](#)

## Project partners

He'eia NERR (Hawai'i), Kachemak Bay NERR (Alaska), Padilla Bay NERR (Washington), South Slough NERR (Oregon), Lake Superior NERR (Wisconsin)

Indigenous community partners from each region  
Pacific Birds Habitat Joint Venture (Pacific Birds)

## Project team

Monica Iglecia, U.S. Coordinator, Pacific Birds (Project Lead)

Dr. Kawika Winter, Director, He'eia NERR (Technical Lead)

Dr. Laura Farwell, Conservation Coordinator, Pacific Birds (Collaborative Lead)

Syverine Bentz, Training Program Coordinator, Kachemak Bay NERR

Deanna Erickson, Director, Lake Superior NERR

Patricia Fox, Manager, South Slough NERR

Roger Fuller, Natural Resource Coordinator, Padilla Bay NERR

Helen Raine, Hawai'i Conservation Coordinator, Pacific Birds

Katherine Schake, Manager, Kachemak Bay NERR

Dr. Alice Yeates, Stewardship Coordinator, South Slough NERR

# Acknowledgments

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We extend our heartfelt thanks to reserve staff and community partners at He'eia for their gracious hospitality, warmth, and good humor in hosting our large workshop group!

We offer gratitude to our local and Indigenous community partners, especially the Elders, who traveled across an ocean to participate in the workshop and share their time, stories, and knowledge.

Thanks to staff from participating NERRS and Pacific Birds for their ready willingness to help out in so many ways to help make this workshop a success.

Special thanks to Cindy Kennie and Lisa Luken at NERRA for their support administering workshop travel funds, and to Dolores Leonard at Roca Communications for thoughtful guidance with project outreach and communications.

Thanks, everyone.



Participants gather after a service-learning project at the *loko i'a kalo* (fishpond or aquaculture system) at Paepae o He'eia

# Background

The value and importance of Indigenous Knowledge, research, and resource stewardship is gaining global recognition in the fields of environmental science, conservation, and natural resource management.<sup>1,2,3</sup> Indigenous perspectives that center people as an inseparable part of nature provide a holistic counterbalance to conventional, reductionist views of humans as separate from nature, and human-nature interactions as transactional and exploitative.<sup>4</sup> Adopting a more holistic understanding of the reciprocal relationship between people and ecosystems also aligns with recent calls from the global scientific community for more dynamic and equitable valuations of ecosystem services in policy- and decision-making.<sup>5</sup> Many Indigenous resource management approaches aim to enhance ecosystem processes and services, including productivity, biodiversity, and species abundance, as a way to bolster system resilience.<sup>6</sup> Increasing the dialogue between conventional and Indigenous science opens the door for innovative co-production of locally relevant knowledge, and offers a more effective, equitable, and sustainable path forward.<sup>7</sup> There are clear social-ecological benefits of shifting towards community-based, collaborative management approaches in which local and Indigenous Knowledge, along with ancestral perspectives, technologies, and practices, can contribute to solving multiple problems that threaten the health, function, and resilience of systems.<sup>7</sup>

At the same time, global change is driving precipitous declines in biodiversity, including alarming losses in bird populations; in North America alone, we have seen a cumulative loss of nearly 3 billion birds since 1970.<sup>5,8</sup> In particular, birds that overwinter in coastal areas, including migratory shorebirds that travel extraordinary distances to winter in coastal habitats across the hemisphere, are facing the steepest proportional losses; one-third of shorebird species have experienced cumulative population losses exceeding 70% since 1980.<sup>8,9</sup> Dramatic declines in bird populations coincide with increasing pressures on coastal areas, where human populations and landscape conversion continue to expand, and where intensifying storms and sea level rise pose unprecedented threats to coastal ecosystems.<sup>10</sup> Migratory birds perform a host of important ecological functions as predators, pollinators, scavengers, seed dispersers, and ecosystem engineers, and also provide important cultural and subsistence resources for many Indigenous communities.<sup>11-15</sup> The intersection of declining populations of culturally important birds and loss of coastal habitats presents both a daunting challenge and a unique opportunity for collaboration between conservation practitioners and Indigenous Peoples and local communities (IPLCs).

The goal of this one-year project, funded by a NERRS Science Collaborative Catalyst grant, was to facilitate collaborative information sharing and learning across four sites in the Western U.S. with a common interest in better integrating conventional and Indigenous Knowledge sources and management practices, with specific applications for birds and their coastal habitats. NERRs are effective platforms for science and engagement representative of their bioregions, and each reserve collects information on the health of local estuarine environments. However, many reserves identified a need to develop more effective approaches to engage with Indigenous science, and to develop multi-fluency in place-based knowledge systems of local communities.



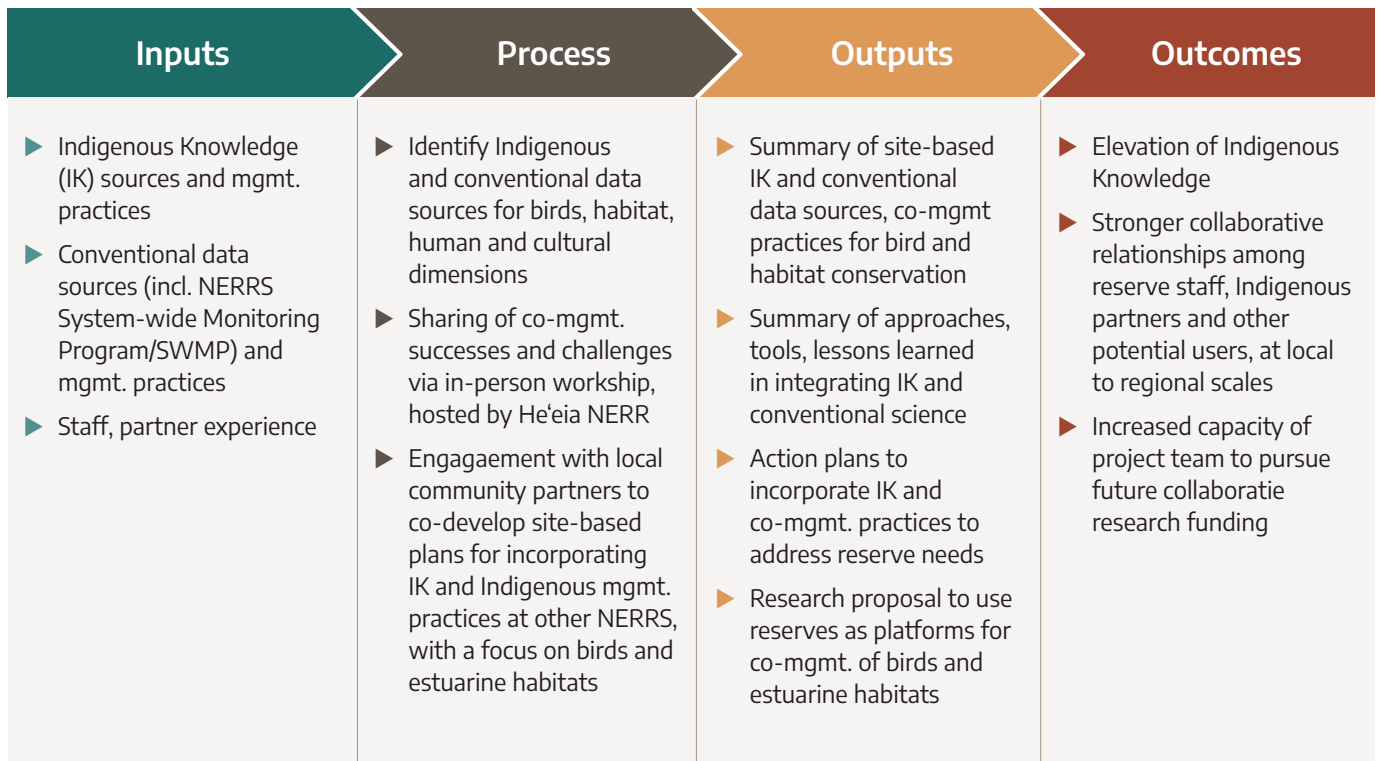
Ae'o (Hawaiian Stilt).  
Photo: Monica Iglecia

# Workshop Overview

The following is not intended as a one-size-fits-all guide for Indigenous Knowledge projects and workshops, but rather reflects our experience and lessons learned. We hope these reflections may be useful to others planning similar projects and events. We cannot emphasize enough the importance of working closely with Indigenous collaborators through every step of planning and implementation, and of being sensitive to issues surrounding Indigenous Knowledge and data sovereignty.

## Workshop Approach and Planning

We began with a relationship-building process to facilitate knowledge exchange and build competency regarding Indigenous science and biocultural restoration. As a project team, we developed and agreed upon: collaborative priorities and a plan for project work, benchmarks for project progress, and a timeline for monthly check-ins where input, feedback, and experiences of reserve staff and Indigenous Peoples and local community (IPLC) collaborators could be shared.



Logic model illustrating connections between project resources (inputs) and planned activities (process), and intended results (outputs and outcomes).

Ahead of the in-person workshop, staff at visiting reserves (Kachemak Bay, Padilla Bay, South Slough, and Lake Superior NERRs) reached out to IPLCs in each region to discuss interests and priorities, cultural and subsistence values, and potential sources of knowledge (both conventional and Indigenous) related to migratory birds and/or coastal wetland habitats. During this outreach process, the project team kept in mind the historical context of colonial knowledge appropriation, recognized that the extent and nature of knowledge exchange would vary among IPLC partners, and expressed our intention to honor Indigenous Knowledge sovereignty. Pacific Birds project team members supported site-based partner engagement and helped connect reserve staff and partners with relevant migratory bird resources and contacts, when and where appropriate. Leading up to the workshop, during fall 2023 and winter 2024, the project team held monthly virtual meetings to share updates, exchange reflections on the process, and conduct logistical planning for the workshop. The project team created and shared a digital folder where meeting notes, documents, and other project files were saved and shared.

Closer to the date of the workshop, the team held two virtual orientations for workshop participants. We shared information about project background and goals, and Dr. Kawika Winter (He'eia NERR Director and project Technical Lead) provided an overview of the co-management framework and biocultural restoration practices at He'eia, as well as Native Hawaiian cultural practices surrounding welcoming protocols and gift-giving. We shared the workshop agenda and answered participant questions about travel logistics, what to expect, and what to pack.



*Kōlea (Pacific Golden-Plovers) migrate between Hawai'i and Alaska.*

*Photo: Monica Iglecia*

Participants share reflections on their experiences during the workshop.



The workshop at He'eia was an interactive, peer-to-peer learning environment. He'eia NERR staff and community partners facilitated gatherings and group sessions, using a variety of participatory engagement techniques to support knowledge sharing. Drawing from the NOAA Office for Coastal Management Facilitation Best Practices,<sup>16</sup> facilitation methods were conducive to visual, auditory, and kinesthetic learning styles and inclusive of diverse forms of expression (e.g., storytelling, music, dance, and other forms of cultural expression). Building on guidance on Indigenous-informed facilitation and Kūlana Noi'i Research Guidelines for Hawai'i, facilitation techniques and prompts emphasized deep listening and reflective processes that acknowledge and respect local and Indigenous Knowledge and Knowledge Keepers (past, present, and future).<sup>17, 18</sup> The workshop was intentionally designed to promote multi-generational knowledge exchange and place-based learning, including service-learning opportunities (laulima in Hawaiian, 'many hands working together'). Our approach also drew from methods piloted in a previous NERRS Science Collaborative-funded project, [Cultural Ecosystem Services in Estuary Stewardship and Management](#).

A primary objective of the collaborative workshop was to learn from the co-management framework and practices at He'eia NERR, to exchange knowledge and practices from other reserves and IPLCs, and to discuss ways these frameworks and approaches could be applied in other estuarine systems with specific applications for culturally important migratory birds and habitats. We made sincere efforts to adjust the workshop agenda and planned activities in response to conversations with participants, throughout the week.

Following the in-person workshop, project team members continued to meet virtually on a monthly basis, sharing reflections and relevant applications of knowledge shared and gained at the workshop by each participating reserve and their bioregions. Staff at each reserve continued conversations with IPLC collaborators and explored ways to integrate Indigenous Knowledge, cultural values, and management practices into stewardship and management practices and priorities of each reserve.

Workshop participants step into a *lo'i kalo* (taro field), part of the wetland agroecosystem at He'eia.





# Workshop Logistics

## Dates

Monday April 22 - Friday April 26, 2024

## Location

He'eia NERR, Hawai'i Institute of Marine Biology (HIMB) [facilities on Moku-o-Lo'e](#) (Coconut Island), O'ahu

## Costs

Transportation, lodging, and meals were covered for all participants by grant funds

## Honoraria

A \$1,600 honorarium was offered to each Indigenous community collaborator who participated (including non-Indigenous Tribal staff) in recognition of cultural contributions and experiences, and to lessen burden of limited Tribal staff capacity

## Lodging

During the workshop, participants stayed in [housing at HIMB](#) (four-bed suites and other cabins). Immediately before and after the workshop, participants were offered lodging at a hotel in Honolulu, near the airport

## Meals

All meals during the workshop were catered (Monday dinner through Friday lunch). Participants were asked to inform organizers of dietary restrictions one month prior to the workshop (at the request of the caterer).

## Transportation

Multiple 7-passenger vans were rented (and driven by workshop participant volunteers) to transport participants between the airport, arrival night hotel, and HIMB, as well as to field trips throughout the week-long workshop



Workshop participants gather at HIMB on the first day for a welcoming circle and introductions.

# Workshop Agenda

Mon 4/22	Tues 4/23	Wed 4/24	Thurs 4/25	Fri 4/26	
<b>TRAVEL DAY</b> Arrival  * please plan to arrive at HIMB between 3-3:30pm	<b>Breakfast</b> (7:30-8:15am)	<b>Breakfast</b> (7:30-8:15am)	<b>Breakfast</b> (7:30-8:15am)	<b>Breakfast</b> (7:30-8:15am)	
	<b>Morning activities</b> (9am-noon) Formal Welcoming Ceremony Laulima in Lo'i (wetland agroecosystem)*	<b>Morning activities</b> (9am-noon) Laulima at Loko i'a (fishpond or aquaculture system)*	<b>Morning activities</b> (9am-noon) Exploring Sources of Water (springs up-valley)*	<b>Optional</b> (9am-noon) Tour of Kāneʻōhe Bay by boat led by Elders	
	<b>Lunch</b> (12-1pm @ Kāko'o)	<b>Lunch</b> (12-1pm @ Paepae)	<b>Lunch</b> (12-1pm @ Papahana)	<b>Lunch</b> (12-1pm)	<b>Lunch</b> (12-1pm)
	<b>Afternoon discussion</b> (1-3pm) Decolonizing/Indigenizing science and conservation (Kawika Winter, Director) Papahānaumokuākea: Another model of Indigenous-designed stewardship (Guest Speaker: Kalani Quicho, NOAA)	<b>Afternoon discussion</b> (1-3pm) He'eia perspectives on Data Sovereignty and Knowledge weaving (Shini Rii, Research Coordinator) Education and CTP in He'eia (Fred Reppun and Casey Ching, Ed/CTP Coordinators)	<b>Afternoon discussion</b> (1-3pm) Open sharing and Knowledge exchange Workshop reflections		
	<b>Break and Free Time</b> (3-5pm)	<b>Break and Free Time</b> (3-5pm)	<b>Break and Free Time</b> (3-5pm)	<b>TRAVEL DAY</b> Departure	
<b>HIMB tour</b> (4-5:30pm)	<b>Host sharing</b> (5-6pm) Explorations into ancestral memory (Kuhai Halau O Kawaikapuolani Pa Olapa Kahiko)	<b>???</b> (5-6pm) [open block] Snorkeling from the island	<b>Closing</b> (5-8pm) Explorations into ancestral memory (Hālau Hula'o Kūkunaokala'i) Farewell Pā'ina Cultural exchange		
<b>Dinner</b> (6-7pm)	<b>Dinner</b> (6-7pm)	<b>Dinner</b> (6-7pm)			

\*Off-island site visit, shuttle provided

**Laulima:** 'many hands working together'; service learning about biocultural restoration (all abilities and ages)

**Pā'ina:** traditional Hawaiian social gathering, a time for people to gather and appreciate one another over a delicious meal

The boat tour on Friday is optional for those who have time; bring snorkel gear if you have it for Wednesday, there is some gear to borrow

# Workshop Participants

In total, 41 participants traveled to Hawai'i to participate in the workshop, in what was described as the most diverse convening of Indigenous partners within the NERR system.

## Visiting participants included:

### ▶ 24 participants representing 16+ Nations/Tribal Entities

- ▷ Including 19 visiting Indigenous participants

<b>From the Chugach region (near Kachemak Bay NERR):</b>	<b>From the Salish Sea region (near Padilla Bay NERR):</b>	<b>From the Coos Bay region (near South Slough NERR):</b>
<ul style="list-style-type: none"><li>▷ Chugach Regional Resources Commission</li><li>▷ Native Village of Nanwalek</li><li>▷ Native Village of Port Graham</li><li>▷ Native Village of Chenega</li><li>▷ Native Village of Eyak (Cordova)</li><li>▷ Seldovia Village Tribe</li></ul>	<ul style="list-style-type: none"><li>▷ Samish Indian Nation</li><li>▷ Swinomish Indian Tribal Community</li><li>▷ Northwest Indian College</li><li>▷ Lummi Nation (student)</li><li>▷ Diné (Navajo Nation), Cheyenne (faculty)</li><li>▷ Lakota, Dakota (student)</li><li>▷ Native Hawaiian (student)</li></ul>	<ul style="list-style-type: none"><li>▷ Coquille Tribe</li><li>▷ Confederated Tribes of Coos, Lower Umpqua, and Siuslaw Indians</li></ul>
		<b>From the Lake Superior region (near Lake Superior NERR):</b>
		<ul style="list-style-type: none"><li>▷ Ojibwe (Fond du Lac Band of Lake Superior Chippewa)</li></ul>

- ▷ 5 non-Indigenous Tribal staff
- ▷ + 1 significant other

### ▶ 10 NERR staff (1 also a Tribal Citizen)

- ▷ + 3 family members (1 baby, 1 caregiver/spouse, 1 youth)

### ▶ 4 Pacific Birds staff

## Overall workshop participation included a number of community leaders:

### ▶ 6 visiting Tribal Elders and 4 Native Hawaiian Elders

### ▶ 3 Executive Directors of Indigenous-Led Community Organizations

### ▶ 2 Reserve Directors (He'eia NERR, Lake Superior NERR)

### ▶ 2 Reserve Managers (Kachemak Bay NERR, South Slough NERR)

### ▶ 1 Migratory Bird Joint Venture Coordinator

### ▶ And several participants representing younger generations:

- ▷ 4 Indigenous youth (ages 23, 15, 13, 2)
- ▷ 2 non-Indigenous youth (ages 12, 4 months)

# Key Takeaways

In planning, facilitating, and following up after the in-person workshop at He'eia, we gained experience and learned some important lessons. Again, we share the following reflections and takeaways in hopes that others may find them useful. Overall, the workshop was a great success and the week-long event ran smoothly – largely due to the hospitality, flexibility, and expertise of our hosts at He'eia, and to the willingness of participants to help out in many different ways.



Top: He'eia community members share Native Hawaiian pathways for accessing ancestral memory through *hula* (chant and dance) with workshop participants.  
Bottom: Helping move rocks for restoration of a *loko i'a kalo* (fishpond or aquaculture system) at Paepae o He'eia.

# Workshop Planning and Facilitation: Takeaways

- ▶ Co-develop workshop priorities and approaches with participants, and clarify cultural norms and expectations.
  - ▷ *especially important when Elders and Knowledge Keepers are invited to join*
- ▶ Offer honoraria in recognition of respected cultural contributions and expertise of Indigenous participants
  - ▷ *not a payment for service and not intended to supersede payment arrangements for consulting or contracting, but a culturally appropriate manner to recognize appreciation for a person's time and teachings shared*
  - ▷ *offer to Tribal organization or agency on behalf of Tribal staff members, if staff are not allowed to accept honoraria as individuals*
- ▶ Be aware of and acknowledge agency and organizational history in the specific context of relationships with participating Tribes and Indigenous communities.
- ▶ Intentionally invite and plan for multigenerational participation, including Elders, middle generations, and children (from infants to teens). This added richness and depth to the experience, and was highly valued by participants.
- ▶ Make sure each participant has a role to play in the workshop or some opportunity to contribute/give back. This was important to participants.
- ▶ Include place-based, service learning opportunities. These provided invaluable, shared experiences that helped build relationships and trust.
- ▶ If accessibility is an issue for field trips or projects, offer alternate options for Elders, care-takers, and mobility-limited participants.
  - ▷ *can be as simple as a shaded/protected area where participants can observe, share stories, and/or participate in accessible activities*
- ▶ Leave open time and avoid overplanning. Meals and unstructured time were valued opportunities for relationship building, story sharing, and cultural exchange.
- ▶ Ask if it is appropriate to take and/or share photos of cultural activities and community members.
  - ▷ *consult with communications staff to provide a media release form, allowing participants to opt out if they wish.*
- ▶ Hold virtual orientations before the workshop, to (1) provide an overview of project background and goals, (2) address participant questions re: what to expect (climate, terrain, accessibility, activities, amenities, packing lists, meals), and (3) discuss cultural protocols surrounding visiting, welcoming, gift-giving, etc.
- ▶ Be realistic about the time required to coordinate a workshop of this size and complexity, and budget adequate administrative funds. Consider contracting an event planner.

## Participant Feedback: Takeaways

We designed a workshop feedback survey, modeled from Indigenous evaluation methods that are narrative and holistic, and which aim to describe the relevance, effectiveness, and impact of project activities and outcomes in the context of place, setting, and community. Participants were invited to share reflections in writing, verbally, or through sharing of photos (Appendix B-C). This approach was intended to build awareness of and responsiveness to Indigenous values and ways of knowing, and to prompt participants to process their experiences in culturally relevant contexts, reflect on what worked for them, celebrate their journey, and carry that learning into future efforts.

The survey was sent to all workshop participants; 15 participants who traveled to He'eia for the event provided feedback. Feedback from participants was overwhelmingly positive, conveying deep appreciation for the experience, and a commitment to continue building relationships and working together to Indigenize conservation efforts. Overarching themes and reflections included, but were not limited to:

- ▶ Increased awareness of the **reciprocal, interconnected relationship** between humans and nature, and the need many participants felt to reflect deeply on this through a process of both learning and un-learning.
- ▶ Re-connecting people with lands, waters, and cultural practices has **cascading benefits for entire ecosystems and communities**, from improved water quality and restored wildlife habitats, to renewed cultural traditions and healing from generational trauma.
  - ▷ *this work is good for people and good for conservation*
  - ▷ *not mission drift or “just DEI” – central to the future of conservation*
- ▶ **Service-learning projects** (laulima, or ‘many hands working together’), **shared meals**, and **shared stories** build trust and are important for cultural connection.
- ▶ **Intergenerational participation and interactions** among Elders, middle generations, and children were highly valued by participants throughout the workshop.
  - ▷ *the importance of language, and of oral traditions to keep Indigenous language alive and learned by younger generations*

Rock wall of the *loko i'a kalo* (fishpond) at Paepae o He'eia.





Multiple generations help in a *lo'i kalo* (taro field).

"In the shared space of this workshop, beneath the vast canopy of stars and the embrace of ancestral spirits, I found kinship and resonance. We are bound not only by our dedication to land stewardship, but also by a shared commitment to nurturing meaningful relationships and fostering reciprocity with the earth and its inhabitants.

May our connections deepen, our partnerships flourish, and may we continue to journey together with humility, reverence, and a steadfast commitment to the work that lies before us."

– YAKAIYASTAI GORMAN-ETL, BEHAVIORAL HEALTH PROGRAM COORDINATOR, NORTHWEST INDIAN COLLEGE

"Indigenous communities have long recognized that people, water, birds and plants are connected, that they cannot be separated as they are so often in conventional scientific practice. There are some things that need to be unlearned and new things for all of us to learn...

This gathering was the catalyst for stronger partnerships between Reserves and their Indigenous partners across the Pacific, which in turn will influence how the rest of the System functions in the future. In the end, every single person left with a renewed sense of hope for the future."

– DR. KAWIKA WINTER, DIRECTOR, HE'EIA NATIONAL ESTUARINE RESEARCH RESERVE



## Post-workshop Action: Takeaways

Although the task of holding this workshop is complete, many seeds were planted that will require continued engagement and follow-up to grow into planned (and unplanned) outcomes. Post-workshop engagement continued in monthly project team meetings, and through partner meetings, planning, and actions at each visiting reserve. Trust and personal relationships were developed and strengthened during the workshop, and project team members and partners expressed a strong desire to continue strengthening these connections, and to take action to integrate Indigenous Knowledge and co-management practices to address needs of local communities in each region.

Examples of post-workshop actions taken by project collaborators to move towards co-management and co-stewardship with Indigenous partners include, but were not limited to:

- ▶ Co-developing reserve priorities (e.g., management plans, hunting/harvesting policies) with Indigenous and local community partners
- ▶ Re-framing stewardship and research priorities using a biocultural lens
- ▶ Adding educational materials and signage regarding Indigenous culture, language, history, and ongoing roles at reserves, including Indigenous place and species names
- ▶ Co-creating internship and training opportunities for Indigenous partners
- ▶ Co-developing funding proposals to support integration of Indigenous Knowledge in reserve research and restoration projects
- ▶ Formalizing Indigenous roles in reserve decision-making (e.g., formalizing inclusion of Indigenous roles in guidance documents; cooperative agreements with NERRS; expanding councils/commissions to designate Indigenous seats)

### Case study

This work can be difficult, and bringing partners who did not participate in the workshop into conversations generated during the workshop may be slow, messy, and uncomfortable.

One of the visiting NERR Managers and a Tribal Representative on the Reserve's Community Council both participated in the He'eia workshop, and introduced the idea of designating Tribal seats on the Community Council. This idea was quickly shut down by one individual with a powerful voice on the Council, and conversations that occurred during and after this meeting were not respectful, inviting, or open. Other Council members expressed support for expanding engagement with Tribes, but members had varying levels of experience regarding culturally appropriate and sensitive ways to explore the topic. Tension around this resulted in the resignation of three Community Council members, including the Chair.

However, the end result is an opportunity to redefine how the Community Council operates, supports reserve programs, and ultimately informs the NERR Management Plan. It can be difficult to assess the best entry point to discuss Indigenizing NERRs; at times it may be appropriate to proceed slowly and with an abundance of caution. Other times may call for an assertive approach that requires steadfast leadership that is fundamentally guided by shared values and respect for Tribal sovereignty. The work can be uncomfortable and unpredictable, and offering support to Managers in this journey is important. For this Reserve, the effort led to a net positive result that fosters healthier dialogue, and the Manager and Council members are hopeful that NERR management priorities will be more equitably informed by all communities within the region, moving forward.



# Helpful Resources

## Guidance for Federal Departments and Agencies on Indigenous Knowledge. 2022. Executive Office of the President.

<https://www.whitehouse.gov/wp-content/uploads/2022/12/OSTP-CEQ-IK-Guidance.pdf>

The White House Office of Science and Technology (OSTP) and the Council on Environmental Quality (CEQ) issue this guidance to assist Agencies in (1) understanding Indigenous Knowledge, (2) growing and maintaining the mutually beneficial relationships with Tribal Nations and Indigenous Peoples needed to appropriately include Indigenous Knowledge, and (3) considering, including, and applying Indigenous Knowledge in Federal research, policies, and decision making.

## Partnering with Native Nations in a Good Way Guide. 2024. Native Governance Center.

<https://nativegov.org/resources/partnering-with-native-nations-guide/>

Are you interested in collaborating with Native nations but don't know where to start? This guide shares best practices for partnering with Native nations in a good way. Developing meaningful partnerships shows respect for sovereignty and elected leaders, and affirms Tribal sovereignty.

## How to Talk About Native Nations: A Guide. 2024. Native Governance Center.

<https://nativegov.org/resources/how-to-talk-about-native-nations/>

The most important piece of advice for learning more? Do your own research first before asking for help. Too often, Native people receive repeated requests to perform emotional labor for others. Before you approach someone, ensure that you've adequately explored the huge array of existing resources on language and terminology. If you do ask for help, consider offering to compensate Native people for their time.

## Native Land (interactive map). 2024. Native Land Digital.

<https://native-land.ca/>

Native Land Digital strives to create and foster conversations about the history of colonialism, Indigenous ways of knowing, and settler-Indigenous relations, through educational resources such as our map and Territory Acknowledgement Guide. We strive to go beyond old ways of talking about Indigenous people and to develop a platform where Indigenous communities can represent themselves and their histories on their own terms. In doing so, Native Land Digital creates spaces where non-Indigenous people can be invited and challenged to learn more about the lands they inhabit, the history of those lands, and how to actively be part of a better future going forward together.

## Indigenous Data Sovereignty & Ethics Resource Hub

<https://usindigenousdatanetwork.org/resources/>

This resource inventory is a collection of diverse resources centered on bringing Indigenous Data Sovereignty and Ethics into action. The Hub is developed as part of the Rising Voices, Changing Coasts Indigenous Data Sovereignty & Ethics workgroup and is administered by the Indigenous Lands & Data Stewards Lab.

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## Appendices

### Appendix A. Follow-up 'Thank you' cards

Following the workshop, we designed, printed, and shipped cards to project teams at each participating NERR, to write personalized notes and mail to local and Indigenous community partners who attended the workshop. This was one way to express our appreciation for their time and participation and to keep in touch and continue strengthening relationships.



## Appendix B. Participant feedback survey

Following the workshop, we sent the following survey to all workshop participants, using Google Forms. Participants were invited to share reflections in writing, verbally, and/or through sharing of photos.



### He'eia Gathering: Reflection Questions and Images

Thank you for participating at the recent workshop in He'eia on integrating Indigenous Knowledge and conventional science to improve estuary stewardship and management, with shared benefits for birds and local communities.

As we process our shared experience over the past weeks we would like to open the door to share memories and moments that were most meaningful to you. The project team would appreciate your reflections on one or more of a few questions and photos. Your responses will remain anonymous, be summarized and shared back to the group in support of memory sharing, and be reviewed by the project team to inspire future action in our regions, in the National Estuarine Research Reserve System, and the Pacific Birds Habitat Joint Venture. Feel free to answer some or all of the three questions.

If you would like to respond by phone, please call and leave a message with Laura Farwell: (360) 301-0378

[laura\\_farwell@pacificbirds.org](mailto:laura_farwell@pacificbirds.org) [Switch account](#)



The name and photo associated with your Google account will be recorded when you upload files and submit this form. Your email is not part of your response.

Any files that are uploaded will be shared outside of the organization they belong to.

## Appendix B. Participant feedback survey (continued)

### Photo Question 1

We spent time together, shared experiences and meals, and listened to/heard stories from the people of He'eia. Here, we participated in preparing the Lo'i Kalo (taro field) for planting.



**What did you value most about our time together and shared experiences?**

Your answer

Back

Next

Clear form

## Appendix B. Participant feedback survey (continued)

### Photo Question 2

We heard about the co-stewardship framework at He'eia, biocultural restoration practices, and perspectives on weaving together conventional and Indigenous Knowledge systems and Indigenizing science. Here we discuss our intentions and reflections on the experience.



**What was a new experience or knowledge you gained, and who would you share it with?**

Your answer

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**Appendix B. Participant feedback survey (continued)**

**Photo Question 3**

We saw applications for site-based work in each place we visited within the He'eia reserve. Here, we participated in Laulima (many hands working together) moving stones to repair the fishpond wall.



**What is the next step you are motivated to take in your own life's work as a result of this event?**

Your answer

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**Appendix B. Participant feedback survey (continued)**

**Further Thoughts**

Thank you again for your participation and for sharing your perspectives! If you have additional reflections or want to let the team know how you are sharing about this work in your own way (sharing with peers or colleagues, reports to councils, documenting for courses, etc.) please feel free to comment below, add additional photos or email us with details: Laura Farwell (laura\_farwell@pacificbirds.org)

If you have a photo that captures a meaningful memory or reflection that you want to share, please link or upload it here and caption it with your answer:

**What comes to mind when you see this photo?**

**What is the significance, importance, or value captured in this image?**

Upload up to 5 supported files. Max 10 MB per file.

 Add file

Any further thoughts you would like to share?

Your answer

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## Appendix C. Participant feedback – 13 survey responses + 2 emails

### #1. What did you value most about our time together and shared experiences?

- I loved the openness and kindness of those leading the groups. I loved the time spent working together on these outings each day. The hands on and the stories behind the work we were doing really made you feel like you were a part of something bigger than all of us. I wish more gatherings were like this.
- I valued the sense of community and being able to hear from indigenous youth/elders. I feel that is something that has been lacking for me. It was amazing to hear all of these wonderful stories and connect it to my work/life. I am taking all of the lessons I learned to heart. :)
- Learning about bio-cultural restoration.
- The hands on experience, as doing things together builds stronger bonds than just talking about things together. Additionally, witnessing the native birds, plants and wildlife thrive again after native plants and ecosystems were returned.
- I most value the shared sense of awe and gratitude for the place and people of He'eia and the expansive and multi-faceted generosity of everyone we met throughout the week. There was so much kindness and beauty. I also valued the opportunity to experience the land directly and to express our gratitude through service.
- I valued the conversation, learning about the structure of He'eia as a NERR, and the sharing of doing and dance. I also valued being able to contribute physical labor to steward the land and water.
- That the indigenous people have been using the same methods for centuries, and are one with their environment, respectful stewards of the land they inhabit.
- The feeling of respect for one another and of the land...this experience of going in the field to help prepare the land for planting taro was exceptional!! I envisioned the ancestors and even those today gathering together to plant and harvest this special vegetable that feeds their people.
- Hearing different view points from a very diverse group, but finding commonalities; hearing from other tribes that they found the work in Hawai'i inspirational. The deeply meaningful cultural practices that the He'eia team shared with us. Hearing the story of how He'eia was saved.
- I felt that the most valuable part of our time together was the tangible integration of culture, songs, and stories with every location and task that we participated in. Being able to experience this as a group gave me an immense sense of purpose and gratitude each day that we were together!
- I really cherished the sense of togetherness we formed as a group throughout this workshop. I loved coming together every day to contribute our time and bodies to the important projects being done by He'eia's partners. I also so appreciate the knowledge shared with us by the staff, partners, and community members at He'eia Reserve. It was so inspiring to hear their stories of triumphs and struggles in the effort to steward the land in a way that is meaningful both ecologically and culturally. I'm bringing back a lot of ideas we can implement at my Reserve.

- It was very inspiring to see how the people of He'eia have continued to practice cultural practices and tradition despite incredible pressure from outside sources.
- Working alongside multiple generations of elders, parents, and youth was so meaningful. So often in conventional science (and the modern workplace in general), we're expected to compartmentalize ourselves. Being a mother and coming from a multicultural background are two important aspects of who I am that I have often felt pressure to push aside, in my professional life. How refreshing and joyful to see the connections between work, family, culture, community, and the natural world not only welcomed but celebrated! It was eye-opening to see this is not only good for our spirits, it brings much-needed depth and perspective to our work and the challenges that we face.

## **#2. What was a new experience or knowledge you gained, and who would you share it with?**

- I suppose the Taro fields and Taro plant has been something I have shared the most with people in the most detail. I have shared about the fish pond wall building but we really just carried rocks for that one even though what they were doing was cool and it was cool to see the birds already using the space they had cleared of the mangrove. But we got to get in the mud and pull weeds and stomp mud and really be a part of the process with the Taro fields.
- I learned that it is possible to have an indigenous framework in a western focused society. It is evident at He'eia that the indigenous lens is embraced and preferred which is unfortunately uncommon where I work. It is refreshing and something I shared with all my coworkers.
- Bio-cultural restoration – and I have been sharing with everyone I can!
- The power of collaboration and not quitting at the first "no".
- I gained a stronger deference and appreciation for the insight and the ways Indigenous elders teach. I felt humbled by their strength and persistence. I reckoned with my own unknowing and naivete, as someone who experiences the unearned privilege of being white and whose ancestors also lived in that privilege. I realized (and perhaps realize over and over) that the real nexus of change towards biocultural restoration is both inside individual people and in the ways we interact as a collective. As I said to several friends afterwards, biocultural restoration is both a revival and an undoing. It takes everything you've got. I have shared this with the staff at our Reserve in the best ways I can, but I have also felt really quiet and internally reflective about it. I feel like I got stronger in my commitment to use the tools and influence available to me to support the resurfacing and revitalization of Indigenous Knowledge in conservation.
- I learned about He'eia NERR's research screening process and would like to share it with other researchers in my region.
- That people can work together in a good way to learn and solve the issues facing Mother Earth and all the nonhuman relatives. I will share this with everyone.
- Yes, another valuable experience...It is so important to hear and learn how others work to restore practices that works best for the people. I loved hearing the many inventive ways people mass produce and yet still concerned for each individual that uses and for those that must learn in order to keep the traditional practice going.

- I learned that He'eia was almost lost to development. I would share that with my fellow conservationists.
- For me the experience of Laulima wasn't necessarily new, but it is something I have been talking a lot about since returning home from the trip. I found it so valuable to work alongside folks of different backgrounds and ages. I am used to working with people that are a similar age to me, so seeing how the many generations all worked together to tend to the land was super special. I believe that incorporating this into the work that I do can be extremely healing for my community.
- Most of the time in our work, it's GO, GO, GO! Especially during field season. It was new for me to be able to slow down enough to think so carefully about the work we were contributing to. I would share with our Reserve staff that it's okay to slow down sometimes and take time to deliberately and consciously contribute to a project together.
- It was helpful to see these successful examples of integrating TEK with conservation objectives. I hope that my department can better listen to the Community we represent, and also look for opportunities to engage and include the Swinomish Community in our research.
- Seeing the success of biocultural restoration at He'eia, and the lack of distinction between people and their environment, was a profound experience of un-learning. I've been sharing this lesson with anyone who will listen, that reconnecting people and communities with traditional lands/waters and cultural practices is not only good from a social and environmental justice lens -- it brings benefits and ripple effects for entire ecosystems.

### **#3. What is the next step you are motivated to take in your own life's work as a result of this event?**

- Every year I pick up trash from town to 13 miles out the road. I walk the beaches and do my best to be hands on with work that keeps our environment clean and healthy. I have picked up 3 vehicle batteries that have been left on the side of the road so far this last month. In my work life I have been graced with the ability to share my subsistence knowledge. I was recently talking to a group of young adults and I was able to let one of them try their hand at harvesting a Bidarki. I then asked who would like to try some raw Bidarki. I was surprised as to how many were willing to try it. Giving people that option to have hands on experience will stick with them longer than a powerpoint presentation ever will.
- My next step is to really push bringing indigenous stories into our everyday work. There are stories that can be connected to all of our projects. Telling these stories will connect us to our work and remind us why restoration/conservation is so important.
- Working with landowners in the Chugach region to work together and restore important habitat.
- I would like to advocate more as a Tribal Council Chair for what we are able to do for our people and environment through federal and state channels. Partnerships are also important to pursue to be stronger through this advocacy.
- I am about to co-lead a biocultural restoration project here. This gave me a structure (work on the land, shared meals, time with elders and children) and a lens to build events and community engagement around. I already changed a staff retreat last month to start with a

walk through the Reserve's forest with elders in the morning. It was awesome. I also observed how often people gave what was needed without being asked, especially folks at He'eia. This helped me realize that my friend, who is undergoing treatment for cancer, needed me to help clean up the house. I spent a morning house cleaning instead of taking them out for coffee because that's what was needed and I was able to see it. I really want to hold onto that understanding in my personal and professional relationships (and the relationships that overlap between the two).

- I am motivated to be more patient as I make leadership decisions.
- Keep moving forward in a good way. Make an effort to form more collaborations toward achieving more sustainable outcomes.
- Another example of how working together for the good of all is so important. When there exists an invasive species that threatens and grossly prohibits the natural existence of other plantlife, it affects the whole environment, man and earth...there exists an imbalance and restricts use of the land. Same goes for what exists in the water. We are caretakers and guardians of our own kind and should work together to keep it so.
- To continue to ensure that lo'i and loko i'a are included in wetland management and conservation planning for waterbirds, and to work harder to ensure that work is genuinely about co-management and co-stewardship.
- I am super motivated to incorporate more of my communities stories into everything that I do! I have already been hard at work doing this. In fact, the other day I was on a boat with two of my coworkers and I told a story about Kulshan and his two wives. A little later that day we saw Orcas!! I told this to one of my directors, and he said that the orcas heard the story of our ancestors and came to say hi. The orcas will do this when we sing our songs as well!
- I want to strive to maintain this partnership and community we built at He'eia. In the Washington group, we have already started working towards this by creating a spreadsheet to communicate our different groups' events we would like to invite partners to participate in. I'm hoping this will foster good communication between our groups about what we're working on, as well as help maintain our friendships through coming together regularly.
- The sense of Community in the places we visited is very powerful. It's inspiring to look for ways to engage with my local Community in a way that is respectful to local tribes and supports the conservation of shared natural resources.
- I am so inspired to continue building on this work with my community and regional partners. Definitely committed to help plan and participate in more events that include multiple generations, Laulima activities, and of course lots of good food!

#### **#4. Any further thoughts you would like to share?**

- I think some of the elders thought they would have more input by talking about hunting of migratory birds or fishing. Maybe have a session with that formal information even if it isn't how this program was set up. Its a Western construct I suppose and that is how some folks feel free to be able to share.
- I would love for this type of event to occur at all of the NERR's, I think it could really hold all of us accountable for taking what we learned from He'eia into action.

- I appreciate the Hawaiians ability to integrate their culture into their every day work practices. It is admirable and something to strive towards.
- Mark getting to travel across the ocean for the first time in 52 years was a pretty momentous experience. I'm really grateful for the magic of the NERRS community.



- A huge THANK YOU for putting this together- it was a very meaningful experience.
- This was a once in a lifetime experience. I am humbly grateful to have been a part of this gathering/workshop.
- This was a deeply thought provoking experience that caused me to examine my own motivations and actions and to think carefully about my place in wetland management and conservation in Hawai'i.
- I have so much gratitude for everyone who organized this and attended! Hóy7sxwq'e!



- Very powerful workshop and many meaningful conversations shared. I hope to build on those conversations with other participants from WA state.
- Incredibly grateful for the opportunity to take part in this event. Will continue to reflect on my own personal and professional roots in cultural and ancestral knowledge. Thanks to all who made the experience possible.

**Email feedback 1.**

Good Afternoon. I've been meaning to write you my thoughts on the whole trip....which was phenomenal!!!! Thank you for this outstanding experience! Numerous times I reflected on moments that we had - listening to various presentations and times out in the field! I shared with numerous people how impressed I was that the indigenous people are reviving and strengthening so much of their culture to continue reflecting their ancestral ways. I so admire Aunty Rocky! What a fighter! Just listening to her convinced me that she was and is one committed woman to her people! I really felt stronger in my beliefs that we can survive if we take care of our resources. Our generations to come will hopefully cherish that. And the people....Ohh so genuine! ..real people! Kawika was an excellent host. His manner of respect shown through. I'm still proud of him.

All those involved in making this trip happen were outstanding! Thank you for showing so much how you cared..not only for us but for what you do!

It truly was one of the better trips I ever made especially all the wonderful sharing and learning! I was deeply impressed!.

Almost every day since being home, it's rained! I wish I coulda "canned" some of that wonderful sunshine we had down there!

Busy, busy month...we have a couple graduates and the festivities have begun in this small village! Happy summer's "almost" here. I should be more thankful, I got off the phone with my sister in Nome during lunch and she was fit to be tied putting up with yet another snow storm they are having!

With love and respect for what you do.



## Email feedback 2.

Ya'a'teeh (Greetings),

With profound gratitude and a heart overflowing with emotion, I extend my sincerest appreciation to each and every one of you for the extraordinary experience and the privilege of partaking in the He'eia Workshop nestled within the sacred lands of Native Hawaiian territories. Attempting to encapsulate the depth of my encounters and the profound impact of this journey feels like trying to contain the boundless ocean within a single droplet. While I penned a humble summary of my experiences and observations, words falter in conveying the ineffable sentiments that reside in the depths of my soul, stirred by the transformative work undertaken by the diverse organizations we were honored to engage with.

To witness firsthand the dedication, resilience, and profound wisdom of those committed to the stewardship of these lands and the well-being of humanity has left an indelible mark upon my spirit. It is a humbling privilege to reflect upon my own journey, my purpose, and the ways in which I navigate my role in serving my students and indigenous communities. In the shared space of this workshop, beneath the vast canopy of stars and the embrace of ancestral spirits, I found kinship and resonance with each of you. We are bound not only by our dedication to land stewardship but also by a shared commitment to nurturing meaningful relationships and fostering reciprocity with the earth and its inhabitants.

From the depths of my being to yours, I offer my deepest appreciation and heartfelt gratitude for the opportunity to walk alongside you on this sacred path. May our connections deepen, our partnerships flourish, and may we continue to journey together with humility, reverence, and a steadfast commitment to the work that lies before us.

Please reach out anytime and I am hoping to continue the dialogue as well as contribute to any work being done.

Axhéé'héé Nitsaago (Huge Thank you)

