

DAVID Y. IGE  
Governor

JOSH GREEN  
Lt. Governor



PHYLLIS SHIMABUKURO-GEISER  
Chairperson, Board of Agriculture

GLENN K. MURANAKA  
Deputy to the Chairperson

State of Hawaii  
**DEPARTMENT OF AGRICULTURE**  
1428 South King Street  
Honolulu, Hawaii 96814-2512  
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TESTIMONY OF PHYLLIS SHIMABUKURO-GEISER  
CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE HOUSE COMMITTEE ON FINANCE

MARCH 28, 2019  
3:00 P.M.  
CONFERENCE ROOM 308

SENATE BILL NO. 753 SD2 HD1  
RELATING TO AQUACULTURE

Chairperson Luke and Members of the Committee:

Thank you for the opportunity to present testimony on Senate Bill 753 SD2 HD1. This bill appropriates funding for operational expenses to revitalize the aquaculture development program and to expand the industry statewide. The Department of Agriculture supports this bill provided it does not impact the Department's priorities listed in the Executive Budget.

The passage of SB 753 will be useful in supporting the expansion of the aquaculture industry in Hawaii. Aquaculture is poised to make a significant contribution to the Governor's goal of doubling food production, as it is the most efficient method of protein production. Dedicated funds will allow for investment in foundational infrastructure and research, including helping farmers use research-based knowledge, which will have long-term benefits for the entire industry. The Department would like to see this funding maintained in the Department's budget past 2020 to ensure industry development can be supported in a consistent and reliable manner.

Thank you for the opportunity to testify on this measure.





March 25, 2019

Representative Sylvia J. Luke, Chair  
Representative Ty J.K. Cullen, Vice Chair  
House Committee on Finance

**Support of SB 753, SD2, HD1, Relating to Aquaculture (Appropriates funds for operational expenses for revitalizing the Aquaculture Development Program within the Department of Agriculture [HDOA]).**

**Thursday, March 28, 2019, 3:00 p.m., in Conference Room 308**

The Land Use Research Foundation of Hawaii (LURF) is a private, non-profit research and trade association whose members include major Hawaii landowners, developers and a utility company. LURF's mission is to advocate for reasonable, rational and equitable land use planning, legislation and regulations that encourage well-planned economic growth and development, while safeguarding Hawaii's significant natural and cultural resources, and public health and safety.

LURF appreciates the opportunity to express its **support of SB 753, SD2, HD1** and of the various agricultural stakeholder groups who defend the goals of viable agricultural operations and the conservation and protection of agriculture, including important agricultural lands (IAL) in Hawaii.

**SB 753, SD2, HD1.** This bill proposes to appropriate funds to be expended by the Department of Agriculture for operational expenses for the revitalization of the Aquaculture Development Program within HDOA.

**LURF's Position.** LURF members include farmers who own, maintain, and engage in agricultural enterprises, and who consider such assistance very helpful, if not critical to the agriculture industry and conduct of their operations, to help sustain their businesses, promote local food production, and increase the State's ability to achieve its food sustainability goals.

LURF appreciates the objective of SB 753, SD2, HD1, which is to support the revitalization and continued development of Hawaii's aquaculture industry, with the intent that the HDOA Aquaculture Development Program shall be the lead state agency for developing aquaculture in the State, and believes that this bill is consistent with the underlying intent and objectives of the IAL laws (Hawaii Revised Statutes, Sections 205-41 to 52), which were enacted to fulfill the mandate in Article XI, Section 3, of the

Hawaii State Constitution, “to conserve and protect agricultural lands, promote diversified agriculture, increase agricultural self-sufficiency and assure the availability of agriculturally suitable lands.”

By recognizing the significance of, and need to assist the local aquaculture industry, and implement incentives which help to support the growth and maintenance of aquaculture in the State, this bill significantly helps to promote economically viable agriculture, food production, and food self-sufficiency in Hawaii.

For the reasons set forth above, LURF is **in support of SB 753, SD2, HD1**, and respectfully urges your favorable consideration of this bill.

Thank you for the opportunity to present testimony regarding this measure.



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March 28, 2019

HEARING BEFORE THE  
HOUSE COMMITTEE ON FINANCE

**TESTIMONY ON SB 753, SD2, HD1**  
RELATING TO AQUACULTURE

Room 308  
3:00 PM

Aloha Chair Luke, Vice Chair Cullen, and Members of the Committee:

I am Brian Miyamoto, Executive Director of the Hawaii Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,900 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic and educational interests of our diverse agricultural community.

**The Hawaii Farm Bureau strongly supports SB 753, SD2, HD1**, which appropriates funds for operational expenses for revitalizing the aquaculture development program within the department of agriculture.

Hawaii had an innovative aquaculture development program (ADP) during the 1980s and 1990s, initially under DBED, then DLNR, and finally DOA. ADP assisted prospective farmers and investors in many ways, including technical assistance, help with site selection and permitting, and perhaps most importantly, providing a strong voice within government in support of aquaculture as a desirable and appropriate industry for Hawaii. ADP played a large part in creating an industry that, starting from almost zero in the 1970s, now generates more than \$76 million annually and is one of the largest sectors of Hawaii's diversified agriculture. Unfortunately, despite its success, ADP has been reduced in staff and function, ultimately being folded into the Animal Industries division of DOA and continues to be downsized. It is no coincidence that Hawaii's aquaculture revenues have leveled off in recent years. In order to restore ADP's ability to help develop aquaculture as a beneficial and sustainable industry for Hawaii, we believe that the following provisions are necessary: 1) increased information dissemination to industry, 2) assistance with site selection and permitting, 3) enhance existing aquatic disease prevention services, and 4) increase in staffing.

Thank you for this opportunity to testify on this important measure.

**SB-753-HD-1**

Submitted on: 3/27/2019 10:50:13 AM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Warren Watanabe	Maui County Farm Bureau	Support	No

Comments:

HOUSE OF REPRESENTATIVES  
THE THIRTIETH LEGISLATURE  
REGULAR SESSION OF 2019  
COMMITTEE ON FINANCE  
Rep. Sylvia Luke, Chair  
Rep. Ty J.K. Cullen, Vice Chair

DATE: Thursday, March 28, 2019  
TIME: 3:00 PM  
PLACE: Conference Room 308  
State Capitol  
415 South Beretania Street

Re: SB 753, SD2, HD1 Relating to Aquaculture

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

I am pleased to offer testimony in strong support of SB 753 SD 2, Relating to Aquaculture, which provides unspecified funds in FY 20 and 21 to revitalize and reestablish a fully functional State Aquaculture Development Program (ADP). The Department of Agriculture (DOA) is the expending agency, as State lead agency for aquaculture development, and a place-holder date of 2050 is used for further discussion.

I am providing these comments from the perspective of having managed the ADP from 1979 to 2006 and as co-author of the White Paper titled "Restoring Aquaculture Industry Advocacy in Hawaii State Government," provided by the Board of Directors, Hawaii Aquaculture and Aquaponics Association (HAAA). The analysis looked at the recent history and status of ADP in the context of: its past, present and desired role in Hawaii's economy; past and present levels of government support and Program changes; and current State and National industry development goals and activities.

Briefly, to highlight the paper's major points:

- Hawaii has established a national and international reputation in aquaculture development. We are home for: the Natural Energy Laboratory of Hawaii Authority, a cutting-edge technology aquaculture park; the U.S. Regional Aquaculture Center for the Pacific; the Pacific Aquaculture and Coastal Resources Center in Hilo; the internationally recognized Oceanic Institute (OI); and the soon to be built Aquaculture Business Incubator in Kona. The State, University of Hawaii and OI have a track record of conducting highly impactful marine fish and shrimp research, e.g., Hawaii is a world source for oyster seed and certified disease -free shrimp broodstock.

One important reason for this success, in addition to a strong State policy, was establishment of an ADP as lead program and industry advocate within government. When last measured, Hawaii had the 6<sup>th</sup> largest industry in value in the U.S.

- The HAAA review revealed State support for ADP has shrunk in recent years, impacting in particular "hands on" staff assistance to existing and prospective farmers. Since 2000

staffing has been reduced from seven positions to three reducing expertise available and ADP's organizational placement has been lowered to Branch status under Animal Industries Division, from a Program in the Chair's Office (functioning essentially as a Division); while adding Livestock Support responsibilities. In addition, operating funds have been reduced significantly, limiting targeted issue responses and leveraging of federal funds by cost-sharing.

- Consider the above statements in concert with the fact stated by the United Nations that future increases in global seafood supply will come from aquaculture and the US imports 90% of the seafood consumed from a high risk, extended supply chain. Further, Administration and Congressional decision-makers are addressing the concern and have recently substantially increased research and development funding to expand domestic seafood production, particularly from marine aquaculture sources. Hawaii's experienced cadre of scientists with expertise in this area should be able to compete for these funds.

For Hawaii decision-makers the multi-faceted role of aquaculture to benefit its citizens is clear: enhance food security, encourage sustainable and environmentally responsible industries, and support job generation and resource preservation in rural areas. Clearly, aquaculture development is a means to realizing these statewide benefits.

- HAAA has made two action recommendations to the Legislature, which I strongly support: 1) Re-establish and publicize that aquaculture and aquaponics are State priorities for economic development and diversification and 2) Rebuild the ADP as an effective advocate and facilitator for statewide sustainable development and give the Program Division status within DOA for needed stature and expert staffing commensurate with the technical challenges and broad, statewide responsibilities.

Earlier versions of SB 753 provided \$500,000 for each year of the biennium to address the gap in support described. I and HAAA strongly support this funding level, but recommend an amendment that provides further guidance for the expenditure. The HAAA testimony language focuses on the specific types of subject-matter expertise and capabilities that previously contributed to the Program's success. I strongly endorse this amendment as these are the staff knowledge areas and uses of funding to leverage Federal monies that were critical to successfully expanding the industry. Lastly, I would urge the Committee to recommend to DOA to establish an Ad hoc Aquaculture and Aquaponics Advisory Committee to assure the needed industry input into decisions.

Thank you for the opportunity to offer these comments.

John S. Corbin MS, CFP, AICP  
President  
Aquaculture Planning & Advocacy LLC  
Kaneohe, Hawaii



THE HOUSE OF REPRESENTATIVES  
THE THIRTIETH LEGISLATURE  
REGULAR SESSION OF 2019

COMMITTEE ON FINANCE

Representative Sylvia Luke, Chair

Representative Ty J.K. Cullen, Vice Chair

DATE: Thursday March 28, 2019  
TIME: 3:00 PM.  
PLACE: Conference Room 308  
State Capitol  
415 South Beretania Street

Re: SB 753 SD2 HD1 Relating to Aquaculture

Dear Chair Luke, Vice Chair Cullen, and Committee Members:

The Hawaii Aquaculture & Aquaponics Association (HAAA) **strongly supports the intent of SB 753 SD2 HD1**, to appropriate funds to revitalize the Aquaculture Development Program (ADP) and to expand the aquaculture industry statewide.

The HAAA has worked closely with the State Legislature and State and County governments to provide industry advocacy and support since 1975. The 2017 aquaculture industry farm gate value of \$76.4 million now places the industry third in diversified agriculture's contribution to the economy. Support is needed to achieve greater benefits to the Hawaii economy, provide healthy seafood for local markets and export, generate good jobs, complement tourism and maintain rural communities. Hawaii is recognized as a national leader in aquaculture research, planning and development. An important reason has been the proactive policy and financial support from the State government that made aquaculture a priority in the State's portfolio of economic development initiatives. Implementation was in large part through the establishment of ADP, as the industry advocate within State government. However, with declining support, ADP lost its critical advocacy role to assist industry's economic development. By 2018, ADP had been downsized and made a Branch under the Animal Industry Division of the Department of Agriculture (DOA), and the new mission emphasized product marketing rather than broad spectrum industry development.

ADP needs to be elevated to Division status within DOA to provide the high-level visibility and stature needed to work across Departments on a variety of issues. Encouraging commercial aquaculture is consistent with long-term State goals to enhance food security, encourage



sustainable industries, diversify the economy, and support rural development. We recommend reestablishment of aquaculture and aquaponics as State priorities and components of all economic development strategies and policies to reflect this strong commitment. We recommend reestablishment of ADP to be an effective aquaculture industry facilitator and to be an advocate within State government for statewide sustainable development. **Staffing and budget should be provided commensurate with the statewide responsibility of strengthening and expanding existing aquaculture businesses and growing new aquaculture businesses to advance the goals described above, at a funding level of \$500,000 above the current level of funding. Finally, we urge the Committee to recommend to DOA to establish an Ad hoc Aquaculture and Aquaponics Advisory Committee to assure the needed industry input into decisions.**

The HAAA Board of Directors has carefully prepared the attached White Paper titled *Restoring Aquaculture Industry Advocacy in Hawaii State Government* to further expand on this important economic development opportunity. **We would be happy to discuss the information in this White Paper and provide additional information in support of SB 753 SD2 HD1.**

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

Sincerely,  
Ronald P. Weidenbach  
HAAA President on behalf of the Board of Directors



January 28, 2019

## **Restoring Aquaculture Industry Advocacy in Hawaii State Government**

### **Executive Summary**

This White Paper presents the need for action to attain the significant benefits of restoring aquaculture development and advocacy as an economic development priority for Hawaii. The Hawaii Aquaculture and Aquaponics Association (HAAA) has worked closely with the State Legislature and State and County governments to provide industry advocacy and support since 1975. The 2017 aquaculture industry farm gate value of \$76.4 million dollars now places the industry third in diversified agriculture's contribution to the economy. Support is needed to achieve greater benefits to the Hawaii economy, provide healthy seafood for local markets and export, generate good jobs, complement tourism and maintain rural communities. Hawaii is recognized as a national leader in aquaculture research, planning and development. An important reason has been the proactive policy and financial support from the State government that made aquaculture a priority in the State's portfolio of economic development initiatives. Implementation was in large part through the establishment of an Aquaculture Development Program (ADP), as the industry advocate within State government. However, with declined support, ADP lost its critical advocacy role to assist industry's economic development focus. By 2018, ADP had been downsized and made a section under the Animal Industry Division of DOA and the new mission emphasized product marketing rather than broad spectrum industry development.

ADP needs to be restored to the program in the Chairpersons' Office, Department of Agriculture (DOA) to provide the high-level visibility and stature to work across Departments on a variety of issues. Encouraging commercial aquaculture is consistent with long-term State goals to enhance food security, encourage sustainable industries, diversify the economy, and support rural development. We recommend reestablishment of aquaculture and aquaponics as State priorities and components of all economic development strategies and policies to reflect this strong commitment. We recommend reestablishment of the Aquaculture Development Program to be an effective aquaculture industry facilitator and advocate within State government for statewide sustainable development and provide staffing and budget commensurate with the statewide responsibility of growing new aquaculture businesses to advance the foals described above. The HAAA Board of Directors would be pleased to provide discuss aquaculture information, and details related to implementation of these goals.

## 1.0 Background, Aquaculture's Role in the Economy

The Hawaii Aquaculture and Aquaponics Association (HAAA) and its predecessor organizations have provided industry advocacy and support since 1975. Over the years, HAAA has worked closely with the State Legislature, State and County governments, the University of Hawaii (UH) and private partners like the Oceanic Institute (OI), on a shared mission to foster the sustainable statewide expansion of commercial aquaculture and more recently aquaponics. We understand that further development and expanding the diversity of species and technologies can achieve greater benefits to the Hawaii economy, provide healthy seafood for the local market and export, generate good jobs, complement tourism and help maintain rural spaces, life styles and communities.

**Past success is underscored by the 2017 aquaculture industry farm gate value of \$76.4 million dollars, that places the industry as high as 3<sup>rd</sup> in Diversified Agriculture's contribution to the economy, behind seed crops and livestock.** To highlight a few bright spots: the diversity of species grown at the Natural Energy Laboratory of Hawaii Authority (NELHA), establishment of the Pacific Aquaculture and Coastal Resources Center in Hilo, internationally impactful marine shrimp and fish research at UH and OI, establishment of the Center for Tropical and Subtropical Aquaculture that serves Hawaii and the U.S. Flag Islands, the emergence of aquaponics, a resurgence of interest in restoring ancient Hawaiian fishponds, and the recent State funding for an Aquaculture Business Incubator at NELHA to foster entrepreneurship **(HAAA would be happy to provide more industry details and organize facility visits).**

## 2.0 Status of Government Support

Recently, the Board of Directors (BOD) of HAAA reviewed current industry support available from State government and UH and compared it to previous years, circa 2000 to the present. We note there has been virtually no growth in industry value since 2014. In recent years, the State has made significant investments in aquaculture research, planning and infrastructure, recognizing the growing global need for aquatic protein and the opportunities for sale of seafood products, technology and technical services, as well as offering educational opportunities.

State funds also leveraged large amounts of Federal and private research funding that have widespread benefit to the economy. The islands sub-tropical climate, geographic isolation, and natural resources provide production advantages to certain types of aquaculture. The BOD review concluded that tangible State support of development has been reduced significantly in recent years, particularly with respect to direct, hands on assistance to existing and prospective business investment.

Historically, Hawaii was recognized as a national leader in aquaculture research, planning and development, particularly in marine (salt water) aquaculture or mariculture. One important reason was the proactive expansion policy and significant financial support from the Legislature and State government, that made aquaculture a priority in the State's portfolio of economic

development initiatives. Implementation was in large part through the establishment of an Aquaculture Development Program (ADP), as the lead program and industry advocate within State government. However, support has shrunk significantly since 2000 and HAAA believes the Program has lost its economic development focus. ADP has had to drastically curtailed its critical advocacy role and capacity to assist industry by virtue of major changes in organization, staffing, and budget.

- **Change in Organizational Placement-** ADP at the beginning of the 21 st Century was a program in the Chairpersons' Office, Department of Agriculture (DOA) – essentially at Division level. Reporting to the Chair of DOA provided the high-level visibility and stature to work across Departments on a variety of issues, as well as represent the State at national and international forums.

By 2018, ADP had been downsized and made a Section under the Animal Industry Division, DOA (see Staffing discussion). In addition, the responsibilities of the Program were changed by adding support for the Livestock Industry (e.g., cattle and pigs) to its role and it was renamed Aquaculture and Livestock Support Services (ALSS). Importantly, the new placement and mission emphasized product marketing rather than broad spectrum industry development.

- **Reduction in Staff-** In 2000 ADP had a staff of seven. The seven positions were: Manager, Secretary, Aquaculture Specialist, Marketing Specialist, Aquaculture Veterinarian, and two veterinary technicians (Prior to 1997 the Program also had an Information Specialist and a Clerk Typist). This Staff handled: planning and policy; industry support services and direct assistance (i.e., finding sites, facilitating permits, providing information, marketing of products and technical services and disease prevention and management); and a small research and extension budget to match a yearly UH Sea Grant research and extension program.

Today the Program consists of a Manager, Aquaculture Specialist, and Economic Development Specialist. The Veterinarian and one technician remained in the Animal Industry Division supervised by the Division Head and focused on managing one important industry segment the disease-free shrimp certification program that helps private farms and OI export certified Specific Pathogen Free (SPF) shrimp broodstock to the mainland, South America and Southeast Asia. The unit no longer focuses on general disease diagnosis and prevention services to aquafarmers statewide. Amplifying the impact of this loss of ADP staff assistance was the loss of three key statewide technical extension positions in the UH Sea Grant Program, which were co-funded by ADP.

- **Reduced ADP Budget-** As with all State program budgets, after staff salaries are covered, there must be sufficient operating funds to provide for needed equipment, supplies, travel, etc. to do the work; accomplish the industry expansion mission. In 2000, ADP was in the DOA and consisted of 7 positions previously described. The overall annual budget was \$502, 050, including salaries and operating funds.

In 2018 there were 3 positions and an overall budget of \$437, 913, a reduction of \$64,137. The combined staff and funds reduction have severely reduced the scope of Program activities and its ability to work with its partners and leverage additional resources.

### **3.0 Why a New Aquaculture Focus**

#### **3.1 Fits Long-term State Goals**

Encouraging commercial land based and ocean farming is consistent with long-term State goals for the future, as defined by the Governor and the Legislature.

- **Enhance Food Security-** Hawaii imports around 90 % of its food overall and 70 % of the seafood consumed. The Governor wants to increase Island food production and self-sufficiency so that we would be less impacted by the interruption of imports. Considering Hawaii's per capita seafood consumption is nearly 3 times the U.S. mainland (46 lbs. per person), with a large and growing tourist market component, expanding commercial aquaculture makes sense as a component of a food security strategy.
- **Encourage Sustainable Industries-** Hawaii must continue to grow and diversify its economy and generate good jobs for its citizens. However, business development should fit with conservation of our natural resources and community desires for sustainable industries, that help preserve a quality environment and quality of life for future generations. Modern aquaculture technologies offer a variety of valuable fresh, brackish and saltwater species for culture and likewise a variety of land-based and ocean farming systems that have been demonstrated sustainable. While finding sites for farms can be challenging on land and in the ocean, suitable locations do exist on all islands.
- **Support Rural Development-** In economic development terms, Hawaii's urban centers offer the preponderance of jobs. Rural communities around the state have more limited options to grow and maintain needed commerce, e.g., various tourist destination models and agriculture farming by families and corporations. Aquaculture adds another

farming option for job generation in rural areas that can preserve preferred life styles and open space.

### **3.2 A New National Aquaculture Initiative**

With the change in Administrations in Washington DC and a Congress interested in growing the economy and job generation, aquaculture development has gotten increased attention. Congress is very concerned that 90 % of U.S. seafood is imported, largely from Third World countries, and domestic seafood production must be increased. HAAA believes it is very timely for the State to strengthen its commitment to expanding the Island industry.

A number of recent actions by the Administration and Congress illustrate this new momentum. There have been significant increases in research funding for aquaculture in the National Sea Grant Program, Department of Commerce and the Regional Aquaculture Center Program, Department of Agriculture. The Office of Aquaculture in NOAA Fisheries has funding for a National Marine Aquaculture Initiatives for fish and shellfish and there is a new announcement for Saltonstall-Kennedy funding targeting aquaculture topics. The Department of Energy has a large research/demonstration grant program focused on growing seaweeds in the ocean for energy generation – a Hawaii company got one of the grants. These R&D efforts are being complemented by nationwide efforts to streamline the federal government regulatory process for commercial aquaculture.

The most exciting recent occurrence deals with the introduction in 2017 of the Advancing the Quality and Understanding of American Aquaculture Act (AQUAA), S 3138, by Senator Roger Wicker of Mississippi. The bill would among other things establish a lead agency for marine aquaculture in NOAA that could issue permits for siting commercial farms in U.S. Federal waters, the Exclusive Economic Zone, and assist state-level development. More important to Hawaii aquaculture interests, the bill authorizes \$350 million dollars over 5 years to implement the legislation. Suitable areas to farm in the EEZ would be identified and subject to a Programmatic Environmental Impact Statement and research would target high leverage technical bottlenecks and demonstration of applied technologies.

Hawaii with its experienced University and private sector marine aquaculture research community and infrastructure could greatly benefit from the bill. Particularly relevant is the state's track record in commercial, open ocean aquaculture - Hawaii currently has the only open ocean fish farm in the U.S. – and the growing opportunity to attract additional private investment, which is on the rise all around the world.

### **4.0 Conclusions and Recommendations**

HAAA agrees with the United Nations and strongly believes in clearly evident national and global trends that increases in seafood supply must come from aquaculture and the next frontier for development is the open ocean. The U.S. is beginning to embrace these ideas and recent actions by the Administration and Congress underscore that conclusion. The Hawaii

aquaculture community can realize many future benefits from the increasing national commitment to freshwater and marine aquaculture and HAAA has two recommendations to position the state to realize these benefits:

- 1) Re-establish aquaculture and aquaponics as State priorities and a component of all economic development strategies, policies and plans, so State and County governments, the University of Hawaii and private universities, the private investment and technology sectors, and the general public understand this strong commitment.**
- 2) Rebuild the Aquaculture Development Program as an effective aquaculture industry facilitator and advocate within State government for statewide sustainable development. Give the Program Division status within DOA and provide staffing and a budget commensurate with the statewide responsibility of siting and growing new aquaculture businesses.**

**The HAAA BOD would be happy to discuss the information in this White Paper and provide additional information.**



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## **Support For SB 753 SD2 HD1**

Thursday March 28, 2019 3 PM  
Conference Room 308  
State Capitol

Re: Strong Support of SB 753 SD2 HD1 Relating to Aquaculture

Honorable Chair Sylvia Luke and Vice Chair Ty Cullen

Thank you for the opportunity to submit this testimony.

I strongly support Senate Bill 753 SD2 HD1

I have been in continuous shrimp production on Molokai since 1988. My success has been largely due to the programs that the State of Hawaii's Aquaculture Development Program (ADP) put in place back in the 1980s and 90s.

Not only myself but other companies existence is largely due to the programs ADP established. Marine shrimp broodstock has become one of Hawaii's major exports.

Hawaii is now a world leader in the development marine shrimp broodstock. This is made possible by DOA routine testing of our farms. Those in the program that test negative for major shrimp pathogens can ship live shrimp to support worldwide shrimp production. Much of the shrimp stocks currently being produced worldwide originated in Hawaii.



This is just one small example of the achievements of ADP.

ADP was a strong advocate that assisted new startups and existing companies. Their existence can accelerate growth in a field that will benefit the state with food security, relieving pressure on wild stocks, produce healthy food alternatives and provide jobs.

Funds should be provided to restore critical staff positions and functions to restore ADP and elevate it to Division status.

Aquaculture is inherently more complex than agriculture and needs positions in government to advocate and promote expansion of the industry.  
Join me in my support of SB 753

Respectfully submitted,

A handwritten signature in black ink that reads "Steven Chaikin". The signature is written in a cursive style and is positioned above a solid black horizontal line.

Steven Chaikin  
Molokai Sea Farms, President



**Committee on Finance**

Representative Sylvia Luke, Chair

Representative Ty J.K. Cullen, Vice Chair

March 27, 2019

Support for S.B. 753 SD2 HD1 Relating to Aquaculture

Blue Ocean Mariculture is the world's leading producer of cultivated Kahala (*Seriola rivoliana*). Our fish are served under the Hawaiian Kanpachi brand in sushi and fine dining restaurants in Hawaii and across the mainland United States. We employ 27 people full-time in the Kona area in our hatchery and offshore aquaculture operations. Blue Ocean's hatchery is located within the Natural Energy Laboratory of Hawaii Authority (NELHA).

We strongly support S.B. 753 SD2 HD1 related to reviving the Aquaculture Development Program to further advance Hawaii's aquaculture industry.

An Aquaculture Development Program in Hawaii will be a valuable resource in continuing to build a strong aquaculture industry across the state. Aquaculture provides an opportunity to strengthen our state's economy by diversifying our economic base, reducing the amount of seafood imported to Hawaii, and creating high-wage job opportunities.

We also believe Hawaii can be a leader in the global aquaculture industry and provide leadership on environmentally responsible aquaculture practices. We believe the best way to pursue Hawaii's potential in aquaculture is through the type of program contemplated by S.B. 753 SD2 HD1. Thank you for the opportunity to testify.

Blue Ocean Mariculture

**SB-753-HD-1**

Submitted on: 3/27/2019 1:47:10 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jacqueline S. Ambrose	HFUU	Support	No

Comments:

**SB-753-HD-1**

Submitted on: 3/26/2019 8:37:13 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
STANLEY RUIDAS	Individual	Support	No

Comments:

I am from the island of Lanai and I support SB753 SD2 HD1. Mahalo for your time.

**SB-753-HD-1**

Submitted on: 3/27/2019 9:35:47 AM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
James Martin	Individual	Support	No

Comments:

Aquaculture is growing all over the World for good reason. it conserves water and increases yeilds in smaller footprints and in places where traditional farming is not possible. Please Support!

**SB-753-HD-1**

Submitted on: 3/27/2019 10:07:50 AM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Andrea Quinn	Individual	Support	No

Comments:

Dear Honorable Committee Members:

Please oppose SCR753 unless you amend the bill to state an environmental impact statement first needs to be conducted for any aquaculture facilities. Aquaculture has contaminated aquatic resources around the globe, and it would be just another assault against Hawaii's already-fragile and moribund marine ecosystem.

Thank you for the opportunity to present my testimony.

Andrea Quinn

Kihei

2029 Nuuanu Ave. #1510  
Honolulu, Hawai'i 96817  
March 27, 2019

Representative Sylvia Luke, Chair  
Representative Ty J.K. Cullen, Vice Chair  
House Committee on Finance  
Hawaii State Capitol, 415 S. Beretania St.  
Honolulu, Hawai'i 96813

Dear Chair Luke, Vice Chair Cullen, and Members of the Committee:

I am sending this testimony to express my **strong support for SB 753 SD2 HD1**, "Relating to Aquaculture," which would appropriate funds to revitalize Hawai'i's aquaculture development program. Hawai'i had an excellent aquaculture development program during the 1980's and 1990's – good enough that other states modeled their programs after Hawai'i's. Hawai'i's original Aquaculture Development Program (ADP) played a large part in creating an industry that generates more than \$70 million in annual revenues, and is now one of the pillars of Hawai'i's diversified agriculture.

I have been involved in aquaculture production and consulting since 1979. In 1983, with a partner, I started a farm (Hawaiian Marine Enterprises) to produce *ogo* (edible seaweed), which at that time was becoming scarce due to overharvesting and other factors. ADP staff helped us find a suitable farm site and provided a small proof-of-concept grant which helped us get established. We operated the farm profitably for 27 years, until our lease expired and the land was sold.

Although our farm prospered during its existence, ADP was not so fortunate. Due to budget cuts, the program was reduced and eventually folded into the Animal Industries division of DOA. The expertise of its current small staff is primarily in marketing, while its original, larger staff had expertise in biology, production technology, economics, and outreach as well as marketing. Its former status as a program directly under the department chair's office has also been diminished, reducing its influence within Hawai'i's government. In order to restore ADP's ability to help develop aquaculture as a beneficial and sustainable industry for Hawai'i, I believe that the following provisions are necessary:

- Increased staffing with broader expertise than currently exists in Animal Industries.
- Sustained multi-year funding for both staff and operations, as was the case in the 1980's and 1990's.
- Restoration of ADP's status as a program under the HDOA chair, or possibly as a separate division, making ADP the lead agency for aquaculture development.

Given sufficient long-term funding, the current version of SB 753 SD2 HD1 meets these needs and will go a long way towards re-establishing ADP's former status. The \$500,000 annual appropriation proposed by the Senate Agriculture and Environment Committee in SB 753's SD1 version would probably be sufficient to restore most of ADP's former functions – provided that this appropriation is **in addition** to the current minimal funding level, and that funding is sustained on a multi-year basis.

I hope, further, that the “institutional knowledge” of former ADP management and staff will be sought in the effort to re-establish the program going forward.

With abundant sunlight and seawater, and continuing demand for seafood products, aquaculture has great potential for further growth in Hawai'i. Recognizing this potential, last year's Legislature appropriated funds for an aquaculture incubator at NELHA. Eventually the companies founded at the incubator will need to find suitable sites, obtain permits, raise capital, and transform pilot-scale operations into full-scale production facilities. An ADP that can assist them in this difficult transition will make it more likely that they will choose to locate their production facilities – and the associated jobs and revenues – within Hawai'i.

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

Sincerely,

A handwritten signature in cursive script that reads "Frederick M. Mencher". The signature is written in black ink and is positioned below the word "Sincerely,".

Frederick M. Mencher



**SB-753-HD-1**

Submitted on: 3/27/2019 11:06:41 AM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Keith Ranney	Individual	Support	No

Comments:

**SB-753-HD-1**

Submitted on: 3/27/2019 11:14:22 AM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Linda Hastings	Individual	Support	No

Comments:

**SB-753-HD-1**

Submitted on: 3/27/2019 12:04:19 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Mary	Individual	Support	No

Comments:

Hawaii needs to “go all out” *now* to increase our food security and aquaculture is a exceedingly important piece to moving in this direction. Aquaculture can help mitigate the some of the cost barrier to entry into farming since it isn’t necessarily connected to viable ag land.

Please support this measure.

Mary Spadaro

Citizen and founder of Slow Money Hawaii

**SB-753-HD-1**

Submitted on: 3/27/2019 12:28:41 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Gwen Morinaga-Kama	Individual	Support	No

Comments:

**SB-753-HD-1**

Submitted on: 3/27/2019 12:35:14 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Timothy Johnson	Individual	Support	No

Comments:

**SB-753-HD-1**

Submitted on: 3/27/2019 12:45:13 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Harriet Witt	Individual	Support	No

Comments:

This bill will help us to move beyond our dangerous dependence on the mainland for food.

**SB-753-HD-1**

Submitted on: 3/27/2019 1:16:27 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
John NAYLOR	Individual	Support	No

Comments:

**SB-753-HD-1**

Submitted on: 3/27/2019 1:29:17 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jo Kimm	Individual	Support	No

Comments:



**SB-753-HD-1**

Submitted on: 3/27/2019 1:51:30 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
J Ashman	Individual	Support	No

Comments:

I strongly support the expansion of the aquaculture industry in Hawaii and hope that you will pass this bill to indicate the State's commitment to the industry

Among other things, aquaculture can make a significant contribution to the Governor's goal of doubling food production, as it is the most efficient method of protein production.

Funding should be provided especially for investment in research, outreach, and infrastructure and this should be long-term, consistent and reliable support. I also believe that Aquaculture should be elevated to Division status within the DOA .

I am also in support of the recommendations proffered in the HAAA Board of Directors' White Paper entitled "Restoring Aquaculture Industry Advocacy in Hawaii State Government.

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

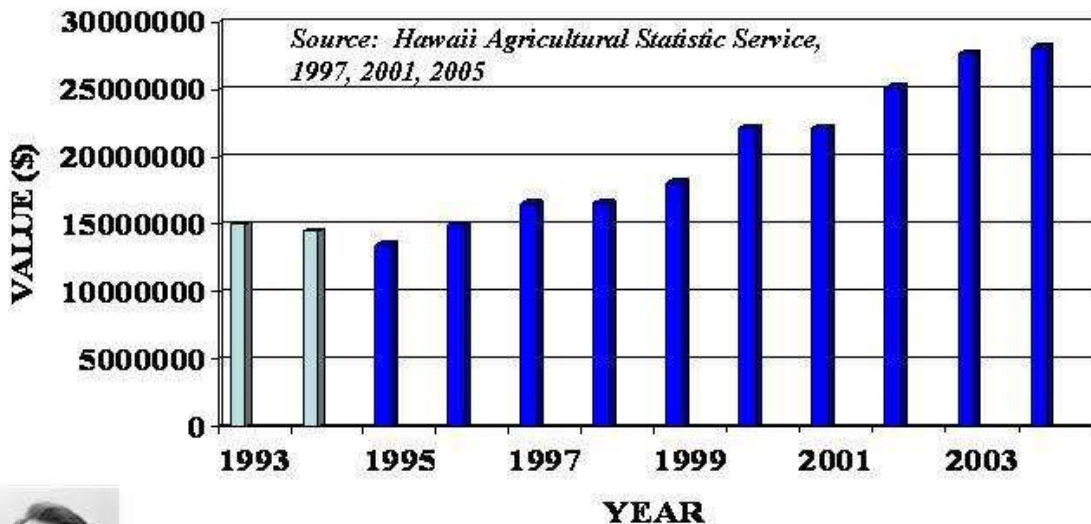
March 27, 2019

To Whom It May Conern:

Regarding : SB 753 - Relating to Aquaculture

My name is Clyde S. Tamaru and was a former Aquaculture Specialist for the University of Hawaii at Manoa. I have been informed that there is legislation that is being considered to be made in the form of what the

## IMPACTS: AQUACULTURE PRODUCTION IN HAWAII (1993-2004)



"You and Extension are a critical part of the team that has accomplished this!"

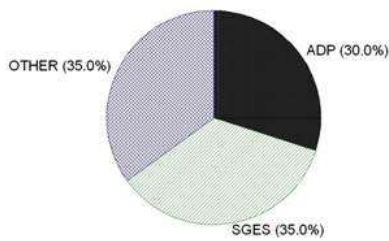
John Corbin (2006) Program Manager: Aquaculture Development Program, Hawaii State Department of Agriculture

Aquaculture Development Program use to provide and what was accomplished. Being a recipient of funding support I can provide some idea of how the program at UH Manoa worked and above is a comment and the output of Aquaculture in Hawaii when I started at UH Sea Grant Back in 1995. By supporting a statewide aquaculture extension we could provide a variety of research, extension and education activities to the State of Hawaii. So in addition to helping the industry grow faculty at UH Manoa were conducting research to provide new products and

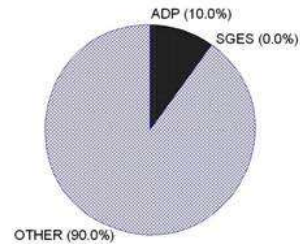
technologies and for the group I worked with and for your purposes it might be best if I show the budget breakdown and how the funding obtained from ADP was used to establish a state wide extension service.

At Windward Community College aquaponics became an important focus the added another dimension to what will be needed as Hawaii continues to diversify its industry. I can also provide some links to video that were made both at WCC and also a farm located in Kona that we helped and

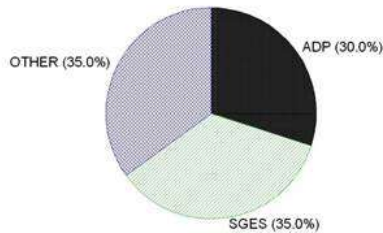
MQ4: Demonstration of a strong record of aquaculture program administration, planning, organization, and fund-raising activities.  
**HAWAII STATE AQUACULTURE EXTENSION PROGRAM SALARY BREAKDOWN (2007-2008)**



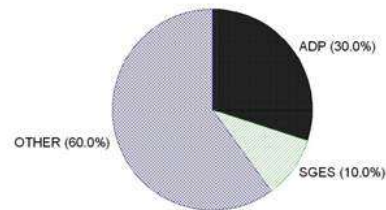
Clyde Tamaru, Ph.D.



Kathleen McGovern-Hopkins



Jim Szyper, Ph.D.



Robert Howerton, Ph.D.

Total Salary and Fringe Benefit \$351,595

gives an idea about what can result with additional funding support.

**AQUAPONIC VIDEOS**  
 Aquaponics Training for Teachers  
<http://vimeo.com/71805168>

Leinaala Bright and Ilima Ho Lastimososa getting ready to go to Washington DC.

<https://www.youtube.com/watch?v=11R57MN8YME&t=7s>

Introduction to Backyard Aquaponics WCC

[https://www.youtube.com/watch?v=0-MJRB18T\\_o&t=148s](https://www.youtube.com/watch?v=0-MJRB18T_o&t=148s)

PBS Hawaii - HIKI NŌ Episode 103 | Mid-Pacific Institute

<https://www.youtube.com/watch?v=H5aQXMNcX58>

Zac Hosler Living Aquaponics Kona

[https://www.youtube.com/watch?v=tcM\\_9xk3aQY](https://www.youtube.com/watch?v=tcM_9xk3aQY)

God's County Waimanalo

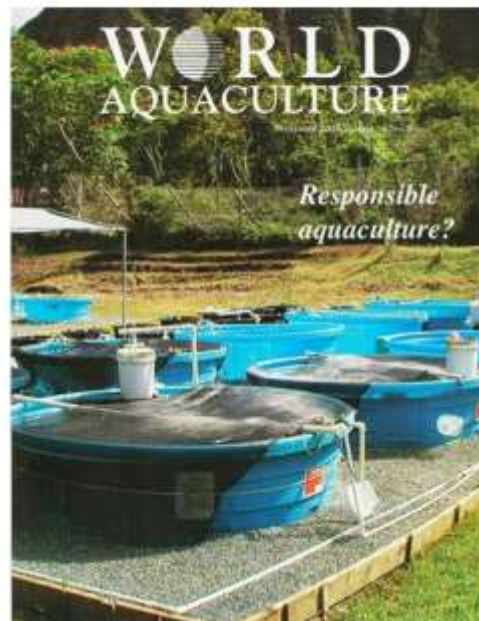
<http://godscountywaimanalo.weebly.com/>

This is just a small example of what was accomplished while I was an extension specialist with UH Manoa but worked a lot out of the Windward Community College.

The figure below shows Dr. Robert Stickney and Kathleen McGovern-Hopkins when a National Sea Grant team came to evaluate our program. He felt a shot of the WCC facility should be placed on the front cover of the World Aquaculture Magazine because of what was being done there. An



University of Hawai'i  
**WINDWARD**  
COMMUNITY COLLEGE



indication that we were doing something special also an indication of what can be done with the investment you are now contemplating.

For all the reasons I strongly urge that support for the aquaculture industry be continued as the work will continue to be needed especially if the goals are for the islands to become self reliant. I would also suggest that the faculty of the College of Tropical Agriculture and Human Resources be engaged as to what is needed most. They can provide additional resources and manpower as the industry continues to grow and diversity. I should point out that sugar is now gone and something needs to fill in to help the economy continue to grow.

Sincerely,

A handwritten signature in black ink, appearing to read "Alvin L. Brown". The signature is written in a cursive style with a large, sweeping initial "A".

From: Kenneth Kaneshiro <kaneshirk001@hawaii.rr.com>  
Sent: Wednesday, March 27, 2019 8:08 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

I strongly support SB 753, SD 2, HD 1 - Relating to Aquaculture, which appropriates funds for operational expenses for revitalizing the aquaculture development program within the department of agriculture.

In recent years ADP has been reduced in staff and function, ultimately being folded into the Animal Industries division of DOA and continues to be downsized. It is no coincidence that Hawaii's aquaculture revenues have levelled off. A revived ADP will help revive aquaculture's growth.

Thank you for the opportunity to testify on this measure.

Mahalo!

From: Barry Kim <kimn001@hawaii.rr.com>  
Sent: Wednesday, March 27, 2019 6:18 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

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Thank you for the opportunity to testify on this measure.

Mahalo!

FIN-Jo

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From: Edwin Bartholomew <edbarth@maui.net>  
Sent: Wednesday, March 27, 2019 9:07 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

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Thank you for the opportunity to testify on this measure.

Mahalo!

FIN-Jo

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From: Lorie Obra <lorie@rustyshawaiian.com>  
Sent: Wednesday, March 27, 2019 5:47 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

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Mahalo!

FIN-Jo

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From: Melvin Matsuda <melvin@kahukubrand.com>  
Sent: Wednesday, March 27, 2019 4:33 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

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Mahalo!

FIN-Jo

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From: Linda Gusman <lsgusman@yahoo.com>  
Sent: Tuesday, March 26, 2019 10:30 PM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

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Mahalo!

FIN-Jo

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From: Hiromichi Nago <info@emhawaii.com>  
Sent: Tuesday, March 26, 2019 9:51 PM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

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FIN-Jo

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From: Donald Lau <whtmzda@yahoo.com>  
Sent: Tuesday, March 26, 2019 9:14 PM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

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FIN-Jo

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From: Alvin Tsuruda <waihale@hawaiiantel.net>  
Sent: Tuesday, March 26, 2019 7:43 PM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

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Mahalo!



FIN-Jo

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From: Patricia Wilson <cheeta.wilson@gmail.com>  
Sent: Tuesday, March 26, 2019 7:38 PM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

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FIN-Jo

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From: Mark Phillipson <reelrelaxed@gmail.com>  
Sent: Tuesday, March 26, 2019 6:07 PM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

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Mahalo!

FIN-Jo

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From: Randy Cabral <kaiwiki.1970@gmail.com>  
Sent: Tuesday, March 26, 2019 5:56 PM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

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FIN-Jo

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From: donald sommer <desommer@yahoo.com>  
Sent: Tuesday, March 26, 2019 5:23 PM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

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FIN-Jo

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From: John Giblin <jgiblinjr@aol.com>  
Sent: Tuesday, March 26, 2019 3:50 PM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

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FIN-Jo

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From: Sarah Styan  
Sent: Tuesday, March 26, 2019 1:37 PM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

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Mahalo!

FIN-Jo

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From: GLENN TOYAMA <gtoyama67@gmail.com>  
Sent: Tuesday, March 26, 2019 1:25 PM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

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FIN-Jo

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From: Adam Killermann <apkajar@gmail.com>  
Sent: Tuesday, March 26, 2019 11:45 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

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FIN-Jo

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From: Jason Holman <jason.a.holman@gmail.com>  
Sent: Tuesday, March 26, 2019 11:35 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

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FIN-Jo

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From: Joni Kamiya <jonikamiya@gmail.com>  
Sent: Tuesday, March 26, 2019 11:29 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

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FIN-Jo

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From: Megan Kono <megankono808@gmail.com>  
Sent: Tuesday, March 26, 2019 11:09 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

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Mahalo!

FIN-Jo

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From: Jerry Nishek <jerry@kauainursery.com>  
Sent: Tuesday, March 26, 2019 10:36 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

I strongly support SB 753, SD 2, HD 1 - Relating to Aquaculture, which appropriates funds for operational expenses for revitalizing the aquaculture development program within the department of agriculture.

In recent years ADP has been reduced in staff and function, ultimately being folded into the Animal Industries division of DOA and continues to be downsized. It is no coincidence that Hawaii's aquaculture revenues have levelled off. A revived ADP will help revive aquaculture's growth.

Thank you for the opportunity to testify on this measure.

Mahalo!

FIN-Jo

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From: Joan Simien <japsimien@yahoo.com>  
Sent: Tuesday, March 26, 2019 10:29 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

I strongly support SB 753, SD 2, HD 1 - Relating to Aquaculture, which appropriates funds for operational expenses for revitalizing the aquaculture development program within the department of agriculture.

In recent years ADP has been reduced in staff and function, ultimately being folded into the Animal Industries division of DOA and continues to be downsized. It is no coincidence that Hawaii's aquaculture revenues have levelled off. A revived ADP will help revive aquaculture's growth.

Thank you for the opportunity to testify on this measure.

Mahalo!

FIN-Jo

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From: Francesca Koethe <frankie.koethe@oahurcd.org>  
Sent: Tuesday, March 26, 2019 10:27 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

I strongly support SB 753, SD 2, HD 1 - Relating to Aquaculture, which appropriates funds for operational expenses for revitalizing the aquaculture development program within the department of agriculture.

In recent years ADP has been reduced in staff and function, ultimately being folded into the Animal Industries division of DOA and continues to be downsized. It is no coincidence that Hawaii's aquaculture revenues have levelled off. A revived ADP will help revive aquaculture's growth.

Thank you for the opportunity to testify on this measure.

Mahalo!

FIN-Jo

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From: OLELO PA'A OGAWA <glow@glowhawaii.com>  
Sent: Tuesday, March 26, 2019 10:27 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

I strongly support SB 753, SD 2, HD 1 - Relating to Aquaculture, which appropriates funds for operational expenses for revitalizing the aquaculture development program within the department of agriculture.

In recent years ADP has been reduced in staff and function, ultimately being folded into the Animal Industries division of DOA and continues to be downsized. It is no coincidence that Hawaii's aquaculture revenues have levelled off. A revived ADP will help revive aquaculture's growth.

Thank you for the opportunity to testify on this measure.

Mahalo!

FIN-Jo

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From: Sandi Kato-Klutke <skatoklutke@gmail.com>  
Sent: Tuesday, March 26, 2019 10:26 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

I strongly support SB 753, SD 2, HD 1 - Relating to Aquaculture, which appropriates funds for operational expenses for revitalizing the aquaculture development program within the department of agriculture.

In recent years ADP has been reduced in staff and function, ultimately being folded into the Animal Industries division of DOA and continues to be downsized. It is no coincidence that Hawaii's aquaculture revenues have levelled off. A revived ADP will help revive aquaculture's growth.

Thank you for the opportunity to testify on this measure.

Mahalo!



FIN-Jo

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From: Patricia E Iwamoto <piwamoto@msn.com>  
Sent: Tuesday, March 26, 2019 10:11 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

I strongly support SB 753, SD 2, HD 1 - Relating to Aquaculture, which appropriates funds for operational expenses for revitalizing the aquaculture development program within the department of agriculture.

In recent years ADP has been reduced in staff and function, ultimately being folded into the Animal Industries division of DOA and continues to be downsized. It is no coincidence that Hawaii's aquaculture revenues have levelled off. A revived ADP will help revive aquaculture's growth.

Thank you for the opportunity to testify on this measure.

Mahalo!

FIN-Jo

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From: melvin kunitake <melvin.kuni@gmail.com>  
Sent: Tuesday, March 26, 2019 10:07 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

I strongly support SB 753, SD 2, HD 1 - Relating to Aquaculture, which appropriates funds for operational expenses for revitalizing the aquaculture development program within the department of agriculture.

In recent years ADP has been reduced in staff and function, ultimately being folded into the Animal Industries division of DOA and continues to be downsized. It is no coincidence that Hawaii's aquaculture revenues have levelled off. A revived ADP will help revive aquaculture's growth.

Thank you for the opportunity to testify on this measure.

Mahalo!

FIN-Jo

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From: Kylie Matsuda-Lum <kylie@kahukufarms.com>  
Sent: Tuesday, March 26, 2019 9:54 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

I strongly support SB 753, SD 2, HD 1 - Relating to Aquaculture, which appropriates funds for operational expenses for revitalizing the aquaculture development program within the department of agriculture.

In recent years ADP has been reduced in staff and function, ultimately being folded into the Animal Industries division of DOA and continues to be downsized. It is no coincidence that Hawaii's aquaculture revenues have levelled off. A revived ADP will help revive aquaculture's growth.

Thank you for the opportunity to testify on this measure.

Mahalo!

FIN-Jo

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From: LUANA BECK <hooluanaranch@yahoo.com>  
Sent: Wednesday, March 27, 2019 10:21 AM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

I strongly support SB 753, SD 2, HD 1 - Relating to Aquaculture, which appropriates funds for operational expenses for revitalizing the aquaculture development program within the department of agriculture.

In recent years ADP has been reduced in staff and function, ultimately being folded into the Animal Industries division of DOA and continues to be downsized. It is no coincidence that Hawaii's aquaculture revenues have levelled off. A revived ADP will help revive aquaculture's growth.

Thank you for the opportunity to testify on this measure.

Mahalo!

**SB-753-HD-1**

Submitted on: 3/27/2019 5:08:07 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Barbara Best	Individual	Support	No

Comments:

**LATE**

**SB-753-HD-1**

Submitted on: 3/27/2019 6:24:05 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Dennis F Lokmer	Individual	Support	No

Comments:

**LATE**

**SB-753-HD-1**

Submitted on: 3/27/2019 6:58:28 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Derek Lindes	Individual	Support	No

Comments:

**LATE**

**SB-753-HD-1**

Submitted on: 3/27/2019 8:18:15 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Thomas Craig	Individual	Support	No

Comments:

Aquaculture grows high protein food efficiently.



**SB-753-HD-1**

Submitted on: 3/27/2019 8:39:24 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

**LATE**

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
C. Kai Lucas	Individual	Support	No

Comments:

**SB-753-HD-1**

Submitted on: 3/28/2019 8:28:06 AM

Testimony for FIN on 3/28/2019 3:00:00 PM

**LATE**

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Soo Sun Choe	Individual	Support	No

Comments:

**LATE**

From: Aileen Yeh <akfwyeh@gmail.com>  
Sent: Wednesday, March 27, 2019 8:34 PM  
To: FINtestimony  
Subject: I Support SB 753, SD 2, HD 1

Dear Chair Luke, Vice Chair Cullen, & members of the committee:

I strongly support SB 753, SD 2, HD 1 - Relating to Aquaculture, which appropriates funds for operational expenses for revitalizing the aquaculture development program within the department of agriculture.

In recent years ADP has been reduced in staff and function, ultimately being folded into the Animal Industries division of DOA and continues to be downsized. It is no coincidence that Hawaii's aquaculture revenues have levelled off. A revived ADP will help revive aquaculture's growth.

Thank you for the opportunity to testify on this measure.

Mahalo!

**LATE**

**SB-753-HD-1**

Submitted on: 3/28/2019 9:47:54 AM  
Testimony for FIN on 3/28/2019 3:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jen Johansen	Cyanotech Corporation	Support	No

Comments:

Cyanotech Corporation is a publically held microalgae company on the Kona Coast. We have been in business over 30 years and employ approximately 125 people. We have been a significant contributor to the State's Aquaculture sales of \$76.4M in 2017. The industry as a whole accounts for a peak number of 500 hired workers on payroll in 2016. Aquaculture produces high quality value added commodities from Hawaii including nutritional supplements and foods.

With continued support this industry can continue to grow, offer a wide variety of local jobs, and further diversify our State's economy. We strongly support SB 753 and appropriation of funds for operational expense and revitalization of the Aquaculture Development Program within DOA.

**SB-753-HD-1**

Submitted on: 3/28/2019 9:50:02 AM

Testimony for FIN on 3/28/2019 3:00:00 PM

**LATE**

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
hugh johnson	Individual	Support	No

Comments:



**LATE**

HOUSE COMMITTEE ON FINANCE  
Thursday, March 28, 2019 – 3:00 PM - Room 308  
Agenda #2

**RE: SB 753 SD2 HD1 - Relating to Aquaculture – In Support**

Hawai'i Aquaculture & Aquaponics Association  
Hawai'i Cattlemen's Council  
Hawai'i Farm Bureau Federation  
Hawai'i Farmers' Union United  
Hawai'i Food Industry Association  
Hawai'i Food Manufacturers Association  
Kohala Center  
Land Use Research Foundation of Hawai'i  
Maui School Garden Network  
Ulupono Initiative  
College of Tropical Agriculture and Human Resources - University of Hawai'i at Manoa

Aloha Chair Luke, Vice Chair Cullen and members of the Committee:

The Local Food Coalition supports SB 753 SD2 HD1, which appropriates funds for operational expenses for revitalizing the Aquaculture Development Program within HDOA.

A full functioning State aquaculture program will help encourage production of more local seafood and will increase jobs and reduce reliance on imported seafood. We support that goal, and believe it coincides with the State's food self-sufficiency initiative and the Administration's goal to double local food production by 2020. Funding is needed to cover operational expenses to ensure the future success and growth of the industry.

The Local Food Coalition is an organization comprising of farmers, ranchers, livestock producers, investors and other organizations working to provide Hawaii's food supply.

We respectfully request your support of SB 753 SD2 HD1. Thank you for the opportunity to submit testimony.

John Garibaldi  
808-544-8319  
[jgaribaldi@wik.com](mailto:jgaribaldi@wik.com)

**SB-753-HD-1**

Submitted on: 3/28/2019 1:59:52 PM

Testimony for FIN on 3/28/2019 3:00:00 PM

**LATE**

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Eloise Engman	Individual	Support	No

Comments:

**SB-753-HD-1**

Submitted on: 3/28/2019 3:25:24 PM

Testimony for FIN on 3/28/2019 3:00:00 PM



<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
ROBERT DUERR	Individual	Support	No

Comments:

Aquaculture was once a cornerstone of sustainability in Hawaii. Already the world looks to Hawaii for brood stock, and research. Please support aquaculture. It can bring jobs and food to Hawaii.

Best,

Robert Duerr

Senior Writer Outdoor Writers of America Association

Hilo