

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

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



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

P.O. BOX 621
HONOLULU, HAWAII 96809

DAWN N.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
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FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

Testimony of
DAWN N. S. CHANG
Chairperson

Before the House Committee on
ENERGY & ENVIRONMENTAL PROTECTION

Thursday, February 08, 2024
9:30 AM

State Capitol, Conference Room 325 and Via Videoconference

In consideration of
HOUSE BILL 2665
RELATING TO THE STATE PLAN

House Bill 2665 proposes to establish green infrastructure objectives, policies, and priority guidelines for state facility systems, infrastructure, and transit projects in the Hawai'i State Planning Act to improve the quality of life for residents and visitors and requires a report to the Legislature. It establishes positions within the Office of Planning and Sustainable Development (OPSD), declares that the general fund expenditure ceiling will be exceeded, and appropriates moneys. **The Department of Land and Natural Resources (Department) supports this measure.**

This measure is aligned with the mission of the Department's Kaulunani Urban and Community Forestry Program. The Kaulunani Program builds capacity in our communities to plan for, establish, manage, and protect green infrastructure, including street trees, urban forests, green spaces, bioswales, and related natural areas where we live, work, and play. Recent analyses using data from the Hawai'i Tree Canopy Viewer (EarthDefine LLC et al. 2021) show that 84% of Hawai'i residents statewide, and 93% of the population of urban Honolulu, have less than 30% canopy coverage, which is the minimum recommended to realize the health and well-being benefits that urban tree canopy provides (Konijnendijk, C.C., 2022). For example, green infrastructure, trees specifically, can reduce surface temperatures by as much as 45 degrees (F) and reduce ambient air temperatures by as much as 25 degrees (F) with shade from trees. More green infrastructure, including trees, is needed to sustain our communities statewide. The Department encourages collaboration with OPSD on this topic.

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



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

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

Co-Chairs:
Chair, DLNR
Director, OPSD

Commissioners:
Chair, Senate AEN
Chair, Senate WTL
Chair, House EEP
Chair, House WAL
Chairperson, HTA
Chairperson, DOA
CEO, OHA
Chairperson, DHHL
Director, DBEDT
Director, DOT
Director, DOH
Chairperson, DOE
Director, C+C DPP
Director, Maui DP
Director, Hawai'i DP
Director, Kaua'i DP
The Adjutant General
Manager, CZM

Before the House Committee on
ENERGY & ENVIRONMENTAL PROTECTION

Thursday February 8, 2024
9:30 AM

State Capitol, Via Videoconference, Conference Room 325

In support of
House Bill 2665
RELATING TO THE STATE PLAN

House Bill 2665 establishes green 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.**

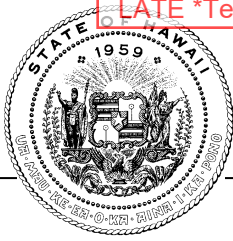
The Commission is a multi-jurisdictional effort between 20 different State and county departments, and Legislative committees. According to the Intergovernmental Panel on Climate Change's 2022 report, nature-based or "green" infrastructure and ecosystem services provide significant benefits when installed 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.

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.



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

STATE OF HAWAII
OFFICE OF PLANNING
& SUSTAINABLE DEVELOPMENT

JOSH GREEN, M.D.
GOVERNOR

SYLVIA LUKE
LT. GOVERNOR

MARY ALICE EVANS
INTERIM DIRECTOR

235 South Beretania Street, 6th Floor, Honolulu, Hawai'i 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawai'i 96804

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Statement of
MARY ALICE EVANS, Interim Director

before the
HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION
Thursday, February 8, 2024
9:30 AM
State Capitol, Conference Room 325

in consideration of
HOUSE BILL 2665
RELATING TO THE STATE PLAN.

Chair Lowen, Vice Chair Cochran and Members of the Committee on Energy and Environmental Protection:

The Office of Planning and Sustainable Development (OPSD) **supports** H.B. 2665, which establishes green 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. Requires report to the Legislature. Establishes positions within the Office of Planning and Sustainable Development.

OPSD strongly supports this measure which adds to the duties assigned to OPSD in administering the Hawaii State Planning Act, in partnership with the Greenhouse Gas Sequestration Task Force (Ch. 225P-4, HRS), a requirement to submit a report to the Legislature making recommendations for implementing the green infrastructure objectives.

OPSD offers the following comment. The Greenhouse Gas Sequestration Task Force is an unfunded mandate with no staff or funds for the required research and reports to the Legislature. All OPSD employees are assigned to specific programs or hired under federal grants.

If the Committee is inclined to pass this measure, OPSD requests that two new sections be added to HB 87: first, establishing one exempt policy analyst position; and second, an appropriation for \$150,000 for salary and program funding.

Mahalo for the opportunity to testify on this measure.

HB-2665

Submitted on: 2/4/2024 2:02:23 PM

Testimony for EEP on 2/8/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Helen Cox	Kauai Climate Action Coalition	Support	Written Testimony Only

Comments:

Aloha Kakou,

Please support HB2665 to establish green infrastructure objectives, policies, and priority guidelines for state facility systems, infrastructure, transit projects, and other areas in the Hawaii State Planning Act. This bill will take a critical step towards decarbonization of buildings to improve the quality of life for residents and visitors. And, importantly, it will direct the state to policies and guidelines that will lead to a reduction in greenhouse gas emissions, an absolute necessity if Hawaii is to reach our climate goals. The bill is clearly responsible and appropriates moneys, establishes positions, and requires a report to the Legislature. Kauai Climate Action Coalition urges you to support HB2665. Mahalo!

Helen Cox, Chair,

Kauai Climate Action Coalition



Email: communications@ulupono.com

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
Thursday, February 8, 2024 — 9:30 a.m.

Ulupono Initiative supports the intent HB 2665, Relating to the State Plan

Dear Chair Lowen and Members of the Committee:

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

Ulupono supports the intent of HB 2665, 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. This bill also establishes positions within the Office of Planning and Sustainable Development.

We would like to offer amendments for your consideration:

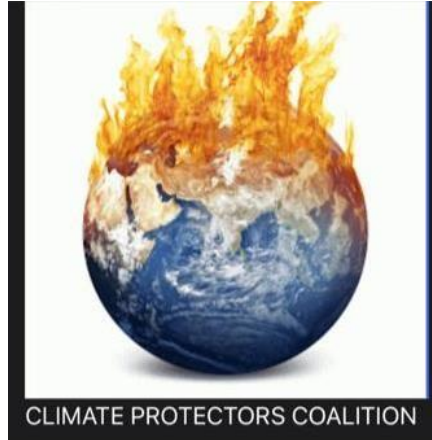
- Include “Sustainable transportation design” and “Climate change resilience” in the objectives in Section §226(a)
 - When green infrastructure is incorporated into planning for transit, it can result in safer experiences for walking, biking and other multimodal transportation options.
 - If green infrastructure design concepts are incorporated into planning for parking lots, sidewalks, and streets, then we increase our climate resilience through increased aquifer recharge and reduced stormwater runoff.
- Add “Reducing air temperatures in and surrounding facilities and projects, thereby reducing the demand for indoor cooling and its associated energy impacts” to objectives in Section §226(b)
 - Lowering ambient air temperatures through green infrastructure can reduce the need for home air conditioning.
- Add language that requires coordination with the Department of Accounting and General Services (DAGS) in addition to the greenhouse gas sequestration task force.
 - DAGS is not a member included in the greenhouse gas sequestration task force and would be the agency responsible for implementing green infrastructure design recommendations and policies in many state facility systems, infrastructure, and transit projects.

Thank you for the opportunity to testify.

Respectfully,

Micah Munekata
Director of Government Affairs

Investing in a Sustainable Hawai'i



To: The Honorable Chair Nicole Lowen , the Honorable Vice Chair Elle Cochran,
and Members of the Committee on Energy and Environmental Protection

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

Re: **Hearing HB2665 RELATING TO THE STATE PLAN**

Hearing: Thursday February 8, 2023, 9:30 a.m., room 325

Aloha Chair Lowen, Vice Chair Cochran, and Members of the Committee on Energy
and Environmental Protection:

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. HIROC is interested in preventing polluted
runoff that harms the reefs and oceans.

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 the climate impact.

**Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i STRONGLY
SUPPORT HB2665.**

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. Hawaii 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 Hawaii 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)



Written Testimony before the

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION
Thursday, February 8, 2024 (9:30 am) – conference room 325

RE: HB2665 RELATING TO THE STATE PLAN.

Chair Lowen, Vice Chair Cochran, Members of the Committee on Energy & Environmental Protection:

Trees for Honolulu's Future (TFHF) is a nonprofit organization with a vision for a tree-filled island that preserves and enhances our quality of life, especially in the face of climate change.

We support the above-referenced Bill, which establishes green infrastructure objectives, policies, and priorities for state facility systems within the State Plan. Importantly the bill also mandates accountability and includes funding.

Trees create multiple benefits well documented by research and noted in this Bill's preamble. Trees create shade and use evapotranspiration to lower temperature. Trees also recharge groundwater and decrease surface runoff protecting our reefs. Trees trap pollutants and store CO2. Trees calm traffic. Sadly though, Honolulu has been losing urban tree canopy over the past years.

Unfortunately, often green infrastructure is the last item considered and the first "value engineered" out of a capital improvement project, when that is completely reverse of the kind of thinking and action we should be taking. Green infrastructure should be the first item considered and the last to be cut.

This Bill has an important accountability aspect by requiring the Office of Planning, 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 established by this measure. That's important because a plan is only a plan, execution is where the "rubber meets the road". We are confident that if all government agencies act in support of mitigating climate change, this Bill will result in much-needed positive change. The best time to act was 20 years ago, the next best, is today.

Mahalo,

A handwritten signature in blue ink, appearing to read "Daniel Dinell", is written over a light blue background.

Daniel Dinell, President
Trees for Honolulu's Future

HONOLULU is HOT TREES are COOL

Visit us: www.TreesForHonolulu.org Contact us: info@TreesForHonolulu.org Voice/Fax/Text: 808-707-6353
P.O. Box 12051, Honolulu, Hawaii 96828

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RE: The Outdoor Circle support of HB2665 regarding Green Infrastructure

February 7, 2024

Dear Senators,

The Outdoor Circle has, for 112 years, stood for a green and beautiful landscape, including comprehensive, well-planned zoning and communities, especially including proper infrastructure such as utilities buried, many canopy shade trees, and issues of quality of life.

HB2665 advances the critical need to establish and incorporate green infrastructure objectives in the Hawaii State Planning Act, with proper staffing and funding as well.

We fully support HB2665 to ensure that our long-range planning for our state fully embraces green infrastructure planning and ask that you support this bill.

Mahalo,

A handwritten signature in black ink, appearing to read "W. Welch", is written over a thin horizontal line.

Winston Welch
Executive Director
The Outdoor Circle

BRANCHES

Hawai'i

East Hawai'i

Kona

Waikoloa Village

Waimea

Kaua'i

O'ahu

East Honolulu

Lani-Kailua

Mānoa

North Shore

Greater Waikiki

STAFF

Winston Welch
Executive Director

Jacqueline Wah
Operations Director

Myles Ritchie
Programs Director

Helping to keep Hawai'i
clean, green, beautiful,
livable and sustainable
since 1912

HB-2665

Submitted on: 1/31/2024 7:29:29 PM

Testimony for EEP on 2/8/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Justin Silva	Individual	Oppose	Written Testimony Only

Comments:

Declares that the general fund expenditure ceiling will be exceeded

HB-2665

Submitted on: 2/2/2024 1:58:50 PM

Testimony for EEP on 2/8/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Barbara Best	Individual	Support	Written Testimony Only

Comments:

Our state must consider the most environmental aspect in its decisions

HB-2665

Submitted on: 2/2/2024 3:22:18 PM

Testimony for EEP on 2/8/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
John NAYLOR	Individual	Support	Written Testimony Only

Comments:

Aloha,

I hope that improvements make it to neighbor islands esp Maui !

Mahalo,

JN Makawao

HB-2665

Submitted on: 2/5/2024 9:04:12 AM

Testimony for EEP on 2/8/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Keith Neal	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Lowen and members of the EEP

I support HB2665

It far better not to create the greenhouse gasses in the first place. Policies and practices should endeavor to eliminate, if not reduce greenhouse gas emissions.

Sequestration technologies are complicated and require study for efficacy.

Mahalo,

Keith Neal

Waimea

HB-2665

Submitted on: 2/6/2024 9:16:20 AM

Testimony for EEP on 2/8/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Ronald "Ron" Reilly	Individual	Support	Written Testimony Only

Comments:

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

In support of HB2665.

Establishing green infrastructure objectives, policies, and priority guidelines for state facility systems will be helpful as we transition to a more sustainable future not based on fossil fuel imports.

I respectfully urge your support of this measure.

Sincerely, Ron Reilly
Volcano Village, Hawaii

HB-2665

Submitted on: 2/6/2024 3:38:21 PM

Testimony for EEP on 2/8/2024 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Ruta Jordans	Individual	Support	Written Testimony Only

Comments:

Please amend to include green solid waste decisions, showing the circularity of sustainable development.