

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 SENATE COMMITTEE ON
AGRICULTURE AND ENVIRONMENT**

**FEBRUARY 5, 2020
1:15 P.M.
CONFERENCE ROOM 224**

**SENATE BILL NO. 2757
RELATING TO THE ENVIRONMENT**

Chairperson Gabbard and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill 2757. This measure authorizes the Agricultural Development and Food Security Special Fund to be used by the Department of Agriculture to award grants up to an unspecified maximum amount to individuals proposing to engage in afforestation, reforestation, soil carbon sequestration, or local organic plant food production in the State. It also requires the Department of Agriculture to submit a listing of the grants and amounts granted to persons undertaking the qualified activities. The Department of Agriculture has strong concerns and offers comments.

The Agricultural Development and Food Security Special Fund (Section 141-10) is fully committed to the nine purposes for which the Special Fund may be expended. These purposes directly target agricultural production and processing such as agricultural resources, agricultural research, agricultural equipment, plant quarantine, promotion and marketing of agricultural products, water testing, and other activities "...intended to increase agricultural production or processing that may lead to reduced importation of food, fodder, or feed from outside the State."

This measure proposes to add four specific activities – afforestation, reforestation, soil carbon sequestration, and organic food production – that may be awarded grants from the Special Fund. It also establishes a not-to-exceed cap on the grant to the existing purposes. The Department respectfully submits that afforestation, reforestation, and soil carbon sequestration do not align with the agricultural production



and processing focus of the Special Fund. We also believe the proposed grant to organic food producers is unnecessary since qualified organic food producers already have access to a tax credit for qualified expenses incurred to produce organic agriculture products (Section 235-110.94). The laudable conservation efforts associated with afforestation, reforestation, and soil carbon sequestration should be funded by other more appropriate sources which have been established for such purposes.

The Department also notes that grant-making authority may be defective because it must include standards by which the grants shall be made. We believe that the measure does not provide sufficient guidance to meet that requirement.

Thank you for the opportunity to testify on this measure.

DAVID Y. IGE
GOVERNOR OF
HAWAII



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 LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

Testimony of
SUZANNE D. CASE
Chairperson

Before the Senate Committee on
AGRICULTURE AND ENVIRONMENT

Wednesday February 5, 2020
1:15 PM
State Capitol, House Conference Room 224

In consideration of
SENATE BILL 2757
RELATING TO THE ENVIRONMENT

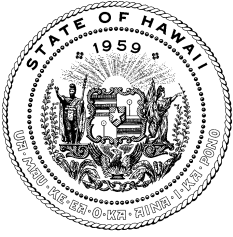
Senate Bill 2757 proposes to authorize the agricultural development and food security special fund to be used to award grants to individuals proposing to engage in afforestation, reforestation, soil carbon sequestration, or local organic plant food production in the State. Requires the department of agriculture to submit a listing of grants and amounts granted to persons who engaged in afforestation, reforestation, soil carbon sequestration, or local organic plant food production in the State. **The Department of Land and Natural Resources (Department) supports the intent of this bill and defers to the Department of Agriculture with comments.**

The State of Hawaii's commitment to uphold the Paris Climate Accord and progressive move towards zero emissions clean economy by 2045 requires that we actively invest in reducing our emissions and mitigate greenhouse gases (primarily carbon dioxide - CO₂). Agriculture, Forests and other Land Uses (AFLOU) are currently the State's only carbon sink. Investing in carbon positive actions such as afforestation, reforestation, soil carbon sequestration, or local organic plant food production is one of the most effective ways to start mitigating our carbon footprint. The Department recognizes that this program is administered by the Department of Agriculture and defers to them.

The Department notes that carbon positive actions are not limited to afforestation, reforestation, soil carbon sequestration, or local organic plant food production and suggests that the Green House Gas Sequestration Task Force be consulted in identifying priority projects reducing emissions and increasing sequestration carbon positive on natural and working lands. The Department also finds that increasing the funding amount of the agricultural development and food security special fund in tandem with expanding the program by increasing the percent of

Hawai'i's Environmental Response, Energy, and Food Security Tax the Department of Agriculture receives could be used to cover program maintenance costs and serve as a revenue stream to accelerate the number of carbon positive projects funded. The Department suggests integrating these costs when contemplating the establishment of this program.

Thank you for the opportunity to comment on this measure.



HAWAII STATE ENERGY OFFICE STATE OF HAWAII

235 South Beretania Street, 5TH Floor, Honolulu, HI 96813 | energy.hawaii.gov

DAVID Y. IGE
GOVERNOR

SCOTT J. GLENN
CHIEF ENERGY OFFICER

(808) 587-3807

Testimony of **SCOTT J. GLENN, Chief Energy Officer**

before the
SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT
Wednesday, February 5, 2020
1:15 PM
State Capitol, Conference Room 224

Comments in consideration of **SB 2757** **RELATING TO THE ENVIRONMENT.**

Chair Gabbard, Vice Chair Ruderman, and members of the Committee. The Hawaii State Energy Office (HSEO) offers comments on SB 2757, which authorizes the agricultural development and food security special fund to be used to award grants to individuals proposing to engage in afforestation, reforestation, soil carbon sequestration, or local organic plant food production in the State; and requires the Department of Agriculture to submit a listing of grants and amounts granted to persons who engaged in afforestation, reforestation, soil carbon sequestration, or local organic plant food production in the State. The HSEO supports the intent of this bill and defers to the Department of Agriculture with comments.

The State of Hawaii has committed to a decarbonized future. A critical path to achieving the zero emissions clean economy target is to sequester greenhouse gases to offset emissions within the State of Hawaii. Based on the Greenhouse Gas Inventory published by the State Department of Health, the inventory sector called "Agriculture, Forests and other Land Uses" (AFLOU) is currently the State's only carbon sink. Investing in actions such as afforestation, reforestation, soil carbon sequestration, or local organic plant food production is one of the most effective ways to offset Hawaii's emissions and promote innovative economic development.

Thank you for the opportunity to testify on this measure.

SB-2757

Submitted on: 1/28/2020 11:04:29 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Alexandra Kahn	Testifying for Surfrider Oahu	Support	No

Comments:

SB-2757

Submitted on: 1/29/2020 8:01:36 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
David Mulinix	Testifying for Our Revolution Hawaii	Support	No

Comments:

SB-2757

Submitted on: 1/30/2020 10:51:27 AM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Kohn MD	Testifying for We Are One, Inc. - www.WeAreOne.cc - WAO	Support	No

Comments:

Strongly support SB 2757 .

Trees bring a plethora of good: animal habitat, beauty, erosion abatement, urban cooling, shade.

They are also a tremendous good in the Climate Crisis fight that is killing everything that lives on our planet.

We must remove vast amounts of carbon from the atmosphere to address the Climate Crisis. Cutting emissions is clearly no longer sufficient. Artificial carbon capture is very expensive, and doesn't work well yet; trees do far better, cost less, absorb carbon anywhere they grow, are simple to plant, require almost no maintenance, and last many decades.

Last year, 3,500 square miles of forest burned in Brazil. 19,000 square miles of brush burned in Australia. These trees must be replaced. We in Hawaii can help a little.

Afforestation and reforestation should be encouraged wherever possible.

Soil carbon sequestration can also help lower atmospheric CO2 and should be supported.

SB 2757 will help a little. Please pass it.

www.WeAreOne.cc



183 Pinana St., Kailua, HI 96734 • 808-262-1285 • info@350Hawaii.org

To: Senate Committee on Agriculture and Environment
From: Brodie Lockard, Founder, 350Hawaii.org
Date: Wednesday, February 5, 2020, 1:15 pm

In strong support of SB 2757

Dear Chair Gabbard, Vice Chair Ruderman, and members:

350Hawaii strongly supports SB 2757.

Trees bring a plethora of good: animal habitat, beauty, erosion abatement, urban cooling, shade.

They are also a tremendous good in the Climate Crisis fight that is killing everything that lives on our planet.

We must remove vast amounts of carbon from the atmosphere to address the Climate Crisis. Cutting emissions is clearly no longer sufficient. Artificial carbon capture is very expensive, and doesn't work well yet; trees do far better, cost less, absorb carbon anywhere they grow, are simple to plant, require almost no maintenance, and last many decades.

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Afforestation and reforestation should be encouraged wherever possible.

Soil carbon sequestration can also help lower atmospheric CO2 and should be supported.

SB 2757 will help a little. Please pass it.

Brodie Lockard
Founder, 350Hawaii.org

SB-2757

Submitted on: 1/31/2020 7:40:38 AM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Ted Bohlen	Testifying for Climate Protectors Coalition	Support	No

Comments:

Dear Chair Gabbard, Vice Chair Ruderman, and members:

»¿The Climate Protectors Coalition **strongly supports SB2757!**

We are a new group inspired by the Mauna Kea Protectors but focused on reversing the climate crisis. As a tropical island State, Hawaii will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, and rising sea levels. We must do all we can to reduce our carbon footprint and become at least carbon neutral as soon as possible, including by encouraging the planting of trees, regenerative agricultural practices and production of local organic plant food in Hawaii.»¿

In order to reverse the climate crisis, we must remove vast amounts of carbon from the atmosphere. Cutting emissions is clearly no longer sufficient.

Planting trees can be a valuable tool in reversing the Climate Crisis by drawing carbon down from the atmosphere and back into the ground. Trees cost less, absorb carbon anywhere they grow, are simple to plant, require minimal maintenance, and last many decades. At a time when forests are burning in the Amazon, Australia, California and elsewhere, we in Hawaii can help a little by planting trees. Afforestation and reforestation should be encouraged wherever possible.

The United States should spend as much as \$4.5 billion per year planting trees to achieve carbon neutrality by mid-century, according to a comprehensive carbon-removal portfolio released this week by the World Resources Institute.

Regenerative agricultural practices are another valuable tool. These include:

- no tillage,
- diverse cover crops,
- in-farm fertility (no external nutrients),

- no pesticides or synthetic fertilizers, and
- multiple crop rotations.

Together, these practices increase carbon-rich soil organic matter. The result: vital microbes proliferate, roots go deeper, nutrient uptake improves, water retention increases, plants are more pest resistant, and soil fertility compounds. Farms are seeing soil carbon levels rise from a baseline of 1 to 2 percent up to 5 to 8 percent over ten or more years, which can add up to 25 to 60 tons of carbon per acre.

It is estimated that at least 50 percent of the carbon in the earth's soils has been released into the atmosphere over the past centuries. Bringing that carbon back home through regenerative agriculture is one of the greatest opportunities to address human and climate health, along with the financial well-being of farmers.

Local organic plant food production:

Hawaii needs more local food for food security and to reduce fossil fuel use in transporting food to Hawaii. Organic plant foods (vegetables and fruits) should be prioritized because they have a much smaller carbon footprint than animal products.

Please pass this bill to help reverse the climate crisis! Mahalo!



P.O. Box 37158, Honolulu, Hawai`i 96837-0158
Phone: 927-0709 henry.lifeoftheland@gmail.com

COMMITTEE ON AGRICULTURE AND ENVIRONMENT

Senator Mike Gabbard, Chair

Senator Russell E. Ruderman, Vice Chair

DATE: Wednesday, February 5, 2020

TIME: 1:15 p.m.

PLACE: Conference Room 224

SB 2757 RELATING TO THE ENVIRONMENT.

Support, Amendment

Aloha Chair Gabbard, Vice Chair Ruderman, and Members of the Committee

Life of the Land is Hawai`i's own energy, environmental and community action group advocating for the people and `aina for 49 years. Our mission is to preserve and protect the life of the land through sound energy and land use policies and to promote open government through research, education, advocacy and, when necessary, litigation.

The bill would offer grants for afforestation, reforestation, soil carbon sequestration, or local organic plant food production.

Proposed Amendment: The grant may only be used for net gains to the forest, it may not be given for someone engaged in chopping down and replanting forests.

Mahalo

Henry Curtis

Executive Director

SB-2757

Submitted on: 2/5/2020 5:50:57 AM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Simon Russell	Testifying for Farm Maui LLC	Support	No

Comments:

SB-2757

Submitted on: 1/27/2020 8:12:33 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Benton Kealii Pang, Ph.D.	Individual	Support	No

Comments:

SB-2757

Submitted on: 1/29/2020 9:12:15 AM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
J Riverstone	Individual	Support	No

Comments:

SB-2757

Submitted on: 1/28/2020 11:23:20 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Caroline Kunitake	Individual	Support	No

Comments:

Please support SB2757.

Mahalo,

Caroline Kunitake

SB-2757

Submitted on: 1/29/2020 10:28:08 AM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Dyson Chee	Individual	Support	No

Comments:

SB-2757

Submitted on: 1/29/2020 11:25:52 AM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Javier Mendez-Alvarez	Individual	Support	No

Comments:

SB-2757

Submitted on: 1/29/2020 1:01:51 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Mark K.Wilson III	Individual	Support	No

Comments:

SB-2757

Submitted on: 1/29/2020 8:05:05 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Sherry Pollack	Individual	Support	No

Comments:

SB-2757

Submitted on: 1/29/2020 10:18:08 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Andrea Nandoskar	Individual	Support	No

Comments:

Please support this bill! SB2757 creatively addresses global warming by incentivizing local community via grants to engage in carbon sequestering measures like growing organic food, creating healthy soil and planting trees and forrests. These activities build community, improve our lives and health AND help reverse global warming which we are already experiencing here in the Islands.

Mahalo for your consideration.

SB-2757

Submitted on: 1/30/2020 6:00:43 AM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Lynn Aaberg	Individual	Support	Yes

Comments:

Please support SB 2757. This bill would help with reforestation, agroforestation, carbon sequestration in both trees and soil, and local, sustainable food production. All of these are extremely important for the health and livelihood of our islands and our planet. These also help in the climate crisis fight, as trees can remove vast amounts of carbon that are currently raising the temperature of our planet. Let's show Hawai'i leading the way. Fires are raging all over the world, forests burning down, and Hawai'i can do its part to replace these trees. Please pass it.

Sincerely,

Lynn Aaberg

SB-2757

Submitted on: 1/30/2020 7:27:30 AM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Zoe Malia Ozoa Loos	Individual	Support	No

Comments:

To: Senate Committee on Agriculture and Environment

From: ZOE MALIA OZOA LOOS

Date: Wednesday, February 5, 2020, 1:15 pm

In strong support of SB 2757

Dear Chair Gabbard, Vice Chair Ruderman, and members:

I strongly support SB 2757 .

Trees bring a plethora of good: animal habitat, beauty, erosion abatement, urban cooling, shade.

They are also a tremendous good in the Climate Crisis fight that is killing everything that lives on our planet.

We must remove vast amounts of carbon from the atmosphere to address the Climate Crisis. Cutting emissions is clearly no longer sufficient. Artificial carbon capture is very expensive, and doesn't work well yet; trees do far better, cost less, absorb carbon anywhere they grow, are simple to plant, require almost no maintenance, and last many decades.

Last year, 3,500 square miles of forest burned in Brazil. 19,000 square miles of brush burned in Australia. These trees must be replaced. We in Hawaii can help a little.

Afforestation and reforestation should be encouraged wherever possible.

Soil carbon sequestration can also help lower atmospheric CO2 and should be supported.

SB 2757 will help a little. Please pass it.

ZOE MALIA OZOA LOOS

SB-2757

Submitted on: 1/30/2020 7:57:42 AM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
helen raine	Individual	Support	No

Comments:

To: Senate Committee on Agriculture and Environment

From: Helen Raine

Date: Wednesday, February 5, 2020, 1:15 pm

In strong support of SB 2757

Dear Chair Gabbard, Vice Chair Ruderman, and members:

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Afforestation and reforestation should be encouraged wherever possible.

Soil carbon sequestration can also help lower atmospheric CO₂ and should be supported.

SB 2757 will help a little. Please pass it.

Helen Raine

SB-2757

Submitted on: 1/30/2020 8:39:33 AM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Joy Silver	Individual	Support	No

Comments:

SB-2757

Submitted on: 1/30/2020 11:29:18 AM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Laurel Quarton	Individual	Support	No

Comments:

SB-2757

Submitted on: 1/30/2020 2:14:36 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Nanea Lo	Individual	Support	No

Comments:

Dear Chair Gabbard, Vice Chair Ruderman, and members:

I strongly support SB 2757 .

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Soil carbon sequestration can also help lower atmospheric CO2 and should be supported.

SB 2757 will help a little. Please pass it.

me ke aloha 'Ä• ina,

Nanea Lo

SB-2757

Submitted on: 1/30/2020 5:28:43 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Matthew Geyer	Individual	Support	Yes

Comments:

The number one thing we need to do to solve the climate crisis is to burn less fossil fuels. But number 2 is supporting efforts to plant trees and other means of carbon sequestration. Please continue to accelerate Hawai'i towards a more sustainable future for us and our keiki.

SB-2757

Submitted on: 2/3/2020 2:41:37 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jared	Individual	Support	No

Comments:

SB-2757

Submitted on: 2/3/2020 5:51:29 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Andrea Quinn	Individual	Support	No

Comments:

Dear Honorable Committee Members:

Please support SB2757, which would not only help to mitigate climate change but also help make Hawaii self-sustaining.

Thank you for the opportunity to present my testimony.

Andrea Quinn

Kihei

SB-2757

Submitted on: 2/3/2020 10:01:28 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Victoria Anderson	Individual	Support	No

Comments:

Please pass this important bill! We need to promote and encourage efforts to sequester carbon ASAP!

Mahalo.

SB-2757

Submitted on: 2/3/2020 11:48:54 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jennifer Azuma Chrupalyk	Individual	Support	No

Comments:

SB-2757

Submitted on: 2/4/2020 10:56:40 PM

Testimony for AEN on 2/5/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Elizabeth c McDermott	Individual	Support	No

Comments: