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

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

Before the House Committee on
EDUCATION

Tuesday, April 7, 2026
2:00 PM
State Capitol, Conference Room 309

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 urge the Department of Land and Natural Resources to work with the Department of Education to develop a formal, long-term program to increase and sustain 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 adequate tree cover. Increasing urban tree canopy is a crucial climate adaptation priority.

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

Tree canopies and healthy soils are essential for managing Hawai'i's increasingly heavy rainfall. Trees capture rainwater in their canopies, slowing down how quickly it reaches the ground. Roots and soil microorganisms improve water absorption and storage in the soil, thereby lowering surface runoff. These actions help prevent localized flooding and ease the burden on drainage systems, especially on school campuses with many impervious surfaces.

School-based tree planting programs provide valuable educational opportunities. As noted in these resolutions, Department of Education campuses already support agricultural and natural resource projects where students can engage in tree propagation, planting, and long-term stewardship. Increasing the tree canopy on school grounds not only improves physical conditions but also boosts environmental literacy, workforce development pathways, and ties 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 of Land and Natural Resources and the Department of Education will enable strategic planning, resource distribution, and the 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 supports increasing capacity through dedicated staffing. Running and maintaining a statewide program of this size will require technical skills, coordination, and a long-term commitment. Investing in these roles will help ensure the program's success and sustainability. Both the Department of Land and Natural Resources and the 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 enhancing 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 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: 04/07/2026

Time: 02:00 PM

Location: 309 VIA VIDEOCONFERENCE

Committee: EDN

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) appreciates the opportunity to provide comments on HCR 91 and recognizes the value of increasing tree canopy coverage on public school grounds. Thoughtfully planned tree planting can provide meaningful educational, environmental, and student-health benefits, including expanded outdoor learning opportunities and increased shade during warmer conditions.

The Department supports continued collaboration with the Department of Land and Natural Resources and acknowledges the success of existing efforts such as the Shade Trees for Schools initiative. The Department also emphasizes the importance of appropriate tree species selection and siting, as inappropriate placement can result in long-term safety risks, infrastructure conflicts, and limitations on campus use as trees mature.

At the same time, the Department has significant concerns regarding the long-term operational and staffing resources required to implement and sustain a formal, statewide program as contemplated by this measure. Expanding tree canopy coverage would create ongoing maintenance obligations, including irrigation, pruning, hazard mitigation, and replacement, which extend well beyond initial planting and require consistent operational funding.

In addition, a formal long-term program would require dedicated permanent staffing to coordinate planning, oversee implementation, manage partnerships, and ensure continued maintenance and campus safety. Without identified and sustained operational funding for both personnel and operations, the Department is concerned that these responsibilities would place additional strain on already limited resources needed to support core facility operations.

The Department appreciates the intent of HCR 91 and supports legislative authorization of long-term operational and staffing needs that will be essential to the program's success.

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



HIPHI Board

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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: April 2, 2026

To: Rep. Justin H. Woodson, Chair
Rep. Trish La Chica, Vice Chair
Members of the House Committee on Education

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: April 7, 2026, 2:00 PM, Conference Room 309

Hawai'i Public Health Institute (HIPHI)¹ and the Healthy Eating, Active Living (HEAL)² 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.³

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.⁴ Expanding tree canopy and shade on school campuses helps reduce heat exposure for students and educators, while improving the overall school environment.

¹ 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.

² 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.

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

⁴ "[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.⁵

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.⁶

Naturally Improving Health

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

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

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

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.

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. Strong tree canopies lower demand on building mechanical systems, reduce energy costs, and reflect Hawai'i's long-standing understanding of resource management through connected systems from mauka to makai.

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.

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, fostering safe learning environments for all of Hawai'i's keiki.

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.

Matthew Loudermilk, member

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

HCR-91

Submitted on: 4/3/2026 11:41:58 PM

Testimony for EDN on 4/7/2026 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
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.

April 7, 2026

COMMITTEE ON EDUCATION

Hawai'i State Capitol
415 South Beretania Street
Honolulu, HI 96813

Hearing: Tuesday, April 7, 2026, at 2:00 pm

Aloha Chair Justin Woodson, Vice Chair Trish La Chica, and committee members of the House Committee on Education.

My name is Adrien Gomez, a UH graduate student, submitting this testimony as an individual representative in **support of House Bill HCR91**. This measure recognizes the threat of increasing temperatures in Hawai'i to students' health and limits outdoor opportunities across public schools. The Bill reports that only 21 percent of elementary schools meet the recommended 30 percent tree canopy coverage needed to provide shade and cooling. Additionally, schools in lower-income communities have reduced tree canopy coverage and higher health risks due to greater heat exposure.

According to the 2022 Hawai'i State Climate Summary, temperatures in the Hawaiian Islands have consistently increased by 2.6°F since 1950. The threat of rising temperatures is exacerbated by the climate's humidity and moisture in the air, which makes it difficult for an individual's body to regulate its own temperature (Combs, 2025). This is a health concern for all populations, but specifically keiki, kūpuna, pregnant women, and individuals with chronic illnesses are more susceptible to heat-related illnesses (Hawai'i State Office of Climate Change, Sustainability and Resiliency, 2020). In 2022, the City and County of Honolulu Climate Change Commission reported that vulnerable communities disproportionately experience negative impacts of climate change. The lack of green space, prevailing winds, and proximity to bodies of water, paired with heat-absorbing concrete, raises environmental temperatures. One of the recommended actions from the 2022 report included prioritizing shading for community gathering spaces, which aligns with Bill HCR91. Community spaces were described as campuses, neighborhoods, and city centers. Strategies for the recommendation included increasing plants and vegetation to provide shading, which can reduce a building's cooling and electrical costs by 25 percent. The report proposes that increased shade in public areas can reduce heat across Hawai'i and encourage outdoor activities.

Mahalo for the opportunity to testify in support of **HCR91**

References

- City and County of Honolulu Climate Change Commission. (2022). Reducing Greenhouse Gas Emissions From Building Operation - Guidance Document. *Hawai`i Natural Energy Institute University of Hawai`i at Mānoa*.
<https://www.hnei.hawaii.edu/wp-content/uploads/HCCC-Reducing-Greenhouse-Gas-Emissions-From-Building-Operation.pdf>
- Combs, L. (2025) How DO Hawai`i Residents Handle the Heat? Here's What You Told Us. *Honolulu Civil Beat*.
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- Hawai`i State Office of Climate Change, Sustainability and Resiliency. (2020) Keep Cool O`ahu. *Office of Climate Change, Sustainability and Resiliency*.
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- Stevens, L.E., Frankson, R., Kunkel, K. E., Chu, P.S., & Sweet, W. (2022) Hawai'i State Climate Summary 2022. *NOAA Technical Report NESDIS 150-HI*. NOAA/NESDIS, Silver Spring, MD, 5 pp. <https://statesummaries.ncics.org/chapter/hi/>