JOSH GREEN, M.D. Governor

> SYLVIA LUKE Lt. Governor



SHARON HURD
Chairperson, Board of Agriculture

DEXTER KISHIDADeputy 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 SENATE COMMITTEE ON WAYS AND MEANS

FEBRUARY 23, 2024 10:30 AM CONFERENCE ROOM 211

SENATE BILL NO. 2329 RELATING TO AQUACULTURE

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

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





The Marine Science Learning Center at Wai'anae High School

Phone: (808) 697-9400

85-251 Farrington Hwy, Wai'anae HI 96792

Dana Hoppe
Program Director, Marine Science Learning Center
Wai'anae High School
85-191 Farrington Fwy
Wai'anae, HI 96792
d.hoppe@seariders.k12.hi.us
808 382-5694

February 21, 2024

I am writing on behalf of the Wai'anae Marine Science Learning Center to express our strong support for SB2029. Establishing a Native fish hatchery at Wai'anae 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 Wai'anae have a part in bringing the 'anae back to Wai'anae.

The Marine Science Learning Center at Wai'anae High School is a program on O'ahu that serves youth on the Wai'anae 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 Wai'anae High School students to earn up to 8 credits. Our mission is to develop young adults into confident, caring, and aloha 'āina-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 Wai'anae 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 Wai'anae 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 Wai'anae.

Dana Hoppe
Program Director
Marine Science Learning Center
Wai'anae High School

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Rufina Kaauwai Molokai

Negus Manna Lāna'i

India Clark North Shore, Oʻahu

Christian Zuckerman Wai'anae, O'ahu

Ted Radovich Waimanalo, Oʻahu

Vincent Kimura Honolulu, Oʻahu

Natalie Urminska Kauai



Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Senate Ways and Means Committee.

The Hawaii Farmers Union is a 501(c)(5) agricultural advocacy nonprofit representing a network of over 2,500 family farmers and their supporters across the Hawaiian Islands. **HFUU supports SB2329.**

This bill provides crucial funding for mullet production for fishponds and stock enhancement, which is essential for the sustainability of aquaculture in Hawaii. By allocating funds for positions, equipment, and maintenance and operating costs, this bill will help to support local farmers and ensure the continued success of our aquaculture industry.

Aquaculture plays a vital role in Hawaii's economy and provides valuable resources for the local community. By investing in mullet production for fishponds and stock enhancement, we are not only supporting our farmers, but also helping to protect our natural resources and promote food security in the state. I urge lawmakers to pass SB2329 Aquaculture and continue to invest in the future of Hawaii's aquaculture industry.

Mahalo for the opportunity to testify.

Kaipo Kekona, President HFUU/HFUF

Kenned S. K. Kebene



Testimony Before The Senate Committee on Ways and Means IN SUPPORT OF SB2329

February 23, 2024, 10:30 AM, Room 211 & Via Zoom

We are Olan Leimomi Fisher and Brenda Asuncion Lima, Kuaʻāina Advocate and Hui Mālama Loko Iʻa Coordinator, respectively, testifying on behalf of Kuaʻāina Ulu ʻAuamo (or KUA). "Kuaʻāina 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. Hawaiʻi'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. 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) Ānuenue Fisheries Research center on O'ahu and one at Wa'ianae High School;
- Two full-time equivalent (2.0 FTE) Aquatic Biologist IV positions, one at DAR's Ānuenue Fisheries Research Center on Oʻahu and one at DAR's Wailoa Fisheries Research Station in Hilo, Hawaiʻi;
- (3) Three full-time equivalent (3.0 FTE) Fishery Technician V positions, one at DAR's Ānuenue 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 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 loke it 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 loke it and their surrounding waters. In our conversations with the Hui Mālama Loke Ita, practitioners from 24 loke it and 5 different islands have indicated this opinion in the past several years. Looking beyond the boundaries of the fishpond walls, loke ita 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 submit testimony in strong support. Please PASS SB2329.

Aloha 'Āina Momona no nā kau ā kau.



The Marine Science Learning Center at Wai'anae High School

Phone: (808) 697-9400

85-251 Farrington Hwy, Wai'anae HI 96792

February 21, 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 e Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committees,

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'is 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 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



Senate Committee on Ways & Means

Hawai'i Alliance for Progressive Action (HAPA) Supports: SB 2396

Monday, February 23rd, 2024 10:30 AM, Conference Room 211

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

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

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. 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 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,

Anne Frederick Executive Director

1

https://www.iccaconsortium.org/index.php/2021/02/20/loko-ia-fishponds-hawaii-communities-restoring-fish eries/

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.

Submitted on: 2/21/2024 4:43:56 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|-------------------|---|---------------------------|---------------------------|
| Makaala Kaaumoana | Testifying for Hanalei Watershed Hui | Support | Written Testimony Only |

Comments:

The Hanalei Watershed Hui strongly supports SB2329. Fishponds are the treasured past and needed future of our Hawaii. They teach us what can be, what resilience is, what healthy proteins are and what we can do to protect our food sources in the coming days of climat change.

Fishponds are critical to every community and must be fostered and promoted and supported.

Me ka pono,

Makaala Kaaumoana

Executive Director



Ali'i Pauahi Hawaiian Civic Club 99-045 Nalopaka Place `Aiea, Hawai`i 96701 APHCC@gmail.com

TESTIMONY OF

Kehaulani Lum President

Before the

SENATE COMMITTEE ON WAYS AND MEANS

Hearing Date: Friday, February 23, 2024 10:30 AM Conference Room 211 & Videoconferen e Hawai'i State Capitol 415 South Beretania Street Honolulu, Hawai'i. 96813

In Consideration of

SB SB 2329

Relating to Aquaculture

Aloha Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Senate Committee on Ways and Means,

Mahalo nui loa for your kind consideration of S.B. 2329, which appropriates funds, including for positions, equipment, and maintenance and operations costs, for mullet production for fishpond and stock enhancement on the islands of O'ahu and Hawai'i.

Ali'i Pauahi Hawaiian Civic Club **strongly supports** this measure as a means to increase the stewardship of 'anae (full-grown mullet), as a valuable cultural practice and food source in Hawai'i Nei.

In the ancestral Hawaiian Chant of Creation, called the Kumulipo, which was translated by Queen Lili'uokalani while she was held under house arrest in 'lolani Palace, the 'ama'ama (baby mullet) and

'anae are noted as two of the earliest life forms born in the sea, appearing after the aku, the ahi, the opelu and the akule, and long before the insects and the birds.

A song written in 1963 by Sam Alama, entitled, "'Ama'ama," refers to the mullet in its opening refrain, "He Aloha ē ka i'a lā, 'Ai a ka 'ama'ama." "I love fish," "To eat mullet." Thirteen years later, less than 40,000 pounds of 'ama'ama were caught in local waters. By 2019, that number was less than 1,600 pounds.

As a decade-long partner in the restoration of the 400-year-old royal Loko i'a Pā'aiau, on the shores of Ke Awa Lau o Pu'uloa (Pearl Harbor), where 'anae (mature mullet) are famed in mo'olelo, Ali'i Pauahi is intimately aware of the scarcity of this fish in the wild. So rare are they that when we ask the children who visit the pond what kind of fish they eat, not a single one has referred to the mullet.

Development, loss of habitat and food source, overfishing, and invasive plant and animal impact have led to the loss of the ocean-spawning stock, to the point that many believe that they will not survive for much longer, without the kind of help envisioned in this measure. With your support, our young generations will reconnect to this revered ancient fish, while learning about the positive impact that they can make in their care and the well-being of our ocean and the community as a whole.

We thank you for your serious consideration of S.B. 2329

Mahalo nui loa,

Kehaulani Lum

Submitted on: 2/21/2024 10:37:22 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|----------------|--------------------------------|---------------------------|---------------------------|
| Jeri Di Pietro | Testifying for Hawai`i SEED | Support | Written Testimony Only |

Comments:

Hawai`i SEED strongly supports SB2329, creating a vehicle for mullet production and stocking our Loko Γa. Healthy Fishponds are an important aspect to providing proteins into our local food security. The cultural presence of fishponds are a time tested design and a key resource. Please support SB2329. Mahalo.



February 22, 2024

To: Chair Donavan M. Dela Cruz, Vice Chair Sharon Y. Moriwaki, and the committee of Ways and means

Subject: In **Support of SB 2329**, Aquaculture; Mullet Production; Fishponds and Stock Enhancement; Appropriation; Expenditure Ceiling (\$)

Aloha mai kakou, Chair Donovan M. Dela Cruz, Vice Chair Sharon Y. Moriwaki, and all other members of the WAM senate committee.

On Behalf of Purple Maia and the Hawaii Food+ Policy Internship.

I **support SB2329** Relating to Aquaculture because this bill 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 of 2020, NOAA, in partnership with Conservation International and He'eia Fishpond helped supply the fishpond with hundreds of juvenile 'ama'ama. They said that by 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 and can provide a support system for them if there is an accident or negative situation for said producers.

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 undergraduates 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.



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 Hawaii's aquaculture future.

Mahalo,

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 undergraduates 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 in Support of SB2329

Senate Committee on Ways and Means (WAM)

February 23, 2024, 10:30 a.m., Room 229 & Via Zoom

Aloha mai Committee Members,

I am Lucas Mead from Puna, Hawai'i, representing the Kumuola Marine Science Education Center.

We **strongly support** SB2329 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.

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. Over 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 loke i'a.

Kumuola manages rehabilitation of Waiāhole, Kapalaho and Waiʻōpio fishponds in Honohononui, Hilo, Hawaiʻi, which serve as "living laboratories" for biocultural knowledge, research, education and training. Over the past five years, genetic research done by Kumuola and our Kamehameha Schools students indicates that **important native juvenile food fish (pua)** entering the fishponds from the ocean, specifically the 'ama'ama, are heavily outnumbered by an introduced invasive species, the Australian mullet or kanda. Annual recruitment ratios into our fishponds range anywhere from 1:7 to 1:62, native:invasive. This bill is one step towards reclamation of community health through support of native food systems and biocultural





resources. Hatcheries tied to our local K-20 educational institutions would not only provide an important pulse of native fish back into our environment, but also pave the way to grow local resource management talent and the next generation of 'āina-conscious stewards.

Please **PASS** SB2329 as an important step toward greater food security for our islands, as well as bringing more Native Hawaiians and local communities back into the stewardship roles needed to best protect and grow our shared biocultural resources through loko i'a.

Mahalo nui loa for considering our testimony,

Lucas Mead

Director, Kumuola Marine Science Education Center Kamehameha Schools Hawai'i, Hālau Kupukupu lumead@ksbe.edu



Submitted on: 2/22/2024 9:33:46 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

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

Comments:

2/22/24

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 it's generations to come.

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

Sincerely,

Serenity Kamaluonalani Hema

Phone #: (808)302-8523

Email: sk.hemz808@gmail.com

Submitted on: 2/22/2024 9:39:13 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

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

Comments:

I (Tyson Arasato) wholeheartedly support SB2329 on creating a native fish hatchery to help restore the various loko i'a around the state. As a CTE teacher at Waianae High School, where the hatchery will be housed, my community will also benefit from this bill. Our Aquaculture facility has been in operation since 1989. Over the past 30 years students have learned, worked and grown at the Marine Science Learning Center. I was blessed to be a part of the program as a student from 2005 and 2007. In 2019 I became the lead Marine Science teacher of the program and have been allowing my students to experience the same learning opportunities I had as a student. The hatchery will increase the practical and professional capacity of my program. Although my students will not be working in the hatchery they will be learning how to grow algae and live larval feeds that are used in the hatchery. Our staff has already undergone training and purchased equipment that will mirror what is being done in the hatchery. We have also made several connections with industry professionals who have done workshops with both staff and students. There are an estimated 40,000 jobs in aquaculture in the US. The hatchery helps our students learn skills that make them competitive in a difficult economic environment. Two of our former students are currently working at the Oceanic Institute as hatchery technicians. Along with creating more food security in Hawaii this bill serves the youth of Hawaii by providing new learning opportunities in the ever growing industry of aquaculture.

<u>SB-2329</u> Submitted on: 2/22/2024 10:36:53 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted B | y | Organization | Testifier Position | Testify |
|-------------|---|--|---------------------------|---------------------------|
| Chris Crame | r | Testifying for Maunalua Fishpond Heritage Center | Support | Written Testimony Only |

Comments:

In strong support

Submitted on: 2/20/2024 5:24:26 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------|--------------|---------------------------|---------------------------|
| Anthony Mau | Individual | Support | Written Testimony Only |

Comments:

I am strongly supporting this bill as an aquaculture professional, scientist, and advocate for Hawaiian Fish Ponds and to support viable fisheries via stock enhancement. Fishpond managers and managing organizations have proven to be able to restore the fishpond infrastructure (to the extent permitted with surrounding land-use changes and infrastructure changes that impact the funciton of each pond), and the next phase is to support the return of the ecology in those ponds. While this bill does not have a large economnic return, this has significant educational, cultural, and climate-related benefits for the entire State. This bill would allow for the continued positive growth that all of our communities want to have.

-Anthony Mau Ph.d.

Submitted on: 2/20/2024 7:03:44 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------|--------------|---------------------------|---------------------------|
| David Leake | Individual | Support | Written Testimony Only |

Comments:

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

I am testifying in strong support of SB 2329.

Restored loko i'a or fishponds are a key component of a healthy ahupua'a system. They play an important environmental function supporting healthy nearshore fisheries and bolstering local food security.

Loko i'a (fishponds) remain a key resource for sustainably feeding local communities. Loko i'a are also important cultural sites providing space for communities to gather, connect to place, learn and mālama.

Please support SB 2329.

Mahalo for your consideration!

David Leake, Kaneohe

Submitted on: 2/20/2024 7:23:25 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

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

Comments:

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

I am testifying in strong support of SB 2329.

Restored loko i'a or fishponds are a key component of a healthy ahupua'a system. They play an important environmental function supporting healthy nearshore fisheries and bolstering local food security.

Loko i'a (fishponds) remain a key resource for sustainably feeding local communities. Loko i'a are also important cultural sites providing space for communities to gather, connect to place, learn and mālama.

Please do the right thing and support SB 2329.

Mahalo for your consideration!

Mary Lu Kelley, Koloa, Kauai

Submitted on: 2/20/2024 7:49:36 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------|--------------|---------------------------|---------------------------|
| Erik Meade | Individual | Support | Written Testimony Only |

Comments:

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

Mahalo for this opportunity to testify on SB 2329, which I strongly support.

Nearshore waters are very dear to me. I have seen an alarming amount of degradation in the last decade. Bills like SB 2329 are vitally important addressing the damages of our nearshore waters.

Thank you for your consideration, Erik Meade, Honolulu

Submitted on: 2/20/2024 8:34:33 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| lisa Lee | Individual | Support | Written Testimony Only |

| Comments | |
|----------|----|
| | ٠. |

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

I am testifying in strong support of SB 2329.

Restored loko i'a or fishponds are a key component of a healthy ahupua'a system. They play an important environmental function supporting healthy nearshore fisheries and bolstering local food security.

Loko i'a (fishponds) remain a key resource for sustainably feeding local communities. Loko i'a are also important cultural sites providing space for communities to gather, connect to place, learn and mālama.

Please support SB 2329.

Mahalo for your consideration!

Lisa Lee, Honolulu

Submitted on: 2/20/2024 8:54:02 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

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

Comments:

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

I am testifying in strong support of SB 2329.

Restored loko i'a or fishponds are a key component of a healthy ahupua'a system. They play an important environmental function supporting healthy nearshore fisheries and bolstering local food security.

Loko i'a (fishponds) remain a key resource for sustainably feeding local communities. Loko i'a are also important cultural sites providing space for communities to gather, connect to place, learn and mālama.

Please support SB 2329.

Mahalo for your consideration! Eliel Starbright, Kapaa

<u>SB-2329</u> Submitted on: 2/20/2024 9:13:45 PM Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| Marlies Lee | Individual | Support | Written Testimony Only |

Comments:

I support this

Submitted on: 2/20/2024 9:16:57 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

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

| Comments | |
|----------|----|
| | ٠. |

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

I am testifying in strong support of SB 2329.

Restored loko i'a or fishponds are a key component of a healthy ahupua'a system. They play an important environmental function supporting healthy nearshore fisheries and bolstering local food security.

Loko i'a (fishponds) remain a key resource for sustainably feeding local communities. Loko i'a are also important cultural sites providing space for communities to gather, connect to place, learn and mālama.

Please support SB 2329.

Mahalo for your consideration!

Keala Fung, Honolulu

Submitted on: 2/21/2024 12:23:12 AM

Testimony for WAM on 2/23/2024 10:30:00 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.

Restored loko i'a or fishponds are a key component of a healthy ahupua'a system. They play an important environmental function supporting healthy nearshore fisheries and bolstering local food security.

Loko i'a (fishponds) remain a key resource for sustainably feeding local communities. Loko i'a are also important cultural sites providing space for communities to gather, connect to place, learn and mālama.

Please support SB 2329.

Submitted on: 2/21/2024 4:10:53 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

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

Comments:

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

I am testifying in strong support of SB 2329.

Restored loko i'a or fishponds are a key component of a healthy ahupua'a system. They play an important environmental function supporting healthy nearshore fisheries and bolstering local food security.

Loko i'a (fishponds) remain a key resource for sustainably feeding local communities. Loko i'a are also important cultural sites providing space for communities to gather, connect to place, learn and mālama.

Please support SB 2329.

Mahalo for your consideration!

Sven Sorge

Submitted on: 2/21/2024 4:11:48 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

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

Comments:

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

I am testifying in strong support of SB 2329.

Restored loko i'a or fishponds are a key component of a healthy ahupua'a system. They play an important environmental function supporting healthy nearshore fisheries and bolstering local food security.

Loko i'a (fishponds) remain a key resource for sustainably feeding local communities. Loko i'a are also important cultural sites providing space for communities to gather, connect to place, learn and mālama.

Please support SB 2329.

It is vital to continue to live the values of Aloha 'Āina, Mālama 'Āina and make decisions that support the well-being and thriving of all future generations on island.

Mahalo piha for your consideration! Me ke aloha,

Irena Bliss Haʻikū, Maui 96708

<u>SB-2329</u> Submitted on: 2/21/2024 5:44:14 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------|--------------|---------------------------|---------------------------|
| Barbara Best | Individual | Support | Written Testimony Only |

Comments:

Provides food security plus local culture Al gathering sites, so mahalo for your consideration

<u>SB-2329</u> Submitted on: 2/21/2024 8:48:24 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| Valerie Weiss | Individual | Support | Written Testimony Only |

Comments:

Please support this measure to provide local food for local people, including nearshore fish and fish ponds.

Submitted on: 2/21/2024 9:08:35 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

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

Comments:

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

I am testifying in strong support of SB 2329.

Restored loko i'a or fishponds are a key component of a healthy ahupua'a system. They play an important environmental function supporting healthy nearshore fisheries and bolstering local food security.

Loko i'a (fishponds) remain a key resource for sustainably feeding local communities. Loko i'a are also important cultural sites providing space for communities to gather, connect to place, learn and mālama.

Please support SB 2329.

Mahalo for your consideration!

<u>SB-2329</u> Submitted on: 2/21/2024 9:43:58 AM Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| Monica Lehua Morris | Individual | Support | Written Testimony Only |

Comments:

In support. Mahalo.

<u>SB-2329</u> Submitted on: 2/21/2024 9:50:39 AM Testimony for WAM on 2/23/2024 10:30:00 AM

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

Comments:

support

Submitted on: 2/21/2024 9:59:48 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| Jodie | Individual | Support | Written Testimony Only |

| Comments | |
|----------|----|
| | ٠. |

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

I am testifying in strong support of SB 2329.

Restored loko i'a or fishponds are a key component of a healthy ahupua'a system. They play an important environmental function supporting healthy nearshore fisheries and bolstering local food security.

Loko i'a (fishponds) remain a key resource for sustainably feeding local communities. Loko i'a are also important cultural sites providing space for communities to gather, connect to place, learn and mālama.

Please support SB 2329.

Mahalo for your consideration!

Jodie Thayer, Wainiha

Submitted on: 2/21/2024 11:27:42 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------|--------------|---------------------------|---------------------------|
| Amber Datta | Individual | Support | Written Testimony Only |

Comments:

Aloha Chair Gabbard and Committee Members:

I am writing in support of SB2329 to appropriate funds for mullet production and stock enhancement. I am from Hawai'i Island and hold a PhD in Conservation Science. I have participated in efforts to restore loko i'a and am supportive of any effort to strengthen these systems. Increasing DLNR's capacity to restore and realize the full potential of loko i'a across our state is critical for revitalizing cultural practices, providing jobs, and increasing food security across our islands. Please support and pass this bill.

Mahalo,

Amber Datta, PhD

Submitted on: 2/21/2024 12:58:07 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| Felicidy Phimmasone | Individual | Support | Written Testimony Only |

Comments:

I support SB2329 because it is an important investment for restorative aquaculture innovation and development here in Hawai'i. In addition, this bill will provide increased food sustainability and security in our islands.

Mahalo and please PASS SB2329.

Submitted on: 2/21/2024 1:05:29 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------|--------------|---------------------------|---------------------------|
| Nanea Lo | Individual | Support | Written Testimony Only |

Comments:

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

I am testifying in strong support of SB 2329.

Restored loko i'a or fishponds are a key component of a healthy ahupua'a system. They play an important environmental function supporting healthy nearshore fisheries and bolstering local food security.

Loko i'a (fishponds) remain a key resource for sustainably feeding local communities. Loko i'a are also important cultural sites providing space for communities to gather, connect to place, learn and mālama.

Please support SB 2329.

me ke aloha 'āina,

Nanea Lo, Mō'ili'ili, O'ahu

Submitted on: 2/21/2024 4:42:01 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| Susan Stayton | Individual | Support | Written Testimony Only |

Comments:

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

I am testifying as a 36 year resident of Hawaii in strong support of SB 2329.

Restored loko i'a or fishponds are a key component of a healthy ahupua'a system. They play an important environmental function supporting healthy nearshore fisheries and bolstering local food security.

Loko i'a (fishponds) remain a key resource for sustainably feeding local communities. Loko i'a are also important cultural sites providing space for communities to gather, connect to place, learn and mālama.

Please support SB 2329.

Mahalo for your consideration!

Susan Stayton, Lawai, Kauai, HI

Submitted on: 2/21/2024 5:50:53 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------------|--------------|---------------------------|---------------------------|
| Jessica dos Santos | Individual | Support | Written Testimony Only |

Comments:

Aloha Legislators,

I am writing to express my enthusiastic support for SB2329, a bill that holds immense significance for the restoration and revitalization of Native Hawaiian loko i'a (fishponds) and the sustainable aquaculture practices they represent. As a resident of Hawai'i deeply committed to preserving our cultural heritage, strengthening food security, and fostering environmental resilience, I believe that this legislation is a crucial step towards achieving these vital objectives.

Native Hawaiian loko i'a are not just aquaculture systems; they are living repositories of our cultural and spiritual heritage, embodying centuries of traditional knowledge, stewardship, and resilience. These fishponds once played a central role in the lives of our ancestors, providing sustenance, livelihoods, and a deep connection to the land and sea. However, following the U.S. Organic Act of 1900, many fishponds were condemned and neglected, leading to a decline in their productivity and significance.

SB2329 seeks to reverse this trend by supporting the restoration and revitalization of loko i'a throughout Hawai'i. By providing increased resources and support for these efforts, the bill not only enhances food security and economic opportunities but also fosters cultural and spiritual revitalization, strengthening the bonds between past, present, and future generations.

The importance of loko i'a extends far beyond their role as food producers. They serve as vibrant hubs of community activity, fostering collaboration and cooperation across diverse sectors. Moreover, the restoration of loko i'a represents a tangible commitment to building resilient local food systems in the face of climate change and external pressures.

One of the most inspiring aspects of SB2329 is its vision for the future of loko i'a, where these fishponds can be restocked from natural populations of prized pua (baby fish) like the 'anae (mullet). This not only speaks to the ecological restoration of these aquatic ecosystems but also to the cultural and spiritual rejuvenation they bring to our communities.

In conclusion, SB2329 represents a critical opportunity to support the restoration and revitalization of Native Hawaiian loko i'a, ensuring that they continue to thrive as vibrant symbols of our cultural heritage and sustainable food systems. I urge you to wholeheartedly support and prioritize the passage of SB2329 for the benefit of our communities, our environment, and future generations.

Sincerely,

Jessica dos Santos

Submitted on: 2/21/2024 6:30:38 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|----------------|--------------|---------------------------|---------------------------|
| Hannah Rozendo | Individual | Support | Written Testimony Only |

Comments:

Aloha, my name is Hannah and I live in the district of Puna on Hawai'i Island. I strongly support SB2329 to renew food security options for people living in Hawai'i. During my time in Hawai'i while studying at UH Hilo, I have volunteered several times at fishponds across the island to support the community who cares for them.

Fishponds should continue to be an essential aspect of culture here, and they deserve greater support. Hawai'i has an incredible legacy of abundance with fishponds and the knowledge, practices, and places need to be preserved for the present and future generations. Each opportunity I have to work in fish ponds is a gift, to learn about the different systems, styles, and species found there.

Fishponds in Hawai'i not only offer the chance to meet a hardworking and caring community, they are a critical investment for restoring the aquaculture that Hawai'i is known for. These innovations in community marine science are unmatched, and provide increased food harvest sustainability and food security for the people living in Hawai'i.

Respectfully,

Hannah Rozendo

Submitted on: 2/21/2024 7:41:26 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|----------------------------------|--------------|---------------------------|---------------------------|
| Kaleiheana-a-Pohaku Stormcrow | Individual | Support | Written Testimony Only |

Comments:

Aloha mai kākou,

Mahalo for the opportunity to submit testimony. I am in strong support of SB2329.

This is an amazing opportunity to bring Hawaiian science and culture into creating sustainable food systems here in Hawai'i. Our ancestors lived here in abundance long before the ships brought food and know how to live sustainably here, we should be living and thinking like they did. Mahalo.

ke aloha,

Kaleiheana Stormcrow

Submitted on: 2/21/2024 8:11:52 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| Kalai Hanohano | Individual | Support | Written Testimony Only |

Comments:

Aloha nō kāua,

My name is Kālai Hanohano. I was raised in He'eia ma mokupuni o O'ahu.

The loko i'a o He'eia has developed into a thriving example of what each ahupua'a and island needs. Hawai'i should be the leading example of sustainability, food production through indigenous methods and practices, and environment restoration and protection. This is a nobrainer decision and should be a top priority of the government. A larger investment of time and resources should be dedicated to scaling a larger number of operational fishponds. This is one small step towards significant and lasting change to Hawai'i. Mahalo.

Kou 'oia'i'o - Kālai Hanohano

February 21, 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,

I, Heather Bailey strongly support SB 2329: Mullet production for fishponds and stock enhancement. Supporting SB 2329 will enhance Hawai'i's food sovereignty and will help to revitalize Hawaii's aquaculture practices.

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

Sincerely, Heather Bailey Heatherbailey808@gmail.com

Submitted on: 2/21/2024 10:20:37 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| Avalon | Individual | Support | Written Testimony Only |

Comments:

Aloha kākou,

I am writing in support of SB2329. Our kia'i loko i'a and the work that they do are vital to the wellbeing of our cultural, economic, ecological, and sustainable food systems. More funding towards creating jobs and enhancing our local aquaculture can only benefit our communities as a whole.

Mahalo,

Avalon P.

Submitted on: 2/21/2024 11:01:31 PM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| Lea Minton | Individual | Support | Written Testimony Only |

Comments:

Dear WAM Committee Members:

I strongly support SB2329 and urge you to pass this bill. It is imperative to the well being of our state and our future sustainability.

Thank you,

Le'a Minton

Submitted on: 2/22/2024 12:32:18 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------|--------------|---------------------------|---------------------------|
| Kimeona Kane | Individual | Support | Written Testimony Only |

Comments:

Aloha mai kākou,

Mahalo for making time to discuss this bill and take to heart the needs of Hawai'i in relationship to this critical aspect of food security and cultural preservation. Hawai'i is losing its foothold on the ability to thrive in the realm of food security. Generations of kanaka have been fed from this same archipelago and now, generations that follow our poor management of resources, will suffer the insecurities we will leave for them. We must be and do better if Hawai'i is to stand a chance. Moving the needle is critical and SB2329 is a step in the direction needed to ensure Hawai'i can be what it needs to be for its people. I strongly support SB2329 and urge you to make this possible by passing this bill.

Mahalo nui,

Kimeona Kane

Submitted on: 2/22/2024 4:21:08 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|-------------------|--------------|---------------------------|---------------------------|
| Adam Scott Wayson | Individual | Support | Written Testimony Only |

Comments:

Overall, I think it is important to perpetuate culture and native environments throughout our community. We need to provide more opportunities, not only for children, but for adults to live off of the land and provide sustainable, lives for themselves in order to maintain our native populations.

Submitted on: 2/22/2024 5:51:36 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|------------------|--------------|---------------------------|---------------------------|
| WALTER Lee RITTE | Individual | Support | Written Testimony Only |

Comments:

I am in strong support of Senate Bill 2329.

The State of Hawaiia has an obligation to support efforts to enhance our ability to produce and cultivate ocean food products . We are an Ocean State that is importing the majority of our food products.

Hawaii has many hundreds of traditional Fishponds that are not in use and has the potential to produce our protein needs and also act as a NURSERY to restock our ailing reefs.

Walter Ritte

Submitted on: 2/22/2024 5:58:41 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|-----------------|--------------|---------------------------|---------------------------|
| Noelani Puniwai | Individual | Support | Written Testimony Only |

Comments:

Food security and meaningful jobs can be found in aquaculture and reviving our ocean resources. Supporting the growth of this industry supports opportunities and the health of our future ocean resources.

Submitted on: 2/22/2024 6:30:09 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------|--------------|---------------------------|---------------------------|
| Isaac Harp | Individual | Support | Written Testimony Only |

Comments:

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

For the future success of Hawaii's many loko i'a and the practitioners who care for them, in addition to enhancing our nearshore fish species' production of future loko i'a seed stock, I strongly support SB2329 and I hope you will too.

Mahalo for your consideration. Have a great day!

Submitted on: 2/22/2024 7:12:17 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|-----------------------------------|--------------|---------------------------|---------------------------|
| Damien Nakoa Kahahawai Farrant | Individual | Support | Written Testimony Only |

Comments:

Aloha mai kākou,

My name is Damien Nākoa Kahahawai Farrant. I was born and raised in Paumalū, Koʻolauloa, Oʻahu. I am currently a PhD candidate in Environmental Science and Management at the University of California, Santa Barbara. Since high school, my academic research has investigated biocultural food systesm in Hawaiʻi including loko iʻa to better understand how we can support the restoration of these resources that provide local food security that we desperately need and enhance overall community resilience.

My interest in loko i'a is rooted in the hundreds of hours I have spent at these sites. Throughout my childhood, I would go with my 'ohana to community workdays at Loko Ea, an loko pu'uone style of fishpond in Kawailoa, Waialua, O'ahu. I passed this location many times in my childhood before that, but during the hours I spent pulling Guinea grass and clearing sand from the 'auwai channel, I learned about how our kūpuna designed and stewarded this and hundreds of other loko i'a to produce an abundance of fish without heavily impacting the landscape by using the natural flows of fresh and salt water, nutrients, and energy around them. I also gained a deep appreciation for how Loko Ea brought the community of all ages together to perpetuate cultural practices and invest their sweat and time into the revitalization of these systems. In both 2014 and 2017, I spent the summer as an intern and researcher at Paepae o He'eia, which exposed me to the loko kuapā style of fishpond. Throughout these summers, I developed new relationships with community members in Ko'olaupoko, O'ahu and the experiences only grew my love for loko i'a and my desire to support the restoration of their functionality. I have shifted my day-today focus on supported Kalou fishpond, a loko wai that is being restored by the North Shore Community Land Trust in Waiale'e, Ko'olauloa, O'ahu. In the past year alone, I have volunteered for more than 110 hours at this particular site. Throughout the years, I have also been fortunate to visit other loko i'a that are being restored across Hawai'i from Kaua'i to Lāna'i to Moku o Keawe.

I am writing to support this measure, SB2329, as an important investment for restorative aquaculture innovation and development here in Hawai'i. This measure additionally will provide food sustainability and security to Hawai'i by supporting the recovery of function in loko i'a that sustained our kūpuna for centuries. While I hundreds of hours of time and energy at different loko i'a, a key limitation on the future productivity of these systems has been a lack of mullet fish. 'Ama'ama were a core species in the vast majority of fishponds, so investing in hatchery programs and related education outreach is vital to the future success of loko i'a as a cultural

resource that can help to meet local need for increased food security in a sustainable manner. Additional investments in holistic aspects of fishpond restoration beyond supporting the 'ama'ama hatchery are also critical to the success of these systems. Supporting the recovery of limu, moi, āholehole, and wetland plants are just a few of the critical components of these systems that we also must care for.

At Paepae o He'eia, they describe how the loko i'a was originally created by the community forming a 2 mile line to pass rocks from mauka to makai to construct the rock wall for every day for a year. Our kūpuna invested everything in these loko i'a because they were cornerstones of sustainability and cultural vibrancy. In order for loko i'a to function once again, we must support grassroots restoration efforts with investments in state employees who will facilitate the necessary recovery of relevant fish populations.

Mahalo and please PASS SB2329

Submitted on: 2/22/2024 7:13:35 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|-----------------|--------------|---------------------------|---------------------------|
| Amber Johannson | Individual | Support | Written Testimony Only |

Comments:

Aloha Kakou,

I'm writing in support of SB 2329. I think it would be amazing to see our fishponds fully restored and functioning. Our state desperately needs to return to the systems established like these for food security instead of relying so heavily on imported food. It would also be wonderful from a cultural standpoint to see the Loko restoration and how that could help future generations of native Hawaiians get back to being more sustainable here. There is so much to learn from the Ahupua'a systems that have been dismantled, I think this is a good step towards sustainability for Hawaii residents and cultural preservation.

Mahalo,

Amber Johannson

Submitted on: 2/22/2024 7:14:50 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| Andrew Tabaque | Individual | Support | Written Testimony Only |

Comments:

Testimony in Support of SB2329

Senate Committee on Ways and Means (WAM)

February 23, 2024, 10:30 a.m., Room 229 & Via Zoom

Aloha mai Committee Members,

I am Andrew Tabaque

I **strongly support** SB2329 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.

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. Over 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 worked closely with fishponds organizations for the last several years and currently a graduate student at UH Hilo focusing on fishponds.

Please **PASS** SB2329 as an important step toward greater food security for our islands, as well as bringing more Native Hawaiians and local communities back into the stewardship roles needed to best protect and grow our shared biocultural resources through loko i'a.

Mahalo nui loa for considering testimony,

Andrew Tabaque

Submitted on: 2/22/2024 8:21:15 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------|--------------|---------------------------|---------------------------|
| Stormy Soza | Individual | Support | Written Testimony Only |

Comments:

Aloha,

My name is Stormy Soza from Kapa'a, Kaua'i and I work closely with those restoring Alekoko fishpond here on our island. Spending time learning from Kia'i Loko (fishpond guardians), I have come to understand the magnitude fishponds play in our greater ecosystems and how important they are to all of our islands as a functioning and healthy space.

I support SB2329 and hope you do too.

Mahalo

Submitted on: 2/22/2024 8:42:08 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| Honu'aina Nichols | Individual | Support | Written Testimony Only |

Comments:

Aloha nui,

My name is Honu'āina Nichols, I work as the Climate Education Coordinator at Mālama Loko Ea Foundation in Hale'iwa, O'ahu.

It is with great pleasure that I urge you to accept this bill. I ka wā ma mua, i ka wā ma hope. The lessons of the past are key to the future. Our loko i'a are not only traditional keys to a sustainable future but also the frontlines to our ever changing climates. They are the literal products of indigenous innovation and adaptive decision making. I implore you to support these systems as they heal our native people and those willing to learn from them physically, mentally, spiritually and emotionally while also healing our āina and restoring our ecological systems. There is nothing un-pono in supporting a bill that gets more people access to survive in a place of healing. Mahalo for supporting SB2329

Mahalo piha,

Honu'āina Nichols

Submitted on: 2/22/2024 8:53:54 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| Xzavier Malaki | Individual | Support | Written Testimony Only |

Comments:

Feb 22, 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 & Camp;

Videoconference

Aloha, my name is Xzavier Malaki from Waianae high school and I am here to speak on SB2329. I support the SB2329 bill because I am from a place where we have a hatchery and learn about how we can keep fish ponds alive. We need those because it's important to our history and the project can help us learn valuable lessons and hopefully get a good job for us.

Thank you for the opportunity to testify in strong SB2329 of this measure.

Sincerely,

Xzavier Malaki

xzavier.malaki@gmail.com

Submitted on: 2/22/2024 8:57:42 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|----------------|--------------|---------------------------|---------------------------|
| Kaezen Madeira | Individual | Support | Written Testimony Only |

Comments:

February 21, 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 & Camp;

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 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 |

Submitted on: 2/22/2024 9:00:34 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------|--------------|---------------------------|---------------------------|
| Hyrum Tom | 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 & Samp; 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 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 Treasurer

Member of the WHS PTSA & SCC

WHS D&D Club President

Phone Number: (808)773-0376

Email: hyrumtom53@gmail.com

Submitted on: 2/22/2024 9:26:20 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------------|--------------|---------------------------|---------------------------|
| Mayjean wakinekona | Individual | Support | Written Testimony Only |

Comments:

February 22,2024

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 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

Submitted on: 2/22/2024 9:29:54 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

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

Comments:

Feb 21, 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 & Camp;

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,

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 |
| |

Submitted on: 2/22/2024 9:32:59 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| Marissa Ing | Individual | Support | Written Testimony Only |

Comments:

Aloha Nui,

I am in support of SB2329. The restoration of Loko i'a is imperative to increased food security and ensuring that cultural and spirtual practices pertaining to aina is perpetuated for generations to come. There was once over 500 functioning fishponds in hawaii, producing up to 600 pounds of fish per acre, per year. For that reason, i support SB 2329 which would create new positions under DLNR Hatchery programs, support hatchery equipment, as well as maintenence and operating costs all with the goal of restocking fishponds on Hawaii Island and Oahu, as well as other public areas. This is one step closer to revitalization of our ancestral aquaculture practices and promotion of self-sustaining food production. As a haumana of uhau humu pohaku and participant of loko i'a restoration, I humbly ask for your support of SB2329.

Mahalo for your time and attention to this important matter.

Marissa Ing

Submitted on: 2/22/2024 9:39:01 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|--------------|---------------------------|---------------------------|
| aliana ho | Individual | Support | Written Testimony Only |

Comments:

Aloha nō,

O wau o aliana ho, mokupuni o Kaua'i mai au. I've been so fortunate to have been raised learning and growing in the nurturing classroom of the Alakoko Fishpond along the Hulē'ia river.

I am writing to support this measure, SB2329, as I see it as a critical next step in ensuring that cultural, sustainable aquaculture practices survive and thrive in Hawai'i. It is imperative to fund and focus resources on practices that provide food security across our pae 'āina. We know how dependency on imported foods and other goods is a fragile and illogical way of living, especially as an island community. We have the knowledge and wisdom to be independent of these systems, and it would be foolish not to invest in these practices. If the barges stop running, we will feed the people, one way or another.

Mahalo for your time, and please PASS SB2329.

Submitted on: 2/22/2024 9:43:15 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

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

Comments:

Feb 21, 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 & Samp; Videoconference

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

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

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 |

Submitted on: 2/22/2024 9:58:22 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------|--------------|---------------------------|---------------------------|
| Thelma Tomich | Individual | Support | Written Testimony Only |

Comments:

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

I am testifying in strong support of SB 2329.

Restored loko i'a or fishponds are a key component of a healthy ahupua'a system. They play an important environmental function supporting healthy nearshore fisheries and bolstering local food security.

Loko i'a (fishponds) remain a key resource for sust'āinably feeding local communities. Loko i'a are also important cultural sites providing space for communities to gather, connect to place, learn and mālama.

Please support SB 2329.

me ke aloha 'āina,

Thelma Kihalani, Pūnohuokawai

Submitted on: 2/22/2024 10:01:13 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|-----------------|--------------|---------------------------|---------------------------|
| Caysha Tanimoto | 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 22, 2024; 10:30 a.m.; State Capitol Conference Room 211 & Samp; Videoconference

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

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

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 |
| Sincerely, Caysha Tanimoto |

Submitted on: 2/22/2024 10:02:22 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|----------------|--------------|---------------------------|---------------------------|
| Kainalu Pakele | 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 22, 2024; 10:30 a.m.; State Capitol Conference Room 211 & Camp;

Videoconference

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 'Anae (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

Submitted on: 2/22/2024 10:04:26 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|-----------------|--------------|---------------------------|---------------------------|
| Giovonni Torres | 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 & Camp;

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, Giovonni Torres

Name Giovonni Torres

Submitted on: 2/22/2024 10:04:27 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|----------------------|--------------|---------------------------|---------------------------|
| Raighneaxsis Kaaihue | Individual | Support | Written Testimony Only |

Comments:

February 22, 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 Raighneaxsis 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. |
|---|
| Thank you for your time and I hope you consider passing this bill. |
| Sincerely, |
| Raighneaxsis Kaaihue |

Submitted on: 2/22/2024 10:04:45 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------|--------------|---------------------------|---------------------------|
| Breana | Individual | Support | Written Testimony Only |

Comments:

February, 22, 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 i am a senior at Waianae High School and i am writing this testimony to share my opinion on why i think that the bill for hatcheries should be supported. The things that would be needed are funds, equipment, maintenance, 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 Breana Ching and I am a student of the marine science learning center at Waianae high school and I am writing to support the bill SB 2329 mullet production for fishponds and stock enhancement. In my opinion I strongly believe that having a hatchery in our community can help not only create many learning opportunities but also help with the food insecurity issue we have in Hawaii. While being in this class I have learned so much more than I have ever learned throughout highschool. As of today I have so many skills and knowledge that I can apply to my everyday life. So in addition I feel like having this hatchery provides just that much more opportunity and skills to learn and a higher level of science.

With these hatcheries we can also help bring back the native mullets we once used to have. The past two years of highschool i have heard so many stories from people who would see the mullets swimming in schools in abundant numbers. Hearing this made me feel kinda sad because I wondered if I would ever be able to see the abundant numbers we once used to have.

Thank you for the opportunity to testify.

Mahalo,

Breana Ching

Submitted on: 2/22/2024 10:19:15 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|--------------|--------------|---------------------------|---------------------------|
| Eric Dilley | Individual | Support | Written Testimony Only |

Comments:

My name is Eric Dilley and I am submitting written testimony in support of SB2329 as an important investment for restorative aquaculture innovation and development in Hawaii, as well as increased food sustainability and security. We as a state need to vastly reduce our reliance on imported food to provide nutritious, local food for the people of Hawaii and to reduce the carbon footprint of importing so much food and goods. Sustainability has been a vital part of Hawaiian culture throughout history and the state has moved away from this over time. It is vital to support measures such as this bill to encourage the local production of food for our people now and into the future. Thank you for your time.

Regards,

Eric Dilley

Submitted on: 2/22/2024 10:21:44 AM

Testimony for WAM on 2/23/2024 10:30:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|-------------------------|--------------|---------------------------|---------------------------|
| Kevin Pakamiaiaea Davis | Individual | Support | Written Testimony Only |

Comments:

I strongly support SB2329 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.

SB2329 is an opportunity for Hawai'i to take a positive step towards resiliency and sustainability. Scientists and practicioners have been active and persistent in caring for our natural resources, and the appropriation of these funds would provide much needed support for the specific areas identified, and hopefully carry-over to other fishery efforts in the future.

Hawai'i once had a thriving loke 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 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. Over 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.

Please **PASS** SB2329 as an important step toward greater food security for our islands, as well as providing more opportunities for the stewardship roles needed to best protect and grow our shared biocultural resources through loko i'a.

Mahalo for considering my testimony,

Kevin Pakamiaiaea Davis