

STATE OF HAWAI'I OFFICE OF PLANNING & SUSTAINABLE DEVELOPMENT

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Statement of MARY ALICE EVANS, Director

before the HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION AND WATER & LAND February 11, 2025, 9:15 AM

State Capitol, Conference Room 325

in consideration of HB 1319 RELATING TO THE STATE PLAN

Chair Lowen, Chair Hashem, Vice Chair Perruso, Vice Chair Lamosao, and Members of the House Committees on Energy & Environmental Protection and Water & Land.

The Office of Planning and Sustainable Development (OPSD) **supports** HB 1319, which establishes green infrastructure objectives, policies, and priority guidelines in the Hawaii State Planning Act.

Green infrastructure has the potential to improve quality of life for both Hawaii's residents and visitors. The reduction of heat, the improvement of air quality, and noise reduction are some of the many benefits that green infrastructure can provide.

As planning efforts evolve to address emerging challenges, the incorporation of green infrastructure into state facility systems, infrastructure, and transit projects is a necessary step toward sustainable, long-term development. Further, OPSD's *Hawaii State Plan Phase I Update Report* highlights the need to update the Hawaii State Planning Act to address emerging cross-cutting issues, including Green Practices, Climate Change, Conservation and Environmental Stewardship, Self-reliance/Resiliency/Security, and Local Food Production—all of which align with the intent of HB 1319.

This measure will help ensure that OPSD has the necessary resources to update the Hawaii State Planning Act and guide future development of the State in a way that enhances residents' quality of life. OPSD will work to align this initiative with other related efforts.

Thank you for the opportunity to testify on this measure.



Co-Chairs: Chair, DLNR Director, OPSD

Commissioners: Chair, Senate AEN Chair, Senate WTL Chair, House EEP Chair, House WAL Chairperson, DTA Chairperson, DOA CEO, OHA Chairperson, DHL Director, DBEDT Director, DBEDT Director, DOH Chairperson, DOE Director, C+C DPP Director, Hawaii DP Director, Kaua'i DP The Adjutant General Manager C7M

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

 Testimony of
 Director, Kaua'i DP The Adjutant General Manager, CZM

 Climate Change Coordinator on behalf of

 Climate Change Mitigation and Adaptation Commission Co-Chair Mary Alice Evans and Co-Chair Dawn N.S. Chang

> Before the House Committees on ENERGY & ENVIRONMENTAL PROTECTION & WATER & LAND

Tuesday February 11, 2025 9:15 AM State Capitol, Via Videoconference, Conference Room 325

In support of House Bill 1319 RELATING TO THE STATE PLAN

House Bill 1319 Establishes green infrastructure objectives, policies, and priority guidelines for state facility systems, infrastructure, transit projects, and other areas in the Hawai'i State Planning Act to improve the quality of life for residents and visitors. The bill defines "green infrastructure", requires the Office of Planning and Sustainable Development, in partnership with the Greenhouse Gas Sequestration Task Force, to submit a report to the Legislature making recommendations for implementing the green infrastructure objectives, policies, and priority guidelines. The bill also establishes full-time equivalent (_.0 FTE) policy analyst positions within the Office of Planning and Sustainable Development, infrastructure objectives, policies, and priority guidelines for state facility systems, infrastructure, transit projects, and other areas in the Hawaii State Planning Act to improve the quality of life for residents and visitors. **The Hawai'i Climate Change Mitigation and Adaptation Commission (Commission) supports this measure.**

The Commission is a multi-jurisdictional effort between 20 different State and county departments, and Legislative committees. According to the Intergovernmental Panel on Climate Change's 2022 report, nature-based or "green" infrastructure and ecosystem services provide significant benefits when installed in urban and infrastructure systems. Often these "green" strategies are both more effective and less costly than traditional engineering or gray solutions on their own.

Nature-based solutions also provide a natural aesthetic and other benefits. Research suggests that trees may improve driving safety. One study found a 46% decrease in crash rates across urban arterial and highway sites after landscape improvements were installed.ⁱ Another study found that placing trees and planters in urban arterial roadsides reduced mid-block crashes by 5% to 20%.ⁱⁱ Increasing tree canopy can reduce heat island effect, provide shade to encourage walking and biking, and provide storm water mitigation and sequester carbon. Green infrastructure can also reduce wastewater infrastructure costs, improve home values, provide opportunity for green jobs, and lessen the impacts of floods thus reducing recovery costs.

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

ⁱ Lee, J., and F. Mannering. 1999 (December). *Analysis of Roadside Accident Frequency and Severity and Roadside Safety Management*. Washington State Department of Transportation, Olympia, WA, 137 pp.

ⁱⁱ Naderi, J.R. 2003. Landscape Design in the Clear Zone: Effect of Landscape Variables on Pedestrian Health and Driver Safety. *Transportation Research Record* 1851:119-130.

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Aloha Chair Lowen, Vice Chair Perruso, and Members of the House Energy & Environmental Protection Committee,

The Hawai'i Farmers Union is a 501(c)(5) agricultural advocacy nonprofit representing a network of over 2,500 family farmers and their supporters across the Hawaiian Islands. **HFU strongly supports HB1319.**

The bill's focus on establishing green infrastructure objectives and guidelines is a significant move towards fostering sustainable and resilient community development. By incorporating green infrastructure, state facilities and transit projects can significantly reduce their environmental footprint, improve urban heat management, and enhance overall ecosystem health. This bill would further demonstrate support for green infrastructure by **explicitly incorporating landesque capital investments**—long-term improvements to biocultural landscapes—into the bill's framework for green infrastructure.

Examples of **landesque capital investment in Hawaii** encompass long-term land modifications that enhance ecosystem resilience and agricultural productivity. **Lo'i kalo (taro terraces)** used 'auwai (irrigation channels) to manage water flow and enrich soil, while **dryland field systems** employed rock mulching to retain moisture in arid regions. **Wai (water systems)**, including terracing and retention ponds, prevented erosion and optimized freshwater use, complementing the **ahupua'a system**, which integrated agriculture, aquaculture (loko i'a), and forestry into a self-sustaining food network. **Agroforestry systems** cultivated canoe crops like breadfruit and kukui in multi-layered forests, stabilizing landscapes while providing food, fiber, and medicine. These enduring **Cultural Landscapes** and **Resilient Agro-Ecosystems** reflect deep ecological knowledge, supporting large populations across diverse environments.

In Section 2 (a) expand the HRS §226- objectives and policies for green infrastructure to include:

(5) Encouraging landesque capital investments in agricultural and rural areas, including terracing, soil and water conservation structures, agroforestry, and perennial crop systems to enhance agricultural resilience and food security.

In Section 3 amend the definition of "green infrastructure" to include:

"Landesque capital investments" means approaches such as soil and water conservation structures, agroforestry systems, and regenerative agricultural infrastructure that contribute to ecosystem services, climate resilience, and agricultural productivity."

In Section 4 amend HRS §226-12(b) i to include:

(10) Promote landesque capital investments, such as terracing, regenerative agricultural infrastructure, soil and water conservation structures, and agroforestry systems, to enhance climate resilience, preserve cultural landscapes, and support sustainable land stewardship.

In Section 5 broaden the HRS §226-104(c) priority guidelines for green infrastructure to include:

(8) Promote land-based carbon sequestration strategies, including agroforestry, biochar production, and regenerative soil management techniques.

(9) Support the development of working landscapes that integrate green infrastructure principles to enhance climate resilience and local food production.

Conclusion

Restoring and integrating these systems into modern land-use planning not only revitalizes Native Hawaiian stewardship practices but also strengthens climate resilience and ecosystem services—aligning with the core intent of green infrastructure policies. Integrating landesque capital investments into HB1319 will ensure that green infrastructure policies benefit not only urban spaces but also Hawai'i's agricultural and rural landscapes. HFUU urges the Legislature to adopt these amendments to strengthen the bill's impact.

Mahalo for the opportunity to testify.

Hunter Heaivilin Advocacy Director Hawai'i Farmers Union



To: The Honorable Chairs Nicole Lowen and Mark Hashem, the Honorable Vice Chairs Amy Perruso and Rachele Lamosao, and Members of the Committees on Energy and Environmental Protection and Water and Land.

From: Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i (by Ted Bohlen)

Re: Hearing HB1319 RELATING TO THE STATE PLAN

Hearing: Tuesday February 11, 2025, 9:15 a.m., room 325

Aloha Chairs Lowen and Hashem, Vice Chairs Perruso and Rachele Lamosao, and Members of the Committees on Energy and Environmental Protection and Water and Land!

The Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i SUPPORT HB1319!

The Hawai'i Reef and Ocean Coalition (HIROC) is a group of scientists, educators, filmmakers and environmental advocates who have been working since 2017 to protect Hawaii's coral reefs and ocean. We support green infrastructure measures that reduce polluted runoff.

The Climate Protectors Hawai'i seek to educate and engage the local community in climate change action, to help Hawai'i show the world the way back to a safe and stable climate. We support the use of trees and other design measures that reduce heat, save energy, and reduce climate warming and its impacts.

Sustainable design concepts for public infrastructure **use green vegetation and trees to decrease urban temperatures, reduce carbon emissions, improve air quality, and capture water to replenish the water table.** The so-called **"green infrastructure"** is a range of measures that **use plant or soil systems, including trees, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to conserve water and reduce flows to sewer systems or to surface waters**.

The effects of climate change have made implementing sustainable design concepts more critical, as each passing year has seen increased temperatures and other impacts from climate change.

Studies have found that individuals who live in areas with **more trees and green space are less likely to have acute respiratory symptoms and less likely to die of heart disease or respiratory disease.** Hawai'i is world-renowned for its vegetation. Citizens and tourists alike actively seek out green spaces. **Increasing the number of parks and green spaces in Honolulu's urban core will enhance the quality of life of residents and visitors alike.**

This bill would establish objectives, policies, and priority guidelines for State facility systems under the Hawai'i State Planning Act to achieve the **use of green infrastructure, vegetation, and trees in State facility systems, infrastructure, and transit projects**. It would require the Office of Planning and Sustainable Development, in partnership with the Greenhouse Gas Sequestration Task Force, to make recommendations for implementing the green infrastructure objectives, policies, and priority guidelines established by this Act.

This bill would make our infrastructure more sustainable and save water and energy.

Please pass this bill! Mahalo!

Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i (by Ted Bohlen)



Email: communications@ulupono.com

HOUSE COMMITTEES ON ENERGY AND ENVIRONMENTAL PROTECTION & WATER AND LAND Tuesday, February 11, 2025 — 9:15 a.m.

Ulupono Initiative <u>supports</u> HB 1319, Relating to the State Plan

Dear Chair Lowen, Chair Hashem, and Members of the Committees:

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

Ulupono supports HB 1319, which establishes green infrastructure objectives, policies, and priority guidelines for State facility systems, infrastructure, transit projects, and other areas in the Hawai'i State Planning Act to improve the quality of life for residents and visitors; adds a definition of "green infrastructure"; requires the Office of Planning and Sustainable Development (OPSD), in partnership with the Greenhouse Gas Sequestration Task Force, to submit a report to the Legislature making recommendations for implementing the green infrastructure objectives, policies, and priority guidelines; and establishes a full-time equivalent policy analyst positions within the OPSD.

Despite the proven benefits of green infrastructure on urban heat, nearshore water quality, and community well-being, it is not a commonly used design element in Hawai'i. We hope that this bill will create the space needed for State agencies to explore how their facilities can lead the way in this regard. When water thrives, we thrive, and green infrastructure is needed now more than ever to move us towards a thriving water future in face of climate change and increasing urbanization.

Thank you for the opportunity to testify.

Respectfully,

Mariah Yoshizu Government Affairs Associate

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Keeping Hawai'i clean, green and beautiful since 1912



February 10, 2025

RE: Strong Support of HB1319 Relating to Green Infrastructure

Dear Representatives,

The Outdoor Circle strongly supports HB1319 Relating to Establishing Green Infrastructure Programs, Objectives, Policies and Guidelines for the State of Hawaii.

This type of legislation is needed to clarify and expand upon other directives that recognize green infrastructure in a similar way as other infrastructure in planning projects to improve the quality of life for our ohana.

Please give your full support to this measure.

Thank you,

Winten Well

Winston Welch Executive Director

Aloha Chair Lowen, Chair Hashem, and Members of the Committees on Energy & Environmental Protection and Water & Land.

I am writing in **STRONG SUPPORT of HB1319**, which seeks to advance sustainable practices and policies in our community. Establishing a framework for sustainability is not simply an environmental concern; it is a foundational investment in the health, prosperity, and resilience of our people and our 'āina.

1. Preserving Our Natural Resources and Biodiversity

Hawai'i's unique ecosystems are home to countless endemic species and culturally significant habitats. By prioritizing the sustainable use of our land and natural resources, we can maintain the delicate balance needed for these species and ecosystems to thrive. Healthy watersheds, native forests, and pristine coastlines are not only essential for tourism and local industries but are also deeply woven into our cultural heritage and identity.

2. Ensuring Long-Term Economic Stability

A sustainable community underpins a vibrant economy. Transitioning to renewable energy sources, supporting local agriculture, and adopting smart growth principles can reduce long-term costs while generating jobs in emerging green sectors. Sustainable initiatives—from energy-efficient buildings to zero-waste programs—can create a competitive advantage for local businesses, attract forward-thinking investors, and encourage innovation in our workforce.

3. Protecting Public Health

A sustainable community ensures clean air, safe drinking water, and nutritious food sources. Encouraging environmentally responsible infrastructure—such as green building designs, efficient public transit, and improved waste management—directly benefits public health. Reduced pollution, improved walkability, and greater access to healthy local produce can collectively lower healthcare costs and enhance overall quality of life.

4. Building Resilience in the Face of Climate Change

Hawai'i is particularly vulnerable to sea-level rise, extreme weather events, and ecosystem disruptions. Strengthening our environmental policies and investing in sustainable projects will build community resilience and help mitigate the impacts of climate change. Whether it's through climate adaptation strategies, expanded renewable energy, or the protection of critical natural areas, each proactive measure we take now will pay dividends in preserving our islands for future generations.

5. Advancing Social Equity

Sustainability is as much about people as it is about the environment. By prioritizing affordable clean energy options, expanding local food production, and integrating green public spaces into urban design, we promote equity and uplift historically underserved communities. Sustainable initiatives can bridge gaps in access to resources and ensure that every resident has the opportunity for a healthy, prosperous life.

By supporting HB1319, we make a clear statement that Hawai'i values the long-term wellbeing of its residents, economy, and natural heritage. This measure will help guide us toward a future where our resources are managed responsibly, our economy is strong and diverse, and our communities remain vibrant and healthy for generations to come.

I respectfully urge you to pass this measure and advance Hawai'i's commitment to sustainability. Mahalo for the opportunity to testify in **strong support of HB1319.**

Respectfully,

Carof Philips

Carol Philips

<u>HB-1319</u>

Submitted on: 1/31/2025 7:43:52 PM Testimony for EEP on 2/11/2025 9:15:00 AM

Submitted By	Organization	Testifier Position	Testify
Jacob Wiencek	Individual	Support	Written Testimony Only

Comments:

This seems like a good idea and something we should properly plan for. I urge this Committee to SUPPORT this bill!