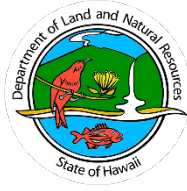


JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

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  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
LAURA H.E. KAAKUA  
FIRST DEPUTY  
M. KALEO MANUEL  
DEPUTY DIRECTOR - WATER  
AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES  
ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

Testimony of  
DAWN N. S. CHANG  
Chairperson

Before the House Committee on  
EDUCATION

Thursday, February 9, 2023  
2:30 PM  
State Capitol, Conference Room 309

In consideration of  
HOUSE BILL 332  
RELATING TO THE DEPARTMENT OF EDUCATION

House Bill 332 establishes the Shade and Fruit Tree Program in the Department of Education (DOE) to support educational activities and encourage propagation of native shade trees and fruit trees for planting in department schools and appropriates funds for the program and to establish an arborist position. **The Department of Land and Natural Resources (Department) strongly supports this measure.**

In addition to a full-time arborist to increase the capacity of DOE to manage the existing and new trees, the Department suggests recurring funds to support an ongoing program of planting and maintenance of DOE trees. Trees are infrastructure and require ongoing management and maintenance to maximize their benefit. Well-managed trees have a cost associated with proper care and maintenance, but generally provide a 3:1 return on investment through the services they provide (e.g., cooling buildings, absorbing storm water, filtering air and water, providing a rich learning environment). Since the 1990s, the Department's Division of Forestry and Wildlife's Kaulunani Urban and Community Forestry Program has supported DOE schools with grants to green their campuses. A recent review of DOE grant recipients revealed that the strong efforts by individual principals, teachers, and students to plant and grow shade and fruit trees needs institutionalized support in order to be sustainable. Trees require long term care to yield all their potential benefits.

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



STATE OF HAWAII  
DEPARTMENT OF EDUCATION  
KA 'OIHANA HO'ONA'AUAO  
P.O. BOX 2360  
HONOLULU, HAWAII 96804

**Date:** 02/09/2023

**Time:** 02:30 PM

**Location:** 309 VIA VIDEOCONFERENCE

**Committee:** House Education

**Department:** Education

**Person Testifying:** Keith T. Hayashi, Superintendent of Education

**Title of Bill:** HB 0332 RELATING TO THE DEPARTMENT OF EDUCATION.

**Purpose of Bill:** Establishes the shade and fruit tree program beginning on 1/1/2024 in the department of education to support educational activities and encourage propagation of native shade trees and fruit trees for planting in department schools. Appropriates funds for the program and to establish an arborist position.

**Department's Position:**

The Hawaii State Department of Education (Department) respectfully provides comments on HB 332.

The Department recognizes the importance of trees and the benefits that they provide and appreciates the arborist position provided in the bill. An additional full-time arborist would provide much needed support to manage the Department's existing tree responsibilities, including removing the overgrowth of weed vegetation in undeveloped areas, streams, and other challenging terrains on Department property. Maintaining these challenging areas has been an issue for decades and remains a severely under-resourced maintenance need. Pursuant to Act 116, Session Laws of Hawaii 2019, public schools can no longer use their funds to maintain these problematic areas.

Fruit trees may be problematic in other ways such as:

1. Pruning and other aspects of maintenance for fruit and other agricultural trees are specialized and the Department's existing contracts and contractors don't include those types of specifications;
2. Fruit trees may require chemical pest control, which the Department generally doesn't allow on campus;
3. Fruit trees require specialized climate, soil testing, irrigation, and other needs that

- involve higher costs than typical shade trees;
4. Fruit trees may be subject to the Department of Agriculture's rules and regulations;
  5. Fruit trees may attract unwanted pests and people trespassing to pick the fruits; and
  6. The Department may be liable for the consumption (or perceived consumption) of any fruits grown on campus.

The Department recognizes the educational and cultural importance of the propagation of native trees and fruit trees. These trees may or may not be conducive to existing agriculture or natural resources programs at all schools. Since schools determine program focus areas, this bill may unintentionally disrupt current learning and successfully established programs.

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



Written Testimony before the

HOUSE COMMITTEE ON EDUCATION

Thursday, February 9, 2023

2:30 pm Conference Room 309

**RE: HB332 RELATING TO THE DEPARTMENT OF EDUCATION**

Chair Woodson, Vice Chair Marten, Members of the House Committee on Education:

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 strongly support the above-referenced Bill, which establishes (and funds!) the shade and fruit tree program beginning in the DOE to support educational activities and encourage propagation of native shade trees and fruit trees for planting in public schools.

This Bill's preamble does a terrific job in making the case for trees and specifically for trees in our schools. It links the actions to student learning. We also appreciate the Bill's effort to involve students in ongoing care of trees. The end result is a trifecta of positivity: good for Hawai'i's environment; great for students; and a nature-based solution to help ameliorate the impact of climate change. TFHF has done work in this space and with various schools and would be happy to be involved when, and as, appropriate.

We urge this Committee to pass the Bill and send it to the Committee on Finance for further review and action.

Mahalo,

Daniel Dinell, President

**HONOLULU is HOT TREES are COOL**

Visit us: [www.TreesForHonolulu.org](http://www.TreesForHonolulu.org) Contact us: [info@TreesForHonolulu.org](mailto:info@TreesForHonolulu.org) Voice/Fax/Text: 808-707-6353

P.O. Box 12051, Honolulu, Hawaii 96828



To: The House Committee on Education (EDN)  
From: Sherry Pollack, Co-Founder, 350Hawaii.org  
Date: Thursday, February 9, 2023, 2:30 pm

### **In strong support of HB332**

Aloha Chair Woodson, Vice Chair Marten, and members of the EDN Committee,

I am Co-Founder of the Hawaii chapter of 350.org, the largest international organization dedicated to fighting climate change. 350Hawaii **strongly support HB332** which establishes the shade and fruit tree program in the department of education to support educational activities and encourage propagation of native shade trees and fruit trees for planting in department schools.

As more and more we face the impacts of climate change, including hotter temperatures, it is important to plan and implement actions that will help mitigate these harmful effects. One such effective measure will be to increase tree canopies, particularly in urban areas and on school campuses.

HB332 will have multiple benefits, including lowering the temperature on campuses through shade, contributing to clean air, and campus beautification. Trees also play an essential role both in mitigating climate-warming greenhouse gases, as well as supporting and improving the quality of life in our living spaces. Moreover, planting trees, especially fruit trees, on campuses can provide generations of students with environmental education opportunities and a source of organic fruit.

Students need to be able to play, gather, and learn outside while attending school. Trees, especially fruit trees, contribute to healthier and more beautiful campuses and communities. Efforts to reduce our environmental footprint and improve quality of life are a win-win for everyone and need to be supported.

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

Sherry Pollack  
Co-Founder, 350Hawaii.org

**HB-332**

Submitted on: 2/8/2023 3:54:32 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Wai Lee	Smart Trees Pacific	Support	Written Testimony Only

Comments:

Smart Trees Pacific, a local tree non-profit, fully supports HB332.

In partnership with Trees For Honolulu's Future, we are working with Aiea Intermediate School to address the heat island problem at the school. At 6% tree canopy, the school bakes from 10 am to 4 pm. AIS is not alone.

Sincerely

Wai

**HB-332**

Submitted on: 2/6/2023 8:59:27 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
heidi kreul	Individual	Support	Written Testimony Only

Comments:

Aloha,

I'd to support HB332. Adding additional arborists to the DOE, to support the growing of fruit and native trees in public schools.

mahslo nui loa,

Heidi

**HB-332**

Submitted on: 2/6/2023 9:24:15 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Greg Thielen	Individual	Support	Written Testimony Only

Comments:

Planting trees is the most pragmatic and common sense thing our local government can do to combat climate change.



**HB-332**

Submitted on: 2/6/2023 10:03:54 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Laurie Baron	Individual	Support	Written Testimony Only

Comments:

Aloha kākou,

I'm writing in support of this bill to provide funding for the DOE to propagate and grow native shade trees and fruit trees in our schools, and for funds another arborist to help get this done.

Thank you,

Laurie Baron

Kāne'ohē

the department of education to support educational activities and encourage propagation of native shade trees and fruit trees for planting in department schools. Appropriates funds for the program and to establish an arborist position.

**HB-332**

Submitted on: 2/6/2023 11:45:09 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Eileen Nelson	Individual	Support	Written Testimony Only

Comments:

I support this Bill for our schools. Temperatures under shade trees can up to 25°F cooler than temperatures above surrounding asphalt. Invest in our Keiki.

**HB-332**

Submitted on: 2/7/2023 6:13:08 AM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Raelyn Reyno Yeomans	Individual	Support	Written Testimony Only

Comments:

Strong support of HB332.

**HB-332**

Submitted on: 2/7/2023 8:07:26 AM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Ann Medeiros	Individual	Support	Written Testimony Only

Comments:

This is an excellent idea. I fully support it. Mahalo, Ann Medeiros

**HB-332**

Submitted on: 2/7/2023 8:38:08 AM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Shelli McCelvey	Individual	Support	Written Testimony Only

Comments:

I support this bill.

**HB-332**

Submitted on: 2/7/2023 9:07:41 AM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
James F Moonier	Individual	Support	Written Testimony Only

Comments:

I fully support this bill.

**HB-332**

Submitted on: 2/7/2023 9:23:18 AM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Jesse Mikasobe-Kealiinohomoku	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Woodson and Vice Chair Marten,

Im submitting written testimony to share that I SUPPORT HB332 which speaks towards advancing educational access towards both culturally relavant learning material and outdoor learning spaces. How do we expect our children, our haumana to aloha aina if we do not invest in bills that will provide such access for them to obtain these hands on learning experiences. How do we build the next generation to care about land/environment if they are not provided the learning stream. These are just some of the questions is of expected for both the House and Senate to answer.

Mahalo for your time taken to read my testimony,

Jesse Mikasobe-Kealiinohomoku

**HB-332**

Submitted on: 2/7/2023 1:00:36 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
David Smith	Individual	Support	Written Testimony Only

Comments:

I support a full-time arborist to increase the capacity of the Department of Education (DOE) to manage the existing and new trees. Trees require ongoing management and maintenance to maximize their benefit. Well-managed trees have a cost associated with proper care and maintenance, but generally provide a 3:1 return on investment through the services they provide (e.g., cooling buildings, absorbing storm water, filtering air and water, providing a rich learning environment).



**HB-332**

Submitted on: 2/7/2023 7:52:14 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Tracy Doane	Individual	Support	Written Testimony Only

Comments:

Aloha, I am a 33 year veteran teacher with the DOE. I teach 2nd grade at Kailua Elementary School. Every fall we have such hot rooms it is difficult to concentrate. Having more trees to cool out campus would be very welcomed. I have also tried to grow fruit trees on campus to give my students a farm to table snack option. With the rules currently in place it's been impossible to grow them. I would be 100% responsible for taking care of them even on breaks including summers. Eventually my young plants and donated trees would die. It's been heartbreaking. With this bill hopefully I will be able to see more shade trees and fruit trees on my campus before I retire. I would love that.

Mahalo

**HB-332**

Submitted on: 2/8/2023 10:38:33 AM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Marcy Fleming	Individual	Support	Written Testimony Only

Comments:

This is an important and simple step to offset ongoing temperature rise and the negative impact it has on our schools. The addition of appropriate trees on our school campuses will facilitate teaching on native plants and tress.

**HB-332**

Submitted on: 2/8/2023 1:05:13 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Jody M Green	Individual	Support	Written Testimony Only

Comments:

Please pass this important bill for the planet and the keiki.

Mahalo

**HB-332**

Submitted on: 2/8/2023 4:05:29 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
JOHN KNOX	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Woodson, Vice Chair Marten, Members of the House Committee on Education --

I am John Knox of Waimanalo, testifying in support of HB332. Scientists and public health officials tell us projected rises in heat waves due to climate change are particularly likely to cause heat strokes or other damage to the elderly and to children. We thus need additional shade canopy on our streets, parks, and most definitely our school playgrounds. HB332 would help achieve the latter. Please support it, and move it forward to Finance Committee for adequate funding.

Thank you for the opportunity to submit this testimony.

**HB-332**

Submitted on: 2/8/2023 4:28:05 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Caroline L Mackenzie	Individual	Support	Written Testimony Only

Comments:

Please- more trees and definitely more arborists are required. I have tried to have the city/county prune my city planting strip trees for light, air and health. Never an answer. PLEASE - HEALTHY trees are important for shade, for green, for reduction of greenhouse gases, for beauty.

**HB-332**

Submitted on: 2/8/2023 6:24:05 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Tom Dinell	Individual	Support	Written Testimony Only

Comments:

I strongly support HB332 Cooling classrooms and school campuses is critical and trees are the best way to do it. Further, trees serve multiple good purposes. Adopt HB332.

**HB-332**

Submitted on: 2/8/2023 6:37:36 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Francisco Acoba	Individual	Support	Written Testimony Only

Comments:

It's important that students learn the various benefits that trees provide, such as sequestering carbon, cleaning the air, and avoiding stormwater runoff. Planting more of them on campus will give students first-hand experience to learn these benefits, making their school a living laboratory.

**HB-332**

Submitted on: 2/8/2023 9:02:10 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Jun Look	Individual	Support	Written Testimony Only

Comments:

Planting Trees on School campuses has been around for a long time. Comman sense for many years noted that trees made the campus environment cool and welcoming. And shade trees were important for playing areas during the hot days.

This bill formalizes this comman sense practice. I support hb 332

Mahalo.



**HB-332**

Submitted on: 2/8/2023 10:49:49 PM

Testimony for EDN on 2/9/2023 2:30:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Olivia Poblacion	Individual	Support	Written Testimony Only

Comments:

Trees provide an enormous amount of environmental, social and economic benefits to communities. At schools they can:

- give shade to playgrounds
- lower temperatures of classrooms and learning spaces
- improve air quality
- block wind and reduce noise from traffic, etc.
- reduce flooding and erosion
- grow nourishing foods for keiki to eat
- provide learning opportunities about ecosystems, plant biology, agriculture, climate change, cultural practices, etc.
- be a calming presence and source of beauty on campus

As a citizen forester volunteer and mother of young keiki in Honolulu (where there are areas of dangerously low canopy causing urban heat islands), I am strongly strongly in favor of this bill!