DAVID Y. IGE GOVERNOR

EMPLOYEES' RETIREMENT SYSTEM HAWAI'I EMPLOYER-UNION HEALTH BENEFITS TRUST FUND

OFFICE OF THE PUBLIC DEFENDER



CRAIG K. HIRAI DIRECTOR

GLORIA CHANG DEPUTY DIRECTOR

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

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

WRITTEN ONLY TESTIMONY BY CRAIG K. HIRAI DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE TO THE HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE ON HOUSE BILL NO. 2493, H.D. 1

February 15, 2022 2:00 p.m. Room 329 and Videoconference

RELATING TO CARBON SEQUESTRATION INCENTIVES

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

House Bill No. 2493, H.D. 1, adds a new part to Chapter 193, HRS, that

establishes the Hawai'i Farmland and Forest Soil Health Carbon Smart Incentive

Program (program) under the Hawai'i Green Infrastructure Authority (HGIA) to promote

carbon sequestration activities through incentives contracts that provide for

compensation eligible practices by program participants; appropriates an unspecified

amount of general funds in FY 23 for HGIA to establish 5.00 positions for the program

and fund operating costs; appropriates an unspecified amount of general funds in FY 23

to the Department of Agriculture to establish 1.00 position to provide support for the

program; and appropriates an unspecified amount of general funds in FY 23 to the

Department of Land and Natural Resources to establish 1.00 position to provide support

for the program.

B&F notes that, with respect to the general fund appropriations in this bill, the federal Coronavirus Response and Relief Supplemental Appropriations Act requires that

states receiving Elementary and Secondary School Emergency Relief (ESSER) II funds and Governor's Emergency Education Relief II funds must maintain state support for:

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

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

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

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

Thank you for your consideration of our comments.

DAVID Y. IGE Governor

JOSH GREEN Lt. Governor



PHYLLIS SHIMABUKURO-GEISER Chairperson, Board of Agriculture

> MORRIS M. ATTA Deputy to the Chairperson

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

TESTIMONY OF PHYLLIS SHIMABUKURO-GEISER CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE HOUSE COMMITTEE ON COMMERCE AND CONSUMER PROTECTION

> FEBRUARY 15, 2022 2:00 P.M. VIA VIDEOCONFERENCE

HOUSE BILL NO. 2493 HD1 RELATING TO CARBON SEQUESTRATION INCENTIVES

Chairperson Johanson and Members of the Committee:

Thank you for the opportunity to testify on House Bill No. 2493 HD1 that establishes the Hawaii Farmland and Forest Soil Health Carbon Smart Incentive Program to incentivize carbon sequestration activities through incentives contracts that provide for compensation for eligible practices by program participants. This Program is to be established within the Hawaii Green Infrastructure Authority which is administratively attached to the Department of Business, Economic Development, and Tourism. The Department of Agriculture offers comments.

The Department of Agriculture acknowledges that agricultural lands and agricultural operations may have a role in sequestering carbon. The program outlined in this measure is meant to achieve additional sequestration by what appears to be voluntary participation of landowners and lessees of agricultural land to undertake certain practices in exchange for compensation that is based on the amount of carbon sequestered. Participation by landowners, lessees, and particularly agricultural operators will require unambiguous evidence that such participation makes economic sense.



The bill also appropriates funds to the Department for one permanent position to support program actions on State lands and provide technical and research assistance to the program.

(page 13, line 14 to page 14, line 2)

"SECTION 5. There is appropriated out of the general revenues of the State of Hawaii the sum of \$ or so much thereof as may be necessary for fiscal year 2022-2023 for one full-time equivalent (1.0 FTE) permanent position to support soil health and carbon sequestration actions on state lands and provide technical and research assistance to the Hawaii farmland and forest soil health carbon smart incentive program established by this Act.

The sum appropriated shall be expended by the department of agriculture for the purposes of this Act."

The Department notes that the position, while located within the Department of Agriculture, is dedicated to assisting HGIA and the administration, development and rollout of the program. The Department is concerned with implementing a permanent program without information and metrics regarding carbon sequestration for Hawai'i's farmers.

Thank you for the opportunity to provide our testimony on this measure.

Page 3



STATE OF HAWAII OFFICE OF PLANNING & SUSTAINABLE DEVELOPMENT

DAVID Y. IGE GOVERNOR

MARY ALICE EVANS DIRECTOR

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Telephone: (808) 587-2846 Fax: (808) 587-2824 Web: https://planning.hawaii.gov/

Statement of

MARY ALICE EVANS

Director, Office of Planning and Sustainable Development

before the

HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

Tuesday, February 15, 2022

2:00 PM State Capitol, Conference Room 329

in consideration of HB 2493, HD 1 RELATING TO CARBON SEQUESTRATION INCENTIVES.

Chair Johanson, Vice Chair Kitagawa, and Members of the House Committee on Consumer Protection and Commerce:

The Office of Planning and Sustainable Development (OPSD) offers comments and amendments for HB 2493, HD 1, which establishes the Hawai'i farmland and forest soil health carbon smart incentive program (program) to incentivize carbon sequestration activities through incentives contracts that provide for compensation for eligible practices by program participants and appropriates funds for positions and for administering the program.

For the past five years, the Office of Planning and Sustainable Development has been researching, publishing materials, and working on carbon sequestration issues with extremely limited and no funding through the Carbon Farming Task Force (established 2017), now expanded to the permanent Greenhouse Gas Sequestration Task Force (established in 2018). As one of the State's two climate-related boards and commissions, the Greenhouse Gas Sequestration Task Force is a 19-member permanent State task force with many experts from the forestry, agricultural, land use, environmental, academic, and soil science communities committed to the task force's subject-matter and mission set by Hawai'i Revised Statutes (HRS) §225P-4. Since 2018, the Greenhouse Gas Sequestration Task Force received only 1 sole appropriation of \$150,000 funding, with the following direct results:

- 1. The creation of a <u>"Healthy Soils Hawai'i" Pilot Project with the Hawaii</u> <u>Agricultural Research Center and the Natural Resources Conservation Service</u> (the original pilot program that the proposed program in HB 2493 is modeled after)
- 2. <u>The Desktop Analysis to Compare Pathways of Carbon Storage</u> (April 2020)
- 3. <u>Hawai'i Natural and Working Lands Baseline and Benchmarks</u> (Aug 2021)

In relation to greenhouse gas sequestration, the Office of Planning and Sustainable Development also published the *Feasibility and Implications of Establishing a Carbon Offset Program in the State of Hawai'i* in December 2019, strongly recommending the establishment of:

- 1. A greenhouse gas sequestration incentives program, and
- 2. A greenhouse gas reduction fund, and financing mechanisms

to subsidize and support greenhouse gas/carbon sequestration efforts within the State of Hawai'i (pages 57-59) as an alternative to establishing a Carbon Offset Program administered by the State Government.

The Office of Planning and Sustainable Development has a long and strong record supporting greenhouse gas sequestration, despite its funding challenges and lack of staff support to administer the Greenhouse Gas Sequestration Task Force.

The Office of Planning and Sustainable Development believes that in an effort to not duplicate roles and responsibilities between state agencies and state boards and commissions that the reviewing committee as proposed on Page 7 of HB 2493, could be conducted by the State's permanent Greenhouse Gas Sequestration Task Force, which must also provide annual reports to the Legislature on their work.

The Office of Planning and Sustainable Development further suggests that the language in this bill be inserted and replace the language in HRS §225P-6; since the Office of Planning and Sustainable Development has previously recommended against state-administered Carbon Offsetting.

Finally, given the intense land use planning and land management as described in HB 2493 and the OPSD's strong relationships with the Department of Land and Natural Resources, the Department of Agriculture, Hawai'i's four counties, and landowners across the state; the Office of Planning and Sustainable Development strongly recommends that the Legislature consider the Office of Planning and Sustainable Development as the coordinating agency of the proposed "Hawai'i farmland and forest soil health carbon smart incentives program."

The Office of Planning and Sustainable Development is on record for the past 5 Legislative Sessions since 2018 requesting staff support for the Greenhouse Gas Sequestration Task Force and the promotion of greenhouse gas sequestration projects and incentives. This carbon smart incentives program directly aligns with the goals of the Greenhouse Gas Sequestration Task Force, and if provided the funding, staffing, and programmatic authority in this bill, the Office of Planning and Sustainable Development would be very prepared to implement this important climate mitigation program for the benefit of the State of Hawai'i, it's people, and future generations.

Thank you for the opportunity to testify on this measure.

DAVID Y. IGE GOVERNOR

GWEN S. YAMAMOTO LAU EXECUTIVE DIRECTOR



HAWAII GREEN INFRASTRUCTURE AUTHORITY

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804 Website: gemshawaii.gov

Telephone: (808) 587-3868 Fax: (808) 587-3896

Testimony of Gwen Yamamoto Lau

Executive Director before the **HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE** Tuesday, February 15. 2022 Time: 2:00 P.M. State Capitol, Conference Room No. 329 & Videoconference

In consideration of HOUSE BILL NO. 2493, HD1 RELATING TO CARBON SEQUESTRATION INCENTIVES

Chair Johanson, Vice Chair Kitagawa and Members of the Committee on Consumer Protection and Commerce:

Thank you for the opportunity to testify and offer comments on House Bill 2493, HD1, relating to carbon sequestration incentives. This bill proposes to establish the Hawaii Farmland & Forest Soil Health Carbon Smart Incentive Program ("Program"), to be administered by the Hawaii Green Infrastructure Authority ("HGIA"), in collaboration with the Departments of Land and Natural Resources and Agriculture. HGIA **supports** this bill.

Through its work financing clean energy infrastructure, HGIA has been actively contributing to the State's efforts in addressing the problem of climate change. The Program will encourage and incentivize local food producers to implement resilient practices that improves soil health and water security by providing technical support to land managers on implementing climate smart practices that restore and/or maintain soil health in forests and working agricultural lands.

This bill leverages the strengths of the Department of Agriculture ("DoA"), the Department of Land and Natural Resources ("DLNR") and HGIA, with DoA and DLNR providing technical expertise and HGIA providing fiscal oversight and fund management of the Program.

HGIA respectfully requests that the following changes be incorporated into the bill:

Page 2, beginning on line 18: Eligible land" means land in the State that is privately owned or public land that is leased [to] or managed by a private citizen at the time of initiation of an incentives contract.

Page 6, beginning on line 1: (3) <u>Coordinate with relevant agencies to establish</u> [Establish] and implement protocols that provide monitoring and verification of compliance with the term of incentives contracts;

Page 6, beginning on line 7: (5) <u>Coordinate with relevant agencies to identify</u> [Identify], evaluate, and distribute dedicated funds to accomplish the purposes of the program;

Page 6, beginning on line 17: (a) The authority, with assistance from relevant shall establish [compensation rates and]-incentives contract terms [for phase I activities] within one year of the date of receipt of a program application. An incentives contract shall be for a term of no less than one year and no more than thirty years as determined by the owner, land manager or lessee; provided that the length of the contract term shall directly correlate with the <u>funded activities</u> [rate of compensation] paid pursuant to the contract.

Page 7, beginning on line 10: (2) [Conducting research to develop technical underpinning of compensation rates for phase II activities;] [(3)] Conducting community and landowner outreach activities; and

Page 7, beginning on line 14: [(4)] (3) Establishing the reviewing committee established under section 196-D for project applications and reports.

Page 7, beginning on line 16: **§196-D Reviewing committee; report**. (a) The chairperson of the authority, or the chairperson's designee, shall establish and serve as the chairperson of a reviewing committee to review program applications. <u>That shall include but is not limited to:</u>

- (1) The chairperson of the board of land and natural resources or the chairperson's designee, who shall serve as the chairperson of the commission;
- (2) The director of agriculture or the director's designee;
- (3) Up to two representatives from the Native Hawaiian community who have expertise in natural and working lands, the protection, restoration, care, and interpretation of Native Hawaiian cultural resources, who shall be invited by the chairperson;

Page 8, beginning on line 11: **§196-E Eligibility**. Landowners, land managers, and lessees of eligible land shall be eligible for the program upon submission of a program application prepared by the authority, to enter into an incentives contract. An owner <u>or manager</u> of eligible land currently engaged in eligible practices shall not be barred from entering into an incentives contract under this part to continue carrying out eligible practices. An owner, <u>land manager</u>, or lessee shall not be prohibited from participating in the program due to participation of the owner or lessee in other federal or state conservation assistance programs. Conservation easements shall not be required for eligibility in the program.

Page 9, beginning on line 5:

- (2) Provide co-benefits to the State and owner, land manager or lessee of eligible land;
- (3) Have the potential to create jobs in the forestry or agriculture sectors, and in rural communities; [and]
- (4) Achieve community priorities including food security or watershed protection-; and

(5) Are located in or provide services to historically disadvantaged and underserved communities.

Thank you for this opportunity to testify and offer comments in support of HB 2493, HD1.

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 CONVEY ANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND RESOURCES ENFORCEMENT EXCINEERING 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 House Committee on CONSUMER PROTECTION & COMMERCE

Tuesday, February 15, 2022 2:00 PM State Capitol, Conference Room 329, Via Videoconference

In consideration of HOUSE BILL 2493, HOUSE DRAFT 1 RELATING TO CARBON SEQUESTRATION INCENTIVES

House Bill 2493, House Draft 1 proposes to establish the Hawaii Farmland and Forest Soil Health Carbon Smart Incentive Program (Program) to incentivize carbon sequestration activities through compensation for eligible practices and appropriate funds for positions and for administering the Program. The bill also proposes to require the Department of Land and Natural Resources (Department) to: 1) Identify and prioritize selected soil health and carbon positive activities; Recommend compensation rates and contract terms for eligible phase I activities; 2) Assist in estimating sequestration rates for carbon positive practices; 3) Serve on the reviewing committee for project applications and reports; 4) Research and develop the technical underpinning of compensation rates for phase II eligible practices; and 5) Conduct community and landowner outreach activities. **The Department supports this bill and offers 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 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, crossboundary forest protection and restoration is also essential to significantly accelerate carbon sequestration rates.

The Department proposes the following amendment to page 2, line 19 so that private land managers with agreements to work on private and State lands are also eligible for funding.

\$196-A Definitions. As used in this part:

"Authority" means the Hawaii green infrastructure authority established pursuant to section 196-63.

"Eligible land" means land in the State that is privately owned or public land that is leased [to] or managed by a private citizen at the time of initiation of an incentives contract.

The Department proposes the following amendment to page 6, lines 1-8, to ensure that HGIA has sufficient technical support for the program.

\$196-B Hawaii farmland and forest soil health carbon smart incentive program; established. (a) There is established within the authority the Hawaii farmland and forest soil health carbon smart incentive program to incentivize carbon sequestration activities through incentives contracts that provide for compensation for eligible practices by program participants.

- (b) The authority shall administer the program and shall:
- Administer or enter into an agreement or agreements for the administration of the program;
- (2) Coordinate with relevant agencies to provide owners and lessees of eligible land financial incentive payments for eligible practices over a designated period, with appropriate crediting for soil health and carbon benefits as specified through an incentives contract;
- (3) [Establish] Coordinate with relevant agencies to <u>establish</u> and implement protocols that provide monitoring and verification of compliance with the

term of incentives contracts;

- (4) Make available to the public any modeling, methodology, or protocol resources developed to estimate sequestration rates of potential projects;
- (5) [Identify,] Coordinate with relevant agencies to identify, evaluate, and distribute dedicated funds to accomplish the purposes of the program;
- (6) Coordinate collaborations for soil health and carbon sequestration modeling, methods, and inventory improvements; and
- (7) Directionally correct movement: heading in the right direction for climate, focusing on multiple cobenefits, and overcoming barriers to entrance into implementation of practices of interest.

The Department proposes the following amendments to page 6, lines 18-19, and page 7, lines 1-15, to allow for flexibility in the program with the understanding that not all lands are the same and costs cannot be standardized.

\$196-C Program assistance; contract terms and compensation rates. (a) The authority, with assistance from relevant agencies, shall establish [compensation rates and] incentives contract terms [for phase I activities] within one year of the date of receipt of a program application. An incentives contract shall be for a term of no less than one year and no more than thirty years as determined by the owner, land manager or lessee; provided that the length of the contract term shall directly correlate with the [rate of compensation] funded activities paid pursuant to the contract.

(b) The authority shall coordinate with relevant agencies to assist the authority in carrying out the purposes of the program, including:

(1) Estimating sequestration rates for phase I and phase

II activities;

- (2) [Conducting research to develop technical underpinning of compensation rates for phase II activities;
- (3)] Conducting community and landowner outreach activities; and

[(4)] (3) Establishing the reviewing committee established under section 196-D for project applications and reports.

The Department proposes the following amendments to page 7, line 19 to ensure that HGIA has sufficient technical support for the program.

\$196-D Reviewing committee; report. (a) The chairperson of the authority, or the chairperson's designee, shall establish and serve as the chairperson of a reviewing committee to review program applications. <u>That shall include but is not limited to:</u>

- (1) The chairperson of the board of land and natural resources or the chairperson's designee, who shall serve as the chairperson of the commission;
- (2) The director of agriculture or the director's designee;
- (3) Up to two representatives from the Native Hawaiian community who have expertise in natural and working lands, the protection, restoration, care, and interpretation of Native Hawaiian cultural resources, who shall be invited by the chairperson;

(b) The reviewing committee shall submit a report to the legislature no later than twenty days prior to the convening of the regular session of 2023 and each regular session thereafter that contains:

 An estimate of annual and cumulative reductions achieved as a result of the program, determined using standardized measures, including measures of economic efficiency;

- (2) A summary of any changes to the program made as a result of program measurement, monitoring, and verification; and
- (3) The total number of acres enrolled in the program.

The Department proposes the following amendments to page 8, lines 11-17 of the bill to ensure all land managers are eligible.

\$196-E Eligibility. Landowners, land managers, and lessees
of eligible

land shall be eligible for the program upon submission of a program application prepared by the authority, to enter into an incentives contract. An owner<u>or manager</u>of eligible land currently

engaged in eligible practices shall not be barred from entering into an incentives contract under this part to continue carrying out eligible practices. An owner<u>, land manager</u>, or lessee shall not be

prohibited from participating in the program due to participation of the owner or lessee in other federal or state conservation assistance programs. Conservation easements shall not be required for eligibility in the program.

The Department proposes the following amendments to page 9, lines 5-10 of the bill to ensure equity is built into the program.

\$196-F Priority of carbon positive activities; benefits.
(a) Priority eligibility shall be given to phase I and phase II
activities that:

- (1) Are cost effective;
- (2) Provide co-benefits to the State and owner, land manager or lessee of eligible land;
- (3) Have the potential to create jobs in the forestry or

agriculture sectors, and in rural communities; [and] (4) Achieve community priorities including food security or watershed protection[-]; and (5) Are located in or provide services to historically disadvantaged and underserved communities.

Thank you for the opportunity to comment on this measure.

<u>HB-2493-HD-1</u>

Submitted on: 2/14/2022 12:27:19 PM Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Morris Atta	Hawaii Department of Agriculture	Comments	Yes

Comments:

I am available to answer questions on behalf of the Department.

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 CONVEY ANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND RESOURCES ENFORCEMENT EXCINEERING 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

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Tuesday, February 15, 2022 2:00 PM State Capitol, Conference Room 329, Via Videoconference

In consideration of HOUSE BILL 2493, HOUSE DRAFT 1 RELATING TO CARBON SEQUESTRATION INCENTIVES

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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 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, crossboundary forest protection and restoration is also essential to significantly accelerate carbon sequestration rates.

The Department proposes the following amendment to page 2, line 19 so that private land managers with agreements to work on private and State lands are also eligible for funding.

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The Department proposes the following amendment to page 6, lines 1-8, to ensure that HGIA has sufficient technical support for the program.

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- (b) The authority shall administer the program and shall:
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- (2) Coordinate with relevant agencies to provide owners and lessees of eligible land financial incentive payments for eligible practices over a designated period, with appropriate crediting for soil health and carbon benefits as specified through an incentives contract;
- (3) [Establish] Coordinate with relevant agencies to <u>establish</u> and implement protocols that provide monitoring and verification of compliance with the

term of incentives contracts;

- (4) Make available to the public any modeling, methodology, or protocol resources developed to estimate sequestration rates of potential projects;
- (5) [Identify,] Coordinate with relevant agencies to identify, evaluate, and distribute dedicated funds to accomplish the purposes of the program;
- (6) Coordinate collaborations for soil health and carbon sequestration modeling, methods, and inventory improvements; and
- (7) Directionally correct movement: heading in the right direction for climate, focusing on multiple cobenefits, and overcoming barriers to entrance into implementation of practices of interest.

The Department proposes the following amendments to page 6, lines 18-19, and page 7, lines 1-15, to allow for flexibility in the program with the understanding that not all lands are the same and costs cannot be standardized.

\$196-C Program assistance; contract terms and compensation rates. (a) The authority, with assistance from relevant agencies, shall establish [compensation rates and] incentives contract terms [for phase I activities] within one year of the date of receipt of a program application. An incentives contract shall be for a term of no less than one year and no more than thirty years as determined by the owner, land manager or lessee; provided that the length of the contract term shall directly correlate with the [rate of compensation] funded activities paid pursuant to the contract.

(b) The authority shall coordinate with relevant agencies to assist the authority in carrying out the purposes of the program, including:

(1) Estimating sequestration rates for phase I and phase

II activities;

- (2) [Conducting research to develop technical underpinning of compensation rates for phase II activities;
- (3)] Conducting community and landowner outreach activities; and

[(4)] (3) Establishing the reviewing committee established under section 196-D for project applications and reports.

The Department proposes the following amendments to page 7, line 19 to ensure that HGIA has sufficient technical support for the program.

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- (1) The chairperson of the board of land and natural resources or the chairperson's designee, who shall serve as the chairperson of the commission;
- (2) The director of agriculture or the director's designee;
- (3) Up to two representatives from the Native Hawaiian community who have expertise in natural and working lands, the protection, restoration, care, and interpretation of Native Hawaiian cultural resources, who shall be invited by the chairperson;

(b) The reviewing committee shall submit a report to the legislature no later than twenty days prior to the convening of the regular session of 2023 and each regular session thereafter that contains:

 An estimate of annual and cumulative reductions achieved as a result of the program, determined using standardized measures, including measures of economic efficiency;

- (2) A summary of any changes to the program made as a result of program measurement, monitoring, and verification; and
- (3) The total number of acres enrolled in the program.

The Department proposes the following amendments to page 8, lines 11-17 of the bill to ensure all land managers are eligible.

\$196-E Eligibility. Landowners, land managers, and lessees
of eligible

land shall be eligible for the program upon submission of a program application prepared by the authority, to enter into an incentives contract. An owner<u>or manager</u>of eligible land currently

engaged in eligible practices shall not be barred from entering into an incentives contract under this part to continue carrying out eligible practices. An owner<u>, land manager</u>, or lessee shall not be

prohibited from participating in the program due to participation of the owner or lessee in other federal or state conservation assistance programs. Conservation easements shall not be required for eligibility in the program.

The Department proposes the following amendments to page 9, lines 5-10 of the bill to ensure equity is built into the program.

\$196-F Priority of carbon positive activities; benefits.
(a) Priority eligibility shall be given to phase I and phase II
activities that:

- (1) Are cost effective;
- (2) Provide co-benefits to the State and owner, land manager or lessee of eligible land;
- (3) Have the potential to create jobs in the forestry or

agriculture sectors, and in rural communities; [and] (4) Achieve community priorities including food security or watershed protection[-]; and (5) Are located in or provide services to historically disadvantaged and underserved communities.

Thank you for the opportunity to comment 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 CONVEY ANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND RESOURCES ENFORCEMENT EXCINEERING 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 House Committee on CONSUMER PROTECTION & COMMERCE

Tuesday, February 15, 2022 2:00 PM State Capitol, Conference Room 329, Via Videoconference

In consideration of HOUSE BILL 2493, HOUSE DRAFT 1 RELATING TO CARBON SEQUESTRATION INCENTIVES

House Bill 2493, House Draft 1 proposes to establish the Hawaii Farmland and Forest Soil Health Carbon Smart Incentive Program (Program) to incentivize carbon sequestration activities through compensation for eligible practices and appropriate funds for positions and for administering the Program. The bill also proposes to require the Department of Land and Natural Resources (Department) to: 1) Identify and prioritize selected soil health and carbon positive activities; Recommend compensation rates and contract terms for eligible phase I activities; 2) Assist in estimating sequestration rates for carbon positive practices; 3) Serve on the reviewing committee for project applications and reports; 4) Research and develop the technical underpinning of compensation rates for phase II eligible practices; and 5) Conduct community and landowner outreach activities. **The Department supports this bill and offers 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 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, crossboundary forest protection and restoration is also essential to significantly accelerate carbon sequestration rates.

The Department proposes the following amendment to page 2, line 19 so that private land managers with agreements to work on private and State lands are also eligible for funding.

\$196-A Definitions. As used in this part:

"Authority" means the Hawaii green infrastructure authority established pursuant to section 196-63.

"Eligible land" means land in the State that is privately owned or public land that is leased [to] or managed by a private citizen at the time of initiation of an incentives contract.

The Department proposes the following amendment to page 6, lines 1-8, to ensure that HGIA has sufficient technical support for the program.

\$196-B Hawaii farmland and forest soil health carbon smart incentive program; established. (a) There is established within the authority the Hawaii farmland and forest soil health carbon smart incentive program to incentivize carbon sequestration activities through incentives contracts that provide for compensation for eligible practices by program participants.

- (b) The authority shall administer the program and shall:
- Administer or enter into an agreement or agreements for the administration of the program;
- (2) Coordinate with relevant agencies to provide owners and lessees of eligible land financial incentive payments for eligible practices over a designated period, with appropriate crediting for soil health and carbon benefits as specified through an incentives contract;
- (3) [Establish] Coordinate with relevant agencies to <u>establish</u> and implement protocols that provide monitoring and verification of compliance with the

term of incentives contracts;

- (4) Make available to the public any modeling, methodology, or protocol resources developed to estimate sequestration rates of potential projects;
- (5) [Identify,] Coordinate with relevant agencies to identify, evaluate, and distribute dedicated funds to accomplish the purposes of the program;
- (6) Coordinate collaborations for soil health and carbon sequestration modeling, methods, and inventory improvements; and
- (7) Directionally correct movement: heading in the right direction for climate, focusing on multiple cobenefits, and overcoming barriers to entrance into implementation of practices of interest.

The Department proposes the following amendments to page 6, lines 18-19, and page 7, lines 1-15, to allow for flexibility in the program with the understanding that not all lands are the same and costs cannot be standardized.

\$196-C Program assistance; contract terms and compensation rates. (a) The authority, with assistance from relevant agencies, shall establish [compensation rates and] incentives contract terms [for phase I activities] within one year of the date of receipt of a program application. An incentives contract shall be for a term of no less than one year and no more than thirty years as determined by the owner, land manager or lessee; provided that the length of the contract term shall directly correlate with the [rate of compensation] funded activities paid pursuant to the contract.

(b) The authority shall coordinate with relevant agencies to assist the authority in carrying out the purposes of the program, including:

(1) Estimating sequestration rates for phase I and phase

II activities;

- (2) [Conducting research to develop technical underpinning of compensation rates for phase II activities;
- (3)] Conducting community and landowner outreach activities; and

[(4)] (3) Establishing the reviewing committee established under section 196-D for project applications and reports.

The Department proposes the following amendments to page 7, line 19 to ensure that HGIA has sufficient technical support for the program.

\$196-D Reviewing committee; report. (a) The chairperson of the authority, or the chairperson's designee, shall establish and serve as the chairperson of a reviewing committee to review program applications. <u>That shall include but is not limited to:</u>

- (1) The chairperson of the board of land and natural resources or the chairperson's designee, who shall serve as the chairperson of the commission;
- (2) The director of agriculture or the director's designee;
- (3) Up to two representatives from the Native Hawaiian community who have expertise in natural and working lands, the protection, restoration, care, and interpretation of Native Hawaiian cultural resources, who shall be invited by the chairperson;

(b) The reviewing committee shall submit a report to the legislature no later than twenty days prior to the convening of the regular session of 2023 and each regular session thereafter that contains:

 An estimate of annual and cumulative reductions achieved as a result of the program, determined using standardized measures, including measures of economic efficiency;

- (2) A summary of any changes to the program made as a result of program measurement, monitoring, and verification; and
- (3) The total number of acres enrolled in the program.

The Department proposes the following amendments to page 8, lines 11-17 of the bill to ensure all land managers are eligible.

\$196-E Eligibility. Landowners, land managers, and lessees
of eligible

land shall be eligible for the program upon submission of a program application prepared by the authority, to enter into an incentives contract. An owner<u>or manager</u>of eligible land currently

engaged in eligible practices shall not be barred from entering into an incentives contract under this part to continue carrying out eligible practices. An owner<u>, land manager</u>, or lessee shall not be

prohibited from participating in the program due to participation of the owner or lessee in other federal or state conservation assistance programs. Conservation easements shall not be required for eligibility in the program.

The Department proposes the following amendments to page 9, lines 5-10 of the bill to ensure equity is built into the program.

\$196-F Priority of carbon positive activities; benefits.
(a) Priority eligibility shall be given to phase I and phase II
activities that:

- (1) Are cost effective;
- (2) Provide co-benefits to the State and owner, land manager or lessee of eligible land;
- (3) Have the potential to create jobs in the forestry or

agriculture sectors, and in rural communities; [and] (4) Achieve community priorities including food security or watershed protection[-]; and (5) Are located in or provide services to historically disadvantaged and underserved communities.

Thank you for the opportunity to comment on this measure.

REBECCA VILLEGAS Council Member District 7, Central Kona



PHONE: (808) 323-4267 FAX: (808) 323-4786 EMAIL: Rebecca.villegas@hawaiicounty.gov

HAWAI'I COUNTY COUNCIL West Hawai'i Civic Center, Bldg. A 74-5044 Ane Keohokalole Hwy. Kailua-Kona, Hawai'i 96740

February 14, 2022 TESTIMONY OF REBECCA VILLEGAS COUNCIL MEMBER, HAWAI'I COUNTY COUNCIL ON HB2493 HD1, RELATING TO CARBON SEQUESTRATION INCENTIVES Committee on Consumer Protection and Commerce Tuesday, February 15, 2022 at 2:00pm

Aloha Chair Ling Johanson and Members of the Committee:

My testimony is submitted in my individual capacity as a member of the Hawai'i County Council and Chair of the Hawai'i County Council Climate Resilience and Natural Resource Management Committee.

We support HB2493 HD1which establishes a farmland and forest soil health carbon smart incentive program that will promote keeping forests and farmlands intact and sequester additional carbon on those lands.

Climate change has led to an increase in the frequency of extreme weather events that serve to only complicate increased risks associated with the Hawaiian islands, Such extreme weather events can put greater stress on an already vulnerable food supply chain as well as water supplies. The potential for shortages highlights the need for greater food and water security, which can be achieved through increased local food production.

Hawaii needs to reduce its contribution to climate change, increase local food production, improve soil health, and secure resilient water sources.

For the reasons stated above I urge the Committee on Consumer Protection and Commerce to support this measure as well. Should you have any questions, please feel free to contact me at (808) 323-4267.

Mahalo for your consideration.

Rebecca Villegas Council Member, Hawai'i County Council

<u>HB-2493-HD-1</u> Submitted on: 2/12/2022 12:13:45 PM Testimony for CPC on 2/15/2022 2:00:00 PM

_	Submitted By	Organization	Testifier Position	Remote Testimony Requested
	donn viviani	Climate Protection and Restoration Initiative	Support	No

Comments:

I'm writing in support of HB2493 I'm Donn Viviani. My wife and I live in Kailua and have family in the Punchbowl and Aina Haina areas. I am currently the Board president of the Climate Protection and Restoration Initiative (https://cprclimate.org/). Before I retired, I was the director of the Climate Policy Division at EPA headquarters in DC. I served as Chairman of the Great Lakes Water Quality Board's Toxic Substances Committee. I have a PhD in Chemistry. I am familiar with the unique threat climate change poses to Hawaii, and specifically the threat to the water surrounding our islands. I want to describe that risk for the Committees in layman terms and explain how serious the risk is to our islands.

I also want to stress that a climate solution is impossible without sequestration. Emission reduction, even zero emissions will not prevent the coming catastrophe.

Before I discuss the risk, I want to address the notion that climate change is a global problem that can't be addressed by the US and its individual states. This is exactly backwards. In fact, climate change can't be fixed WITHOUT the US and its individual states. Given our economic power, outsized consumption and massive energy use we are responsible for at least a quarter of the past problem and much of the ongoing problem. So it's important that each State declares its intention to take the action necessary to help deal with this existential threat to mankind.

I hope the committee understands that climate science is not fancy and it is not at all controversial. I will focus here on the ocean threat, because we're a group of isolated islands at the mercy of the ocean. Some of the ocean effects are imminent and many will be catastrophic. Three things are happening that threaten a collapse of the entire marine food web; could cause an inundation and submersion of parts of our islands; and are providing the energy impetus for extreme and catastrophic weather events. Unless we take action VERY SOON these events will become unstoppable. Here is how the problem develops...

First. the sun's light heats the air in the same way a microwave oven heats food. The more CO2 from fossil fuel burning, the more heat. Most of that heat ends up in the ocean. Hot water expands and so the oceans rise. This heat is conducted to lower depths and that water expands as well and oceans rise more, i.e., the sea level rises.

Hurricanes and cyclones start with evaporation, the warmer the water, the more evaporation, and the more storms and damage to our islands. On Oahu, a six foot rise, projected as early as mid century, would inundate Honolulu up to a few blocks from H1. Storm events will drive the water further inland.

Second, the elevated CO2 in the air from fossil fuel burning, enters the ocean and makes it more acidic. Acidic, corrosive water impairs the growth and survival of animals that build shells. These critters are the oceans primary producers, i.e., they are the base of the food chain and are the marine food webs only source of fatty acids. Because ocean acidification reduces the availability of carbonate ions that marine animals need to calcify their shells and skeletons, CO2 reduces the ability of these animals to build their protective structures. This uses up energy that they need for reproduction and they will get outcompeted by other species. Destroying the balance that evolved over eons. Acidified waters also can dissolve shells.It's estimated that by 2030 in much of the southern oceans shell would rather dissolve than form.

Third, warmer water holds less dissolved oxygen than colder water. A warm top layer stratifies the ocean making it harder for the transfer of nutrients. Less oxygen and less nutrient availability is a double whammy for for marine organism growth.

Together these three stressors: acidification, warming and deoxygenation are a perfect storm and can act together to destroy the marine food web, by wiping out entire trophic levels. Warm water speeds up marine organism's metabolism. Higher metabolic rates require more nutrients and oxygen. But hotter surface water forms a layer that impedes the transfer of needed nutrients, and that same hotter water drives off oxygen.

This with the added stress of acidification has been shown in mesocosm studies to destroy trophic levels and kill all the higher levels dependent on them, i.e. to paraphrase Augustus de Morgan. "Great fish have little fish upon their backs to bite 'em, and little fish have lesser fish, and so ad infinitum" If we start removing layers of fish, it all collapses! If we don't act soon we'll have an ocean full of only jellyfish. There are many terrestrial risks ae well, but here I only discussed what will happen to the ocean, we are at the mercy of.

Therefore I support HB2493's sequestration initiative, a necessary step to fixing earths energy imbalance. We all will eventually feel some terrible consequences, however your decision today won't affect me or you as much as what awaits our children and grandchildren. I can say without hyperbole, this is an existential risk to our species! Please support this resolution.

Mahalo Donn J Viviani



To: The House Committee on Consumer Protection & Commerce CommitteeFrom: Sherry Pollack, 350Hawaii.orgDate: Tuesday, February 15, 2022, 2pm

In support of HB2493 HD1

Aloha Chair Johanson, Vice Chair Kitigawa, and Consumer Protection & Commerce Committee members,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii.org **supports HB2493 HD1** that would establish the Hawaii farmland and forest soil health carbon smart incentive program to incentivize carbon sequestration activities through incentives contracts that provide for compensation for eligible practices by program participants.

Establishing a farmland and forest soil health carbon smart incentive program will promote keeping forests and farmlands intact and sequester additional carbon on those lands. This program will incentivize actions that will improve soil health and sequester carbon. This would allow small farmers, ranchers, foresters, and landowners to be compensated for taking measures to help Hawaii reach its climate readiness goals.

Climate change has led to an increase in the frequency of extreme weather events which increases the risks to our already vulnerable food supply chain. Hawaii 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 Hawaii farmland and forest soil health carbon smart incentive program are an effective means to do that.

Mahalo for the opportunity to testify in **support** of this important legislation.

Sherry Pollack Co-Founder, 350Hawaii.org

HB-2493-HD-1 Submitted on: 2/12/2022 2:02:28 PM Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Travis Idol	Hawaii Interfaith Power and Light	Support	No

Comments:

I am the President of Hawaii Interfaith Power and Light (HIPL), a local nonprofit dedicated to helping religious people and communities in Hawaii respond to the climate crisis from an interfaith as well as their own personal religious beliefs, values, and vision for the future.

HIPL is in support of HB2493, a bill to support the Hawaii farmland and forest soil health carbon smart incentive program. HIPL supports a holistic approach to responding to the climate crisis. It cannot just be cutting back on emissions or changing technologies to avoid greenhouse gas emissions. We need to cultivate a deeper and more meaningful relationship with the Creator and all of Creation. That relationship should result in actions and practices that support and restore the health and vitality of ourselves and the natural world. As part of that, it should reduce our greenhouse gas emissions and actually sequester atmospheric carbon into the living and vibrant systems of which we are a part.

This program can be an important part of that transformation of our perspective, relationship, actions, and outcomes. It has the potential to reduce our contribution to climate change, increase local food production, improve soil health, and secure resilient water sources through watershed protection. The Native Hawaiians cultivated these values, governance, and practices that ensured their own health and the ability to thrive in Hawaii. The phrase aina momona has been used to represent this healthful abundance that can only be achieved when we cultivate and nurture right relationships with each other, the natural world, and the ground of our whole being.

This requires deep personal and collective changes in our values, goals, and attitudes, as well as practices in Hawaii. Thus, it is essentially a spiritual endeavor, and HIPL will strive to help bring it to fruition. But this effort can certainly be supported and facilitated by the Hawaii legislature. HB 2493 represents one important way the state can provide that support and participate in this transformation. Regenerative agriculture and forest conservation and restoration are important ways we can reduce climate-changing emissions and actually sequester greenhouse gasses back into the living vibrant systems that support us all. Incentivizing Hawaii's people to engage in these activities reinforces the movement to restore aina momona.

We urge you to support HB2493.



Before the House Committee on Consumer Protection and Commerce

Tuesday, February 15, 2022 2:00pm State Capitol, Conference Room 329, Via Videoconference

In consideration of House Bill 2493 HD1 RELATING TO CARBON SEQUESTRATION INCENTIVES

Conservation Council For Hawaii **SUPPORTS HB2493, HD1.** Protecting Hawaii's native forests is one of the few actions that both help mitigate climate change (through directly sequestering carbon and avoiding emissions caused by deforestation) as well as helping Hawaii adapt to climate change, since forests protect against drought, as well as hold soil intact to reduce impacts of flooding and erosion from big storms.

Thank you for the opportunity to **support HB2493, HD1**.
Submitted on: 2/14/2022 11:09:15 AM Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Ted Bohlen	Climate Protectors Hawaiʻi	Support	Yes

Comments:

To: The Honorable Aaron Ling Johanson, Chair, the Honorable Lisa Kitagawa, Vice Chair, and members of the House Consumer Protection and Commerce Committee

From: Climate Protectors Hawai'i (by Ted Bohlen)

Re: Hearing HB2493 HD1 RELATING TO CARBON SEQUESTRATION INCENTIVES.

Tuesday February 15, 2022, 2:00 p.m., by videoconference

Aloha Chair Johanson and Vice Chair Kitagawa:

Position: Strongly Support HB2493 HD1!

The Climate Protectors Hawai'i is a group focused on reversing the climate crisis and encouraging Hawai'i to lead the world towards a safe and sustainable climate and future. The **Climate Protectors Hawai'i STRONGLY SUPPORTS HB2493 HD1!**

As a tropical island State, Hawai'i will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, food insecurity, and rising sea levels destroying our shorelines. We must do all we can to reduce our carbon footprint and become carbon negative as soon as possible.

In striving to become carbon negative, it will not be enough to limit greenhouse gas emissions; we must also draw carbon down from the atmosphere. Substantial sequestration of carbon is needed as well as major greenhouse gas emission controls.

The purpose of this Act is to establish a Hawai'i farmland and forest soil health carbon smart incentive program that will promote keeping forests and farmlands intact and sequester additional carbon on those lands.

This bill would be a significant step toward reducing atmospheric carbon that is the major cause of the climate crisis.

Please pass this important bill!

Mahalo!

Climate Protectors Hawai'i (by Ted Bohlen)



The Nature Conservancy - Hawaiʻi and Palmyra 923 Nuʻuanu Avenue Honolulu, HI 96817 Tel (808) 537-4508 Fax (808) 545-2019 nature.org/hawaii

Testimony of The Nature Conservancy Supporting HB 2493 HD1, RELATING TO CARBON SEQUESTRATION INCENTIVES. COMMITTEE ON CONSUMER PROTECTION & COMMERCE February 15, 2022, 2:00 pm Conference Room 329 via videoconference

Aloha Chair Rep. Aaron Ling Johanson, Vice Chair Rep. Lisa Kitagawa, and Members of the Committee:

The Nature Conservancy (TNC) strongly supports HB 2493 HD1, Relating to Carbon Sequestration Incentives, which would establish the Hawai'i farmland and forest soil health carbon smart incentive program to incentivize carbon sequestration activities through incentives contracts that provide for compensation for eligible practices by program participants, and appropriates funds for positions and for administering the program.

As a member of the US Climate Alliance Natural and Working Lands Hawai'i Research Team (Team), TNC appreciates the opportunity to testify on this bill. As you may know the Team worked closely with the US Climate Alliance and American Forests to design this program to address the needs of our natural and working land managers.

A Hawai'i farmland and forest soil health carbon smart incentive program is vital to support our local producers and reach a carbon neutral clean economy by 2045. Agriculture, forests and other land uses 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. Establishing 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 the Hawai'i Green Infrastructure Authority (HGIA) as the host of this program. Through its work financing clean energy infrastructure, HGIA has been actively contributing to the State's efforts in addressing the problem of climate change and can effectively continue this work through this 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 and therefore protect our reefs from sedimentation and stress, and support our local producers and growers.

Mahalo for the opportunity to provide testimony on HB 2493 HD1.

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 people.

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February 15, 2022

HEARING BEFORE THE HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE

TESTIMONY ON HB 2493, HD1 RELATING TO CARBON SEQUESTRATION INCENTIVES

Conference Room 329 & Videoconference 2:00 PM

Aloha Chair Johanson, Vice-Chair Kitagawa, 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 with comments HB 2493, HD1, which establishes the Hawaii farmland and forest soil health carbon smart incentive program to incentivize carbon sequestration activities through incentives contracts that provide for compensation for eligible practices by program participants. Appropriates funds for positions and for administering the program.

- Agricultural lands and operations already have a significant role in sequestering carbon. The proposed program hopes to promote additional sequestration through 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.
- Based on its land use planning and management expertise, relationships with other agencies, previous work, and strong record supporting greenhouse gas sequestration, we agree with the Office of Planning and Sustainable Development (OPSD) in its recommendation that the Legislature consider OPSD as the coordinating agency of the proposed program.
- The proposed 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 to The Committee on Consumer Protection & Commerce

Tuesday, February 15, 2022 2:00 PM VIA Video Conference Conference Room 329, Hawaii State Capitol

HB 2493 HD1

Chair Johanson, Vice Chair Kitagawa, and members of the committee,

Hawaii Gas **<u>supports</u> HB 2493 HD1**, which establishes the Hawaii farmland and forest soil health carbon smart incentive program to incentivize carbon sequestration activities through incentives contracts that provide for compensation for eligible practices by program participants and appropriates funds for positions and for administering the program.

Hawaii Gas is a national leader in the production and distribution of renewable gas in a gas utility system and has committed to support the state's march towards carbon neutrality by 2045. Despite representing less than 1% of the greenhouse gases emitted into Hawaii's atmosphere, we agree that it's everyone's responsibility to do everything we can to make sure Hawaii meets that milestone.

Carbon sequestration programs have shown great promise in other states around the country, and Hawaii offers a unique environment and unique species that make the state compatible with such programs. As we move towards 2045, it's important that Hawaii look to multiple avenues, fuel sources, and other opportunities to meet that goal. By incentivizing farmers in various projects — including the growth of biofuels — the state makes it possible to bring more renewable fuels options and thus meet our goal.

We urge the committees to pass HB 2493 HD1.

Thank you for the opportunity to testify.

Submitted on: 2/11/2022 2:58:36 PM Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Douglas Perrine	Individual	Support	No

Comments:

Caring for our soil protects our forests and farmlands for the future as well as sequestering carbon emissions that contribute to climate change. Therefore I support a program to create incentives for optimal soil management.



COMMITTEE ON CONSUMER PROTECTION & COMMERCE Rep. Aaron Ling Johanson, Chair Rep. Lisa Kitagawa, Vice Chair

HB2493 HD1 Relating to CARBON SEQUESTRATION INCENTIVES

Tuesday, February 15, 2022, 2:00 PM VIA VIDEOCONFERENCE

Chair Ling, Vice Chair Kitagawa, and Members of the Committee,

The Hawaii Cattlemen's Council (HCC) is the Statewide umbrella organization comprised of the five 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 the intent of HB2493** to establish the Hawaii farmland and forest soil health carbon smart incentive program (program) to incentivize carbon sequestration activities. We agree with the Office of Planning and Sustainable Development testimony that they would be the appropriate entity to implement the program, as the Greenhouse Gas Sequestration Task Force is aligned with the goals of the carbon smart incentives program. The Greenhouse Gas Sequestration Task Force should be provided the funding, staffing, and programmatic authority to carry out this program.

We appreciate 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. A great resource is a recently published article in the Land Journal, titled "Maintaining the Societal Benefits of Rangelands: The Case of Hawaii" which can be read at http://bit.ly/rangelandbenefits. We highlight this because the review helps to illustrate that 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 bill 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.



P.O. Box 934 • Hilo, HI 96721 • (808) 333-6755 • www.hicattle.org • office@hicattle.org

We do comment that these incentives would apply to both private land owners as well as those who lease on state lands, and in order to apply these practices, long term leases are necessary. The investment in the practices and monitoring or results do not happen over a short time period, but instead are realized over the years. This is one of the key reasons the Hawaii Cattlemen's Council advocates for agricultural leases to be transferred from the Department of Land and Natural Resources (where leases are often on revocable permits) to the Department of Agriculture where appropriate lease are given for long-term planning of agricultural operations, and aid in encouraging investment into other climate smart practices.

We appreciate the opportunity to testify on this measure.

Nicole Galase Hawaii Cattlemen's Council Managing Director

Submitted on: 2/13/2022 5:41:43 AM Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Paul Bernstein	Individual	Support	No

Comments:

Aloha Chair Johanson, Vice Chair Kitagawa, and members of the CPC committee:

Thank you for hearing HB 2493. I'm writing in support. If Hawaii is going to meet its 2045 emissions goal of net-zero and hopes to go negative thereafter, carbon sequestration must play a significant role. Carbon sequestration is a complex issue, and therefore as a state, we need to build up infrastructure to support the study, monitoring, and achievement of it. HB2493 will help the state move forward in these areas and build up the state's capabilities to sequester as much carbon as possible in the best ways possible.

Please pass this bill out of your committee.

Mahalo nui loa,

Paul Bernstein

Submitted on: 2/13/2022 9:38:52 AM Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Dylan Ramos	Individual	Comments	No

Comments:

Aloha,

I greatly support the intent of this bill, but as with a lot of these environmental, climate, and agricultural bills, HB2493 needs amending to better prioritize and benefit Hawaii's small businesses, workers, farmers, families, and 'āina. Please make sure this and all bills involved with purchasing, subsidizing, or incentivizing are taking into account the need to make funds available for smaller lands that must be reached but may not have access to funds like those from DLNR or NRCS. Conversely, please better address the risk of enabling greenwashing by large corporations and funding those who can already afford to undertake such measures. For them, perhaps another bill is warranted.

Mahalo, Dylan Ramos

HB 2493 HD 1 TESTIMONY

To: House Committee on Consumer Protection and Commerce Hearing on Feb. 15, 2022 at 2:00 p.m.

From: John Kawamoto

Position: Support

Carbon sequestration complements efforts to reduce carbon emissions to mitigate climate change. We need to do both – sequester carbon and reduce carbon emissions -- if we are to avoid a global climate catastrophe.

Among other things, this bill incentivizes the planting of new forests to sequester carbon. Meanwhile, other bills are being considered by the Legislature that would cut down forests to generate electricity. Those bills would neutralize the effect of this bill and should be avoided.

This bill mitigates climate change, and it will have beneficial impacts for generations.

Submitted on: 2/13/2022 12:53:29 PM Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Wendy Gibson-Viviani	Individual	Support	No

Comments:

TO: HOUSE OF REPRESENTATIVE-- COMMITTEE ON CONSUMER PROTECTION & COMMERCE

Dear Chair, Aaron Ling Johanson, Vice-Chair Lisa Kitagawa, and Members of the Committee,

My name is Wendy Gibson-Viviani. I have been a resident on Oahu for 29 years.

I **support the purpose of HB2493,** to establish a farmland and forest soil health carbon smart incentive program that will promote keeping forests and farmlands intact and sequester additional carbon on those lands.

My husband, Donn J. Viviani, a former Director of the Climate Policy Division at EPA headquarters in DC, tells me that "a climate solution is impossible without sequestration", that "Emission reduction, even zero emissions will not prevent the coming catastrophe".

I support this bill because it says that in addition to cutting emissions from burning carbon, Hawaii needs to:

1. Mitigate climate change by sequestering greenhouse gases through regenerative agriculture and forest preservation.

2. Incentive nature—based actions that are soil health and carbon positive provide rich, diverse co-benefits such as restoring, maintaining, and improving landscape soil health and water security through payment for services programs.

3. Allow small farmers, ranchers, foresters, and landowners to be compensated for taking measures to help Hawaii reach its climate readiness goals.

I believe these actions could create workable solutions and help us fulfill Hawaii's commitment to uphold the Paris Climate Accord and make progress towards a zero emissions, clean economy by 2045. Thank you for the opportunity to provide testimony. I hope that you will support this bill.

Wendy Gibson-Viviani RN/BSN,

Kailua (Oahu resident for 29 years)

HB-2493-HD-1 Submitted on: 2/13/2022 10:47:46 PM Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Andrea Nandoskar	Individual	Support	No

Comments:

Support

Submitted on: 2/14/2022 1:25:51 PM Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Matthew Geyer	Individual	Support	Yes

Comments:

Thank you for hearing and supporting HB2493 HD1, we need to do all we can to sequester carbon naturally using the soil and forests. Keiki are counting on us to act now!

Submitted on: 2/14/2022 1:38:24 PM Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Jennifer Navarra	Individual	Support	No

Comments:

Sequestering carbon is the soil is one of the most important things we must do to fight climate change.

Please pass this bill \clubsuit



STATE OF HAWAII OFFICE OF PLANNING & SUSTAINABLE DEVELOPMENT



DAVID Y. IGE GOVERNOR

MARY ALICE EVANS DIRECTOR

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Statement of

MARY ALICE EVANS

Director, Office of Planning and Sustainable Development

before the

HOUSE COMMITTEE ON CONSUMER PROTECTION AND COMMERCE

Tuesday, February 15, 2022

2:00 PM State Capitol, Conference Room 329

in consideration of HB 2493, HD 1 RELATING TO CARBON SEQUESTRATION INCENTIVES.

Chair Johanson, Vice Chair Kitagawa, and Members of the House Committee on Consumer Protection and Commerce:

The Office of Planning and Sustainable Development (OPSD) offers comments and amendments for HB 2493, HD 1, which establishes the Hawai'i farmland and forest soil health carbon smart incentive program (program) to incentivize carbon sequestration activities through incentives contracts that provide for compensation for eligible practices by program participants and appropriates funds for positions and for administering the program.

For the past five years, the Office of Planning and Sustainable Development has been researching, publishing materials, and working on carbon sequestration issues with extremely limited and no funding through the Carbon Farming Task Force (established 2017), now expanded to the permanent Greenhouse Gas Sequestration Task Force (established in 2018). As one of the State's two climate-related boards and commissions, the Greenhouse Gas Sequestration Task Force is a 19-member permanent State task force with many experts from the forestry, agricultural, land use, environmental, academic, and soil science communities committed to the task force's subject-matter and mission set by Hawai'i Revised Statutes (HRS) §225P-4. Since 2018, the Greenhouse Gas Sequestration Task Force received only 1 sole appropriation of \$150,000 funding, with the following direct results:

- 1. The creation of a <u>"Healthy Soils Hawai'i" Pilot Project with the Hawaii</u> <u>Agricultural Research Center and the Natural Resources Conservation Service</u> (the original pilot program that the proposed program in HB 2493 is modeled after)
- 2. <u>The Desktop Analysis to Compare Pathways of Carbon Storage</u> (April 2020)
- 3. <u>Hawai'i Natural and Working Lands Baseline and Benchmarks</u> (Aug 2021)

In relation to greenhouse gas sequestration, the Office of Planning and Sustainable Development also published the *Feasibility and Implications of Establishing a Carbon Offset Program in the State of Hawai'i* in December 2019, strongly recommending the establishment of:

- 1. A greenhouse gas sequestration incentives program, and
- 2. A greenhouse gas reduction fund, and financing mechanisms

to subsidize and support greenhouse gas/carbon sequestration efforts within the State of Hawai'i (pages 57-59) as an alternative to establishing a Carbon Offset Program administered by the State Government.

The Office of Planning and Sustainable Development has a long and strong record supporting greenhouse gas sequestration, despite its funding challenges and lack of staff support to administer the Greenhouse Gas Sequestration Task Force.

The Office of Planning and Sustainable Development believes that in an effort to not duplicate roles and responsibilities between state agencies and state boards and commissions that the reviewing committee as proposed on Page 7 of HB 2493, could be conducted by the State's permanent Greenhouse Gas Sequestration Task Force, which must also provide annual reports to the Legislature on their work.

The Office of Planning and Sustainable Development further suggests that the language in this bill be inserted and replace the language in HRS §225P-6; since the Office of Planning and Sustainable Development has previously recommended against state-administered Carbon Offsetting.

Finally, given the intense land use planning and land management as described in HB 2493 and the OPSD's strong relationships with the Department of Land and Natural Resources, the Department of Agriculture, Hawai'i's four counties, and landowners across the state; the Office of Planning and Sustainable Development strongly recommends that the Legislature consider the Office of Planning and Sustainable Development as the coordinating agency of the proposed "Hawai'i farmland and forest soil health carbon smart incentives program."

The Office of Planning and Sustainable Development is on record for the past 5 Legislative Sessions since 2018 requesting staff support for the Greenhouse Gas Sequestration Task Force and the promotion of greenhouse gas sequestration projects and incentives. This carbon smart incentives program directly aligns with the goals of the Greenhouse Gas Sequestration Task Force, and if provided the funding, staffing, and programmatic authority in this bill, the Office of Planning and Sustainable Development would be very prepared to implement this important climate mitigation program for the benefit of the State of Hawai'i, it's people, and future generations.

Thank you for the opportunity to testify on this measure.

LATE *Testimony submitted late may not be considered by the Committee for decision making purposes.

HB-2493-HD-1

Submitted on: 2/14/2022 2:16:35 PM Testimony for CPC on 2/15/2022 2:00:00 PM



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Su	bmitted By	Organization	Testifier Position	Remote Testimony Requested
Da	ve Mulinix	Our Revolution Hawaii	Support	Yes

Comments:

Aloha Committee,

On behalf of Our Revolution Hawaii's 5,000 members and supporters statewide, we stand in strong support of HB2493 that establishes the Hawaii farmland and forest soil health carbon smart incentive program to incentivize carbon sequestration activities through incentives contracts that provide for compensation for eligible practices by program participants. Appropriates funds for positions and for administering the program.

Mahalo for your kind attention,

David Mulinix, Cofounder & Organizer

Our Revolution Hawaii



Environmental Caucus of The Democratic Party of Hawaiʻi

Energy & Climate Action Committee

Tuesday, February 15, 2022, 2:00 am

House Committee on Consumer Protection and Commerce HOUSE BILL 2493 – RELATING TO CARBON SEQUESTRATION INCENTIVES

Position: Strong Support

Me ke Aloha, Chair Kitagawa, Vice-Chair Johanson, and Members of the Committee on Consumer Protection and Commerce:

The Energy and Climate Action Committee reiterates its strong support of this thoughtful and far-reaching bill. Sequestration of atmospheric carbons is one of the planet's most pressing needs for the foreseeable future, and this bill will also benefit a prime priority for Hawaii communities – food security.

Soil depletion has been a deleterious by-product of commercial agriculture for a very long time, and soil health will benefit human health in multiple ways, including the production of more nutritious food for people and animals alike, and improving air quality with healthy microbes. Hawaii has every food-bearing biome in the world, rich native soils, and often multiple growing seasons in a relatively benign climate. Hawaii should be able to grow 100% of its essential foodstuffs, and its forests and rangelands could be doing our fair share of atmospheric greenhouse gas (GHG) sequestration. In addition, this program opens the door to ending food waste and sharply curtailing waste loads needing landfill or incineration – two more obsolete practices we need to resolve.

The technical support provided under this program will be essential to broad collaboration across all landowners, and our understanding is that the Green Infrastructure Authority is prepared to work with the Climate Change Mitigation and Adaptation Commission within the Department of Land and Natural Resources, Forestry Division, to work in conjunction with the U.S. Climate Alliance Natural and Working Lands Research Team, the Department of Agriculture, the Greenhouse Gas Sequestration Task Force, the Nature Conservancy, and the Law School.

The program has a comprehensive understanding and a long-range strategy, with an early implementation phase to gear up and subsequent implementation phases, a thoughtful presentation of eligibility, incentives, and priorities, multiple benefits, site visits, and several staffing positions to administer this complex program of outreach, technical service, loans and reviews.

One concern has been the possibility of seed corn companies taking disproportionate advantage of these provisions. The program managers can apply the multiple benefit lens in review.

We appreciate your full support of this bill.

Mahalo for the opportunity to address this matter.

Charley Ice & Ted Bohlen, Co-Chairs, Energy and Climate Action Committee Environmental Caucus of the Democratic Party

LATE *Testimony submitted late may not be considered by the Committee for decision making purposes.

HB-2493-HD-1

Submitted on: 2/14/2022 3:41:05 PM Testimony for CPC on 2/15/2022 2:00:00 PM



Submitted By	Organization	Testifier Position	Remote Testimony Requested
Cara Oba	Individual	Support	No

Comments:

Chair Johanson and Members of the Consumer Protection and Commerce Committee,

I support HB2493 HD1. The bill supports necessary distributed action and helps to building local knowledge about our carbon sequestration potential while improving soil health. It could work well in coordination with other existing incentives regarding composting and cover crops.

Additional co-benefits that could be included in section 196-F are fire suppression, reduced soil runoff, and carbon positive community education/leadership. These are additional considerations that would be useful in a full evaluation of a project's impact.

I would also would like to encourage inclusion of language that dissuades properties seeking to use their land for carbon credits. Feasibility analysis done by the Office of Planning showed that carbon credits is not a productive outcome. We should be more focused on the tangible benefits for our local community of greater food and water security.

Thank you for the opportunity to share my thoughts.

LATE *Testimony submitted late may not be considered by the Committee for decision making purposes.

HB-2493-HD-1

Submitted on: 2/14/2022 11:58:10 PM Testimony for CPC on 2/15/2022 2:00:00 PM



Submitted By	Organization	Testifier Position	Remote Testimony Requested
Janet L Pappas	Individual	Support	No

Comments:

Dear CPC Committee,

We need to quickly reduce carbon emissions around the world to prevent further global warming and we also need to increase local food production. I urge you to support Bill HB2493 HD1 which will incentivise Hawaii farmers to sequester carbon in the soil on their farm and forest land and also help farmers grow more food products in Hawaii.

Please pass and fund this bill without delay.

Sincerely,

Jan Pappas

Aiea, Hawaii 96701