

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA

P.O. BOX 621
HONOLULU, HAWAII 96809

Testimony of
DAWN N. S. CHANG
Chairperson

Before the Senate Committee on
AGRICULTURE & FOOD SYSTEMS

Wednesday, March 13, 2024
8:30 AM

State Capitol, VIA VIDEOCONFERENCE, Conference Room 325

In consideration of
SENATE BILL 2329, SENATE DRAFT 1
RELATING TO AQUACULTURE

Senate Bill 2329, Senate Draft 1 proposes to appropriate moneys for mullet production for fishponds and stock enhancement, including for new positions, equipment, maintenance, and operating costs. **The Department of Land and Natural Resources (Department) supports this bill, provided that its passage does not replace or adversely impact priorities indicated in the Executive FY 2025 Supplemental Budget Request, and offers the following comments.**

The Department is generally supportive of measures that promote and strengthen aquaculture throughout the state, and the increase of mullet production for fishponds and stock enhancement aligns with the Department's vision. This bill appropriates funds for two full-time equivalent (2.0 FTE) aquatic biologist V positions, two full-time equivalent (2.0 FTE) aquatic biologist IV positions, three full-time equivalent (3.0 FTE) fishery technician V positions, and one full-time equivalent (1.0 FTE) fishery technician IV position. These positions would be located at the Division of Aquatic Resources' Anuenue Fisheries Research Center on O'ahu, the Wailoa Fisheries Research Station in Hilo, Hawai'i, and Wai'anae High School in Wai'anae, O'ahu. Additionally, this bill appropriates funds for the purchase of shipping containers for office space and plankton production, tanks, backup generators, and hatchery equipment. These positions and operating funds will greatly enhance the Department's ability to support mullet production and other restorative aquaculture projects throughout the State.

Because of Hawai'i's isolated geographic location in the middle of the Pacific Ocean, coupled with its high dependency on food imports, the state is at a high risk of unexpected supply chain

DAWN N.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

RYAN K.P. KANAKA'OLE
FIRST DEPUTY

DEAN D. UYENO
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE
MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

disruptions that could threaten its food supply. The State of Hawai‘i, along with many non-governmental organizations, have recognized this threat and rightly pursued ideas and policies that help promote and encourage initiatives to increase local food supply, thereby lowering our dependency on out-of-state food shipments.

When responsibly and sustainably managed, aquaculture can be an integral part of local food production and security. Aquaculture also has the potential to reduce fishing pressure on stressed fish stocks which can lead to the recovery of native fish and invertebrate species that have been overexploited in the past. Appropriating funds, including for positions, equipment, and maintenance and operating costs, for mullet production for fishponds and stock enhancement is a measure the Department supports.

Mahalo for the opportunity to provide testimony in support of this measure.

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
KA 'OIHANA MAHI'AI
1428 South King Street
Honolulu, Hawai'i 96814-2512
Phone: (808) 973-9600 FAX: (808) 973-9613

**TESTIMONY OF SHARON HURD
CHAIRPERSON, BOARD OF AGRICULTURE**

BEFORE THE HOUSE COMMITTEE ON AGRICULTURE & FOOD SYSTEMS

**MARCH 13, 2024
8:30 AM
CONFERENCE ROOM 325**

**SENATE BILL NO. 2329, SD1
RELATING TO AQUACULTURE**

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

Thank you for the opportunity to testify on Senate Bill 2329, SD1. The bill appropriates funds, including for positions, equipment, and maintenance and operating costs, for mullet production for fishponds and stock enhancement. The Department supports this bill.

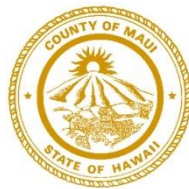
Dependable hatchery operations are a key component to sustained aquaculture development. They provide consistent supply of healthy juveniles for grow-out systems and foster research and development in disease, breeding, and husbandry. The initial focus on mullet with the intention to support other species fits well with the Department's plan to expand the aquaculture industry.

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



RICHARD T. BISSEN, JR.
Mayor

JOSIAH K. NISHITA
Managing Director



OFFICE OF THE MAYOR
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793
www.mauicounty.gov

LATE

TO: Representative Cedric Asuega, Chair
Representative Kirstin Kahaloa, Vice Chair
Committee on Agriculture and Food Systems

Representative Kyle Yamashita, Chair
Representative Lisa Kitagawa, Vice Chair
Committee on Finance

RECEIVED
Date & Time
Mar 12, 2024, 10:40 pm

FROM: Richard T. Bissen, Jr., Mayor
Rogerene Arce, Director of Agriculture

DATE: March 12, 2024

SUBJECT: **SUPPORT OF SB2329, RELATING TO AQUACULTURE**

Thank you for the opportunity to testify in **SUPPORT** of this important measure. The Act Appropriates moneys for mullet production for fishponds and stock enhancement, including for new positions, equipment, maintenance, and operating costs. Declares that the appropriations exceed the state general fund expenditure ceiling for 2024-2025

We **SUPPORT** this measure for the following reasons:

1. This bill provides vital funding for sustainable aquaculture by funding mullet production for fishpond recharge and stock enhancement.
2. This bill funds much needed equipment, maintenance, and operating costs that will increase our agricultural workforce and industry as a whole.
3. This bill will begin to take steps towards the development of a resilient environment and a healthy public. The restoration of our aquaculture and fishponds in particular addresses climate change adaptation, food and nutrition security, and presents a unique opportunity economically.

For the foregoing reasons, we **SUPPORT** this measure.



Testimony Before The
House Committee on Agriculture & Food Systems (AGR)
IN SUPPORT OF SB2329 SD1
March 13, 2024, 8:30 AM, Room 325 & Via Zoom

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 SB2329 as an incremental step on a pathway towards 'āina momona. We urge your committee members to review this [wonderful Hawai'i Public Radio piece by Ku'uwehi Hiraishi](#) published March 7, 2024 on this effort, particularly at Wai'ānae High School's Marine Science Learning Center. This bill would appropriate a currently uncertain sum for the Department of Land and Natural Resources' (DLNR's) Hatchery Programs to support:

- (1) Two full-time equivalent (2.0 FTE) Aquatic Biologist V positions, one at the Division of Aquatic Resources' (DAR's) Ānuenuue Fisheries Research center on O'ahu and one at Wa'ianae High School;
- (2) Two full-time equivalent (2.0 FTE) Aquatic Biologist IV positions, one at DAR's Ānuenuue Fisheries Research Center on O'ahu and one at DAR's Wailoa Fisheries Research Station in Hilo, Hawai'i;
- (3) Three full-time equivalent (3.0 FTE) Fishery Technician V positions, one at DAR's Ānuenuue Fisheries Research Center on O'ahu, one at Wai'ānae High School, and one at DAR's Wailoa Fisheries Research Station in Hilo, Hawaii; and
- (4) One full-time equivalent (1.0 FTE) Fishery Technician IV position at Wai'ānae High School.

Furthermore, the bill appropriates out of the state's general revenues the sum of \$4,500,000 for (1) shipping containers for office space and plankton production, (2) tanks; (3) backup generators; and (4) hatchery equipment for all facilities, as well as \$150,000 for maintenance and operating costs including feed, supplies, electricity, and water.

KUA's coordinators and network participants in all three of our networks have built stronger connections to DLNR-DAR and the aquaculture community, knowing very well that to reach a vision of greater food self-sufficiency we need to transform our culture, values, and institutions **together**. Supporting a DLNR role in producing fingerlings and limu for restorative aquaculture would directly address one of the recommendations in the 1993 Report of the Governor's Task Force on Moloka'i Fishpond Restoration. This report was published nearly 30 years ago, but many of its findings are still relevant and indeed, important to fishponds on most other islands in Hawai'i, not only those on Moloka'i. A [Loko I'a Needs Assessment](#) finalized in November 2020 reiterated the continued interest in contemporary aquaculture technology to support fishpond revitalization. We acknowledge the existing resources and technical capacity within DLNR-DAR's existing hatchery program and encourage this proposed further support to build towards that vision of 'āina momona - increasing Hawaiian fish for Hawaiian waters and food system infrastructure.

Importantly, the 1993 report 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. **We appreciate creative and collaborative approaches that build the capacity and skills of the next generation with intention, and in a way that benefits ongoing community efforts at loko i'a as a catalyst for ecosystem regeneration.**

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.

Mahalo for this opportunity to testify in strong support. **Please PASS SB2329 SD1.**

Aloha 'Āina Momona no nā kau ā kau.



The Marine Science Learning Center at Wai'anae High School

85-251 Farrington Hwy, Wai'anae HI 96792

Phone: (808) 697-9400

March 11, 2024

To: Representative Cedric Asuega Gates, Chair
Representative Kirstin Kahaloa, Vice Chair
Members of the House Committee on Agriculture & Food Systems

RE: SUPPORT FOR SENATE BILL 2329

RELATING TO AQUACULTURE – Appropriates funds, equipment, maintenance, and operating costs for mullet production for fishponds and stock enhancement

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

My name is Katie Kealoha, I am the coordinator of the Marine Science Learning Center at Wai'anae High School and I am writing to strongly support SB 2329: Mullet production for fishponds and stock enhancement.

At the Learning Center, we have utilized our on campus saltwater aquaculture facility for decades to teach students scientific concepts, entrepreneurial skills and the importance of food systems and a healthy environment from mauka to makai. Our team has worked hard to build capacity for a native fish hatchery on campus, as we feel that this would not only provide important infrastructure to support increased food security, but employment opportunities and invaluable training for our students and community.

Over the years we have been fortunate to partner with many different fishponds and other aquaculture organizations to give our students a well-rounded view of aquaculture and its potential to improve Hawai'i's food security. It would be incredibly meaningful for our students to contribute to these efforts by learning the skills and assisting with providing pua 'ama, or mullet fingerlings to many of these partners. Our community of Wai'anae has a deep history of connection to 'anae as a resource, and to be party to restoring abundance of that resource will be a very powerful thing.

This bill forwards the work that has been done over the past couple of years to not only establish a native fish hatchery at Wai'anae High School, but to bring together various stakeholders to understand the requirements for this project to successfully meet its objectives. This bill provides for those key needs by ensuring that the positions and facilities required to produce, rear and distribute our native fish.

I urge the committee to support this measure not only for the benefit of our Wai'anae students and larger community but for a more sustainable Hawai'i.

Mahalo,

Katie Kealoha



SIERRA CLUB OF HAWAI'I

HOUSE COMMITTEE ON AGRICULTURE & FOOD SYSTEMS

March 13, 2024

8:30 AM

Conference Room 325

In **SUPPORT** of **SB2329 SD1**: Relating to Aquaculture

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

On behalf of our over 20,000 members and supporters, the Sierra Club of Hawai'i **SUPPORTS SB2329 SD1**, which would provide a much-needed boost to traditional loko i'a restoration and maintenance efforts through the increased production of pua'ama, and thereby enhance our food security, climate resilience, and ecological and cultural integrity for current and future generations.

In 2015, the Legislature passed Act 31, which amended the State Planning Act to recognize the following agricultural objective: "Perpetuate, promote, and increase use of traditional Hawaiian farming systems, such as the *use of loko i'a*, māla, and irrigated lo'i, and growth of traditional Hawaiian crops, such as kalo, 'uala, and 'ulu."¹ This was done in recognition of the critical importance of traditional farming methods and crops including loko i'a to our future food security.² As the Senate Committee on Water and Land found,

[P]rioritizing traditional agricultural techniques such as traditional Hawaiian farming is increasingly viewed as good policy. The United Nations Commission on Trade and Development urges nation states to support the development of sustainable small-scale farms and traditional farming systems to achieve food security, particularly in light of climate change. Supporting traditional farming is also consistent with the recommendations of the Taro Security and Purity Task Force's 2010 legislative report *E ola hou ke kalo; ho'i hou ka 'āina lē'ia: The taro lives; abundance returns to the land*. The report emphasizes the need to invest in traditional farming and crops to perpetuate culture and to support disaster preparedness and food security in our islands.³

Accordingly, the promotion of loko i'a through the increased production of pua'ama, or juvenile mullet, as proposed by this measure will advance the legislature's far-sighted recognition of the importance of traditional agricultural methods to our food security and climate resilience.

¹ HRS §226-7(b)(17) (emphasis added).

² See, e.g., Kurashima et. al., *The potential of indigenous agricultural food production under climate change in Hawai'i*, 2 NATURE SUSTAINABILITY 191 (2019), available at <https://www.nature.com/articles/s41893-019-0226-1>.

³ Committee on Water and Land, Stand. Com. Rep. No. 591, Reg. Sess. 2015, available at https://www.capitol.hawaii.gov/sessions/session2015/CommReports/SB434_SD2_SSCR591_.htm.



SIERRA CLUB OF HAWAI'I

In addition, the restoration and maintenance of loko i'a not only uplift a long-established foundation of our social and cultural fabric – providing opportunities for practitioners, students, community groups, and the broader public to connect over culturally grounded science, practices, and values – but also promote important ecological functions, including through the mitigation of runoff and the enhancement and preservation of estuarine habitat. By supporting the restoration and maintenance of loko i'a through the provision of much-needed pua'ama, this measure will also encourage efforts to restore and maintain loko i'a and thereby enhance our islands' cultural and ecological integrity.

Therefore, the Sierra Club of Hawai'i respectfully urges the Committee to **PASS** this measure. Mahalo nui for the opportunity to testify.



Oceanic Institute

March 11, 2024

TO: Representative Cedric Asuega Gates, Chair
Representative Kirstin Kahaloa, Vice Chair
Members of the House Committee on Agriculture & Food Systems

RE: SUPPORT FOR AND COMMENTS TO SENATE BILL 2329, SD1 RELATING TO AQUACULTURE – Appropriates funds, equipment, maintenance, and operating costs for mullet production for fishponds and stock enhancement

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

Oceanic Institute of Hawaii Pacific University (OI) strongly supports SB 2329, SD1: Mullet production for fishponds and stock enhancement.

Aquaculture has a long history in Hawaii and traditional Hawaiian fishponds, or *loko i'a*, were once prominent along the shores of the Hawaiian Islands. These ponds provided a stable source of protein which could sustain populations during food shortages. Today, most Hawaiian fishponds have fallen into disrepair but local community organizations are working together to restore traditional fishponds for cultural and educational purposes, as well as to provide a source of nutritious food. Despite aquaculture's rich history in Hawaii, there is an urgent need to develop a more robust aquaculture industry in our State. This urgency reflects a collective desire to achieve Hawaii's sustainability and climate goals and commitments highlighted in the Hawai'i 2050 Sustainability Plan which identifies doubling local food production by 2030.

A significant barrier to the expansion of Hawaii's aquaculture industry is the lack of baby fish to stock our aquafarms or for stock enhancement of nearshore waters. Many aquafarmers in Hawaii operate small-scale farms and the cost to operate their own hatchery is prohibitively expensive. Oceanic Institute can serve as the State's *de facto* hatchery to provide baby fish to interested stakeholders, and this will result in the lowering of a significant barrier to expansion of an aquaculture industry. Founded in 1960, OI is a nonprofit research and development organization dedicated to marine aquaculture, biotechnology, coastal resource management, and job creation. OI has a 50-year history developing maturation, hatchery, nursery, and growout techniques for more than 10 species of tropical and subtropical marine fish, including mullet ('ama'ama). In addition to our large inventory of fish, OI has multiple hatcheries and invaluable content expertise which can assist the State of Hawaii, through the Division of Aquatic Resources of the Department of Land and Natural Resources, in producing pua'ama (juvenile mullet) for Hawaiian fishpond operators and for stock enhancement to help restore native populations. OI hopes to continue to serve in this capacity long into the future.

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

Sincerely,

A handwritten signature in black ink that reads "Shaun Moss".

Shaun M. Moss, Ph.D.

Executive Director

smoss@hpu.edu



House Committee on Agriculture

Hawai'i Alliance for Progressive Action (HAPA) Supports: SB2329 SD1

Monday, March 13th, 2024 8:30AM, Conference Room 325

Aloha Chair Dela Cruz, Vice Chair Moriwaki and Members of the Committee,

HAPA strongly supports SB2329 SD1, which appropriates money for mullet production for fishponds and stock enhancement, including for new positions, equipment, maintenance, and operating costs.

HAPA understands that fishpond systems play an important role in Hawaiian cultural practices, have an ecologically important role in watersheds, and could significantly contribute to Hawai'i's food security goals

These fishponds were, and continue to be, essential components of traditional food systems in Hawai'i, providing food security and community resilience.¹ Their revitalisation goes hand in hand with the revitalization of Hawaiian language, arts, architecture, and diet. Today, most fishpond sites are highly degraded and in need of restoration, and support and funding for said restoration efforts.

Please support SB2329 SD1 to help us restore these critical indigenous agricultural infrastructure systems that increase our food security, resiliency and improve our environment.

Thank you for your consideration.

Respectfully,

A handwritten signature in black ink, appearing to read 'Anne Frederick', written in a cursive style.

Anne Frederick
Executive Director

¹ <https://www.iccaconsortium.org/index.php/2021/02/20/loko-ia-fishponds-hawaii-communities-restoring-fisheries/>

Aloha Chair, Vice Chair, and members of the committee,

Hulu Mamo Hawaiian Civic Club stands in support of SB2329.

Hulu Mamo Hawaiian Civic Club believes that Hawaiian fishponds, known as loko i‘a, are a traditional form of mariculture that is designed to enhance and protect nutrient-rich estuary habitat to cultivate abundant algae and recruit smaller fish through a weir-type gate openings in the rock walls, and keep most large carnivorous fish out. Loko i‘a played an important role in food production of traditional Hawaii and has the ability to provide a healthy source of protein for the population of Hawaii today.

Loko i‘a also play an important ecological function in watersheds and resource management by capturing sediment that would otherwise enter the ocean and smother reefs, helping to protect our ocean resources and reefs, contributing to thriving nearshore fisheries. A healthy loko i‘a also provides an increase in fish that is able to be harvested from within a loko i‘a, reducing the fishing pressures on the nearby surrounding nearshore fish stocks.

Hulu Mamo Hawaiian Civic Club and the Association of Hawaiian Civic Clubs supports this bill and hopes that you will pass it, in order to improve the environment, the food security of Hawaii, as well as the wellbeing of Native Hawaiians, as is indicated by the attached resolution, which was passed by the Association of Hawaiian Civic Clubs on October 21, 2023 at their annual convention in Kālia, Waikīkī, O‘ahu.

Hulu Mamo Hawaiian Civic Club is focused on Aloha ‘Āina and supporting Aloha ‘Āina organizations across our pae ‘āina.

Mahalo nui loa for your time and consideration.

Keoni Shizuma

President, Hulu Mamo Hawaiian Civic Club

ASSOCIATION OF HAWAIIAN CIVIC CLUBS

A RESOLUTION

NO. 2023 - 42

URGING THE DEPARTMENT OF LAND AND NATURAL RESOURCES AND ITS DIVISION OF AQUATIC RESOURCES TO SUPPORT THE RESTOCKING OF HAWAIIAN FISHPONDS IN ORDER TO REBUILD AND REPLENISH NEARSHORE FISH POPULATIONS

WHEREAS, Hawai'i's marine ecosystems are not as healthy as they once were, caused by things like climate change, unsustainable harvest practices, and land development, as certain reports showing that populations of Hawai'i's fish species have declined by as much as 90% since the early 1900s, and an estimated 88% of all food is imported to Hawai'i; and

WHEREAS, Hawaiian Fishponds, known as loko i'a, are traditional form of mariculture, designed to enhance and protect nutrient-rich estuary habitat to cultivate abundant algae and recruit smaller fish through a weir-type gate openings in the rock walls, and keep most large carnivorous fish out; and

WHEREAS, loko i'a played an important role in the food production of traditional Hawai'i, with close to 400 flourishing loko i'a prior to 1900, sustaining communities in numerous ways including through sustainable local seafood, limu, shellfish, and fertilizer, at one time producing an average of 400-600 pounds of fish per acre per year, yielding over 2 million pounds of fish annually throughout Hawai'i, according to the Loko I'a Needs Assessment (2021); and

WHEREAS, loko i'a have an ecologically important role in watersheds and resource management by capturing sediment that would otherwise enter the ocean and smother reefs, helping to protect our ocean resources and reefs, contributing to thriving nearshore fisheries; and

WHEREAS, loko i'a attract baby fish and provide a safer environment for them to grow, increasing their chances of survival and ability to reproduce; and

WHEREAS, a healthy loko i'a provides an increase in fish that is able to be harvested from within a loko i'a, reducing the fishing pressures on the nearby surrounding nearshore fish stocks; and

WHEREAS, a loko i'a can act as amplifying factors in nearshore environments, not just growing food within, but contributing to the fish populations outside the physical borders of the loko i'a for the benefit of the ecosystem and public fisheries; and

WHEREAS, fishing is part of Hawai'i's heritage and seafood is a primary food source, with local fisheries providing an estimated 45 million pounds annually, according to the State of the Plate report (2018); and

WHEREAS, the marine science learning center at Wai'anae High School currently has a functioning aquaculture facility with a saltwater well that has been the central focus of the science curriculum delivered to students enrolled in the class for more than twenty-five years and has a long history of engaging students in hands-on, work-based learning through work in an aquaculture facility, and is uniquely positioned to facilitate transmission of the skill sets necessary to produce sizable amounts of mullet fingerlings to supply fishponds and take mullet through their life cycle to future generations; and

WHEREAS, Ānuenuē Fisheries Research Center and nursery infrastructure at the Wailoa facility previously produced pua mullet and pua moi in the past; and

WHEREAS, thriving nearshore fisheries with abundant fish populations would provide residents with another avenue to source fish to feed their families, decreasing our need for imported seafood and contributing to Hawai'i's Aloha+ goal of 20-30% of food consumed is grown locally.

NOW, THEREFORE, BE IT RESOLVED, by the Association of Hawaiian Civic Clubs at its 64th Annual Convention in Kālia, Waikīkī, O'ahu, in the malama of 'Ikuā and the rising of 'Olekūkolu, this 21st day of October 2023, urging the Department of Land and Natural Resources and its Division of Aquatic Resources to support the restocking of Hawaiian fishponds in order to rebuild and replenish nearshore fish populations; and

BE IT FURTHER RESOLVED, that this Association calls upon the Department of Land and Natural Resources and its Division of Aquatic Resources to:

- Utilize the Ānuenuē Fisheries Research Center and nursery infrastructure to produce pua mullet and pua moi again, for restocking fishponds and replenishing nearshore fisheries
- Continue to support educational and capacity-building efforts related to native fish production at the marine science learning center at Wai'anae High School; and

BE IT FURTHER RESOLVED, that a certified copy of this resolution be transmitted to Department of Land and Natural Resources Division of Aquatic Resources, as well as the Governor of the State of Hawai'i, President of the State Senate, Speaker of the State House of Representatives, Chair of the State Senate subject matter committee on Hawaiian Affairs, Chair of the State House subject matter committee on Hawaiian Affairs, Chair of the Board of Trustees of the Office of Hawaiian Affairs, and all County Mayors.



The undersigned hereby certifies that the foregoing Resolution was duly adopted in the malama of 'Ikuā and the rising of 'Olekūkolu, on the 21st day of October 2023, at the 64th Annual Convention of the Association of Hawaiian Civic Clubs in Kālia, Waikīkī.

DreanaLee Kalili

DreanaLee Kalili, President

SB-2329-SD-1

Submitted on: 3/11/2024 7:25:37 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Susan B Roberts Emery	Green Party of Hawai'i	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

I am standing in very strong support of SB2329 SD1, on behalf of the Green Party of Hawai'i. We believe the health of our fishponds reflects the health of our people.

Loko 'ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Supporting the health of Loko 'ia will accelerate Hawai'i's local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience. This is a win win for all of Hawai'i.

Please support SB 2329 SD1.

Mahalo nui,

Susan RobertsEmery

Co-chair GPH

SB-2329-SD-1

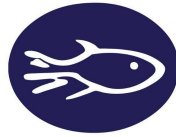
Submitted on: 3/11/2024 9:25:10 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
laurel brier	Kauai Climate Action Coalition	Support	Written Testimony Only

Comments:

Supporting local food production means climate action and support for food security and a healthier people. Strong support for SB 2329 SD1



Paepae o He'eia

He'eia Fishpond, He'eia O'ahu

P.O Box 6355, Kane'ohe HI 96744 – ph: (808) 236-6178 – admin@paepaeoheeia.org

March 12, 2024

TO: Representative Cedric Asuega Gates, Chair
Representative Kirstin Kahaloa, Vice Chair
Members of the House Committee on Agriculture & Food Systems

**RE: SUPPORT FOR SENATE BILL 2329, SD1 RELATING TO AQUACULTURE –
Appropriates funds, equipment, maintenance, and operating costs for mullet
production for fishponds and stock enhancement**

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

Paepae o He'eia strongly supports SB 2329, SD1: Mullet production for fishponds and stock enhancement. This bill will provide necessary funding to increase mullet production on Oahu and Hawaii island as well as provide the necessary labor and supplies to do so. We are excited at the prospect of more mullet swimming on our reefs and within our fishponds statewide as our mullet fishery is a shell of what it used to be. Just 100 years ago mullet were the fish of the people and sustained our communities and families and was a common subsistence and commercial food source. Commercial landings of mullet have dramatically decreased in the last 120 years:

- 1900 - 714,705 pounds (1900) *Division of Fish and Game, DLNR, 1980*
- 1978 - 17,848 pounds (1978) *Division of Fish and Game, DLNR, 1980*
- 2018 - 2,189 pounds (2018) *DAR, DLNR, 2018*

In terms of this bill, there is no need to discuss the reasons for this dramatic decrease. This bill is a part of the solution to the problem. It is a well known fact that we need a more diverse and resilient food system and this bill helps to make that a reality.

Paepae o He'eia has continuously managed the 800-year old He'eia Fishpond since 2001 and has extensive experience with our Hawaiian mullet. We are strong advocates for traditional Hawaiian aquaculture in Hawaii and healthy reef ecosystems. Thank you for the opportunity to testify in strong support of this measure.

Sincerely,
Keli'i Kotubetey
Assistant Executive Director

keli@paepaeoheeia.org

SB-2329-SD-1

Submitted on: 3/12/2024 8:57:38 AM

Testimony for AGR on 3/13/2024 8:30:00 AM

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

Comments:

The Hawaii Aquaculture and Aquaponics Association (HAAA) supports SB 2329 SD1 to develop a mullet hatchery at Waianae High School, as part of their exceptional aquaculture program, and to provide staff and resources to DLNR to support, produce, and distribute mullet fingerlings Statewide in support of expanding fish production in active Hawaiian fish ponds.

Thank you for your consideration of this supportive testimony.

LATE

SB-2329-SD-1

Submitted on: 3/12/2024 9:42:04 AM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Mayjean wakinekona	marine science learning center	Support	Written Testimony Only

Comments:

March 12, 2024

To: Representative Cedric Asuega Gates, Chair

Representative Kirstin Kahaloa, Vice Chair

Members of the House Committee on Agriculture & Food Systems

RE: SUPPORT FOR SENATE BILL 2329

RELATING TO AQUACULTURE – Appropriates funds, equipment, maintenance, and operating costs for mullet production for fishponds and stock enhancement

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

My name is Mayjean Wakinekona-kahunanui, I am a student of the marine science learning center at Waianae High school and I am writing to strongly support SB 2329: Mullet production for fishponds and stock enhancement.

This bill would be beneficial for our community because there are learning resources for students, there are good paying jobs that specialize in algae production and fish production in aquaculture. The increase of native species and resources it also helps reduce the need of importing food. The native fish population is really important to Hawaiian culture. As

we've learned about our aquatic resources,their history and their current state, the decline in our native mullet,which our district is named for, has been a common issue. This bill is an excellent opportunity for students in our community as well as Hawaii at large. Mullet was once an abundant resource that fed many communities,however currently fishponds struggle to recruit our native species, and their efforts to restore abundance and food production within our communities are hindered by the lack of native fish.while there are multiple factors that contribute to the issue,supporting mullet production through this bill will be an excellent start in beginning to mitigate the problem.

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

Sincerely,

Mayjean Wakinekona-Kahunanui



The Marine Science Learning Center at Waiʻanae High School

85-251 Farrington Hwy, Waiʻanae HI 96792

Phone: (808) 697-9400

March 12, 2024

RECEIVED
Date & Time
Mar 12, 2024, 3:07 pm

LATE

To: Representative Cedric Asuega Gates, Chair
Representative Kirstin Kahaloa, Vice Chair
Members of the House Committee on Agriculture & Food Systems

RE: SUPPORT FOR SENATE BILL 2329
RELATING TO AQUACULTURE – Appropriates funds, equipment, maintenance, and
operating costs for mullet production for fishponds and stock enhancement

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

I am writing on behalf of the Waiʻanae Marine Science Learning Center to express our strong support for SB2029. Establishing a Native fish hatchery at Waiʻanae High School is an important step in improving Hawaii's food security. An added benefit is that it will also significantly increase the number and type of skills we will be able to build within our students. I believe that it is fitting that the students of Waiʻanae have a part in bringing the `anae back to Waiʻanae.

The Marine Science Learning Center at Waiʻanae High School is a program on Oʻahu that serves youth on the Waiʻanae coast. Our outdoor aquaculture facility serves as a foundation for hands-on learning experiences that teach students sustainability, teamwork, entrepreneurship, and personal responsibility. We cultivate environmental literacy, promote marine conservation, support technical training, and foster community engagement. We run a rigorous two-year program that allows Waiʻanae High School students to earn up to 8 credits. Our mission is to develop young adults into confident, caring, and aloha ʻāina-minded individuals who have the desire and ability to fulfill their kuleana (responsibility) to their family, community and world. Adding the components of a fish hatchery will significantly improve our ability to reach our mission.

In conclusion, the Waiʻanae Marine Science Learning Center extends its resolute support for SB2329. We believe that this project not only seamlessly aligns with our organizational mission but also presents a unique opportunity for impactful collaboration that will redound to the benefit of the Waiʻanae community and its marine ecosystems. We eagerly anticipate the positive impact that this project can yield for our shared mission of environmental education and conservation in Waiʻanae.

Dana Hoppe
Program Director
Marine Science Learning Center
Waiʻanae High School

SB-2329-SD-1

Submitted on: 3/11/2024 5:21:27 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Stacey Alapai	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

I am testifying in strong support of SB 2329 SD1.

Loko 'ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko 'ia are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko 'ia will accelerate Hawai'i's local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Please support SB 2329 SD1.

Thank you for your consideration,
Stacey Alapai, Makawao 96768

SB-2329-SD-1

Submitted on: 3/11/2024 5:22:28 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Eliel Starbright	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

I am testifying in strong support of SB 2329 SD1.

Loko 'ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko 'ia are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko 'ia will accelerate Hawai'i's local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Please support SB 2329 SD1.

Thank you for your consideration, Eliel Starbright, Kapaa

SB-2329-SD-1

Submitted on: 3/11/2024 5:24:29 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
emily gambino	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

I am testifying in strong support of SB 2329 SD1.

Loko 'ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko 'ia are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko 'ia will accelerate Hawai'i's local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Please support SB 2329 SD1.

Thank you for your consideration,

Emily Gambino, Makawao

SB-2329-SD-1

Submitted on: 3/11/2024 5:49:49 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Jayven Okuda	Individual	Support	In Person

Comments:

Aloha,

‘O Jayven Okuda ko‘u inoa,

I am in strong support of this bill. This is because loko i‘a are vert important to Hawai‘i and feeds Hawai‘i, through its production of i‘a. In support of this bill, I hope that fishponds continue to get the support they need in order to feed nā kaiāulu o Hawai‘i. Also, so that future generations will be able to learn about these funded and supported loko i‘a. So that the future of Hawai‘i continues to thrive and grow in culture that keeps Hawai‘i alive.

Mahalo,

Jayven Okuda

SB-2329-SD-1

Submitted on: 3/11/2024 5:53:26 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Isis Usborne	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

I am testifying in strong support of SB 2329 SD1.

Loko 'ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko 'ia are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko 'ia will accelerate Hawai'i's local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Please support SB 2329 SD1.

Thank you for your consideration,

- Isis Usborne, 96815

SB-2329-SD-1

Submitted on: 3/11/2024 6:11:45 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Ruta Jordans	Individual	Support	Written Testimony Only

Comments:

This bill is needed if we are to reach our goals.

SB-2329-SD-1

Submitted on: 3/11/2024 6:18:45 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Judith A Mick	Individual	Support	Written Testimony Only

Comments:

Healthy fishponds were always important sources of food in ancient Hawaii and should be reinstated to feed Hawaii's people in a sustainable way. Judith Mick, Kailua

SB-2329-SD-1

Submitted on: 3/11/2024 6:22:44 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Uilani Naipo	Individual	Support	Written Testimony Only

Comments:

I SUPPORT this measure.

-U'ilani Naipo

SB-2329-SD-1

Submitted on: 3/11/2024 6:41:35 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Susan Douglas	Individual	Support	Written Testimony Only

Comments:

TY! Susan Douglas, Kihei

SB-2329-SD-1

Submitted on: 3/11/2024 7:37:08 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Noelle Lindenmann	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

I am testifying in strong support of SB 2329 SD1.

Loko 'ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko 'ia are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko 'ia will accelerate Hawai'i's local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience. This is even more important as we look to connect our keiki to cultural practices.

Please support SB 2329 SD1.

Thank you for your consideration,

Noelle Lindenmann, Kailua-Kona

SB-2329-SD-1

Submitted on: 3/11/2024 7:37:46 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Georgia L Hoopes	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

I am testifying in strong support of SB 2329 SD1.

Mahalo,

Georgia Hoopes, Kalaheo

SB-2329-SD-1

Submitted on: 3/11/2024 8:05:15 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Raelyn Reyno Yeomans	Individual	Support	Written Testimony Only

Comments:

I am in Strong Support. Thank you!

SB-2329-SD-1

Submitted on: 3/11/2024 9:29:42 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
B.A. McClintock	Individual	Support	Written Testimony Only

Comments:

I am testifying in strong support of SB 2329 SD1.

Loko 'ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko 'ia are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko 'ia will accelerate Hawai'i's local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Please support SB 2329 SD1.

SB-2329-SD-1

Submitted on: 3/11/2024 11:44:14 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
KEALA FUNG	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

I am testifying in strong support of SB 2329 SD1.

Loko 'ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko 'ia are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko 'ia will accelerate Hawai'i's local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Please support SB 2329 SD1.

Thank you for your consideration,

Keala Fung, Honolulu

SB-2329-SD-1

Submitted on: 3/12/2024 12:00:40 AM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Mary Lu Kelley	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

Please listen. I am testifying in strong support of SB 2329 SD1.

Loko 'ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko 'ia are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko 'ia will accelerate Hawai'i's local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Please support SB 2329 SD1. Do the right thing.

Thank you for your consideration,

Mary Lu Kelley

Koloa, HI

SB-2329-SD-1

Submitted on: 3/12/2024 12:20:07 AM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Sven Sorge	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

I am testifying in strong support of SB 2329 SD1.

Loko 'ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko 'ia are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko 'ia will accelerate Hawai'i's local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Please support SB 2329 SD1.

Thank you for your consideration

SB-2329-SD-1

Submitted on: 3/12/2024 1:00:53 AM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Irena Bliss	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

I am testifying in strong support of SB 2329 SD1.

Loko i'a (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko i'a are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko i'a will accelerate Hawai'i's local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Please support SB 2329 SD1.

Ua mau ke ea o ka 'āina i ka pono.

Mahalo nui for your consideration,

Irena Bliss

Ha'ikū, Maui 96708

SB-2329-SD-1

Submitted on: 3/12/2024 8:01:35 AM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Melissa Barker	Individual	Support	Written Testimony Only

Comments:

Honorable Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

I am writing to ask that you please support of SB 2329 SD1.

Loko 'ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko 'ia are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko 'ia will accelerate Hawai'i's local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Thank you for your attention and consideration.

Melissa Barker

Kapaa, HI

SB-2329-SD-1

Submitted on: 3/12/2024 9:43:41 AM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Serenity K. Hema	Marine Science Learning Center	Support	Written Testimony Only

Comments:

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

My name is Serenity Hema, I am a student in the Marine Science Learning Center at Wai’anae High School and I am writing to strongly support SB 2329: Mullet production for fishponds and stock enhancement.

This bill would be beneficial for our community because it can be an important learning aspect for our community, to improve food security, and to restore the native fish population.

At the Marine Science Learning Center, we learn about our community history, aquaculture, the ecosystem health, and science by visiting other places such as fishponds and having our own facility as a learning resource. We strongly support SB 2329: Mullet production for fishponds and stock enhancement. With this bill, it could help restore our once, used to be, plentiful food resource when back in the day they’d collect at least 2 million pounds of ‘anae a year. Additionally it can help restore and increase the count in native species which could be very beneficial for the ecosystem. Bringing back and restoring the native species can also be important for our community and schools so next generations can learn about native resources that once used to prosper in the land. With this bill, it can help restore the fish favored by Hawaiian royalty and the reason why Wai’anae got its name. Moreover, our community and residents wouldn’t have to depend on foods out of our reach and instead be able to have access to local foods without depending on other places to provide for us.

In conclusion, us students strongly support SB 2329 because it can greatly improve and impact not just us as individuals but for the community of Wai’anae and many others.

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

**Sincerely,
Serenity Kamaluonalani Hema
Phone #: (808)302-8523**

SB-2329-SD-1

Submitted on: 3/12/2024 9:47:57 AM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Kaezen Madeira	Marine Science Learning Center	Support	Written Testimony Only

Comments:

March 12, 2024

To: Representative Cedric Asuega Gates, Chair

Representative Kirstin Kahaloa, Vice Chair

Members of the House Committee on Agriculture & Food Systems

RE: SUPPORT FOR SENATE BILL 2329

RELATING TO AQUACULTURE – Appropriates funds, equipment, maintenance, and operating costs for mullet production for fishponds and stock enhancement

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

My name is Kaezen Madeira, I am a student at Wai’anae High School. I’m enrolled in the Marine Science Learning Center and I’m writing to strongly support SB 2329: Mullet production for fishponds and stock enhancement.

This bill would be beneficial to our community because it would be a good resource that will teach skills that us students need and can apply to life after high school. It will further our understanding and broaden our knowledge of food production, which is the exact title of the course. In addition, through this native fish hatchery we can bring back a native fish

that was once abundant but now has been fading through the years. The native fish hatchery will be good for our school because it will be a new and interesting addition to our facility and it will also benefit our community's food security. Back to the benefits for us students, through the addition of the native fish hatchery we will attain skills that will expose us to numerous job opportunities.

Thank you for your consideration and the opportunity to testify in strong support of this measure. I hope you will support SB2329.

Sincerely,

Kaezen Madeira

SB-2329-SD-1

Submitted on: 3/12/2024 9:56:44 AM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Hyrum Tom	Individual	Support	Written Testimony Only

Comments:

To: Representative Cedric Asuega Gates, Chair

Representative Kirstin Kahaloa, Vice Chair

Members of the House Committee on Agriculture & Food Systems

RE: SUPPORT FOR SENATE BILL 2329

RELATING TO AQUACULTURE – Appropriates funds, equipment, maintenance, and operating costs for mullet production for fishponds and stock enhancement

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

My name is Hyrum Tom. I'm a student at Waianae High School and I am writing here to support SB 2329:Mullet Production for fishponds and stock enhancements

This bill would be beneficial for our community because it would create;

- **Learning resources for students**
- **Provide well paying jobs in the community having to deal with agriculture.**
- **Food security in the form of; An increase of native fish in the wild, and stock enhancement of native fish ponds.**

This would be a good resource for our community because it would provide Education for students, parents and the community spreading awareness about food security. It would also provide jobs in agriculture to grow the skill sets of the people in our community. At one time in the past, Hawaiian fishponds used to be able to produce more than 2 million lbs of fish a year. Now Hawaii's fish ponds can perform even close to its former glory. Where 5 years ago, it only averaged 500,000 lbs of mullet. All in all, creating a fish pond would help the community and myself included in the future providing me opportunities in the future.

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

Sincerely,

~ Hyrum Tom

Student Of Waianae Highschool

WHS % 2025 Council Member

Member of the WHS PTSA & SCC

WHS D&D Club President

Phone Number: (808)773-0376

Email: hyrumtom53@gmail.com

SB-2329-SD-1

Submitted on: 3/12/2024 9:57:44 AM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Giovonni	Marine Science learning center	Support	Written Testimony Only

Comments:

My Giovonni Torres I'm a student of Waianae highschool. This bill would be beneficial for our community because not only would it help with knowing how bioload, and water quality is determined by a species and it could be the main cause for major changes bioload in short means waste in your water column or every drop of water in there and bioload plays a huge role in water quality or this instance a tank and filters are used to make sure the water is clean and it is important for a species because bioload is unhealthy if not properly disposed of and effects ammonia, nitrites, and nitrates in this water and if not cleaned could cause diseases or death. And secondly water quality is determined by the species in the water obviously the bigger the species the more maintenance you might need to do or the more numbers maybe the more deaths you have and that could throw off the water quality within the tank and could also cause diseases and illness which could cause even more death. This bill can help all of this because they can make it their perfect environment and very sustaining for the species not only surviving but thriving. This knowledge could impact school by making us more able to keep a species alive.

Sincerely, Giovonni Torres

Name Giovonni Torres

SB-2329-SD-1

Submitted on: 3/12/2024 9:58:33 AM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Chaysten	Individual	Support	Written Testimony Only

Comments:

March 12, 2024

To: Representative Cedric Asuega Gates, Chair

Representative Kirstin Kahaloa, Vice Chair

Members of the House Committee on Agriculture & Food Systems

RE: SUPPORT FOR SENATE BILL 2329

RELATING TO AQUACULTURE – Appropriates funds, equipment, maintenance, and operating costs for mullet production for fishponds and stock enhancement

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

I am in the Marine Biology program at Waianae High School, we, including myself STRONGLY SUPPORT SB 2329. We have learned about aquaculture and about ecosystem health by even visiting fishponds. If this bill is accepted it would benefit both us and our community. Some ways it would benefit us is the science pathway for students such as ourselves, others who might/are interested in this pathway would be more likely to learn more about mullet and other species. Food security: More fishponds would be utilized and even increase the species of our native fish, which is the mullet and what Waianae is named after.

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

Sincerely,

Chaysten Popa-Basso

SB-2329-SD-1

Submitted on: 3/12/2024 9:59:19 AM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Diamond Holbron Kealoha	Individual	Support	Written Testimony Only

Comments:

March 12, 2024

To: Representative Cedric Asuega Gates, Chair

Representative Kirstin Kahaloha, Vice Chair

Members of the House Committee on Agriculture & Food Systems

RE: SUPPORT FOR SENATE BILL 2329

RELATING TO AQUACULTURE – Appropriates funds, equipment, maintenance, and operating costs for mullet production for fishponds and stock enhancement

Aloha e Chair Gates, Vice Chair Kahaloha, and Members of the Committee,

I, a student of Waianae High School and in the Marine Science pathway, support the SENATE BILL 2329

RELATING TO AQUACULTURE – Appropriates funds, equipment, maintenance, and operating costs for mullet production for fishponds and stock enhancement

I want to support the Senate Bill 2329 because it would allow our Marine Science pathway to have better technology while maintaining our hatchery and to collect better data. This bill would be important to us because it would show more appreciation towards mullet hatcheries and how they play a big part of our future and culture, offering more job opportunities for upcoming generations and even our generation now. Also, being in the Marine Science pathway, it would allow students like myself to really learn about hatcheries and be able to have more in the later future. This bill would also be very beneficial for schools and jobs because it will allow us to be more connected to aquaculture because, being on an island surrounded by ocean, it is a future industry that has a lot of potential for careers and food security and prepares us to take care of our home and culture in a more effective way.

Thank you for the opportunity to testify in strong & support of this measure.

Sincerely,

Diamond Holbron Kealoha

SB-2329-SD-1

Submitted on: 3/12/2024 10:16:01 AM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Raul mehares jr	Marine Science Learning Center	Support	Written Testimony Only

Comments:

March 12, 2024

To: Representative Cedric Asuega Gates, Chair

Representative Kirstin Kahaloa, Vice Chair

Members of the House Committee on Agriculture & Food Systems

RE: SUPPORT FOR SENATE BILL 2329

RELATING TO AQUACULTURE – Appropriates funds, equipment, maintenance, and operating costs for mullet production for fishponds and stock enhancement

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

My name is Raul Mehares Jr. I am a junior in waianae high school. I am writing this letter in support of sb2329. I support this bill because it will be good for fishponds and the waianae community. We need to get more fish in fishponds and in the wild. Mahalo for your time.

Raul Mehares Jr

SB-2329-SD-1

Submitted on: 3/12/2024 11:42:20 AM
Testimony for AGR on 3/13/2024 8:30:00 AM

RECEIVED
Date & Time
Mar 12, 2024, 3:07 pm

LATE

Submitted By	Organization	Testifier Position	Testify
Lela Kalama	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

I am testifying in strong support of SB 2329 SD1.

Loko ‘ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko ‘ia are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko ‘ia will accelerate Hawai‘i’s local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Please support SB 2329 SD1.

Thank you for your consideration,

Lela Kalama, Keaau, HI

RECEIVED
Date & Time
Mar 12, 2024, 3:07 pm

LATE

SB-2329-SD-1

Submitted on: 3/12/2024 12:58:20 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Mariko Whitenack	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

My name is Mariko Whitenack and I am a resident of Kaimukī. I am testifying in strong support of SB 2329 SD1.

Loko ‘ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko ‘ia are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko ‘ia will accelerate Hawai‘i’s local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Please support SB 2329 SD1.

Mahalo for your consideration and the opportunity to submit testimony.

SB-2329-SD-1

Submitted on: 3/12/2024 5:32:36 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

RECEIVED
Date & Time
Mar 12, 2024, 10:39 pm

LATE

Submitted By	Organization	Testifier Position	Testify
pamela burrell	Individual	Support	Written Testimony Only

Comments:

Aloha Committee members,

Supporting the health of Loko ‘ia will accelerate Hawai‘i’s local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Please support SB 2329 SD1.

Mahalo,

Pamela Burrell, Kalihiwai, Kaua‘i

RECEIVED
Date & Time
Mar 12, 2024, 10:39 pm

LATE

SB-2329-SD-1

Submitted on: 3/12/2024 5:58:08 PM
Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Michele Nihipali	Individual	Support	Written Testimony Only

Comments:

Ioha Chair Gates, Vice Chair Kahaloa and Honorable Committee Members,

I am testifying in strong support of SB 2329 SD1.

Loko 'ia (fishponds) remain an important resource for feeding local communities and providing community and cultural connection. Healthy fishponds also support healthy nearshore fisheries.

Loko 'ia are not only important food sources for our local communities but important cultural sites providing space for communities to gather, connect to place and mālama.

Supporting the health of Loko 'ia will accelerate Hawai'i's local food production and food security goals while also supporting indigenous traditional and customary cultural practices and community resilience.

Please support SB 2329 SD1.

Thank you for your consideration,

Michele Nihipali

54-074 A Kam Hwy.

Hauula, HI 96717

RECEIVED
Date & Time
Mar 13, 2024, 6:43 am

LATE

SB-2329-SD-1

Submitted on: 3/12/2024 11:29:22 PM

Testimony for AGR on 3/13/2024 8:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Dylan Ramos	Individual	Support	Written Testimony Only

Comments:

Aloha,

As a taxpayer and voter born and raised in Hawai'i, I support this bill.

Mahalo,
Dylan Ramos
96816