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 CONVEYANCES COMMISSION ON WATER RESOURCE MANAGEMENT CONSERVATION AND RESOURCES ENFORCEMENT ENGINEERING FORESTRY AND WILDLIFE HISTORIC PRESERVATION KAHOOLAWE ISLAND RESERVE COMMISSION LAND STATE PARKS

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES DIVISION OF FORESTRY AND WILDLIFE 1151 PUNCHBOWL STREET, ROOM 325 HONOLULU, HAWAII 96813

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES POST OFFICE BOX 621 HONOLULU, HAWAII 96809

> Testimony of SUZANNE D. CASE Chairperson

Before the Senate Committee on WATER AND LAND

Wednesday, January 29, 2020 1:15 PM State Capitol, Conference Room 229

In consideration of SENATE BILL 2440 RELATING TO ENVIRONMENTAL PROTECTION

Senate Bill 2440 proposes to appropriate \$200,000 to the Department of Land and Natural Resources to establish a tree planting program, to be implemented by the Kaulunani urban and community forestry program, including the establishment of a community partnership coordinator position. The Department of Land and Natural Resources (Department) supports this measure provided that its passage does not replace or adversely impact priorities indicated in the Executive Supplemental Budget request.

The Department recognizes trees are our strongest allies for addressing the climate crisis. In addition to carbon sequestration, the benefits of community tree planting include: reduction in the urban heat-island effect and stormwater runoff, creation of wildlife habitat, and significant quality-of-life and human health benefits. Opportunities for communities to engage in tree planting and care promotes physical, emotional, and cultural well-being---as well as ecosystem functioning. The Department notes that the USDA Forest Service provides approximately \$200,000 annually for the Kaulunani urban and community forestry program that requires 1:1 state match; state funding provided for this program would be leveraged with the federal funds, and be available for matching additional grant funding. The Department also notes that there is strong community interest in this type of program, with more deserving proposals received per year than can be supported by available federal funds, and project volunteers that provide matching funds to the current federal funds received at 3:1.

Thank you for the opportunity to comment on this measure.



Written Testimony before the

SENATE COMMITTEE ON WATER AND LAND Monday, January 27, 2020 Conf. Room 229 (1:15 pm)

RE: SB2440 RELATING TO ENVIRONMENTAL PROTECTION

Chair Kahele, Vice Chair Keith-Agaran and Members of the Committee:

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

<u>We support the above-referenced bill</u>, which provides \$200,000 in funds to DLNR for a coordinator and tree planting as long as the funds are matched or leveraged by the Kaulunani community grant program. Trees create multiple benefits well documented by research. 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. Sadly though, as the bill's preamble points out, Hawaii has been losing tree canopy in both the forests and urban settings.

TFHF has received Kaulunani grant funding in the past, most recently not at the level requested. We know other worthy groups are also deserving of funding, but there simply aren't enough financial resources available. Additionally, trees provide an excellent return on investment so encouraging more is a smart action to take.

We ask that this bill be passed on to the Committee on Ways and Means.

Mahalo,

Daniel Dinell President

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

<u>SB-2440</u> Submitted on: 1/27/2020 4:32:16 AM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Ted Bohlen	Testifying for Climate Protectors Coalition	Support	No

Comments:

The Climate Protectors Coalition supports funding for afforestation and reforestation efforts to reduce atmospheric greenhouse gases.



183 Pinana St., Kailua, HI 96734 • 808-262-1285 • info@350Hawaii.org

To: The Senate Committee on Water and Land

From: Brodie Lockard, Founder, 350Hawaii.org

Date: Wednesday, January 30, 2020, 1:15 pm

In strong support of SB 2440

Dear Chair Kahele, Vice Chair Keith-Agaran, and members:

350Hawaii.org strongly supports SB 2440.

Trees bring a plethora of good: animal habitat, beauty, erosion abatement, urban cooling, shade.

They are also a tremendous good in the Climate Crisis fight that is killing everything that lives on our planet.

We must remove vast amounts of carbon from the atmosphere to address the Climate Crisis. Cutting emissions is clearly no longer sufficient. Artificial carbon capture is very expensive, and doesn't work well yet; trees do far better, cost less, absorb carbon anywhere they grow, are simple to plant, require almost no maintenance, and last many decades.

Last year, 3,500 square miles of forest burned in Brazil. 19,000 square miles of brush burned in Australia. These trees must be replaced. We in Hawaii can help a little.

SB 2440 will help a little. Please pass it.

Brodie Lockard Founder, 350Hawaii.org

Submitted on: 1/27/2020 8:44:55 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Devyn	Testifying for 350 Hawaii	Support	No

Comments:

To: The Senate Committee on Water and Land From: Devyn Date: Wednesday, January 30, 2020, 1:15 pm

In strong support of SB 2440

Dear Chair Kahele, Vice Chair Keith-Agaran, and members:

I strongly support SB 2440.

Trees are an invaluable tool in our fight to decrease the atmospheric CO2 that is baking our planet.

It becomes increasingly clear that deliberately removing large amounts of carbon from the atmosphere will be a necessary part of addressing the Climate Crisis. Technological solutions to achieve this are immature and very expensive; trees require no design, engineering, testing or construction.

Trees are effective carbon sinks wherever they grow. Trees planted in Hawaii offset the carbon that pervades the world, for many decades.

The 3,500 square miles of forest burned last year in Brazil and 19,000 burned in Australia have made the need for afforestation more urgent than ever.

Trees are relatively inexpensive and simple to plant. After a few years, they require virtually no maintenance.

Trees provide myriad additional benefits: urban cooling, shade, beauty, erosion abatement, and animal habitat.

SB 2440 offers all of these merits. Please pass it.

Devyn

<u>SB-2440</u> Submitted on: 1/27/2020 7:17:20 AM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
laurel brier	Testifying for Apollo Kauai	Support	No

Comments:

In the name of fighting the Climate Crisis we must support efforts such as this to sequester carbon.

Thank you,

Laurel Brier

for Apollo Kauai - Alternative Energy grassroots organization since 2004

Submitted on: 1/26/2020 10:16:56 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Zoe Malia Ozoa Loos	Individual	Support	No

Comments:

Anything and everything needs to be done in order to take protect our aina, our keiki, our community during the climate crisis. We must do what it takes, we must lead the way as an island nation that will deal with more problems than the mainland. Problems that only an island nation will have to deal with. There should be no reason for me or anyone to convince legislators to enact laws that will fight to protect the land and do what needs to be done in order to help alleviate and reverse what is happening in our Aloha State. Without the land how do we expect to survive? It is our duty to protect the land, to honor her, to nourish her in her own right and for our own survival.

Mahalo for all the work you have been doing and will be doing, I full-heartedly support all legislation that will work towards climate justice.

<u>SB-2440</u> Submitted on: 1/26/2020 10:19:04 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
John Nix	Individual	Support	No

Comments:

A;oha all,

Please support SB2440 and lead us into the future away from toxic exposure and away from a dying planet. Support increasing good paying jobs and let us all benefit from doing the right thing,

Mahalo,

Dr. John and Debra Nix

Kihei

Submitted on: 1/27/2020 5:58:57 AM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Randy Ching	Individual	Support	No

Comments:

Aloha Chair Kahele, Vice Chair Keith-Agaran and members of the committee,

I support SB 2440. We need to plant trees everywhere -- urban, suburban, rural, conservation, ag lands. Funding is critical -- especially for DOFAW's nurseries. Kaulunani Project would benefit greatly with a permanent community liaison position.

My current job involves planting trees and maintaining them. Trees do many wonderful things, and the #1 thing they do in this climate emergency that we find ourselves in, is to sequester carbon. So SB 2440 would help in this effort.

I have talked to many tree planting individuals and organizations. Many have indicated that there is a scarcity of native trees in DOFAW's nurseries. Funding another position would help the State to grow more native trees. Or even non-native trees (if that is what's needed).

Please pass SB 2440. It is a small but important step in mitigating the effects of the climate emergency. Mahalo for the opportunity to testify.

Randy Ching (concerned citizen)

Honolulu (makikirandy@yahoo.com)

<u>SB-2440</u> Submitted on: 1/27/2020 4:33:31 AM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Nanea Lo	Individual	Support	No

Comments:

Hello,

My name is Nanea Lo and I am a lifelong resident and kanaka maoli (Native Hawaiian) of this land. I am writing to say I fully support this bill and I'm asking for you all to do the same.

Me ke aloha 'Ä• ina,

Nanea Lo

<u>SB-2440</u> Submitted on: 1/27/2020 9:04:19 AM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Peg Sullivan-Miller	Individual	Support	No

Submitted on: 1/27/2020 11:12:49 AM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
janice palma-glennie	Individual	Support	No

Comments:

aloha,

As a landscape designer based in Kona for over 35 years, i support Bill 2440.

This bill will help insure that our communities have cleaner, cooler air while making them more beautiful and less prone to the ravages of global warming.

Please suppoert this bill.

mahalo and sincerely,

janice palma-glennie

<u>SB-2440</u> Submitted on: 1/27/2020 1:48:29 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jonathan Boyne	Individual	Support	No

Comments:

I support SB2440.

<u>SB-2440</u> Submitted on: 1/27/2020 2:58:51 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Charles K. Burrows	Individual	Support	No

<u>SB-2440</u> Submitted on: 1/27/2020 3:54:09 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
anne zellinger	Individual	Support	No

Comments:

Trees provide beauty, shade and are an integral part of our water cycle and ecosystem. State promotion of this benefits all. It is a win win proposition.

<u>SB-2440</u> Submitted on: 1/27/2020 6:29:30 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Caroline Kunitake	Individual	Support	No

Comments:

Please support SB2440.

Mahalo,

Caroline Kunitake

<u>SB-2440</u> Submitted on: 1/27/2020 9:10:44 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
John Grandinetti	Individual	Support	No

Submitted on: 1/27/2020 8:53:30 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Bradford Baang	Individual	Support	No

Comments:

To: The Senate Committee on Water and Land From: Brad Baang, Waianae, HI 96792 Date: Wednesday, January 30, 2020, 1:15 pm

In strong support of SB 2440

Dear Chair Kahele, Vice Chair Keith-Agaran, and members:

I strongly support SB 2440.

In addition, we should be planting fruit and vegetable trees in every neighborhood's little open land along residential sidewalk ways. Much wasted land around neighborhoods without trees and organic foods. This is why I fiercely support this bill.

* Trees are an invaluable tool in our fight to decrease the atmospheric CO2 that is baking our planet.

* It becomes increasingly clear that deliberately removing large amounts of carbon from the atmosphere will be a necessary part of addressing the Climate Crisis. Technological solutions to achieve this are immature and very expensive; trees require no design, engineering, testing or construction.

* Trees are effective carbon sinks wherever they grow. Trees planted in Hawaii offset the carbon that pervades the world, for many decades.

* The thousands of square miles of forest burned last year in both Brazil and Australia have made the need for afforestation more urgent than ever.

* Trees are relatively inexpensive and simple to plant. After a few years, they require virtually no maintenance.

* Trees provide myriad additional benefits: FOOD, urban cooling, shade, beauty, erosion abatement, and animal habitat.

I look forward to Senate support of this bill.

Mahalo,

Brad Baang, Waianae, HI 96792

<u>SB-2440</u> Submitted on: 1/27/2020 7:22:02 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Koohan Paik	Individual	Support	No

Submitted on: 1/27/2020 8:09:34 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Robert Edmondson	Individual	Support	No

Comments:

Aloha,

In teaching Hawaii's youth for over 40 years I hoped to prepare them for a bright future here.

Now we must all help insure Hawaii's future water supply and climate by replanting Hawaii's forests.

This Bill is one step we all must take now to insure a better future.

Mahalo, Rob Edmondson

<u>SB-2440</u> Submitted on: 1/27/2020 8:27:16 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Carolynn Bell-Tuttle	Individual	Support	No

<u>SB-2440</u> Submitted on: 1/27/2020 8:42:26 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
John NAYLOR	Individual	Support	No

<u>SB-2440</u> Submitted on: 1/27/2020 7:15:01 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Matthew Geyer	Individual	Support	No

Comments:

Planting trees is one of the best ways to fight against climate change other than reducing fossil fuel usage. Please help make the world a livable place for our children and grand children.

<u>SB-2440</u> Submitted on: 1/28/2020 10:15:33 AM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Hattie Gerrish	Individual	Support	No

Submitted on: 1/28/2020 10:27:56 AM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
donald erway	Individual	Support	No

Comments:

The GEMS program was a great idea for offering accessible, affordable, cost-effective green infrastructure financing options to customers. The building energy efficiency revolving loan fund went far in helping low-income residents borrow from the State to make energy efficiency improvements to buildings. But they've had limits.

- * These programs suffered from inefficient bond financing.
- * Because it's expended annually, a revolving loan fund will improve these flaws.

<u>SB-2440</u> Submitted on: 1/28/2020 10:35:30 AM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Nako'olani Warrington	Individual	Support	No

Comments:

Please SUPPORT and PASS SB 2440.

Mahalo nui for this important bill!

<u>SB-2440</u> Submitted on: 1/28/2020 11:29:53 AM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Springer Kaye	Individual	Support	No

<u>SB-2440</u> Submitted on: 1/28/2020 11:39:18 AM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Barbara Hershey	Individual	Support	No

<u>SB-2440</u> Submitted on: 1/28/2020 11:51:19 AM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Mark K.Wilson III	Individual	Support	No

Submitted on: 1/28/2020 1:05:28 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Jason Shon	Individual	Support	No

Comments:

Aloha Chair Kahele, Vice Chair Keith-Agaran, and members of the Committee,

I support this bill because I think our state should do more to plant native trees. As a resident of Moiliili, I often walk by barren patches of grass along the HI on my way to work. When driving around the island I also consistently see open spaces along highways and in other urban pockets that could benefit from trees. Increasing our urban canopy cools the air, sequesters carbon, and makes communities more attractive. Planting native trees and other culturally appropriate flora helps to foster an appreciation and awareness of plant species unique to Hawaii.

Although the City and County of Honolulu recently set a goal of increasing its urban canopy, I can't say I have noticed a difference. I would like to see more urgency and committment by local and state government to achieve this goal.

Thank you for your consideration.



<u>SB-2440</u> Submitted on: 1/28/2020 1:41:28 PM Testimony for WTL on 1/29/2020 1:15:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Julia	Individual	Support	No

Comments:

Reaching carbon nuetrality is important for the future of Hawai'i and the world. Supporting tree planting programs is one way to achieve that.



Submitted By	Organization	Testifier Position	Present at Hearing
Mark A. Koppel	Individual	Support	No

Comments:

COULD ANYONE not WANT TO PROTECT THE ENVIRONMENT?

AND NO CHOPPING DOWN TREES. (HU HONUA). THAT DAMAGES THE ENVIRONMENT.

Submitted on: 1/28/2020 10:19:02 PM Testimony for WTL on 1/29/2020 1:15:00 PM



Submitted By	Organization	Testifier Position	Present at Hearing
Phaethon Keeney	Individual	Support	No

Comments:

To: The Senate Committee on Water and Land From: Phaethon Keeney Date: Wednesday, January 30, 2020, 1:15 pm

In strong support of SB 2440

Dear Chair Kahele, Vice Chair Keith-Agaran, and members:

I strongly support SB 2440.

Natural Climate Solutions, like trees, are the only cost effective and proven technology we have to remove greenhouse gasses from our atmosphere, and come with a myriad of benefits from biodiversity protection and stabilization to water drawdown and purification to food, medicine and materials resources to erosion control and reef protection and so much more. We need trees, lots more of them, and fast, reducing our energy demands and dependence on fossil fuels will not be enough to avert Climate Collapse, we need to get planting.

The Kaulunani Community Tree planting program is the best tool we have towards bringing together the best of both public and private lands available for planting and community stewardship and quality time for all. Planting trees is far too undervalued, for so many reasons, why not see our taxpayers dollars go to the best use possible, especially during this Climate Bottleneck over the next decade? I say fund the Kaulunani Tree planting program plus some, use this bill to expand the program and create community coordinators in every town (preferably with a Cultural component recognizing Hawaiian practitioners and traditions of stewardship). Lets get planting to the maximum capacity we can. The community wants to, for so many reasons, but the most urgent reason is that we are here now, in the decade between 2030 and 2040, the last chance to stabilize our planet's climate.

Consider, Hawaii, due to see the greatest number and cumulative severity of impacts of Climate Change of any State in the Nation, needs serous Climate targets in line with a livable planet. The UN IPCC gives us 10 years to reduce global emissions by 50%

(100% in Energy & Transport by 2030 is easiest) to hold to the Paris targets of 1.5C, including reliance on ambitious programs of drawdown of existing atmospheric greenhouse gases (some folks propose with expensive and unproven technology, some folks turn to trees). While 1C above preindustrial levels is showing extreme impacts already, 1.5C is a best case scenario that threatens governmental collapse and unlivable heat index in some equatorial areas of the globe, while 2C has been called "unconcionable" for people and planet. 2C is a likely "tipping point" towards a "Hothouse Earth" beyond human control. On our current trajectory we will likely be at 1.5 C in the 2030's and 2C in the 2040's (see IPCC report on 1.5C) as we fly past these targets on the redline "worst case scenario" despite ambitions towards a 4C (and more likely above, current modeling indicates 7C) future by the end of the century. The IPCC redline is not factoring in Earth System tipping points given likely at 2C, please see the 2018 PNAS paper "Trajectories of the Earth System in the Anthropocene," pretty much the the scariest science paper ever written. Please do the right thing and act quickly. We need to reduce our energy demands and move to 100% clean energy, AND plant trees, lots of them, and our increased ambition will encourage others. Help us be the seeds of change, support the Kaulunani Tree planting program and all other tree planting programs for Hawaii, you won't regret it, mahalo!

Sincerely,

Phaethon Keeney

Honokaa Hawaii