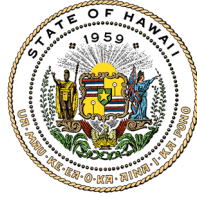


JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

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  
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RYAN K.P. KANAKA'OLE  
FIRST DEPUTY  
CIARA W.K. KAHAHANE  
DEPUTY DIRECTOR - WATER  
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FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

Testimony of  
RYAN K.P. KANAKA'OLE  
Acting Chairperson

Before the House Committee on  
WATER AND LAND

Tuesday, March 31, 2026  
10:00 AM  
State Capitol, Conference Room 411

In consideration of  
HOUSE CONCURRENT RESOLUTION 91  
and  
HOUSE RESOLUTION 83  
RELATING TO TREE CANOPY COVERAGE ACROSS PUBLIC SCHOOLS  
STATEWIDE

House Concurrent Resolution 91 and House Resolution 83 call on the Department of Land and Natural Resources to work with the Department of Education to create a formal, long-term program to increase and maintain tree canopy coverage across public schools statewide. **The Department of Land and Natural Resources (Department) strongly supports these resolutions.**

Hawai'i is already facing rising temperatures that impact student health, safety, and learning environments. Many school campuses lack enough tree canopy. The need to expand urban tree canopy, especially in underserved and Title I school communities, is a climate adaptation priority.

Urban and community forestry is a proven, nature-based solution that provides multiple co-benefits. Trees lower ambient temperatures through shade and evapotranspiration, helping to reduce the urban heat island effect. They improve air quality, decrease stormwater runoff, sequester carbon, and boost the overall health and livability of school environments. These ecosystem services directly support the State's broader climate resilience goals and commitment to a more sustainable future.

Tree canopies and healthy soils are vital for managing Hawai'i's increasingly intense rainfall. Trees catch rainwater in their canopies, slowing down how quickly it reaches the ground. Roots and soil microorganisms enhance water absorption and storage in the soil, thereby reducing

surface runoff. These actions help prevent localized flooding and reduce strain on drainage systems, especially on school campuses with many impervious surfaces.

School-based tree planting initiatives offer valuable educational opportunities. As highlighted in these resolutions, Department of Education campuses already host agricultural and natural resource programs where students can participate in tree propagation, planting, and long-term stewardship. Expanding the tree canopy on school grounds not only improves physical conditions but also enhances environmental literacy, workforce development pathways, and connections to 'āina.

The Department's Kaulunani Urban and Community Forestry Program has demonstrated the success of these partnerships through two pilot projects supported by federal grants. Through the 2025 Memorandum of Agreement with the Department of Education, the Shade Trees for Schools initiative has expanded access to cooling shade across campuses, while the Fruit Trees for Schools pilot program has integrated food production and hands-on learning opportunities. These efforts have shown strong demand, measurable benefits, and enthusiastic participation from schools and communities, but they have largely depended on short-term funding sources.

These resolutions offer an important opportunity to move from pilot efforts to a coordinated, long-term program. Building a sustained partnership between the Department and the Department of Education will enable strategic planning, fair distribution of resources, and consistent maintenance of the urban tree canopy over time. The Department strongly supports including provisions for long-term maintenance, suitable species selection, and site planning to ensure that investments produce lasting climate, health, and educational benefits.

The Department also endorses increasing capacity through dedicated staffing. Running and sustaining a statewide program of this scope will require technical skills, coordination, and a long-term commitment. Investing in these roles will help ensure the program's success and ongoing viability. Both the Department and Department of Education need supporting positions.

Finally, this measure closely aligns with the mission of the Kaulunani Urban and Community Forestry Program, which aims to support Hawai'i's communities in fostering wellbeing and resilience through trees and forests. Expanding the tree canopy across public schools is an investment in our keiki, our communities, and the long-term health of our islands.

For these reasons, the Department of Land and Natural Resources strongly backs these resolutions and respectfully encourages their adoption.

Mahalo for the opportunity to testify 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:** 03/31/2026

**Time:** 10:00 AM

**Location:** 411 VIA VIDEOCONFERENCE

**Committee:** WAL

**Department:** Education

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

**Title of Bill:** HCR91, REQUESTING THE DEPARTMENT OF LAND AND NATURAL RESOURCES AND DEPARTMENT OF EDUCATION TO COLLABORATE TO ESTABLISH A FORMAL, LONG-TERM COLLABORATIVE PROGRAM TO EXPAND, EQUITABLY DISTRIBUTE, AND SUSTAIN TREE-CANOPY COVERAGE ACROSS PUBLIC SCHOOLS STATE WIDE.

**Purpose of Bill:** Requesting The Department Of Land And Natural Resources And Department Of Education To Collaborate To Establish A Formal, Long-term Collaborative Program To Expand, Equitably Distribute, And Sustain Tree-canopy Coverage Across Public Schools State Wide.

**Department's Position:**

The Hawaii State Department of Education (Department) would like to provide comments on HCR 91 for the committee's consideration.

The Department recognizes the importance of increasing tree canopies on public school grounds. The propagation and care of trees on public school grounds provide a variety of educational opportunities including learning about the tree propagation cycle, the vital role that trees play in the overall environment, and cultural uses of indigenous trees. In addition to the educational opportunities that trees provide, many public school grounds would benefit from an increase in the tree canopy coverage specifically during outdoor educational activities.

The Department believes that the establishment of a formal, long-term collaborative program with the Department of Land and Natural Resources would create a pathway to further strengthen the ongoing collaboration on projects such as the Shade Trees for Schools initiative.

Also, the selection of tree species and the location on public school grounds where trees are planted are critical factors in determining the long-term viability of a tree. The selection of tree species is important because if the wrong one is selected, it can pose a safety risk over time as the tree grows larger. This will prevent schools from using areas on their campus due to the risk of falling branches. The location of where the

tree is planted is equally important. In addition to locations that would ensure durable climate, health, and educational benefits, trees should not be planted on or near underground utilities, and areas where there would be cause for community concerns.

The Department is concerned about the long-term maintenance of the trees that would be added to the existing tree inventory as well as the creation of staff positions to implement and sustain the work of this collaborative program. In order to implement this resolution, the Department would need funding for staff positions and operating funds for tree maintenance and care.

Thank you for the opportunity to provide comments on HCR 91.



## HIPHI Board

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Hawaiian Research Office

Danette Wong Tomiyasu, MBA  
Retired, Hawai'i State Department of  
Health

## HIPHI Initiatives

Coalition for a  
Tobacco-Free Hawai'i

Community-Based Research &  
Evaluation

Community Health  
Worker Initiatives

Environmental Health

Hawai'i Climate Change and Health  
Working Group

Hawai'i Drug & Alcohol-Free Coalitions

Hawai'i Immunization Coalition

Hawai'i Oral Health Coalition

Hawai'i Public Health Training Hui

Healthy Eating + Active Living

Kūpuna Collective/Healthy Aging &  
Community Living

Public Health Workforce Development

Date: March 29, 2026

To: Rep. Mark J. Hashem, Chair  
Rep. Dee Morikawa, Vice Chair  
Members of the House Committee on Water and Land

Re: Support for HCR 91/HR 83, Requesting The Department Of Land And Natural Resources And Department Of Education To Collaborate To Establish A Long-term Collaborative Program To Equitably Distribute And Sustain Tree-Canopy Coverage Across Public Schools State Wide

Hrg: March 31, 2026, 10:00 AM, Conference Room 411

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Hawai'i Public Health Institute (HIPHI)<sup>1</sup> and the Healthy Eating, Active Living (HEAL)<sup>2</sup> are in **support of HCR 91/HR 83**, which requests DLNR and the DOE to expand tree canopies at public schools across the state.

### A Warming Environment and Student Health

Hawai'i is experiencing hotter days and nights, and many school campuses, particularly those with large areas of asphalt, limited tree cover, and older infrastructure, are increasingly affected by heat. School grounds often include large paved areas such as parking lots, walkways, and play courts that absorb and retain heat throughout the day, creating hot environments for students and staff.<sup>3</sup>

Heat exposure is not just a comfort issue. It is a public health issue. Excessive heat can lead to dehydration, heat exhaustion, decreased concentration, reduced physical activity, and increased health risks, especially for keiki, kūpuna, and individuals with underlying health conditions. On school campuses, heat can affect classroom learning, recess and physical education participation, and after-school activities.<sup>4</sup> Expanding tree canopy and shade on school campuses helps reduce heat exposure for students and educators, while improving the overall school environment.

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<sup>1</sup> Hawai'i Public Health Institute's mission is to advance health and wellness for the people and islands of Hawai'i. We do this through expanding our understanding of what creates health of people and place, fostering partnerships, and cultivating programs to improve policies, systems, and the environments where people live, learn, work, age, and play.

<sup>2</sup> The Healthy Eating + Active Living (HEAL) Coalition, formerly known as the Obesity Prevention Task Force, was created by the legislature in 2012 and is comprised of over 60 statewide organizations. The HEAL Coalition works to make recommendations to reshape Hawai'i's school, work, community, and health care environments, making healthier lifestyles obtainable for all Hawai'i residents.

<sup>3</sup> "[Protecting Californians with Heat-Resilient Schools](#)," UCLA Luskin Center for Innovation, Policy Brief, May 2023.

<sup>4</sup> "[How to Save Outdoor Recess](#)," Hana Kiros, The Atlantic, September 2024.

### **Natural Cooling and Active Living**

From a public health and built environment perspective, shaded outdoor environments encourage physical activity by making it more comfortable to walk, play, and participate in outdoor activities. When school campuses have shaded walkways, playgrounds, and gathering areas, students are more likely to be active during recess and before and after school, which supports physical health, mental well-being, and academic performance.<sup>5</sup>

Shade trees can significantly reduce surface temperatures on asphalt and playground areas and create more comfortable outdoor learning environments. In addition to cooling, trees improve air quality, reduce glare, provide stormwater benefits, and improve the overall appearance and livability of school campuses.

### **Schools as Community Climate Infrastructure**

School campuses are important community spaces. They are places where children learn, play, eat, and socialize, and they often serve as gathering places, emergency shelters, and community hubs. Investing in shade trees and tree canopy on school campuses therefore provides benefits not only for students and teachers but for entire communities.

Tree canopy expansion should be viewed as climate resilience and public health infrastructure, not simply landscaping. Trees help reduce urban heat islands, lower surface temperatures, improve air quality, and make outdoor spaces more usable. On school campuses, these benefits translate directly into healthier learning environments and improved student well-being.<sup>6</sup>

### **Conclusion**

By affirming support for expanding shade trees on school campuses, this resolution encourages partnerships between the Department of Education, counties, community organizations, and environmental groups to increase tree canopy coverage where students learn and play every day. Increasing tree canopy coverage could reduce heat exposure and improve student health, and in a manner that uplifts natural solutions without overburdening the state's fiscal resources.

Mahalo,



Kris Coffield  
Policy and Advocacy Associate

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<sup>5</sup> [“Researchers Recommend Planting Trees to Increase Outdoor Play Among Kids”](#), Vinod Hopson, UTHealth Houston School of Public Health, April 2023.

<sup>6</sup> [“Urban Heat Zones’ Making Schools Even Hotter”](#), Calvin Macatantan, NEA Today, August 2025.

**HR-83**

Submitted on: 3/30/2026 8:21:11 AM

Testimony for WAL on 3/31/2026 10:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Jennifer Maydan	Kaulunani Urban & Community Forestry Advisory Council	Support	Written Testimony Only

Comments:

**Testimony of the Kaulunani Urban & Community Forestry Advisory Council  
In Strong Support of H.C.R. 91 and H.R. 83  
Relating to Tree Canopy on Public School Campuses**

**Chair and Members of the Committee:**

**The Kaulunani Urban & Community Forestry Advisory Council strongly supports House Concurrent Resolution 91 and House Resolution 83, which request the Department of Land and Natural Resources and the Department of Education to collaborate in establishing a formal, long-term program to expand, equitably distribute, and sustain tree canopy across public school campuses statewide.**

**The Kaulunani Advisory Council acts in an advisory capacity to the Kaulunani Urban & Community Forestry Program and the Division of Forestry and Wildlife within DLNR. The Council provides recommendations, direction, and strategic guidance for a range of community forestry initiatives, including reviewing grant applications, recommending approval for community projects, and advising on educational and outreach efforts.**

**The Council is composed of a diverse group of professionals representing a range of sectors and experience across all counties of Hawai'i. Members bring expertise in education, arboriculture, planning, conservation, and community development, with representation from county agencies, nonprofit organizations, and community-based initiatives across O'ahu, Hawai'i Island, Maui, and Kaua'i. This diversity provides a statewide perspective on both the challenges and opportunities of expanding urban tree canopy.**

**From this vantage point, the Council sees strong and growing demand for tree planting and stewardship on school campuses. Schools are among the most important and impactful places to invest in tree canopy. They serve as daily environments for keiki, gathering spaces for communities, and opportunities for hands-on education in environmental stewardship. The Council has been impressed with the pilot projects Kaulunani has led on Department of Education campuses and sees a strong need for a state-funded, institutionalized program to carry these efforts forward and scale them statewide.**

**However, canopy coverage across school campuses is uneven. Many campuses, particularly in areas with higher heat exposure, lack sufficient shade, contributing to hotter outdoor environments that can affect student health, comfort, and learning. At the same time, schools represent one of the most scalable and equitable opportunities to expand tree canopy statewide.**

**Establishing a formal, long-term collaboration between DLNR and the Department of Education is a critical step toward addressing this gap. A coordinated program can ensure that tree planting is not a one-time event, but a sustained engagement that is supported by planning, maintenance, and integration into school design and operations.**

**The Council emphasizes that success will depend on applying the principles of “right tree, right place, right care,” as well as investing in long-term stewardship. Trees on school campuses must be properly selected, sited, and maintained to provide lasting benefits while minimizing risk.**

**Expanding tree canopy on school grounds also provides broader benefits. Trees reduce heat, improve air quality, and create more comfortable outdoor learning environments. They also support stormwater management by increasing infiltration and reducing runoff, and contribute to protecting downstream coastal resources. These benefits reflect Hawai‘i’s long-standing understanding of resource management through connected systems from mauka to makai.**

**Importantly, school-based tree planting programs create opportunities for partnerships through engaging students, educators, families, and community organizations in the care and stewardship of trees. These efforts help build environmental awareness and workforce pathways while strengthening connections between schools and their surrounding communities.**

**The Kaulunani Advisory Council strongly supports the intent of H.C.R. 91 and H.R. 83 to institutionalize and expand these efforts through a coordinated, statewide approach. Establishing a formal program will help ensure that tree canopy expansion across school campuses is equitable, strategic, and sustained over time.**

**The Council stands ready to provide guidance and support to advance this work in partnership with DLNR, the Department of Education, and communities statewide.**

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

**Jennifer Maydan, Chair**

**(on behalf of the Kaulunani Urban & Community Forestry Advisory Council)**



Written Testimony before the House  
Committee on Water & Land

Tuesday, March 31, 2026 (10:00 am) Conference Room 411

**RE: HCR91/HR83 -- REQUESTING THE DEPARTMENT OF  
LAND AND NATURAL RESOURCES AND DEPARTMENT OF EDUCATION  
TO COLLABORATE TO ESTABLISH A FORMAL, LONG-TERM COLLABORATIVE  
PROGRAM TO EXPAND, EQUITABLY DISTRIBUTE, AND SUSTAIN TREE-CANOPY  
COVERAGE ACROSS PUBLIC SCHOOLS STATE WIDE.**

Chair Hashem, Vice Chair Morikawa and Members of the House Committee on Water & Land:

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

TFHF supports the above-referenced resolutions that request DLNR and DOE establish a formal, long-term collaborative program to focus on increasing tree canopy in Hawai'i's public schools.

The benefits of trees are well documented and reflected in several of the resolution's Whereas clauses. Trees provide shade and reduce temperatures through evapotranspiration. They help recharge groundwater, reduce stormwater runoff, and protect nearshore reefs. Trees also filter pollutants, store carbon, and create safer, calmer streets, plus improve educational outcomes!

**Trees take time to grow. They also require thoughtful planning -- selecting the right species, planting in the right place, and committing to long-term care. Schools are a wonderful place to plant seeds for the future, including trees.**

TFHF has partnered with many public schools on O'ahu and consistently finds enthusiastic teachers, administrators, custodians, and students eager to improve their campuses. Tree planting and stewardship also offer valuable opportunities for hands-on learning, connecting students to lessons in science, environmental stewardship, and community responsibility.

Establishing a formal, long-term collaborative program is the right step to build on existing efforts, coordinate resources, and ensure these benefits reach schools statewide.

TFHF respectfully urges adoption of these resolutions and referral to the House Committee on Education for further consideration.

Sincerely,

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

**HR-83**

Submitted on: 3/28/2026 7:32:06 AM

Testimony for WAL on 3/31/2026 10:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Johnnie-Mae L. Perry	Individual	Support	Written Testimony Only

Comments:

I, Johnnie-Mae L. Perry, Support

91 HCR REQUESTING THE DEPARTMENT OF LAND AND NATURAL RESOURCES AND DEPARTMENT OF EDUCATION TO COLLABORATE TO ESTABLISH A FORMAL, LONG-TERM COLLABORATIVE PROGRAM TO EXPAND, EQUITABLY DISTRIBUTE, AND SUSTAIN TREE-CANOPY COVERAGE ACROSS PUBLIC SCHOOLS STATE WIDE.

MEASURE TO REDUCE OVERUSE OF AIR CONDITIONERS

**HR-83**

Submitted on: 3/30/2026 8:23:22 AM

Testimony for WAL on 3/31/2026 10:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Noa Lincoln	Individual	Support	Written Testimony Only

Comments:

I support this bill as a Native Hawaiian, a lifelong resident of Hawaii, and a subject matter expert. Trees have multiple positive physical and psychological outcomes for people in general, and those effects are amplified in our children. I urge the passing of this bill and more trees in our local schools.

**HR-83**

Submitted on: 3/30/2026 9:06:55 AM

Testimony for WAL on 3/31/2026 10:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Kevin Sullivan	Individual	Support	Written Testimony Only

Comments:

Aloha Chair and Members of the Committee,

In my view and experience, Hawai‘i remains behind where it should be in prioritizing urban and community forestry as a core element of climate resilience, public health, and livable community planning. These measures offer a practical and supportive step forward. I strongly support HCR103 and HR95.

As an AICP-certified planner and Certified Arborist, I can attest to the vital importance of keeping trees and urban forestry intimately woven into Hawai‘i’s built environment. Trees hold collective energy and memory of and for communities- they are as connected and rare as we are. MOre concretely, (pun intended) tree canopy provides shade, comfort, habitat, stormwater benefits, cleaner air, and important public health protection. These benefits are not optional. They are essential infrastructure.

These resolutions are well grounded. They recognize that urban heat island effects are already being felt across the State, that vulnerable populations such as children, kūpuna, and residents of low-canopy areas face heightened heat risk, and that tree canopy programs provide multiple co-benefits including lower temperatures, improved air quality, reduced runoff, lower energy costs, and better mental and physical health outcomes.

I especially support the resolutions’ request for collaboration among state and county agencies to assess: existing canopy distribution, canopy loss and gain trends, disparities in canopy access, priority heat-vulnerable areas, integration with capital improvement and housing projects, coordination with schools and community organizations, and best practices for species selection, irrigation, maintenance, and long-term canopy health.

So this is the right direction for Hawai‘i. Trees help cool hardscaped areas, stabilize soils, intercept rainfall (ie flood management), support biodiversity, and improve the daily lived experience of residents. Thoughtful canopy expansion can also help address inequities by directing attention to neighborhoods and public spaces with too little shade and too much heat exposure. The resolutions also appropriately build on existing Hawai‘i examples, including the Kaulunani Urban and Community Forestry Program and Shade Trees for Schools.

I respectfully urge the Committee to pass HCR103 and HR95.

Finally, I urge you to consider in the future, stronger legislation regarding urban forestry and canopy targets that Counties be deemed to abide by. The best place is probably **§226-58 (county general plans)**, with a conforming amendment to **HRS §46-4 (county zoning)** so the targets actually flow into county code. The watersheds and nearshore environments deserve it, let alone the populace, by whom you abide and rely on.

Mahalo for the opportunity to testify.