

**JOSH GREEN, M.D.**  
Governor

**SYLVIA LUKE**  
Lt. Governor



**SHARON HURD**  
Chairperson, Board of Agriculture

**DEXTER KISHIDA**  
Deputy to the Chairperson

State of Hawai'i  
**DEPARTMENT OF AGRICULTURE**  
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**TESTIMONY OF SHARON HURD  
CHAIRPERSON, BOARD OF AGRICULTURE**

**BEFORE THE HOUSE COMMITTEE ON AGRICULTURE AND FOOD SYSTEMS**

**FEBRUARY 07, 2024  
9:30 AM  
CONFERENCE ROOM 325**

**HOUSE BILL NO. 2001  
RELATING TO RESTORATIVE AQUACULTURE**

Chair Gates, Vice Chair Kahaloa, and Members of the Committee:

Thank you for the opportunity to testify on House Bill 2001. The bill requires the Department of Agriculture's Aquaculture Development Program to conduct a feasibility study to identify potential sites in the State for restorative aquaculture activities and makes an appropriation. The Department supports this bill.

Restorative aquaculture is an emerging sector in the State's aquaculture portfolio. Thorough planning is necessary to sustain initiatives that incorporate the conservation benefits with good aquaculture practices. The identification of viable restorative aquaculture locations will support permitting, resource allocation, and community support for projected activities.

As such, the Department supports this measure. Thank you for the opportunity to testify on this measure.





**LATE**

**HB2001**  
**RELATING TO RESTORATIVE AQUACULTURE**  
Committee on Agriculture & Food Systems

February 7, 2024

9:30 am

Room 325

The Office of Hawaiian Affairs (OHA) **SUPPORTS** HB2001, which requires the Department of Agriculture's Aquaculture Development Program to conduct a feasibility study to identify potential sites in the State for restorative aquaculture activities and general fund appropriations.

For millennia, Native Hawaiians built and maintained a successful and thriving ecosystem of traditional loko i'a (fishponds) and lo'i (taro) fields across the Pae 'Aina. Native Hawaiian traditional ecosystem and resource management methodologies and practices have garnered national and international recognition. Some estimates suggest these successful, thriving, and abundant practices helped to feed around 1 million people, almost as many that are living in the Hawai'i today.

Sadly, European and American contact and colonization led to changes in our land tenure systems, excessive development and environmental degradation, leading to damage, and destruction of many of our traditional loko i'a and lo'i and the subsequent ecosystems surrounding them. Today, the hard work of rebuilding, restoration and revitalization many of our remaining traditional loko i'a and lo'i are being done by Native Hawaiians practitioners, families, and communities in collaboration and partnerships, with non-profits, state and federal agencies, including OHA.

OHA supports a feasibility study for the restoration of native species of seaweed and native bivalve oyster species as an important next step for restoring the health and well-being of the traditional ecosystems of Hawai'i. We look forward to the potential such a study can have for our native food systems and economies.

Accordingly, OHA urges the committee to **PASS HB2001**. Mahalo nui for the opportunity to testify on this important issue.



Testimony Before The  
House Committee on Agriculture and Food Systems  
**SUPPORT WITH COMMENTS ON HB2001**  
Wednesday, February 7, 2024, 9:30AM, Room 325

We are Olan Leimomi Fisher and Brenda Asuncion Lima, Kua'āina Advocate and Hui Mālama Loko I'a Coordinator, respectively, testifying on behalf of [Kua'āina Ulu 'Auamo \(or KUA\)](#). "Kua'āina Ulu 'Auamo" stands for "grassroots growing through shared responsibility," and our acronym "KUA" means "backbone." **Our mission is to connect and empower communities to improve their quality of life through the collective care for their biocultural (natural and cultural) heritage, serving as a "backbone organization" that supports creative and community-driven solutions to problems stemming from environmental degradation.** Hawai'i's biocultural resources continue to be negatively impacted by political, economic, and social changes, and the increasing dangers of climate change make fostering and empowering resilient communities acutely critical.

Currently KUA supports three major networks of: (1) almost 40 mālama 'āina (caring for our 'āina or "that which feeds") community groups collectively referred to as E Alu Pū (moving forward together); (2) over 60 loko i'a (fishpond aquaculture systems unique to Hawai'i) and wai 'ōpae (anchialine pool systems) sites in varying stages of restoration and development, with numerous caretakers, stakeholders, and volunteers known as the Hui Mālama Loko I'a ("caretakers of fishponds"); and (3) the Limu Hui made up of over 50 loea (traditional experts) and practitioners in all things "limu" or locally-grown "seaweed." Our shared vision is to once again experience what our kūpuna (ancestors) referred to as '**āina momona** – abundant and healthy ecological systems that sustain our community resilience and well-being.

**KUA supports, with comments, HB2001 as an incremental step on a pathway towards 'āina momona.** We believe that to best achieve 'āina momona, this feasibility study should:

- 1) Include analysis for nearshore fish species as well as limu and bivalves – especially those culturally-valued by Native Hawaiians and loko i'a practitioners; and
- 2) Prioritize engagement with rural and Native Hawaiian communities and nonprofits already piloting restorative aquaculture with native fish and limu species.

KUA's coordinators and participants in all three of our networks have built stronger connections to the Department of Agriculture and the aquaculture community at-large knowing very well that to reach a vision of greater food self-sufficiency we need to transform our culture, values, and institutions together. **Restoration of our nearshore fisheries should support and prioritize the food systems that uphold subsistence lifestyles and practices in our community, including our subsistence lawai'a (fishers).** Supporting a restorative aquaculture feasibility study is significant to reviving the abundance of our shorelines with an

added possibility of producing commercially valuable yields from healthy regenerative ecosystem services.

Approaches to restorative aquaculture are not new to Hawai'i; rural and Native Hawaiian community initiatives have talked about them for a long time. **Over thirty years ago in 1993, Governor Waihe'e's Task Force on Moloka'i Fishpond Restoration recommended that "the State of Hawai'i...actively support and help fund the development of a hatchery to provide seedstock for fishponds and stock enhancement of the reefs."** Many practitioners envision a future when loko i'a can be stocked again from natural populations of prized species such as 'anae, but since those fisheries are depleted in many areas across Hawai'i, hatchery-raised fingerlings are an important component of the restoration efforts for loko i'a and their surrounding waters. In our conversations with the Hui Mālama Loko I'a, practitioners from 24 loko i'a on 5 different islands have indicated this opinion in the past several years. Looking beyond the boundaries of the fishpond walls, loko i'a themselves are key assets to restocking the wild fishery by serving as enhanced nursery areas for the baby fish.

As we look to the future, our communities are raising the kupa'āina who want to have jobs focused on mālama 'āina. The recent increased capacity of the DOCARE Academy enrollment is one example, and greater aquacultural capacity and economy are also possible pathways for our young people to flourish. The communities we work with are committed to ensuring the long-term health of our biocultural resources that they have cared for and depended on for generations since time immemorial. **We believe our environment, the foundation of our very existence, is about long-term investment and a vision of 'āina momona.** To get there it requires taking the steps necessary for greater self-sufficiency, development of a pipeline of new and more innovative career pathways, mindsets, relationships, and resources for mālama 'āina efforts. Passing this bill out of your committee is a start on a pathway toward reaching this vision. **Please support this feasibility study, adding "fish" into the analysis along with limu and bivalves, and prioritizing collaboration with our local nonprofits and communities already restoring loko i'a and utilizing time-tested traditional and customary practices.**

Mahalo for this opportunity to testify on this important issue.

**Aloha 'Āina Momona.**



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February 7, 2024

HEARING BEFORE THE  
HOUSE COMMITTEE ON AGRICULTURE & FOOD SYSTEMS

**TESTIMONY ON HB 2001**  
RELATING TO RESTORATIVE AQUACULTURE

Conference Room 325 & Videoconference  
9:30 AM

Aloha Chair Gates, Vice-Chair Kahaloa, and Members of the Committee:

I am Brian Miyamoto, Executive Director of the Hawai'i Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,800 farm family members statewide and serves as Hawai'i's voice of agriculture to protect, advocate, and advance the social, economic, and educational interests of our diverse agricultural community.

**The Hawai'i Farm Bureau supports HB 2001**, which requires the Department of Agriculture's Aquaculture Development Program to conduct a feasibility study to identify potential sites in the State for restorative aquaculture activities.

Hawai'i's aquaculture industry farm gate value is \$80,000,000, the second-highest contribution to the economy in diversified agriculture. Hawai'i's favorable climate and geography allow for inherent advantages benefitting aquaculture production.

The Legislature acknowledged the importance of Hawai'i's aquaculture industry by revitalizing the Aquaculture Development Program through Act 63, SLH 2019. However, more investment and research into the aquaculture industry is needed, including investment and research into different types of aquaculture, aquaculture system optimization, and economic implications of various methods of aquaculture production.

Restorative Aquaculture is a sustainable opportunity for food production that can also benefit the ocean and climate. Seaweed and bivalves can provide food for Hawai'i while requiring almost no feed or fresh water while also helping to restore coastal ecosystems by improving water quality and removing excess nutrients and carbon dioxide.

Hawai'i is well-positioned and suited for restorative aquaculture because of our favorable climate, critical ocean biosecurity through natural isolation, and high seafood consumption. Restorative Aquaculture can help strengthen and grow Hawai'i's aquaculture industry and also provide environmental benefits.

Thank you for the opportunity to testify on this important matter.



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PO BOX 746  
KALAHEO, HI 96741

2/6/2024

TO: Rep. Cedric Asuega Gates, Chair; and Rep. Kirstin Kahaloa, Vice Chair  
House Committee on Agriculture & Food Systems

Wednesday, February 7, 2024, 9:30 a.m.; State Capitol Conference Room 325 & the [House YouTube](#) channel

**RE: COMMENTS TO HOUSE BILL 2001 – Requires HDOA ADP to conduct a feasibility study to identify potential sites for restorative aquaculture activities.**

Aloha Chair Gates, Vice Chair Kahaloa, and Members of the Committee,

Kauai Sea Farm would like to comment on HB 2001 – Relating to a feasibility study for restorative aquaculture. There is tremendous potential for restorative aquaculture in Hawaii, and we support this feasibility study, but we are concerned about the ability of HDOA to efficiently conduct a meaningful study without the cooperation of DLNR. The type of production described in this bill implies that restorative aquaculture will involve native species grown in Hawaii state waters. Our understanding is that permitting of aquaculture activities for native species currently falls under the purview of DLNR, as does the use of nearshore state waters for any type of activity or production. We would like to see more involvement of DLNR in this feasibility study, as this agency cooperation will be necessary for any meaningful study results.

Kauai Sea Farm is a family-owned business located on Kauai Island, actively involved with restorative aquaculture production in the Nomilo Fishpond. We are the only producer of clams for food in Hawaii, and are engaged in federally and locally funded research projects to establish a hatchery supply for native species that have potential for restorative production and are highly valuable. This bill pertains directly to our current work and ambitions, and we sincerely appreciate the attention paid to these opportunities. We support the nature of this bill, but hope to inform legislators of the need to involve DLNR in this process.

Thank you for the opportunity to testify in comment of this measure.

Sincerely,

David Anderson  
Production Manager  
Kauai Sea Farm  
(808) 652-3791  
dave@kauaiseafarm.com

**HB-2001**

Submitted on: 2/6/2024 8:51:22 AM

Testimony for AGR on 2/7/2024 9:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Ronald Weidenbach	Hawaii Aquaculture and Aquaponics Association	Support	Written Testimony Only

Comments:

The Hawaii Aquaculture and Aquaponics Association (HAAA) supports the intent of HB2001 but requests that the deliverables for this proposed feasibility study for resstorative aquaculture be broadened to carefully assess the economic development potential of this form of aquaculture as well as its technical, natural resource, and community benefit considerations.

**HB-2001**

Submitted on: 2/5/2024 9:04:35 PM

Testimony for AGR on 2/7/2024 9:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Uilani Naipo	Individual	Support	Written Testimony Only

Comments:

I support this measure.

- U'ilani Naipo