

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

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I
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 House Committee on
FINANCE

Tuesday, April 2, 2024
2:30 PM

VIA VIDEOCONFERENCE, Conference Room 308, State Capitol

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

Senate Bill 2329, Senate Draft 1, House Draft 1 proposes to appropriate funds 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 an unspecified number of full-time equivalent (FTE) aquatic biologist V positions, an unspecified number of full-time equivalent (FTE) aquatic biologist IV positions, an unspecified number of full-time equivalent (FTE) fishery technician V positions, and an unspecified number of full-time equivalent (FTE) fishery technician IV positions. 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.

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

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 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 FINANCE

APRIL 2, 2024
2:30 PM
CONFERENCE ROOM 308

SENATE BILL NO. 2329 SD1 HD1
RELATING TO AQUACULTURE

Chair Yamashita, Vice Chair Kitagawa and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill 2329 SD1 HD1. 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.





Food+ Policy Internship 2024

food@purplemaia.org

March 30 2024

To: **FIN**

Subject: **SB 2329 SD1 HD1** Testimony

Aloha

Honorable Members of the [Committee Name],

My name is Joseph Ramos and I am writing to represent Hawaii Food + Policy, and I am writing to express my **strong support** for **Senate Bill 2329, Senate Draft 1, House Draft 1**, which pertains to aquaculture in our state. This measure is not only crucial for supporting sustainable aquaculture practices but also has the potential to preserve and revitalize native Hawaiian practices that can mitigate future environmental challenges, such as the catastrophic Lahaina Fires of 2023.

SB2329 appropriates funds for mullet production for fishponds and stock enhancement, including provisions for new positions, equipment, maintenance, and operating costs. This investment is vital for enhancing the productivity and resilience of our aquaculture industry, which plays a significant role in ensuring food security and economic sustainability in Hawaii.

Furthermore, this measure aligns with and supports native Hawaiian practices related to fishpond cultivation and stock enhancement. Fishponds have long been integral to Hawaiian culture and tradition, serving as sustainable sources of food and fostering community resilience. By investing in mullet production and stock enhancement for fishponds, SB2329 not only supports modern aquaculture initiatives but also honors and

The Food+ Policy internship develops student advocates who learn work skills while increasing civic engagement to become emerging leaders. We focus on good food systems policy because we see the importance and potential of the food system in combating climate change and increasing the health, equity, and resiliency of Hawai'i communities.

In 2024, the cohort of interns are undergrads and graduate students from throughout the UH System. They are a mix of traditional and nontraditional students, including parents and veterans, who have backgrounds in education, farming, public health, nutrition, and Hawaiian culture.



Food+ Policy Internship 2024

food@purplemaia.org

preserves indigenous knowledge and practices that have sustained our islands for generations.

The catastrophic Lahaina Fires of 2023 serve as a stark reminder of the urgent need to address environmental challenges and promote sustainable practices. SB2329 represents a proactive step towards mitigating future risks by investing in aquaculture initiatives that can enhance ecosystem resilience and food security. By supporting native Hawaiian practices such as fishpond cultivation, this measure has the potential to strengthen community resilience and reduce the likelihood of future environmental disasters.

In conclusion, I urge the committee to **support SB2329** and recognize its importance in promoting sustainable aquaculture practices and preserving native Hawaiian traditions. By investing in mullet production for fishponds and stock enhancement, we can build a more resilient and sustainable future for Hawaii.

Mahalo for your attention to this important matter.

Malama Pono
Joseph Ramos

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In 2024, the cohort of interns are undergrads and graduate students from throughout the UH System. They are a mix of traditional and nontraditional students, including parents and veterans, who have backgrounds in education, farming, public health, nutrition, and Hawaiian culture.



Testimony Before The
House Committee on Finance (FIN)
IN SUPPORT OF SB2329 SD1 HD1
April 2, 2024, 2:30 PM, Room 308 & 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 SD1 HD1 as an incremental step 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'anae High School's Marine Science Learning Center. The original version of this bill would appropriate necessary funds 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) Ānuenuenu Fisheries Research center on O'ahu and one at Wai'anae High School;
- (2) Two full-time equivalent (2.0 FTE) Aquatic Biologist IV positions, one at DAR's Ānuenuenu 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 Ānuenuenu Fisheries Research Center on O'ahu, one at Wai'anae 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'anae High School.

Furthermore, the original version of SB2329 SD1 HD1 would appropriate 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. **The originally calculated dollar amounts and specified number of positions were developed by DAR staff in close collaboration with community members, and determined to be necessary to fulfill the core functions of this bill – please reinstate the original dollar amounts and number of positions before passing SB2329 SD1 HD1.**

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 HD1.**

Aloha 'Āina Momona no nā kau ā kau.



"Solutions not Complaints"

Aloha no kakou,

I am writing this testimony in strong support of SB2329 SD1 HD1 Loko I'a Restocking

My name is Damien Kenison, I live in Ho'okena, South Kona, Hawaii Island. Our communities are striving to protect our natural and cultural resources for mea'ai and the perpetuation of our cultural practices that defines the connection to our 'aina. The ingenuity of our kupuna to establish loko I'a as a way to supplement their diets, is a concept that many of our young people today have accepted as their kuleana to revive.

Our dependence on importing food has taken a toll on the people of Hawaii. The improper use of agricultural land and the urban development of our coastline has imperiled our welfare physically and spiritually. Most of our Hawaiian people are in the low to medium income bracket and the rising inflation rate is an indicator of the precarious situation that has affected our health and financial status.

The pilikia of our ability to only afford the cheapest and less healthy foods, along with many of us having no access to land to grow mea'ai is compounded by the rising cost of living here. The growing movement to re-establish loko I'a should be supported and promoted as a way to improve the socio-economic status of the majority of kanaka maoli whose lifestyle is based on a limited personal income that is a medical emergency away from bankruptcy or homelessness.

Loko I'a is not the answer to all of our problems but it is a start. Supporting appropriate land and ocean resource use will help our politicians and government agencies to understand some of the negative impacts of Tourism and Real Estate on our people. Investing in the loko I'a that are already established will encourage other communities and young adults to take up the kuleana of considering the restoration or creation of loko I'a where they live increasing community involvement in land use applications.

The Hawaiian Culture is a big part of what draws visitors to our islands and the restoration of cultural sites and perpetuation of traditional practices will enhance visitor experience for increased appropriate interaction between the hoa'aina of Hawaii and the millions of tourists who come here. Please support this important measure for the benefit of all stakeholders in Hawaii Nei.

Ke Aloha Nunui,

A handwritten signature in blue ink that reads "Damien Kenison". The signature is written in a cursive, flowing style.

Damien Kenison
Kauhako Ohana Association

KAUHAKŌ OHANA ASSOCIATION



"Solutions not Complaints"

PO Box 38, Honaunau, HI. 96726

(808) 987-9149

namamo@yahoo.com

SB-2329-HD-1

Submitted on: 3/31/2024 5:19:21 PM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Barbara Kaaumoana	Hanalei Watershed Hui	Support	Written Testimony Only

Comments:

Aloha Chair Yamashita and members of the Finance committee,

The Hanalei Watershed Hui **strongly** supports this measure to support mullet stocking in our fishponds across Hawaii. This project is an investment in our future and promotes place based resilience both as a home based food source and economic investment in community health.

This is **exactly** what Hawaii should be doing. This is needed NOW.

Mahalo nui,

Makaala Kaaumoana

Exedcutive Director



March 31, 2024

To: Chair Yamashita, Vice Chair Kitagawa, and the House Committee on Finance

Re: **SUPPORT**, SB2329: Relating to Aquaculture

Mālama Pūpūkea-Waimea
Post Office Box 188
Hale'iwa, HI 96712

Board of Directors

*Denise Antolini
Keelan Barcina
Anne Chung
Olan Leimomi Fisher
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*Athline Clark
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Dr. Alan Friedlander
Debbie Gowensmith
Maxx E. Phillips
Bill Quinlan
Palakiko Yagodich*

Staff

*Jenny Yagodich, Director of
Educational Programs &
Makai Watch Coordinator*

Aloha Chair Yamashita, Vice Chair Kitagawa, and the House Committee on Finance,

We respectfully write in **SUPPORT** of SB2329 which would appropriate the funds necessary to create several new jobs within the Department of Land and Natural Resources (DLNR) Division of Aquatic Resources (DAR's) Hatchery Programs, including new positions in partnership with the Marine Science Learning Center at Wai'anae High School.

These much-needed positions within DLNR/DAR would help to rebuild our sustainable local food systems through restorative aquaculture which is critical to our resilience.

Our marine resources are fragile and it is up to all of us to ensure their abundance is protected and maintained for future generations.

MPW **SUPPORTS SB2329** and hopes this bill will advance.

Mālama Pūpūkea-Waimea (MPW) is a grassroots, community non-profit that actively works to care for, educate about, and protect our fragile, near-shore marine ecosystems. Our mission is "working to replenish and sustain the natural and cultural resources of the Pūpūkea and Waimea ahupua'a for present and future generations through active community stewardship, education, and partnerships."

Mahalo for the opportunity to provide testimony,

Jenny Yagodich

Jenny Yagodich
Director of Educational Programs &
Makai Watch Coordinator

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



House Committee on Finance

Hawai'i Alliance for Progressive Action (HAPA) Supports: SB2329 HD1

Tuesday, April 2nd, 2024 2:30PM, Conference Room 308

Aloha Chair Yamashita, Vice Chair Kitagawa and Members of the Committee,

HAPA strongly supports SB2329 HD1, which appropriates funds 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 HD1 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/>

The Hawai'i Alliance for Progressive Action (HAPA) is a public non-profit organization under Section 501(c)(3) of the Internal Revenue Code. HAPA's mission is to catalyze community empowerment and systemic change towards valuing 'aina (environment) and people ahead of corporate profit.



The Marine Science Learning Center at Wai'anae High School

85-251 Farrington Hwy, Wai'anae HI 96792

Phone: (808) 697-9400

April 2, 2024

Testimony in Support of SB2329 SD1 HD1
House Committee on Finance (FIN)
April 2, 2024, 2:30 p.m., Room 308 &am Via Zoom

Aloha e Chair Yamashita, Vice Chair Kitagawa, 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 it's 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 Waianae 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 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



Food+ Policy Internship 2024

food@purplemaia.org

April 1, 2024

Subject: *SB2329 - Relating to Aquaculture*

Aloha mai kakou, Chair Kyle Yamashita, Vice Chair Lisa Kitagawa, and all other members of the Finance House Committee.

We are writing **IN SUPPORT** SB2329 Relating to Aquaculture because SB2329 is a bill that would help the State further its goals of food independence and self-sufficiency by promoting the production of mullet fish.

As the State looks towards expanding its food sustainability future it is crucial we promote the production of near-shore fish and support our fishponds in providing for our community. Mullet or 'Ama'ama were a big part of the seafood diet for the Native Hawaiians and returning to that can help the community towards a more sustainable diet.

In March 2020, NOAA, in partnership with Conservation International and He'eia Fishpond helped supply the fishpond with hundreds of juvenile 'ama'ama. They said that doing this, and continuing to do so, it would help the fishpond return to its older levels of production and subsequently ensure its success.

Giving these seafood producers support in raising pua (young/baby fish) can also alleviate pressures on them. It can provide a support system for them if there is an accident or negative situation for said producers.

We need to support our fishpond producers and invest into our Aquaculture industry as a means to provide for the people of Hawaii. It is sustainable, economically sound, and time-tested. Please support SB2329 and ensure success in Hawai'i's aquaculture future.

Mahalo,
Janine Mariano & Hawaii Food+ Policy Team
#fixourfoodsystem

The Food+ Policy internship develops student advocates who learn work skills while increasing civic engagement to become emerging leaders. We focus on good food systems policy because we see the importance and potential of the food system in combating climate change and increasing the health, equity, and resiliency of Hawai'i communities.

In 2024, the cohort of interns are undergrads and graduate students from throughout the UH System. They are a mix of traditional and nontraditional students, including parents and veterans, who have backgrounds in education, farming, public health, nutrition, and Hawaiian culture.

SB-2329-HD-1

Submitted on: 3/30/2024 9:09:49 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Lu Ann Mahiki Lankford-Faborito	Individual	Support	Written Testimony Only

Comments:

strong support

SB-2329-HD-1

Submitted on: 3/30/2024 12:35:28 PM

Testimony for FIN on 4/2/2024 2:30:00 PM

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 - Makawao, HI

SB-2329-HD-1

Submitted on: 3/30/2024 3:27:48 PM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Neil Frazer	Individual	Comments	Written Testimony Only

Comments:

Aloha Kakou,

I have long been a supporter of efforts to restore loko i‘a, and when I was younger I participated in some of the muddier work (rebuilding walls, pulling out mangroves, etc.) both on O‘ahu and Molokai.

My reservations about this bill concern hatcheries, and especially the introduction of hatchery produced juvenile fish into the Wailoa Estuary. Among scientists who have studied the subject, hatcheries are regarded with considerable skepticism. Even in the best run hatcheries the hatchery selection process for adult spawners is such that the fish produced by the hatchery have reduced levels of fitness compared to wild stocks. When hatchery fish are mixed with wild stocks, the fitness levels (and thus population levels) of the wild stocks decline with each successive generation.

Sincerely, Neil Frazer PhD, Professor Emeritus, Department of Earth Sciences, University of Hawaii at Mānoa, (my peer-review research publications are at https://www.soest.hawaii.edu/earthsciences/people/faculty/faculty-pubs/pubs_neil.pdf)

SB-2329-HD-1

Submitted on: 3/30/2024 3:52:46 PM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
John Romain	Individual	Support	Written Testimony Only

Comments:

Testimony in Support of SB2329 SD1 HD1 House Committee on Finance (FIN) March 2, 2024, 2:30 p.m., Room 308 & Via Zoom

Aloha pumehana Committee Members, I am John Romain from Hana Maui

I **strongly support** SB2329 SD1 HD1 regarding restocking our precious loko i‘a (fishponds) by appropriating much-needed funds for this restorative aquaculture effort that continues to gain more interest and support in the face of climate change and increased pressures to ensure a more sustainable and abundant Hawai‘i now and into the future. **Please reinstate the original dollar amounts and number of positions before PASSING this measure.**

I have been a Hana resident for 38 years and in 1991, I along with my neighbors, restored an ancient freshwater fishpond. The pond was flooded and filled with dirt and debris from the tsunami on April 1, 1946. As the springs were plugged the pond quickly filled with California grass and became a convenient duping site. The restoration took 8 months to complete and was stocked with awa provided by the Oceanic Institute. In November 1993 the restored pond was blessed and named Loko Waihua (original name was lost) by Parley Kanaka’ole and sisters Pualani & Nalani 1993 the first harvest under direction of Danny Akaka of the big island was held in conjunction with the second annual Taro Festival – numerous harvests have been held since then with the harvest always going to the benefit of the community The restored pond is now a community asset, linked to the past and a hedge toward food security in our remote community. In these uncertain times the restoration of idle or destroyed fishponds perpetuates Hawaiian culture and sustainably produces food for the respective communities

Please **PASS** SB2329 SD1 HD1 as an important step toward greater food security for Hawai‘i, as well as returning more Native Hawaiian and local communities to the stewardship roles needed to best protect and grow our shared biocultural resources through loko i‘a.

Mahalo nui loa for considering my testimony,

John Romain

SB-2329-HD-1

Submitted on: 3/31/2024 11:41:04 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Regina Gregory	Individual	Support	Written Testimony Only

Comments:

Support

Don't forget the seaweed.

SB-2329-HD-1

Submitted on: 3/31/2024 10:14:01 PM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Thomas Brandt	Individual	Support	Written Testimony Only

Comments:

Strong support!

SB-2329-HD-1

Submitted on: 4/1/2024 8:20:38 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Diane Preza	Individual	Support	Written Testimony Only

Comments:

Testimony in Support of SB2329 SD1 HD1

House Committee on Finance (FIN)

March 2, 2024, 2:30 p.m., Room 308 & Via Zoom

Aloha Committee Members,

I am Diane Preza from the island of Lāna‘i.

I strongly support SB2329 SD1 HD1 regarding restocking our precious loko i‘a (fishponds) by appropriating much-needed funds for this restorative aquaculture effort that continues to gain more interest and support in the face of climate change and increased pressures to ensure a more sustainable and abundant Hawai‘i now and into the future. Please reinstate the original dollar amounts and number of positions before PASSING this measure.

On Lāna‘i we face many challenges in restoring our Waia‘ōpae fishpond. Once restored Waia‘ōpae will play a significant role in our effort to achieve food security on Lāna‘i. Passing this measure will help us all progress toward sustainability in Hawai‘i overall.

Mahalo for considering my testimony,

Diane Preza

SB-2329-HD-1

Submitted on: 4/1/2024 8:25:06 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
tyson arasato	Marine Science Learning Center	Support	Written Testimony Only

Comments:

Apr 1, 2024

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,

My name is Tyson Arasato and I am a teacher at Waianae High School. I am a teacher at the Marine Science Learning Center (2020-present) as well as a former student (2005-2007). I live and work in Waianae and I support SB2329 because it will have a positive impact on our community, local fishponds and the wild stock of mullet in hawaii.

I have visited various fishponds on multiple islands over the past 10 years. While visiting I have taken part in fixing and improving in a variety of ways. But none of the work and efforts will matter if we can't get native mullet back in the fishpond. The hatchery will be the missing component needed to restart productive fishponds. Aside from being a much needed source of fish for fishponds, the hatchery will also help restore the population of native fish in the wild.

This hatchery is needed for our state and our culture (Hawaiian) as a whole.

Mahalo for your time and consideration

SB-2329-HD-1

Submitted on: 4/1/2024 8:25:26 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Caysha Tanimoto	Waianae High School Marine Science Learning Center	Support	Written Testimony Only

Comments:

Testimony in Support of SB2329 SD1 HD1
House Committee on Finance (FIN)
March 2, 2024, 2:30 p.m., Room 308 & Via Zoom

RE: <indicate whether you support, oppose, or are commenting and delete the other options:

SUPPORT FOR, OPPOSITION TO, OR COMMENTS TO> SENATE BILL 2329

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

My name is Caysha Tanimoto, I am a current Senior student at Waianae High School and a Student of the Marine Science Center at Waianae High School and I'm here to strongly support SB 2329: Mullet Production for fishponds and stock enhancement.

At the learning center, as a student we have spent our time learning about aquaculture ecosystems, health and science by visiting different fishponds and rearing species in our on campus saltwater aquaculture facility. This bill can help us as students now and the future students to have access to learn new skills and life forms about aquaculture and be able to give back to our kai and land. Also this can increase food security in our community and that with help with native fish growth and increase breeding populations .

Thank you for the opportunity to testify

SB-2329-HD-1

Submitted on: 4/1/2024 8:25:48 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Kainalu Pakele	Marine Science Learning Center	Support	Written Testimony Only

Comments:

April 1st, 2024

RE: SENATE BILL 2329

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

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

My name is Kainalu Pakele, I am a part of the Marine Science Learning Center at Waianae High School. I am writing in support of SB 2329.

This bill will support our community because it would open more opportunities and jobs in aquaculture. Having a hatchery on campus would give students and teachers to study new life forms and develop new skills. This bill would also increase the food security in Hawaii and make us more independent. By supporting fish ponds by giving them access to more native fish to grow and increase their native fish stock. This bill would help ‘Aeae (Mullet) come back to Waianae. It would give us a way to raise more native fish to introduce back into our oceans.

Thank you for your consideration of this bill.

Sincerely, Kainalu Pakele

Testimony in Support of SB2329 SD1 HD1
House Committee on Finance (FIN)
March 2, 2024, 2:30 p.m., Room 308 & Via Zoom

4/1/24

Aloha pumehana Committee Members,

I am Chatham Callan, Associate Professor of Aquaculture at UH Hilo, submitting this testimony as a private citizen (not on behalf of UH).

I **strongly support** SB2329 SD1 HD1 regarding restocking our precious loko i‘a (fishponds) by appropriating much-needed funds for this restorative aquaculture effort that continues to gain more interest and support in the face of climate change and increased pressures to ensure a more sustainable and abundant Hawai‘i now and into the future. **Please reinstate the original dollar amounts and number of positions before PASSING this measure.**

Hawai‘i once had a thriving loko i‘a system of over 500 fishponds across the islands, supporting estimates of over one million kānaka with an average of up to 600 pounds of fish per acre, per year, or over two million pounds of fish annually (see [Loko I‘a Needs Assessment](#), Aug. 2021). **Loko i‘a do not only provide increased food security, but also cultural and spiritual revitalization and perpetuation, as well as increased opportunities for multi-sector collaboration.** For various political reasons, loko i‘a systems in Hawai‘i were largely condemned or neglected, and today **we all know that the vast majority of all our food is imported, with estimates showing that roughly 60% of our seafood alone is imported.** With growing efforts in loko i‘a restoration and education over the years, several practitioners have voiced their hopes to begin restocking the nearly-restored fishponds to support our shared goal to live more sustainably and independently from reliance on outside food sources. **Nearly 30 years ago, the Governor’s Task Force on Moloka‘i Fishpond Restoration published a report recommending the state to fund the development of hatcheries to provide pua (baby fish) for fishponds and stock enhancement for surrounding reefs.** Although some funding has been recently provided since this recommendation three decades ago, more funding and continued support is necessary to ensure success for restocking our loko i‘a.

I have over 20 years of experience in aquaculture and production of marine fish, having served as the Director of the Finfish Research Program at Oceanic Institute on Oahu, and now as an Associate Professor of Aquaculture at UH Hilo. I have personally worked with many of Hawaii’s fishpond proprietors, and have led projects aimed at restocking these ponds with mullet over the past 10 years. I can attest to the need for hatchery produced fish to help re-vitalize these important resources, and would like to point out that UH Hilo Pacific Aquaculture & Coastal Resources Center can serve as a partner in this important work. That facility already has mullet broodstock and the staff necessary to begin producing fingerlings, it just needs the financial support to do so.

Please **PASS** SB2329 SD1 HD1 as an important step toward greater food security for Hawai'i, as well as returning more Native Hawaiian and local communities to the stewardship roles needed to best protect and grow our shared biocultural resources through loko i'a.

Mahalo nui loa for considering my testimony,

Chatham Callan

A handwritten signature in black ink, appearing to read 'Chatham Callan', with a long horizontal flourish extending to the right.

SB-2329-HD-1

Submitted on: 4/1/2024 8:31:07 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Raighneaxis Kaaihue	Individual	Support	Written Testimony Only

Comments:

April 1, 2024

TO: Senator Donovan M. Dela Cruz, Chair; and Senator Sharon Y. Moriwaki, Vice Chair

Senate Ways and Means Committee

Friday, February 23, 2024; 10:30 a.m.; State Capitol Conference Room 211 &

Videoconference

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 Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committees,

My name is Raighneaxis Kaaihue, I am a student in the Marine Science Learning Center at Waianae High School. I am writing in support of SB2329: Mullet Production for fishponds and stock enhancement.

This bill would be beneficial for our community because it would give our community more opportunities to learn and build our island's food security. This is of importance to me because in Marine Science I have learned that if this bill were to be passed, we could learn about this technology at our high school and provide learning opportunities in our community. The baby fish could help produce more fish in fishponds and build stock

enhancement for the island, not just Waianae. I believe that this would be really beneficial to the future generations and food security of the islands.

Thank you for your time and I hope you consider passing this bill.

Sincerely,

Raighneaxis Kaaihue

SB-2329-HD-1

Submitted on: 4/1/2024 8:43:20 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Glen Kagamida	Individual	Support	Written Testimony Only

Comments:

ALL AQUACULTURE IS IMPORTANT AND AN OBVIOUS ARE FOR HAWAII. SHOULD DEFINITELY BE PURSUED.

MAHALO!

SB-2329-HD-1

Submitted on: 4/1/2024 8:53:49 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Guyson-Shawn Koa	Marine Science Learning Center	Support	Written Testimony Only

Comments:

Aloha, O Guyson-shawn Koa ko'u inoa no MĀili, Wai'anae mai oa.

I am writing this testimony in support for my Wai'anae High school program MSLC. I am a senior/student at Waianae high school. If we were able to have a hatchery in our facility/school it would be very beneficial to the community, students and school. With this hatchery we would be able to expand our saltwater facility, have new ways to teach and show the schools that do come to our school for facility tours, which was proven from one of our senior projects which we do annually. We hope you consider passing this bill It would also be very appreciative by the community, students, and the future generations to come.

Apr 1, 2024

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,

My name is Tyson Arasato and I am a teacher at Waianae High School. I am a teacher at the Marine Science Learning Center (2020-present) as well as a former student (2005-2007). I live and work in Waianae and I support SB2329 because it will have a positive impact on our community, local fishponds and the wild stock of mullet in Hawaii.

I have visited various fishponds on multiple islands over the past 10 years. While visiting I have taken part in fixing and improving in a variety of ways. But none of the work and efforts will matter if we can't get native mullet back in the fishpond. The hatchery will be the missing component needed to restart productive fishponds. Aside from being a much needed source of fish for fishponds, the hatchery will also help restore the population of native fish in the wild.

This hatchery is needed for our state and our culture (Hawaiian) as a whole.

Mahalo for your time and consideration

Explain your reasoning for why you support (copy and paste from your last testimony)

Make sure you have a thank you (copy and paste)

Sign

SB-2329-HD-1

Submitted on: 4/1/2024 9:26:01 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

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

Comments:

Aloha nui committee members,

My name is Jason and I volunteer for Waihe'e Limu Restoration. I am writing this in support of Bill SB2329 as it is a vital part of Hawaiian cultural revitalization. It is an important investment for restorative aquaculture innovation and development here in Hawai'i, as well as increased food sustainability and security in our islands.

Mahalo & please PASS SB2329 SD1 HD1.

Jason

SB-2329-HD-1

Submitted on: 4/1/2024 9:40:49 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
kehaulani custino	Individual	Support	Written Testimony Only

Comments:

Aloha nui Committee Members,

I am Kehaulani Custino from Waiehu Maui and I am apart of Waihe'e Limu Restoration.

Waihe'e was once a fishing village and my ohana who reside in the area still fish there today. But over time the fish population started to dwindle. I have seen when limu used to roll up on the beach in large clumps as big as a watermelon when I was a child in the 80's and today there is barely any in sight. My mother started limu restoration to bring the fish back in 2004 and still with the efforts to advocate for the return of fresh water, replanting limu, educating the public about limu and the important role it plays, the fish is not returning in the way it used to. The area needs the fish to return and the surrounding areas around Waihe'e once had fish ponds which made Waihe'e, Waiehu, and Kapuna an area perfect for the lawai'a of the area to support their families. Having a loko i'a will support both my limu restoration efforts as seeing the fish return to the area. Today there is more baracuda found in these waters and make it difficult for the baby pua to find a safe space to grow. I will also add, shoreline fish is easier for mommas to eat when they are hapai. The loko i'a will support the healthy development of our children because the shoreline fish will be in more abundance with the support of a loko i'a.

By supporting bill SB2329 SD1 HD1 there will be a better enviroment that would support the limu restoration efforts and bring the fish back as well. Waihe'e was once a fishing village and I hope to continue to see the area as a fishing village for my children and their children as well.

Mahalo & please PASS SB2329 SD1 HD1.

Kehaulani Custino

SB-2329-HD-1

Submitted on: 4/1/2024 10:12:42 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

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

Comments:

April 1, 2024

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,

My name is Hyrum Tom. I'm a current student at Waianae High School (c/o 2025) 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 Treasurer

Member of the WHS PTSA & SCC

WHS D&D Club President

Phone Number: (808)773-0376

Email: hyrumtom53@gmail.com

SB-2329-HD-1

Submitted on: 4/1/2024 10:15:44 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

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

Comments:

Apr 1, 2024

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-HD-1

Submitted on: 4/1/2024 10:18:59 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

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

Comments:

Aloha,

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-HD-1

Submitted on: 4/1/2024 10:20:20 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

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

Comments:

**TO: Senator Donovan M. Dela Cruz, Chair; and Senator Sharon Y. Moriwaki, Vice Chair
Senate Ways and Means Committee**

**Friday, February 23, 2024; 10:30 a.m.; State Capitol Conference Room 211 &
Videoconference**

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 Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committees,

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, Giovanni Torres

Name Giovanni Torres

SB-2329-HD-1

Submitted on: 4/1/2024 10:20:25 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

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

Comments:

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,

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-HD-1

Submitted on: 4/1/2024 10:20:27 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Xzavier Malaki	marine science learning center	Support	Written Testimony Only

Comments:

My name is Xzavier Malaki and i am supporting SB2329 because we are a local community that uses these tools to help learn and understand.

I support this because it will help us learn and know whats best for our community.

Mahalo for your time !

Xzavier Malaki

SB-2329-HD-1

Submitted on: 4/1/2024 10:26:02 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

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

Comments:

Aloha e Chair Gates, Vice Chair Kahaloa, 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-HD-1

Submitted on: 4/1/2024 10:26:14 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
chaunston kido-white	Individual	Support	Written Testimony Only

Comments:

Aloha e Chair Gates, Vice Chair Kahaloa, and Members of the Committee, My name is Chaunston Kido-White I'm a student a waianae high school Marine science learning center I believe this bill could help us because with this hatchery us students can learn how to reproduce our native fish in the future. Without the fish hatchery, who knows how the fish population will be in like 30 years from now some of our native species might be gone and the future generations won't be able to see this fish that i've seen. So yes this this hatchery would help us out

SB-2329-HD-1

Submitted on: 4/1/2024 11:28:24 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
LaVerne S Bishop	Individual	Support	Written Testimony Only

Comments:

Honorable Committee Members,

My name is LaVerne Bishop from Kaua'i. I strongly support this measure as a foundation for the state's direction in `Aina Momona, while incorporating our next generation in rediscovery and capacity building in the wisdom of fishponds as a balanced, abundant source of fish, limu, taro and other wetland plants. Acting on our climate resiliency, dedicating state positions and educating our young people in right stewardship of the land to benefit the people of Hawaii is right. I'm a board member of Malama Hule`ia. Our work at the Alakoko Fishpond revitalizes the pond ecosystems, surrounding wetlands, and forested hillsides, vastly improves water quality, supporting native plants and regenerating threatened and endangered bird populations. Importantly, educating the next leaders and engaging community in pride of place through conscious caretaking, now called aquaculture, secures a future that sustained thousands in the past. Thank you for your service and careful consideration of this bill.

Respectfully submitted,

LaVerne Bishop

SB-2329-HD-1

Submitted on: 4/1/2024 11:55:44 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Shannon Rudolph	Individual	Support	Written Testimony Only

Comments:

Support

SB-2329-HD-1

Submitted on: 4/1/2024 4:29:59 PM

Testimony for FIN on 4/2/2024 2:30:00 PM

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

Comments:

Strong support for infrastructure and workforce that will restock our fishponds and feed our people.

- U'ilani Naipo

SB-2329-HD-1

Submitted on: 4/1/2024 9:13:22 PM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Greg Puppione	Individual	Support	Written Testimony Only

Comments:

My name is Greg Puppione, a resident of Honolulu, and I strongly support SB2329 SD1 HD1.

This bill will provide critical support for loko i'a practitioners, and significantly enhance their efforts to build our islands' food security, perpetuate cultural values and practices, restore our nearshore ecosystems, and ensure our islands' resilience for generations to come. Please pass this measure as an important, smart investment in the future of our Hawai'i nei.

Mahalo nui for the opportunity to testify.

SB-2329-HD-1

Submitted on: 4/1/2024 9:27:04 PM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Lei Tata	Individual	Support	Written Testimony Only

Comments:

My name is Lei Tata, a resident of Kahuku, and I strongly support SB2329 SD1 HD1.

This bill will provide critical support for loko i'a practitioners, and significantly enhance their efforts to build our islands' food security, perpetuate cultural values and practices, restore our nearshore ecosystems, and ensure our islands' resilience for generations to come. Please pass this measure as an important, smart investment in the future of our Hawai'i nei.

Mahalo nui for the opportunity to testify.

SB-2329-HD-1

Submitted on: 4/2/2024 4:03:24 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Danelle Guion	Individual	Support	Written Testimony Only

Comments:

My name is Danielle Guion, a resident of Makakilo, O'ahu, Hawaii, and I strongly support SB2329 SD1 HD1.

This bill will provide critical support for loko i‘a practitioners, and significantly enhance their efforts to build our islands’ food security, perpetuate cultural values and practices, restore our nearshore ecosystems, and ensure our islands’ resilience for generations to come. Please pass this measure as an important, smart investment in the future of our Hawai‘i nei.

Mahalo nui for the opportunity to testify.

SB-2329-HD-1

Submitted on: 4/2/2024 7:56:38 AM

Testimony for FIN on 4/2/2024 2:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Natasha Latta	Individual	Support	Written Testimony Only

Comments:

My name is Natasha Latta, a resident of Paauilo Big Island, and I strongly support SB2329 SD1 HD1.

This bill will provide critical support for loko i'a practitioners, and significantly enhance their efforts to build our islands' food security, perpetuate cultural values and practices, restore our nearshore ecosystems, and ensure our islands' resilience for generations to come. Please pass this measure as an important, smart investment in the future of our Hawai'i nei.

Mahalo nui for the opportunity to testify.