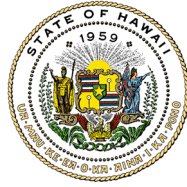


**JOSH GREEN, M.D.**  
GOVERNOR  
KE KIA'ĀINA



**KENNETH S. HARA**  
DIRECTOR OF EMERGENCY  
MANAGEMENT

**JAMES DS. BARROS**  
ADMINISTRATOR OF  
EMERGENCY MANAGEMENT

STATE OF HAWAII  
KA MOKU'ĀINA O HAWAI'I  
**DEPARTMENT OF DEFENSE**  
**KA 'OIHANA PILI KAUA**  
**HAWAI'I EMERGENCY MANAGEMENT AGENCY**  
4204 DIAMOND HEAD ROAD  
HONOLULU, HAWAI'I 96816-4420

STATE OF HAWAI'I  
DEPARTMENT OF DEFENSE  
HAWAI'I EMERGENCY MANAGEMENT AGENCY

TESTIMONY ON HOUSE BILL 952  
RELATING TO NATURAL RESOURCES

BEFORE THE HOUSE COMMITTEE ON **WATER AND LAND**

BY

JAMES DS. BARROS  
ADMINISTRATOR  
HAWAI'I EMERGENCY MANAGEMENT AGENCY

FEBRUARY 4, 2023

Aloha Chair Ichiyama, Vice-Chair Poepoe, and members of the committee:

I am James Barros, Administrator of the Hawai'i Emergency Management Agency (HI-EMA).

HI-EMA provides written testimony in **SUPPORT** of HB952.

This bill would appropriate funds to the Department of Land and Natural Resources to address the impacts of climate change in Hawai'i.

The latest science continues to support the projections that climate change will increase the risk of flooding, coastal inundation, storm surge, prolonged drought, and other hazards to Hawai'i. This growing risk increases the urgency and need for mitigation measures.

HI-EMA supports steps that increase the availability of resources to mitigate against these hazards, especially those that potentially can be used to leverage federal funds to address the problems.

The agency would note that the stated purpose of the appropriation to "protect" natural resources is closely aligned with the existing hazard mitigation activities by the State and Counties. HI-EMA respectfully requests that the committee consider adding language to encourage that DLNR's spending from this appropriation be aligned with the hazard mitigation framework, including the State Hazard Mitigation Plan which HI-EMA is updating in 2023.

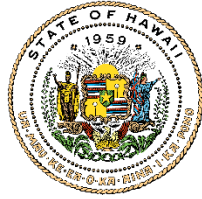
We support this bill provided that its passage does not replace or adversely impact priorities indicated in the Governor's budget.

Thank you for the opportunity to provide testimony.

James Barros: [james.barros@hawaii.gov](mailto:james.barros@hawaii.gov); 808-733-4300

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

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



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

P.O. BOX 621  
HONOLULU, HAWAII 96809

DAWN N.S. CHANG  
CHAIRPERSON  
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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  
WATER & LAND

Thursday, February 7, 2023  
9:30 AM

State Capitol, Conference Room 430, Via Videoconference

In consideration of  
HOUSE BILL 952  
RELATING TO NATURAL RESOURCES

House Bill 952 proposes to appropriate funds to the Department of Land and Natural Resources (Department) to address the impacts of climate change in the State. **The Department supports this measure.**

Hawai'i's natural and cultural resources provide our drinking water and sustain all life on our islands, are huge economic assets and prime attractions of our tourism industry, support the well-being, health, and identity of our communities and are both severely impacted by climate change and provide the State with it's only carbon sink. A University of Hawai'i study examined the various services provided by O'ahu's Ko'olau forests - including drinking water recharge, flood prevention, water quality, carbon storage, biodiversity, cultural, aesthetic, recreational, and commercial values. These services were calculated to have a net present value of between \$7.4 and \$14 billion. Coral reefs – the first line of defense to large ocean swells - annually protect \$836 million in averted damages to property and economic activity in Hawai'i. Despite the value of our forests and oceans, Hawai'i invests less than 1% of the total state budget into maintaining these assets.

The Department is severely under-funded and lacks the capacity to address the many challenges currently facing Hawai'i's natural and cultural resources. While the Department is committed to seeking funds from a variety of non-State sources, the majority of federal grants have matching requirements (typically 20% or more), which the Department cannot meet given its limited base budget. The Bipartisan Infrastructure Law (BIL) includes a variety of climate-specific programs and funding opportunities. However, without adequate state funding, the Department will continue to struggle to apply for non-state and federal grants.

Additional funding provided by this bill can be used as much needed match to apply for federal grants made available by the BIL, with the goal to leverage state dollars 1:1. Providing additional funding to the Department will allow the Department to increase capacity and expand actions to protect more of the State's natural and cultural trust resources and enhance our resilience to climate change.

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

**HB-952**

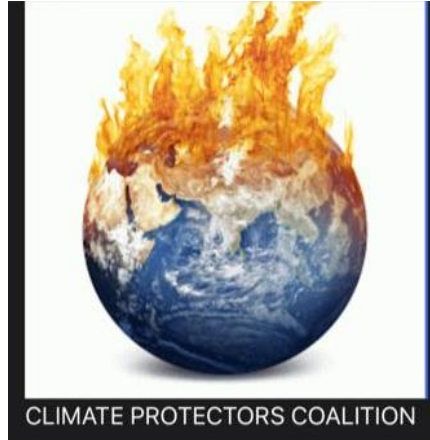
Submitted on: 2/5/2023 1:13:49 PM

Testimony for WAL on 2/7/2023 9:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
laurel brier	Kauai Climate Action Coalition	Support	Written Testimony Only

Comments:

There is an excellent opportunity to access federal funds to help address the climate crisis and related issues of water security and land management issues. This bill will help provided the required matching funds that will be necessary to qualify for those funds.



To: The Honorable Chair Linda Ichiyama, the Honorable Vice Chair Mahina Poepoe, and Members of the Committee on Water and Land.

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

Re: **Hearing HB952 RELATING TO NATURAL RESOURCES**

Hearing: Tuesday February 7, 2023, 9:30 a.m., room 430

Aloha Chair Ichiyama, Vice Chair Poepoe, and Members of the Committee on Water and Land:

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. 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.

**Hawai'i Reef and Ocean Coalition and Climate Protectors Hawai'i strongly support HB952!**

Hawai'i needs federal funds currently for many purposes. One existential problem for Hawai'i is that the coral reefs that protect Hawaii's shorelines are dying from ocean heat and other causes. We need to help the corals survive by, among other things, upgrading many thousands of cesspools to reduce

the nutrients in human waste that harm corals. Upgrading cesspools is potentially a \$2 billion problem!

This bill appropriates State funds to serve as a match in acquiring key federal funds. The Inflation Reduction Act, the Restoring Resilient Reefs Act, and the Recovering America's Wildlife Act may be potential sources of revenue for upgrading cesspools and otherwise protecting corals and our shorelines.

With intensified and more unpredictable hurricanes and ongoing flood and drought probabilities, now is the time to make the most of available funds to mitigate and adapt to the mounting impacts of climate change.

Please support this measure with a generous portion of the available budget, as it will help bring many federal dollars to Hawai'i.

Mahalo for the opportunity to testify on this matter!

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



# UNIVERSITY OF HAWAII SYSTEM

## ‘ŌNAEHANA KULANUI O HAWAII

### Legislative Testimony

### Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

Testimony Presented Before the  
House Committee on Water and Land  
Tuesday, February 7, 2023 at 9:30 a.m.

By

Charles “Chip” Fletcher, PhD  
Dean, School of Ocean and Earth Science and Technology

And

Darren T. Lerner, PhD  
Director, Sea Grant College Program,  
School of Ocean and Earth Science and Technology

And

Michael Bruno, Provost  
University of Hawai'i at Mānoa

#### HB 952 – RELATING TO NATURAL RESOURCES

Chair Ichiyama, Vice Chair Poepoe, and Members of the Committee:

The University of Hawai'i Sea Grant College Program (Hawai'i Sea Grant) and the Climate Resilience Collaborative (CRC) **support House Bill 952.**

This measure appropriates funds to the department of land and natural resources to address the impacts of climate change in the State.

Hawai'i Sea Grant's mission is to provide integrated research, extension, and education activities that increase understanding and use of ocean and coastal resources of the Hawaiian and Pacific Islands and support the informed personal, policy, and management decisions that are integral to realizing this vision. Hawai'i Sea Grant is part of a national network of 34 university-based programs associated with the National Oceanic and Atmospheric Administration (NOAA) that promote better understanding, conservation, and use of coastal resources.

CRC is a multi-investigator research project at the University of Hawai'i at Mānoa focused on sea level rise adaptation and climate resilience. CRC is working to update coastal models with more recent projections of sea level rise and to take account of other variables that impact Hawai'i's shorelines.

Hawai'i Sea Grant and CRC would be happy to provide updated sea level rise data and projections to the Committee or any lawmaker upon request.



**Hawai'i Sea Grant and the Climate Resilience Collaborative support the intent of House Bill 952.**

Thank you for the opportunity to testify on this measure.

**Testimony of The Nature Conservancy  
Supporting HB 952, Relating to Natural Resources.**

**Committee on Water and Land  
February 7, 2023, 9:30 am  
Conference Room 430 via Videoconference**

Aloha Chair Ichiyama, Vice Chair Poepoe, and Members of the Committee:

**The Nature Conservancy (TNC) supports HB 952**, Relating Natural Resources, which would appropriate funds to the Department of Land and Natural Resources (DLNR) to address the impacts of climate change in the State.

Hawai'i's environment is the engine that drives our economy and a natural, recreational, and cultural treasure that supports our island lifestyle and livelihoods. At the same time, our native forests and nearshore reefs and fisheries are threatened by stresses including drought, overuse, sedimentation, and invasive species, all of which are exacerbated by climate change. DLNR is charged with protecting our natural environment, and climate change continues to increase the needs for funding to meet the Department's mission.

TNC works to protect and manage the natural systems that sequester carbon, provide our fresh water, and protect our coastlines; all of which reduce the impacts of climate change. However, to fully address the growing impacts of our changing climate, we need bold action. Nature can play a huge role in pulling carbon out of the atmosphere and making our islands and oceans more resilient, but we need to support nature and fund the management of our key ecosystems. This bill will help to support those efforts. The bill will also help to take advantage of Federal programs which require matching funds.

As Hawai'i and the world continues to face the impacts of climate change, support for sustained funding at a scale to meet the needs for conservation and management will be necessary for future generations to benefit from the natural resources that we and past generations have. It is our kuleana to care for the resources to pass on to the future. This bill will help to fulfill that kuleana.

Mahalo for the opportunity to provide testimony on HB 952.

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

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**HB-952**

Submitted on: 2/2/2023 6:18:46 PM

Testimony for WAL on 2/7/2023 9:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
cheryl B.	Individual	Comments	Written Testimony Only

Comments:

Comments

For this bill which appropriates funds to the department of land and natural resources to address the impacts of climate change in the State. How will the DLNR be accountable for those funds? Who will oversee them? How will this work under the current structure of the DLNR since they are already shorthanded?

**HB-952**

Submitted on: 2/4/2023 2:41:10 PM

Testimony for WAL on 2/7/2023 9:30:00 AM

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

Comments:

NO SUCH THING AS CLIMATE CHANG this has already bin Proven. Ale Gore Said in 1989 that we would be under Water by the year 2000 that has come and gone and no Riesing Seas has happen All Bull SHIT!!!! Last year the Sience Deptment in the University of Hawaii Said the Sea level has rasien only 0000.64 Since 2000. What Riseing Sae Level nothing there You people should all be Fired!!!!

**HB-952**

Submitted on: 2/5/2023 11:54:48 AM

Testimony for WAL on 2/7/2023 9:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Andrea Nandoskar	Individual	Support	Written Testimony Only

Comments:

Support!

**HB-952**

Submitted on: 2/5/2023 1:20:16 PM

Testimony for WAL on 2/7/2023 9:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Keith Neal	Individual	Support	Written Testimony Only

Comments:

House Committee on Water and Land

house Bill 952 – Relating to Natural resources

Position: Strong Support

To: Chair Ichiyama, Vice-Chair Poepoe, and members of the House Committee on Water and Land:

HB952 appropriates funds to serve as matching funds in acquiring key federal funds. These funds are needed to make a speedy transition to clean renewable energy, regenerate soils to greater and necessary productivity, to manage retreat from rising sea levels, and to make buildings more efficient.

Sincerely,

Keith Neal

Waimea

**HB-952**

Submitted on: 2/5/2023 2:29:02 PM

Testimony for WAL on 2/7/2023 9:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
John Latkiewicz	Individual	Support	Written Testimony Only

Comments:

The climate crisis is upon us – a warming climate, epic natural disaster, e., fires, floods, heat waves, extinctions. At this point, any and all action to curb greenhouse emissions in particular and gases . It is in that spirit that offer my testimony on [HB952](#)

HB952 appropriates funds to the department of land and natural resources to address the impacts of climate change in the State. A wide variety of funding is becoming available. However, matching funds are often required. HB952 provides that support thereby allowing us to multiply the impact of those funds.

Thank you for your attention.

**HB-952**

Submitted on: 2/5/2023 2:34:16 PM

Testimony for WAL on 2/7/2023 9:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Paul Bernstein	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Ichiyama, Vice Chair Poepoe, and members of the WTL committee;

I'm writing in support of HB952 because it helps Hawai`i receive available federal funds that will help the state reduce its emissions and care for its environment. Please pass this bill out of your committee.

Respectfully,

Paul Bernstein



**HB-952**

Submitted on: 2/5/2023 3:03:40 PM

Testimony for WAL on 2/7/2023 9:30:00 AM

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

Comments:

I support HB952.

**HB-952**

Submitted on: 2/5/2023 8:39:38 PM

Testimony for WAL on 2/7/2023 9:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Cynthia Punihaole Kennedy	Individual	Support	Written Testimony Only

Comments:

Aloha Rep. Linda Ichiyama, Chair; Rep Mahina Poepoe, Vice-Chair; and Members of the House Committee on Water & Land

I strongly support HB 952, which appropriates funds for the department of land and natural resources to address the impacts of climate change in the State. Climate Change is upon us, and we must confront the challenges and craft pragmatic solutions.

I ask for your strong support on HB 952.

Mahalo nui loa

Cynthia Punihaole Kennedy

**HB-952**

Submitted on: 2/6/2023 6:58:48 AM

Testimony for WAL on 2/7/2023 9:30:00 AM

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

Comments:

Chair Ichiyama, Vice Chair PoePoe and members of the House Committee on Water & Land,

Mahalo Representatives Ichiyama, PoePoe, Chun, Ganaden, Hashem, Morikawa, Takayama and others for introducing HB952 to take advantage of matching federal funding to address the impacts of climate change in Hawaii.

I am in strong support. Appropriating funding opens up opportunities to act now on climate impact solutions to help prevent even higher costs in the the future.

Virginia Tincher

Aina Haina, Oahu

Member of the Hawaii Environmental Change Agents (HECA) and Hawaii Citizens Climate Lobby