



**STATE OF HAWAII  
HAWAII CLIMATE CHANGE MITIGATION & ADAPTATION  
COMMISSION  
POST OFFICE BOX 621  
HONOLULU, HAWAII 96809**

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**Testimony of  
Leah Laramée  
Coordinator, Hawai'i Climate Change Mitigation and Adaptation Commission**

**Before the Senate Committee on  
ENERGY AND ENVIRONMENTAL PROTECTION**

**Thursday, February 9, 2023  
9:00 AM  
State Capitol, Via Videoconference, Conference Room 325**

**In support of  
House Bill 188  
RELATING TO CARBON SEQUESTRATION**

House Bill 188 appropriates funds for the Hawai'i carbon smart land management assistance pilot program. **The Hawai'i Climate Change Mitigation and Adaptation Commission (Commission) supports this measure.**

The State of Hawai'i's commitment to uphold the Paris Climate Accord and progressively move towards zero emissions clean economy by 2045 requires that we actively invest in reducing our emissions and mitigate greenhouse gases (primarily carbon dioxide - CO<sub>2</sub>). Regenerative agriculture, forests, wetlands, and our nearshore waters and reefs serve as the State's only carbon sinks, removing carbon from the atmosphere. Investing in carbon positive actions such as afforestation, reforestation, soil carbon sequestration, local organic plant food production, restoring native wetland ecosystems, and protection of threatened wetlands, forests, regenerative agricultural lands, and coastlines are effective ways to mitigate our carbon footprint.

The Commission recognizes that small land managers play a significant role in managing natural and working lands but often operate on small profit margins. Providing incentives to land managers will allow them to make changes on their lands to increase carbon sequestration and improve healthy soils to help the state meet food security and carbon emission goals. Additional funding for the State's watershed partnership program that provides landscape-level, cross-boundary forest protection and restoration is also essential to significantly accelerate carbon sequestration rates.

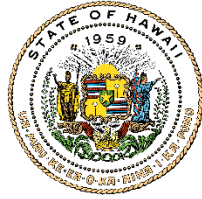
In collaboration with the US Climate Alliance and the Hawai'i Natural and Working Lands Research Team the Commission has been able to support efforts to bring \$40,000,000 to the state through USDA's Climate Smart Commodities grant which will work in tandem with this program

to increase local food production while meeting Hawai'i's 2045 carbon emission goals. The addition of funding to this program will help to leverage federal dollars to expand climate smart practices throughout the state and support land managers in the production of climate smart commodities.

Mahalo for the opportunity to testify in support of this measure.

JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA

P.O. BOX 621  
HONOLULU, HAWAII 96809

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LAND  
STATE PARKS

Testimony of  
DAWN N. S. CHANG  
Chairperson

Before the House Committee on  
ENERGY & ENVIRONMENTAL PROTECTION

Thursday, February 09, 2023  
9:00 AM

State Capitol, Conference Room 325

In consideration of  
HOUSE BILL 188  
RELATING TO CARBON SEQUESTRATION

House Bill 188 proposes to appropriate funds for the Hawai'i Carbon Smart Land Management Assistance Pilot Program. **The Department of Land and Natural Resources (Department) supports this measure provided that its passage does not replace or adversely impact priorities indicated in the Executive Budget request.**

The State of Hawai'i has committed to upholding the Paris Climate Accord and progressive movement towards zero emissions clean economy by 2045. This commitment requires that the State actively invest in reducing emissions and mitigating greenhouse gases (primarily carbon dioxide and methane). Investing in carbon-positive land management actions (such as native tree planting, improved native forest management, soil carbon sequestration, and/or techniques for carbon-friendly food production) is one of the most effective ways to start mitigating our carbon footprint.

The Department recognizes that small-scale landowners can play a significant role in managing natural and working lands but often operate on thin margins. Providing funding incentives to land managers will encourage practices that keep forests and farmlands intact and sequester additional carbon to help Hawaii reach its climate readiness goals. Additional funding for forest protection and management will contribute to greater carbon sequestration rates, as well.

Mahalo for the opportunity to present testimony in support of this measure.

**HB-188**

Submitted on: 2/2/2023 4:10:37 PM

Testimony for EEP on 2/9/2023 9:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
William W. Steiner	Pacific Agricultural Land Management Systems	Support	Written Testimony Only

Comments:

PALMS and its fellow organization Hawaii Oil Seed Producers support this bill. We plan to make biochar from weedy woody species (albizia, strawbeery guava) and our own recyclable production wastes as a soil supplement to add carbon to our orchards. We estimate 2-4 t/acre can be sequestered in this way which will promote microbiotic communities and water uptake in Big Island soils to enrich them.



**House Committee on Energy & Environmental Protection**

**Hawai'i Alliance for Progressive Action (HAPA) Supports: SBHB188**

Thursday, February 9, 2023 9:00 a.m. Conference Room 325

Aloha Chair Lowen, Vice Chair Cochran, and Members of the Committee,

On behalf of the Hawai'i Alliance for Progressive Action (HAPA) I am submitting testimony in support of HB188.

HB188 establishes the Hawai'i farmland and forest soil health Carbon smart incentive program to incentivize carbon sequestration activities through incentive contracts that provide compensation for eligible practices by program participants.

HAPA supports HB188 because we believe that it will help promote keeping forests and farmlands intact and support ways that land management can help with encouraging the sequestering of carbon.

This program will incentivize those actions that help to improve soil quality and those that help to sequester carbon and allow small farmers, ranchers, foresters, and landowners to be compensated for the valuable role they play in helping us reach our climate readiness goals.

Hawai'i needs to reduce its contribution to climate change, increase local food production, improve soil health, and secure resilient water sources through watershed protection. Programs such as the Hawai'i farmland and forest soil health Carbon smart incentive program are a part of the solution to making this happen.

Please pass HB188.

Thank you for your consideration.

Respectfully,

A handwritten signature in black ink, appearing to read 'Anne Frederick', written in a cursive style.

Anne Frederick  
Executive Director



**Hawaii Cattlemen's Council, Inc.**

COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Rep. Nicole E. Lowen, Chair

Rep. Elle Cochran, Vice Chair

**HB188**

RELATING TO CABRON SEQUESTRATION

Thursday, February 9, 2023, 9:00 AM  
Conference Room 325 & Videoconference

Chair Lowen, Vice Chair Cochran, and Members of the Committee,

The Hawaii Cattlemen's Council (HCC) is the Statewide umbrella organization comprised of the four county-level Cattlemen's Associations. Our member ranchers represent over 60,000 head of beef cows; more than 75% of all the beef cows in the State. Ranchers are the stewards of over 750 thousand acres of land in Hawaii, or 20% of the State's total land mass. We represent the interests of Hawaii's cattle producers.

The Hawaii Cattlemen's Council **supports HB188** which appropriates funds for the Hawaii carbon smart land management assistance pilot program.

We appreciate passing of Act 185, Session Laws of Hawaii 2022 and the legislature's acknowledgement that both forestry and regenerative agriculture can contribute to carbon sequestration and be a solution to curbing the detrimental impacts of climate change. These impacts, such as extreme weather, drought, sea level rise, are already affecting the state, and a focus on increasing local food security is necessary. We are learning more about the positive outcomes that well-managed rangelands can provide, including carbon sequestration and increased soil health, among others. Ranchers have the capacity, knowledge, and proven track record to maintain large land areas, thereby managing the rangelands and deriving ecosystem benefits. There are still gaps in quantifying the different benefits, and this program and other projects that are currently underway will help progress to quantify those benefits while also incentivizing ranchers to either continue climate smart practices, or start new practices the increase soil health and reduce carbon emissions or sequester carbon.

We support this bill that will provide funding for the Hawaii carbon smart land management assistance pilot program.

Nicole Galase  
Hawaii Cattlemen's Council  
Managing Director





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

February 9, 2023

HEARING BEFORE THE  
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

**TESTIMONY ON HB 188**  
RELATING TO CARBON SEQUESTRATION

Conference Room 325 & Videoconference  
9:00 AM

Aloha Chair Lowen, Vice-Chair Cochran, and Members of the Committee:

I am Brian Miyamoto, Executive Director of the Hawai'i Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,800 farm family members statewide and serves as Hawai'i's voice of agriculture to protect, advocate and advance the social, economic, and educational interests of our diverse agricultural community.

**The Hawai'i Farm Bureau supports HB 188**, which appropriates funds for the Hawaii carbon smart land management assistance pilot program to incentivize carbon sequestration activities through incentive contracts that provide compensation for eligible practices by program participants.

- Agricultural lands and operations already have a significant role in sequestering carbon. The program hopes to promote additional sequestration through the voluntary participation of landowners/lessees of agricultural land who would be compensated to undertake certain stipulated practices. It will be particularly important that these practices are science and evidence-based and that participation in the program makes agronomic and economic sense.
- The program highlights the need for State agricultural leases to be transferred from the DLNR (where they are relatively short-term, and otherwise less supportive leases or revocable permits) to the DOA where appropriate lease terms allow long-term planning, investments, and participation in forward-thinking beneficial programs such as this one.

Thank you for the opportunity to provide our comments and thank you for your continued support of Hawai'i's agricultural community.

**Testimony of The Nature Conservancy  
Supporting HB 188, Relating to Carbon Sequestration.**

**Committee on Energy and Environmental Protection  
Thursday, February 9, 2023, 9:00 am  
Conference Room 325 and via Videoconference**

Aloha Chair Lowen, Vice Chair Cochran, and Members of the Committee:

**The Nature Conservancy (TNC) supports HB 188**, Relating to Carbon Sequestration, which would appropriate funds for the Hawai'i carbon smart land management assistance pilot program.

The Hawai'i carbon smart land management assistance pilot program is vital to support our local producers and reach a carbon neutral clean economy by 2045. Agriculture, forests, and other land uses (AFOLU) are currently the State's only carbon sink. Actively investing in carbon positive actions such as restoring forests through tree planting, forest protection, and improved management, soil carbon sequestration, improved pasture management, and local organic plant food production are the most effective and efficient ways to mitigate our carbon footprint. Funding this program will help small land managers employ healthy soil and carbon smart practices to sequester additional carbon on natural and working lands.

TNC also supports ensuring that the Department of Land and Natural Resources has funding and personnel to support the successful establishment of the carbon smart land management assistance pilot program.

Carbon smart practices will not only sequester carbon but improve soil health, protecting agriculture into the future; increase the amount of water that filters into our aquifers; reduce erosion, protecting our reefs from sedimentation and stress; and support our local producers and growers.

Mahalo for the opportunity to provide testimony supporting HB 188.

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*The Nature Conservancy of Hawai'i and Palmyra is a non-profit organization dedicated to the preservation of the lands and waters upon which all life depends. The Conservancy has helped protect more than 200,000 acres of natural lands in Hawai'i and Palmyra Atoll. We manage 40,000 acres in 13 nature preserves and work in over 50 coastal communities to help protect and restore the nearshore reefs and fisheries of the main Hawaiian Islands. We forge partnerships with government, private parties, and communities to protect forests and coral reefs for their ecological values and for the many benefits they provide to people.*

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**HB-188**

Submitted on: 2/8/2023 11:50:33 AM

Testimony for EEP on 2/9/2023 9:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Susan Ing	HECA Carbon Sequestration Task Force	Support	Written Testimony Only

Comments:

Aloha Kakou Energy & Environmental Protection Chair Lowen, Vice Chair Cochran, and Committee Members,

Last year, the Hawaii Environmental Change Agents (HECA) Carbon Sequestration Task Force strongly supported bill SB3325 SD2 HD1 CD1 which established the Hawai‘i Carbon Smart Land Management Assistance Pilot Program. The program established a holistic, distributed, grassroots approach to climate action that supports carbon sequestration land management activities throughout our community. It provided opportunities for a variety of land uses that can improve our food and water security as well as ecosystem and biodiversity protection. The program aims to be accessible as there are no restrictions on the scale of landholdings and is open to a variety of land managers — public or private, owners and lessees. This benefits all of us. Funding this program is critical if we want to shift our land use behaviors towards a regenerative future.

We need to start as soon as possible. Until we have the program underway, we will not be able to truly evaluate and plan to increase our natural carbon sequestration capabilities. Change will not happen overnight. Our landowners require the time to plan and prepare their lands for these changes. Natural, biological sequestration processes take time as plants root, shoots grow, and soil microbes and biomes recover. The longer we wait, the less time we spend developing our collective skills and delay the reaching of our carbon sequestration potential. Our islands are currently a carbon sink but it’s capabilities are expected to decline with increased development and the threats of climate change such as drought, wildfire, and sea level rise. Smart land use management is increasingly important in our fight against climate change. We strongly support HB188 and the funding of the Hawai‘i Carbon Smart Land Management Assistance Pilot Program.

Mahalo,

Susan Ing

## HECA Carbon Sequestration Task Force

**HB-188**

Submitted on: 2/1/2023 2:59:58 PM

Testimony for EEP on 2/9/2023 9:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Douglas Perrine	Individual	Support	Written Testimony Only

Comments:

I support HB188. It only makes sense to fund the programs we have created.

**HB-188**

Submitted on: 2/4/2023 2:19:13 PM

Testimony for EEP on 2/9/2023 9:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Gerard Silva	Individual	Oppose	Written Testimony Only

Comments:

NO Such thing are Carbon Sequestration. More Bull Shit. I am sure you Idiots can look it up on the Internet and Find out How Bull Shit this is. DO YOUR JOB!!!!

**HB-188**

Submitted on: 2/5/2023 1:39:30 PM

Testimony for EEP on 2/9/2023 9:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Will Caron	Individual	Support	Written Testimony Only

Comments:

I support HB188.

**HB-188**

Submitted on: 2/5/2023 3:05:14 PM

Testimony for EEP on 2/9/2023 9:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Katherine Fryer	Individual	Support	Written Testimony Only

Comments:

I support HB188.

**HB-188**

Submitted on: 2/7/2023 9:01:53 AM

Testimony for EEP on 2/9/2023 9:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Virginia Tincher	Individual	Support	Written Testimony Only

Comments:

Chair Lowen, Vice Chair Cochran and members of the Energy & Environmental Protection Committee,

Mahalo Chair Lowen, Vice Chair Cochran and members Perruso and Woodson for introducing this important bill, HB188

As an active supporter of climate solutions for Hawaii and someone who tries to buy only locally grown food I am in strong Support of HB188.

I'm finding that most climate solutions that reduce emissions also benefit the land and the health of it's people.

The bill supports multiple concurrent benefits

- sustainable agriculture for locally grown food
- carbon sequestration land management practices which includes: agroforestry, cover crops, reforestation, and afforestation to support carbon sequestration; less chemical inputs for sustainable agriculture equates to reduced greenhouse gases for the agriculture sector (which is considerable!)

Mahalo,

Virgina Tincher

Aina Haina, Oahu

Member of Hawaii Environment Change Agents Task Forces and

Citizens Climate Lobby Natural Solutions and Carbon Cashback

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION  
Feb. 9 at 9:00 am

SUPPORTING HB188

My name is John Kawamoto, and I support HB 188.

The Earth is heading toward a climate catastrophe because humans have put too much carbon dioxide and other greenhouse gases into the atmosphere. There is 50% more carbon dioxide in the atmosphere than before the Industrial Age. According to NASA, after carbon dioxide is emitted, it stays in the atmosphere for 300 to 1,000 years. Clearly, we must do more to reduce carbon emissions and sequester carbon that is in the atmosphere.

Regenerative agriculture and forest preservation are within the realm of carbon sequestration, and funding should be provided to encourage them. Payment-for-services programs that improve soil health and are carbon-positive can help restore, maintain, and improve landscape soil health and water security. These programs would allow small farmers, ranchers, foresters, and landowners and lessees to be compensated for taking measures to help Hawaii reach its climate readiness goals. This bill would fund programs like these.

This bill is among many that should be passed to mitigate climate change so that the Earth can be made more livable for ourselves and future generations.



**HB-188**

Submitted on: 2/7/2023 6:11:55 PM

Testimony for EEP on 2/9/2023 9:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Caroline Azelski	Individual	Support	Written Testimony Only

Comments:

Support. Thank you.

**HB-188**

Submitted on: 2/8/2023 8:55:25 AM

Testimony for EEP on 2/9/2023 9:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Matthew Geyer	Individual	Support	In Person

Comments:

I stand in support of this measure in hopes that it will help us increase carbon sequestration.