### <u>SB-3198</u> Submitted on: 1/29/2022 5:27:41 PM

Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Remote Testimony Requested
Kevin Kelly	Individual	Support	No

Comments:

The Hawaii Ulu Cooperative is a model organization that deserves the full support of state in their efforts to scale their operation. Their team has not only created a functioning collective of ulu growers, but they have single handedly created a growing market for ulu. Please continue to support this success!

Mahalo for the opportnity to testify on this bill.



Email: <a href="mailto:communications@ulupono.com">communications@ulupono.com</a>

#### SENATE COMMITTEE ON AGRICULTURE & ENVIRONMENT Wednesday, February 2, 2022 — 1:00 p.m.

# Ulupono Initiative <u>supports</u> SB 3198, Relating to Capital Improvement Projects Benefiting Agriculture.

Dear Chair Gabbard and Members of the Committee:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve the quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food; renewable energy and clean transportation; and better management of freshwater and waste.

**Ulupono** <u>supports</u> **SB 3198**, which appropriates funds for Capital Improvement Projects for agriculture.

Ulupono supports funding for critical agricultural infrastructure across the State. This bill identifies the needs of the Honalo Marshalling Yard, to support the efforts of the Hawai'i Ulu Coop in providing fresh, nutritious Hawai'i-grown products to our community. There are other similar projects proposed in the Hawai'i Department of Agriculture's CIP Budget that merit strong consideration by the legislature.

Ulupono closely tracked the federal Infrastructure Investment and Jobs Act and advocated for key strategic investments in water infrastructure for agriculture. Unfortunately, the federal bill did not provide resources to support agricultural water systems. Agricultural water system infrastructure (irrigation systems) is an essential component of our state's efforts to achieve its goals of increasing local food production and food security.

This is affirmed in the HDOA's 2019 Agricultural Water Use and Development Plan (AWUDP), which documents how Hawai'i's agricultural industry relies on these water systems to deliver inexpensive water to meet and expand agricultural production even during times of drought. The HDOA has identified agricultural water systems as the most important infrastructural requirement needed to expand Hawai'i's diversified agriculture industry. However, most of the large-scale irrigation systems in the state are or will soon be more than 100 years old.

Additionally, according to the Association of State Dam Safety Officials' latest Dam Safety Performance Report, more than a third of Hawai'i's dams are rated either in poor or unsatisfactory condition.

#### Investing in a Sustainable Hawai'i



In the AWUDP, the HDOA estimates the five-year cost of repairs and maintenance for Hawai'i's most critical agricultural water systems at approximately \$168 million - of that amount, about \$90 million is needed specifically for HDOA-managed agricultural water systems over that same period. This is substantial for our small state, requiring an average of more than \$33 million per year for five years. While the price tag to repair and maintain these systems may seem high, the cost to replace these plantation-era water systems would be in the billions of dollars. More importantly, continuing to let these systems fall into disrepair puts Hawai'i's food security at risk, particularly the food security of the next generation who will be forced to adapt to a hotter and dryer planet.

#### Climate Change in Hawai'i

The importance of well-maintained agricultural water systems becomes even greater when the impacts of climate change on Hawai'i's food security are considered. In April 2021, Hawai'i became the first state to declare a climate emergency, when the State Legislature passed <u>Senate Concurrent</u> <u>Resolution 44 SD1 HD1</u>, which also requested "statewide collaboration toward an immediate just transition and emergency mobilization effort to restore a safe climate."

The people of Hawai'i are seeing first-hand local impacts consistent with the effects of climate change: rising air temperatures; decreased rainfall and stream flow; increased rain intensity; increased frequency of drought; and increased frequency of powerful storms. For example:

- Since 1950, temperatures across the Hawaiian Islands have been on the rise, ranging from increases of 0.2 to 0.4 degrees Fahrenheit per decade;
- The annual total precipitation measured at Hilo International Airport decreased by nearly 20 inches since 1950—the most among Hawai'i's four major airports;
- Rain intensity is becoming as much a destructive factor as drought, with the amount of rain falling in the very heaviest downpours from 1958 to 2007 increasing by approximately 12%;
- The area in Hawai'i burned annually by wildfires has increased four-fold in recent decades, according to University of Hawai'i wildland fire researcher Clay Trauernicht, demonstrating a significant impact, at least in part, from climate change; and
- Powerful storms are anticipated to become more frequent, as warmer climates tend to amplify existing weather patterns and variability, according to Hawai'i's state climatologist, Pao-Shin Chu.

These are each detrimental to local food production on their own; and yet, as an isolated island state we are also susceptible to climate change impacts far from our shores due to Hawai'i's continuing over-reliance on food from imports.

#### Food Pricing & Availability in Hawai'i

For international and domestic food producers, meeting the global demand of a projected 10 billion people by 2050—an increase of 2.3 billion people over just a quarter of a century—will become increasingly challenging as the Earth's climate continues to warm. Some estimate this will require an increase in global food production of 60%, if we are to ensure enough food for all.

According to research by The Nature Conservancy, climate change will bring increased moisture deficits across the United States. Nationally, the total area irrigated will need to increase by 11-54 million acres (an increase of 19-94%) by 2090 in order to maintain food production.

An analysis of top food producing states California and Iowa paints a grim picture:



- California, based on available data, produces over a third of the nation's vegetables and twothirds of its fruits and nuts. Yet, California is expected to see a 50% increase in the number of severe droughts by the end of this century, with research predicting a decrease in California's yields by more than 10% for walnuts, almonds, avocados, table grapes, rice, wheat, and tomatoes.
- Iowa is the largest producer of corn in the United States, with Iowa farms producing more than 19% of American corn, eggs (14%), hogs (30%), and soybeans (17%) in 2008. Iowa could see up to a 25% drop in corn yields by mid-century (from 200 to 150 bushels per acre), according to the Fourth National Climate Assessment, a federal study mandated by Congress and completed every four years, significant decreases are on the horizon.

Left dependent on imports, Hawai'i residents will experience greater volatility of food prices and food availability because of the impact of climate change on national and global food production. It can no longer be assumed that there will always be an unlimited supply of affordable food from overseas to feed Hawai'i's population.

#### Irrigation Infrastructure IS Part of Climate Change Adaptation

In the Biden Administration's fact sheet outlining the Infrastructure Investment and Jobs Act, the White House highlighted investments in **infrastructure to make communities more resilient to the impacts of climate change, including** "funds to protect against droughts and floods..."

Irrigation plays an essential role in increasing food production and is an effective method of climate change adaptation. Globally, irrigated land represents only 16% of arable land, but produces 44% of total crop production. For most crops, irrigation can double or triple crop yields. For example, irrigated crop yields for corn, soybean, and wheat are 165%, 75%, and 140% higher than rain-fed yields. In regards to climate change adaptation, irrigation systems mitigate the impact of decreasing rainfall, increasing frequency of drought, and increasing temperatures; and irrigation can help capture more rainfall during storm events, so that water can be used in the future.

The HDOA's AWUDP plan concludes: "The investment into these agricultural water systems is the key to provide adequate water to continue to grow diversified agriculture. As the saying goes, ...without water there is no agriculture..., which is the reason these agricultural water systems were originally constructed—and why they need to be maintained for another 100 years."

We strongly agree. For generations to come, local food production will depend on these systems and their ability to provide water for local farmers and ranchers. This represents a singular opportunity to make Hawai'i more self-sufficient and resilient.

Thank you for this opportunity to testify.

Respectfully,

Micah Munekata Director of Government Affairs

<u>SB-3198</u> Submitted on: 1/31/2022 11:11:56 PM Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Remote Testimony Requested
Robert Bence	Individual	Support	No

Comments:

aloha I support these capital improvements of SB3198 mahalo

## <u>SB-3198</u>

Submitted on: 2/1/2022 9:26:52 AM Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	<b>Testifier Position</b>	Remote Testimony Requested
Reba Lopez	Individual	Support	No

Comments:

As president of the Haleakala Chapter of the Hawaii Farmers Union United, and a family farmer at Birds with Arms Farms, I would like to testify in support of this bill. Mahalo.



P.O. Box 253, Kunia, Hawai'i 96759 Phone: (808) 848-2074; Fax: (808) 848-1921 e-mail info@hfbf.org; www.hfbf.org

### **FEBRUARY 2, 2022**

#### HEARING BEFORE THE SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

### **TESTIMONY ON SB 3198** RELATING CAPITAL IMPROVEMENT PROJECTS BENEFITING AGRICULTURE

Conference Room 224 & Videoconference 1:00 PM

Aloha Chair Gabbard, Vice-Chair Nishihara, 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 1,800 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 supports SB 3198, which appropriates funds for capital improvement projects for the Hawaii 'Ulu Cooperative.

The Hawaii 'Ulu Cooperative provides an important service to Hawai'i farmers by aggregating, processing, and marketing 'ulu and associated co-crops grown in diversified farming systems. The Honalō Marshaling Yard facility is owned by the State of Hawai'i and was developed over 25 years ago to support these very activities. The facility is now in gross need of public investment to enable increased production and the scaling of local food industries that have demonstrated the potential for both economic development and long-term food security and sustainability.

By 2025, the Hawaii 'Ulu Cooperative anticipates handling nearly 2 million pounds per year of 'ulu and associated co-crops based on existing members' production figures, for an overall farm gate value of over \$6.5 million paid out directly to local farmers. Investing in the Honalō facility today is a worthwhile and vital investment in the capacity of Hawai'i's agricultural sector and in the ability of our islands to not only feed ourselves nutritious food but to export high-value dense crops and processed agricultural products for revenue growth and job creation.

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

DAVID Y. IGE Governor

JOSH GREEN Lt. Governor



PHYLLIS SHIMABUKURO-GEISER Chairperson, Board of Agriculture

> **MORRIS 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 SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

#### FEBRUARY 2, 2022 1:00 P.M. CONFERENCE ROOM 224 and VIA VIDEOCONFERENCE

#### SENATE BILL NO. 3198 RELATING TO CAPITAL IMPROVEMENT PROJECTS BENEFITING AGRICULTURE

Chairperson Gabbard and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill 3198. This bill appropriates funds for capital improvement project for the Honalo Marshaling yard which is currently under lease to the Hawaii Ulu Co-operative. The Department offers the following comments.

The Department notes our understanding that the Ulu Cooperative is also requesting similar grant funding from the federal government under the Build Back Better framework for these same proposed improvements. In addition, the Co-op is also requesting funds for the construction of the receiving building under the state's Grant in Aid program. We respectfully note that many items in this request overlap with either the expected federal BBB grant and/or State of Hawaii grant in aid. This overlap may cause confusion and potentially jeopardize the funding from one or more of the sources if the grants are received.

Thank you for the opportunity to testify.



#### Testimony In Support of SB 3198 Capital Improvement Benefiting Agriculture Senate Agriculture and Environment Committee February 2, 2022

Testimony of Kyle Datta President Hawai'i Ulu Producers Cooperative

Dear Chairman Gabbard and Vice Chair Nishihara;

The Hawaii Ulu Producers Cooperative strongly supports SB 3198 Capital Improvement Benefiting Agriculture The Hawaii Ulu Cooperative is an existing food hub for producers of our local starches, ulu, kalo, ulua, on both Hawai'i Island, Maui and Oahu. We have over 108 farmers and have harvested over 625,000 lbs. of local produce. Thanks to the legislature's appropriation of \$1.25 million for infrastructure improvements at our Honalo facility on Hawai'i island, we are increasing the facility's ability to process food by a factor a 10: from 200,000 pounds to 2 million pounds. The project will take approximately two years from inception, and thus, the impact will be realized in three to four years (2024/2025).

Despite the prior appropriation from the Legislature and HUC's own fund raising efforts, the state engineers working for the Department of Agriculture found multiple compliance related items from wastewater, electrical and fire that need to be upgraded for the construction to begin. These were not known by the Department of Agriculture or HUC when it assumed the lease from the Hawaii Island Food Bank. HUC has committed the funds (~\$700,000+) to ensure the project will be built.

This created a funding gap for the additional work needed to complete the planned capacity expansion and operate with efficiency, namely the receiving building and expanded kitchen area that are the subject of this bill.

SB 3198 provides Hawaii Ulu Cooperative additional funding to help them grow and expand. Since HUC is the primary starch processor in the state and provides food to schools, hospitals, and the general public, this bill's impact will resonate across our state and empower a resilient, regenerative local food system.

We commend the Senate Agriculture and Environment Committee for its forward thinking approach to supporting local food and local farmers.

Respectfully Submitted, Kyle Datta President Hawaii Ulu Cooperative



Officers Vincent Mina State President HFUU

Anabella Bruch Vice-President HFUU

Maureen Datta Secretary HFUU Aloha Chair Gabbard, Vice Chair Nishihara, and Members of the Committee on Agriculture and Environment,

The Hawaii Farmers Union United (HFUU) is a 501(c)(5) agricultural advocacy nonprofit representing a network of over 2,500 family farmers and their supporters across the Hawai'ian islands. **HFUU strongly supports SB3198** to provide funding to revamp the Honalo Marshalling Yard facility operated by the Hawaii Ulu Cooperative.

Reba Lopez Mahalo for the opportunity to testify.

#### Chapter Presidents

Dash Kuhr Kohala, Hawai'i

Drake Weinert, East Hawai'i

> Steve Lund Puna, Hawai'i



Un

Andrea Drayer K'au, Hawaii

Maureen Datta Kona, Hawai'i

Robert Boudreaux Hana, Maui

Reba Lopez Haleakala, Maui

Bobby Pahia Mauna Kahalawai, Maui

> Kaipo Kekona Lahaina, Mau

Brynn Foster North Shore, Oahu

Christian Zuckerman Wai'anae, Oahu

Vincent Kimura Waimanalo, Oahu

Anabella Bruch Kauai

<u>SB-3198</u> Submitted on: 2/1/2022 2:00:35 PM Testimony for AEN on 2/2/2022 1:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Anna Ezzy	Individual	Support	No

Comments:

I am a resident of Haiku, Maui and I am in support of this bill to support local agriculture by improving HUPC infrastructure.



Farmer owned, 'āina grown

#### **Testimony In Support of SB 3198 Capital Improvement Benefiting Agriculture** Senate Agriculture and Environment Committee February 2, 2022

### Testimony of Dana Shapiro, General Manager of Hawai'i 'Ulu Producers Cooperative

Dear Chairman Gabbard, Vice Chair Nishihara and members of the Committee,

As a member and the General Manager of the Hawaii Ulu Producers Cooperative, I strongly support SB 3198 Capital Improvement Benefiting Agriculture. The Hawaii Ulu Cooperative is an existing food hub for producers of our local starches, 'ulu, kalo, 'uala and pala'ai on Hawai'i Island, Maui and Oahu. We have over 113 farmers and have harvested over 800,000 lbs. of local produce. Thanks to the legislature's appropriation in 2019 of \$1.25 million for infrastructure improvements at our Honalo facility on Hawai'i island, we are increasing the facility's ability to process food by a factor of 10: from 200,000 pounds to 2 million pounds per year. The project will take approximately two years from inception, and thus, the impact will be realized in three to four years (2024/2025).

Despite the prior appropriation from the Legislature and HUC's own fundraising efforts, the state engineers working for the Department of Agriculture found multiple compliance related items from wastewater, electrical and fire that need to be upgraded for the construction to begin. These were not known by the Department of Agriculture or HUC when it assumed the lease from the Hawaii Island Food Bank. HUC has committed the funds (~\$700,000+) to ensure the project will be built.

This created a funding gap for the additional work needed to complete the planned capacity expansion and operate with efficiency, namely the receiving building, expanded kitchen area, and refridgerated packing room that are the subject of this bill.

SB 3198 provides Hawai'i 'Ulu Cooperative the additional funding needed to help them grow and expand. Since HUC is the primary starch processor in the state and provides food to schools, hospitals, and the general public, this bill's impact will resonate across our state and empower a resilient, regenerative local food system.

We commend the Senate Agriculture and Environment Committee for its forward thinking approach to supporting local food and local farmers.

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#### Hawai'i 'Ulu Producers Cooperative

79-1017 E Honalo Rd, Kailua-Kona, Hawaiʻi 96740 | 808-238-8869 | eatbreadfruit.com | info@eatbreadfruit.com

Sincerely,

Danafapiro

General Manager

Hawai'i 'Ulu Producers Cooperative

#### <u>SB-3198</u> Submitted on: 2/1/2022 3:52:44 PM Testimony for AEN on 2/2/2022 1:00:00 PM

Submit	ed By	Organization	Testifier Position	Remote Testimony Requested
Harriet	Witt	Testifying for Hawaii Farmers Union United	Support	No

Comments:

The kinds of buildings and other structures necessary to support local regenerative agriculture are sorely lacking. No individual farmer can foot the bill for providing this. Therefore, we need you to support this bill. Mahalo, Harriet Witt, 43 Puu Koa Place, Haiku, Maui