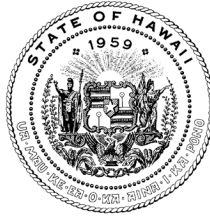


DAVID Y. IGE
GOVERNOR OF HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

**Testimony of
SUZANNE D. CASE
Chairperson**

**Before the House Committee on
FINANCE**

**Tuesday, April 5, 2022
1:30 PM**

**State Capitol, Conference Room 308, Via Videoconference
In consideration of
SENATE BILL 3190, SENATE DRAFT 2, HOUSE DRAFT 1
RELATING TO FISH HATCHERY EDUCATION**

Senate Bill 3190, Senate Draft 2, House Draft 1 proposes to require the Department of Education to establish a native fish hatchery pilot program at Waianae High School; and appropriate funds. **The Department of Land and Natural Resources supports this bill.**

Loko i'a, Hawaiian fishponds, are unique aquaculture systems throughout Hawaii and are important components of the ahupua'a (traditional land stewardship framework) that contribute to a healthy, sustainable, and robust food system. Fishponds and aquaculture can provide a sustainable source of local-grown fish for Hawaii residents. Production of fingerlings for grow-out can take pressure off nearshore fish stocks which can be a conservation tool for managing fisheries. At a broader level, fishponds can increase local food production, improve food security, perpetuate local and traditional practices, and provide employment opportunities for Hawaii residents.

The proposed fish hatchery, sited within a public high school, will connect students with a unique perspective on loko i'a and all they represent. Learning to operate a fish hatchery will allow students the opportunity to become proficient in a variety of STEM activities in a hands-on, working environment. Participation in the hatchery production of native fishes will provide opportunities for students to learn transferrable skills related to scientific, management, agricultural, and conservation fields. In addition, this program will connect students with practitioners and professionals whose lives and livelihoods depend on these products and skills, many of whom will become mentors and future employers.

Thank you for the opportunity to comment on this measure.

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

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



STATE OF HAWAII
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAII 96804

Date: 04/05/2022

Time: 01:30 PM

Location: 308 Via Videoconference

Committee: House Finance

Department: Education

Person Testifying: Interim Superintendent Keith Hayashi
Hawaii State Department of Education

Title of Bill: SB 3190, SD2, HD1 RELATING TO FISH HATCHERY
EDUCATION.

Purpose of Bill: Requires the department of education to establish a native fish hatchery pilot program at Waianae high school. Appropriates funds. Effective 7/1/2051. (HD1)

Department's Position:

The Hawaii State Department of Education (Department) supports SB 3190, SD2, HD1 and appreciates the positions and funding to establish the native fish hatchery pilot program. The Department does ask that any additional funding does not affect the Department's top budget priorities to restore funds that were reduced as a result of the fiscal fallout from COVID-19 and the funding of existing budget shortfalls that were included in the Department's supplemental budget request. Without those funds, the Department will face severe constraints on its ability to continue to promote equity and access to needed resources and support for all students.

The native fish hatchery pilot program at Waianae High School will provide hands-on and real-world experiences focused on aquaculture and native fish propagation to students on the Waianae coast and will support Hawaii's sustainable future and food security efforts. The partnership between industry professionals and teachers will increase student learning opportunities that are critical to post-secondary and workforce success.

Thank you for the opportunity to provide testimony in support of SB 3190, SD2, HD1.

DAVID Y. IGE
GOVERNOR



CRAIG K. HIRAI
DIRECTOR

GLORIA CHANG
DEPUTY DIRECTOR

EMPLOYEES' RETIREMENT SYSTEM
HAWAII EMPLOYER-UNION HEALTH BENEFITS TRUST FUND
OFFICE OF THE PUBLIC DEFENDER

STATE OF HAWAII
DEPARTMENT OF BUDGET AND FINANCE
P.O. BOX 150
HONOLULU, HAWAII 96810-0150

ADMINISTRATIVE AND RESEARCH OFFICE
BUDGET, PROGRAM PLANNING AND
MANAGEMENT DIVISION
FINANCIAL ADMINISTRATION DIVISION
OFFICE OF FEDERAL AWARDS MANAGEMENT (OFAM)

WRITTEN ONLY
TESTIMONY BY CRAIG K. HIRAI
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
TO THE HOUSE COMMITTEE ON FINANCE
ON
SENATE BILL NO. 3190, S.D. 2, H.D. 1

April 5, 2022
1:30 p.m.
Room 308 and Videoconference

RELATING TO FISH HATCHERY EDUCATION

The Department of Budget and Finance (B&F) offers comments on this bill.

Senate Bill No. 3190, S.D. 2, H.D. 1, requires the Department of Education to:

1) establish a native fish hatchery pilot program at Waianae High School; 2) submit a report on the progress of the pilot program and any findings and recommendations, including any proposed legislation, to the Legislature no later than 20 days prior to the convening of the regular sessions of 2023, 2024, and 2025; and 3) cease the pilot program on June 30, 2025. The bill also establishes 3.00 full-time equivalent positions and appropriates an unspecified amount of general funds for FY 23 for the purposes of this measure.

B&F notes that, with respect to the general fund appropriation in this bill, the federal Coronavirus Response and Relief Supplemental Appropriations Act requires that states receiving Elementary and Secondary School Emergency Relief (ESSER) II funds and Governor's Emergency Education Relief II funds must maintain state support for:

- Elementary and secondary education in FY 22 at least at the proportional level of the state's support for elementary and secondary education relative to the state's overall spending, averaged over FYs 17, 18 and 19; and
- Higher education in FY 22 at least at the proportional level of the state's support for higher education relative to the state's overall spending, averaged over FYs 17, 18 and 19.

Further, the federal American Rescue Plan (ARP) Act requires that states receiving ARP ESSER funds must maintain state support for:

- Elementary and secondary education in FY 22 and FY 23 at least at the proportional level of the state's support for elementary and secondary education relative to the state's overall spending, averaged over FYs 17, 18 and 19; and
- Higher education in FY 22 and FY 23 at least at the proportional level of the state's support for higher education relative to the state's overall spending, averaged over FYs 17, 18 and 19.

The U.S. Department of Education has issued rules governing how these maintenance of effort (MOE) requirements are to be administered. B&F will be working with the money committees of the Legislature to ensure that the State of Hawai'i complies with these ESSER MOE requirements.

Thank you for your consideration of our comments.

SB-3190-HD-1

Submitted on: 4/4/2022 9:19:25 AM

Testimony for FIN on 4/5/2022 1:30:00 PM

Submitted By	Organization	Testifier Position	Testify
David Sakoda	DLNR	Support	Remotely Via Zoom

Comments:

I am available for questions to DLNR. Please allow me Zoom access.

DAVID Y. IGE
Governor

JOSH GREEN
Lt. Governor



PHYLLIS SHIMABUKURO-GEISER
Chairperson, Board of Agriculture

MORRIS M. ATTA
Deputy to the Chairperson

State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512
Phone: (808) 973-9600 FAX: (808) 973-9613

TESTIMONY OF PHYLLIS SHIMABUKURO-GEISER
CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE HOUSE COMMITTEE ON FINANCE

APRIL 5, 2022

1:30 P.M.

CONFERENCE ROOM 308 & VIA VIDEOCONFERENCE

SENATE BILL NO. 3190 SD2 HD1
RELATING TO FISH HATCHERY EDUCATION

Chairperson Luke and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill 3190 SD2 HD1. The bill requires the department of education to establish a native fish hatchery pilot program at Waianae high school; appropriates funds; and is effective 7/1/2051. The Department supports this bill.

The growth of the aquaculture industry relies on access to a viable workforce which has basic aquaculture training and knowledge. The traditional fishponds are excellent cultural and technical learning centers and, when combined with modern marine science or aquaculture programs at the high school level, can be very effective in sustaining and growing the interest of students who are ready to enter the workforce.

The Department respectfully recommends the bill also include James B. Castle High School in Kaneohe. Castle High School has students participating with the Pacific



American Foundation at the Waikalua Loko I'a Fishpond. Including another school to this bill would create a wider foundation for aquaculture workforce development on Oahu. The Department will collaborate with the Department of Education to ensure curriculum continuity and transition for the students into the workforce.

As such, the Department supports this measure provided it does not adversely impact the Department's priorities in the Executive Supplemental Budget. Thank you for the opportunity to testify.



Testimony Before The
House Committee on Finance
IN SUPPORT OF SB 3190 SD2 HD 1
April 5, 2022, 1:30PM, Room 308

My name is Kevin Chang and I am the Executive Director of [Kua'āina Ulu 'Auamo \(or KUA\)](#). KUA works to empower grassroots rural and Native Hawaiian mālama 'āina groups to celebrate their places and pass on their traditions to better Hawai'i and achieve 'āina momona— an abundant, productive ecological system that supports community well-being.

KUA employs a community-driven approach that currently supports a statewide network of 36 mālama 'āina community groups collectively referred to as E Alu Pū (moving forward together), 40 fishpond projects and practitioners called the Hui Mālama Loko I'a, and a growing group of over 60 Limu practitioners and supporters called the Limu Hui. Participants in our networks have had long term dreams of bringing fishponds, food fish and limu back to our shorelines and dinner tables.

KUA supports SB 3190 SD2 HD1 as an incremental step on a pathway towards 'āina momona. This bill would require DOE to establish a native fish hatchery pilot program at Wai'anae high school and appropriate the funds to do so.

KUA's coordinators and network participants in all three of our networks have built stronger connections to the education community, including the DOE, the DLNR 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. Participants in our Limu Hui have long worked to continue the legacy of the Marine Science Learning Center to support this kind project in Wai'anae, a place literally known as "mullet water" for the 'anae or mullet that was once abundant there. This existing program at Wai'anae High School has much of the infrastructure, curriculum, and experience to implement this pilot program.

As the bill mentions, several reports have already articulated the need for native fish hatcheries to support the ongoing restoration efforts of loko i'a, traditional Hawaiian fishponds. Many practitioners envision a future when loko i'a can be stocked again from natural populations of prized species such as 'anae, but since those fisheries are depleted in many areas across Hawai'i, hatchery-raised fingerlings are an important component of the restoration efforts for loko i'a and their surrounding waters. In our conversations with the Hui Mālama Loko I'a, practitioners from over 20 loko i'a on 5 different islands have indicated this opinion in the past several years.

Indeed, as we look to the future our communities are raising the kupa'āina who want to have jobs focused on mālama 'āina. I am sure some of the submitted applications that recently inundated and exceeded the capacity of the DOCARE Academy enrollment portal came from these young people. We appreciate this creative and collaborative approach that builds the capacity and skills of the next generation with intention, and in a way that benefits ongoing community efforts at loko i'a.

The communities we work with are committed to ensuring the long-term health of our biocultural resources. They have depended on them for generations. 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 among other things taking the steps toward greater self-sufficiency, development of a pipeline of new and more innovative career pathways, mindsets, relationships and resource flows for mālama 'āina. Passing this bill out of your committee will open a pathway toward reaching this vision.

Mahalo for this opportunity to testify in support.

Aloha 'Āina Momona.



Environmental Caucus of The Democratic Party of Hawai'i

To: The Honorable Sylvia Luke Chair,
The Honorable Kyle T. Yamashita, Vice Chair, and
Members of the Senate Committee on Finance

Re: **SB 3190 SD1 HD 1– RELATING TO FISH HATCHERY EDUCATION**

Hearing: Tuesday, April 5, 2022, 1:30 p.m., Room 308 & videoconference

Position: Strong Support

Aloha Chair Luke, Vice Chair Yamashita, and members of the Committee on Finance:

The Environmental Caucus of the Democratic Party of Hawai'i strongly supports SB 3190, SD1, HD1. This measure would require the Department of Education to establish a native fish hatchery pilot program at Waianae high school. This bill also appropriates funds for this pilot program.

The Environmental Caucus of the Democratic Party of Hawai'i supports this bill as it will enhance the effort of local communities and grassroots nonprofit organization working across the State to restore traditional fishponds for cultural, educational, and food production purposes. This measure will provide an opportunity to develop a regenerative mullet hatchery program as part of a broader effort to restock fishponds while simultaneously supporting place-based and future-focused career and technical education natural resource pathways in the department of education.

The marine science learning center at Waianae high school is a functioning aquaculture facility with a saltwater well which has been the central focus of the science curriculum delivered to students for over a quarter of a century. The saltwater well will provide an essential ecological condition for a mullet hatchery program. This facility is uniquely positioned to facilitate transmission of the skill sets necessary to produce sizable amounts of mullet fingerlings to supply fishponds and take mullet fingerlings through their life cycle to future generations. Most importantly, this hatchery would educate youth, residents, and visitors through experimental training while assist in providing the community with food security and resiliency.

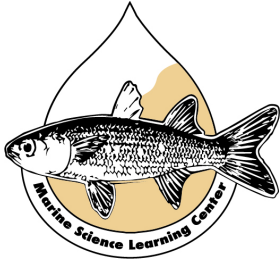
The Environmental Caucus supports this bill as it offers a unique learning opportunity for the students at Waianae High School, it perpetuates the culture and traditions of the community, and it will contribute toward food security and economic diversity which Hawaii desperately needs.

Thank you very much for this opportunity to testify on this bill. Please pass this bill.

Respectfully yours,

Melodie R. Adulya

Chair, Environmental Caucus, Democratic Party of Hawai'i



The Marine Science Learning Center at Wai'anāe High School

85-251 Farrington Hwy, Wai'anāe HI 96792

Phone: (808) 697-9400

February 22, 2022

Senator Donovan M. Dela Cruz, Chair

Senator Gilbert S.C. Keith-Agaran, Vice Chair

Hawai'i State Senate Committee on Ways and Means

Hearing: Tuesday, February 22, 2022, 10:00 a.m.

Conference Room 211 & Videoconference

Re: Senate Bill 3190 Relating to Fish Hatchery Education

Aloha Chair DelaCruz, Vice Chair Keith-Agaran and Member of the Committee,

My name is Katie Kealoha, I am the coordinator of the Marine Science Learning Center at Wai'anāe High School. I am writing in support of SB 3190 which would establish a native fish hatchery pilot program at Wai'anāe High School.

At the Learning Center, we seek to provide our students with opportunities to learn important science concepts, build marketable skills, and understand food systems and their importance through work-based learning in our aquaculture facility. We find that many students grasp difficult concepts such as water chemistry much more easily by seeing those concepts in action in a hands-on setting. The establishment of this hatchery pilot program at our school would be an incredible opportunity to expand our students' knowledge, as well as to provide internships and training that would give students a headstart in many fields.

Aside from science and workplace skills, we also strive to help our students understand the importance of sustainability and food security in our ever changing world. We have been fortunate to partner with many different fishponds and other aquaculture organizations to give our students a well-rounded view of aquaculture and it's potential to improve Hawai'i's food security. It would be incredibly meaningful for our students to contribute to these efforts by learning the skills and assisting with providing pua 'ama, or mullet fingerlings to many of these partners. Our community of Wai'anāe 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.

Lastly, as Hawai'i looks towards a sustainable future, developing a green workforce has emerged as an urgent need. This hatchery as an internship site would enhance students opportunities to move forward in the field of aquaculture and food production, as well as provide future job opportunities for program graduates.

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

Mahalo,

Katie Kealoha

SB-3190-HD-1

Submitted on: 4/4/2022 10:09:19 AM

Testimony for FIN on 4/5/2022 1:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Jesse Kealiinohomoku	Individual	Support	Written Testimony Only

Comments:

I stand in support of SB3190. Requiring the department of education to establish a native fish hatchery pilot program at Waianae high school.

Me ke aloha,

#Fixourfoodsystem

Coby Chock
1119 Lunahelu Pl.
Kailua, HI 96734

April 4, 2022

SB3190 SD2 HD1: RELATING TO FISH HATCHERY EDUCATION

Sylvia Luke, Chair
House Committee on Finance

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

My name is Coby Chock. I am a lifelong resident of the Windward side and am writing in **strong support** for SB3190 SD2 HD1 that creates a fish hatchery education pilot program at Waianae High School. This bill will provide personnel and funding to expand their aquaculture program.

I would like to suggest an amendment to this measure adding Castle High School to this pilot program. Castle High School is located in Kaneohe just a few blocks from Kaneohe Bay and is currently collaborating with partners to establish an aquaculture initiative for their students. Aquaculture has been taking place in Kaneohe Bay for centuries at the Waikalua Loko I'a and Castle's auspicious proximity to this fishpond, and marine biology research activities on Coconut Island makes Castle an ideal place for this program. By adding Castle High School to this bill, the legislature can provide workforce training to students and create opportunities for young adults to connect with industry professionals and researchers in an emerging industry in the state.

I recommend making the following modifications to HB1801 SD2 HD1:

- Adding Castle High School to the pilot program.
- Add that the Department of Education will coordinate with the Department of Agriculture Aquaculture and Livestock Support Services to create the curriculum and provide technical assistance to the hatchery operation.
- Add a new appropriation for Castle High School to establish a fish hatchery pilot program for one full-time equivalent (1.0 FTE) hatchery manager position and for the construction, operation, and maintenance of a hatchery.

I appreciate this opportunity to testify in **strong support** of SB3190 SD2 HD1. Thank you for your time and consideration.

Mahalo,



Coby Chock

SB-3190-HD-1

Submitted on: 4/4/2022 3:21:06 PM

Testimony for FIN on 4/5/2022 1:30:00 PM

Submitted By	Organization	Testifier Position	Testify
Tierra Bartolotti	Individual	Support	Written Testimony Only

Comments:

Aloha Hawai'i State House Committee on Finance,

Across Hawai'i, loko i'a are an important cultural asset for growing food and educating communities about Native Hawaiian culture and history. Loko i'a have historically played a vital role in providing sustainable aquatic protein sources to Native Hawaiians. It is estimated that there were once 488 fishponds across the Hawaiian islands prior to colonial occupation. The restorative work happening in our communities to reintroduce Native Hawaiian fishponds as a productive community resource have been integral in strengthening & supporting Native Hawaiian food sovereignty.

Establishing a fish hatchery pilot program at Waianae High School is a significant opportunity to only greatly enhance local sustainability efforts, but inspire, educate, and equip our next generation of students to enter technical jobs in the green workforce. SB3190 would help optimize the production of large mullet which were once common along the shore of Waianae, by developing pua or fingerling systems & integrating traditional knowledge in a controlled learning environment setting. This bill is critical in advancing the incorporation of traditional aquaculture systems into our current food system. SB3190 is critical in supporting support Native Hawaiians' in gaining access to regenerative, locally-sourced, aquatic protein sources. I stand in full support for SB3190 & greatly appreciate that this bill has been introduced.

Additional Resources:

NOAA: Hatchery-Raised Mullet: Keys to the Future of Hawaiian Fishponds

<https://videos.fisheries.noaa.gov/detail/video/5831688790001/hatchery-raised-mullets:-keys-to-the-future-of-hawaiian-fishponds?autoStart=true&q=fishpond>