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

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HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

Testimony of  
DAWN N. S. CHANG  
Chairperson

Before the House Committee on  
ENERGY & ENVIRONMENTAL PROTECTION

Tuesday, February 4, 2025  
9:00 AM

State Capitol, Conference Room 325 & Videoconference

In consideration of  
HOUSE BILL 1495  
RELATING TO THE KEAUKOU AQUIFER SYSTEM

House Bill 1495 proposes to establish a Keauhou aquifer system monitoring pilot program within the Department of Land and Natural Resources (Department) and directs the Commission on Water Resource Management (Commission) implement a program to: 1) manage the monitoring wells installed in the Keauhou aquifer system; 2) monitor groundwater levels in the Keauhou aquifer system; and 3) conduct water quality tests in the Keauhou aquifer system. This bill also requires the Department submit an interim report to the Legislature every six months, detailing groundwater levels and water quality analysis in the Keauhou aquifer system. The bill also appropriates \$163,000 from the general revenues of the State of Hawai'i for fiscal years 2025-2026 and 2026-2027 for the installation of two monitoring wells in the Keauhou aquifer. **The Department strongly supports this measure, provided that its passage does not adversely impact the Administration's budget priorities, and offers comments.**

The Keauhou aquifer system is a vital water source that sustains local communities, ecosystems, and cultural practices. However, it faces ongoing challenges, including increasing water demand and concerns over potential resource overuse. The balance between development and resource sustainability remains a key issue, as stakeholders seek to ensure long-term water availability while preserving the unique environmental and cultural heritage of the region.

The Commission seeks to protect and regulate groundwater use within the Keauhou aquifer system, ensuring that withdrawals do not compromise the health of the aquifer or the ecosystems and traditional practices that rely on it. To support this goal, the Department suggests amendments to create a Keauhou aquifer system monitoring pilot project. A pilot project would support ongoing efforts to manage the Keauhou aquifer system, conduct community outreach and education, and collaborate with other agencies such as the Division of Aquatic Resources.

If consistent with the administration's funding priorities, the Department also supports the construction of monitoring wells within the Keauhou aquifer system to support responsible management of Keauhou's ground water resources.

SECTION 1. (a) ~~[There is established a]~~ The department of land and natural resources shall establish a -year Keauhou aquifer system monitoring pilot ~~[program within the department of land and natural resources.]~~ project.

(b) The commission on water resource management, in partnership with other agencies, shall:

- (1) ~~[Manage the]~~ Collect data from monitoring wells installed in the Keauhou aquifer system;
- (2) Monitor groundwater levels in the Keauhou aquifer system; ~~[and]~~
- (3) Conduct water ~~[quality]~~ salinity tests in the Keauhou aquifer system.
- (4) Monitor the impacts of groundwater pumping on the health of coastal ecosystems and traditional and customary practices within the Keauhou aquifer system;
- (5) Initiate public information meetings to report on the data collected;
- (6) Conduct community outreach to guide the management of groundwater resources in the Keauhou aquifer system;
- (7) Integrate existing and new studies and research into a plan for the responsible management of groundwater resources in the Keauhou aquifer system; and

(8) Conduct other related activities as the department deems necessary to carry out the purpose of the pilot project.

(c) The department of land and natural resources shall submit an interim report to the legislature every six months, detailing, at minimum, groundwater levels and water ~~[quality]~~ salinity analysis in the Keauhou aquifer system.

SECTION 2. Based on the department of land and natural resources' assessment of the Keauhou aquifer system monitoring pilot project, the department shall determine whether to continue, expand, or end the pilot project.

SECTION ~~[2.]~~ 3. There is appropriated out of the general revenues of the State of Hawaii the sum of \$200,000 or so much thereof as may be necessary for fiscal year 2025-2026 and the same sum or so much thereof as may be necessary for fiscal year 2026-2027 for the Keauhou aquifer system monitoring pilot project.

There is also appropriated out of the general revenues of the State of Hawaii the sum of \$163,000 or so much thereof as may be necessary for fiscal year 2025-2026 and the same sum or so much thereof as may be necessary for fiscal year 2026-2027 for the installation of two monitoring wells in the Keauhou aquifer system.

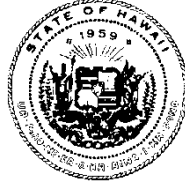
The sums appropriated shall be expended by the department of land and natural resources for the purposes of this Act.

SECTION ~~[3.]~~ 4. This Act shall take effect on July 1, 2025.

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

JOSH GREEN, M.D.  
GOVERNOR

SYLVIA LUKE  
LT. GOVERNOR



DEAN MINAKAMI  
EXECUTIVE DIRECTOR

## STATE OF HAWAII

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT AND TOURISM  
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### Statement of DEAN MINAKAMI

Hawaii Housing Finance and Development Corporation  
Before the

### HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

February 04, 2025 at 9:00 a.m.  
State Capitol, Room 325

In consideration of  
**H.B. 1495**  
**RELATING TO THE KEAUKOU AQUIFER SYSTEM.**

Chair Lowen, Vice Chair Perruso, and members of the Committee.

HHFDC **supports** HB 1495, which appropriates funds to the Department of Land and Natural Resources (DLNR) to install two monitoring wells in the Keauhou Aquifer System. It also establishes the Keauhou Aquifer System Monitoring Program and requires reports to the Legislature.

The development of affordable housing in West Hawaii is being impeded by concerns about new potable water wells. For example, HHFDC's Kamakana Villages, a master planned community in north Kona with the potential of 1,600 affordable housing units, is located within the area of the Keauhou Aquifer and is stalled due to a lack of potable water.

The pilot program will help to address concerns about developing new water sources in north Kona.

Thank you for the opportunity to testify on this bill.



# NATURAL ENERGY LABORATORY OF HAWAII AUTHORITY

An Authority of the State of Hawaii attached to the Department of Business, Economic Development & Tourism

Statement of  
**Laurence Sombardier**  
**Interim Executive Director**  
Natural Energy Laboratory of Hawaii Authority  
before the

## HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Tuesday, February 4, 2025  
9:00AM  
State Capitol, Conference Room 325 & Videoconference

in consideration of

### **HB 1495** **RELATING TO THE KEAUHOU AQUIFER SYSTEM.**

The Natural Energy Laboratory of Hawaii Authority (NELHA) is pleased to support HB 1495 which establishes the Keahou Aquifer System Monitoring Program and appropriates funds to DLNR to install two monitoring wells for this purpose. NELHA is a self-sufficient agency which currently supports over 50 companies with annual economic impact to Hawaii on the order of \$148M as determined by the University of Hawaii Economic Research Organization for calendar year 2022.

NELHA's duties include supporting ocean research and technology development on the 870-acre Hawaii Ocean Science and Technology (HOST) park it administers. Additional fresh water will be necessary to develop the remaining 200 + acres within the park to accommodate

additional projects and assist in diversifying the West Hawaii economy by developing innovative technologies in accordance with HRS 227D.

Over the past decade, NELHA has partnered with various State agencies, County, and local community and other stakeholders to develop the OTA well with the aim of providing freshwater for housing as well as economic development activities. The efforts have been stalled due to significant push back and agreement has not yet been arrived at regarding well permit conditions. Establishing a monitoring program which is managed by the DLNR/CWRM will assist in making data driven decisions with respect to permit conditions and assist with addressing concerns expressed by the West Hawaii community regarding the development of the OTA well and other wells currently contemplated for West Hawaii.

Thank you for the opportunity to offer these comments and express its support.

He Mele komo a he mele aloha no na kupuna o ke au i hala Aloha mai kakou.

Aloha,

My name is Cindy Freitas and I'm a Native Hawaiian descended of the native inhabitants of Hawai'i prior to 1778 and born and raised in Hawai'i.

I am also a practitioner who still practice the cultural traditional customary practices that was instill in me by my grandparents at a young age from mauka (MOUNTAIN TO SEA) to makai in many areas.

I'm In SUPPORT

An **aquifer** is a body of water-saturated rock or sediment that stores water. The **Keauhou Aquifer** is a part of the **North Kona** aquifer system, and understanding its dynamics is key to managing it sustainably.

- **Recharge Rate:** The Keauhou Aquifer receives water from rainfall, surface water infiltration, and groundwater flow from surrounding areas. The monitoring wells will track the **rate of recharge**, which is critical for ensuring that the aquifer is replenished at a sustainable rate.
- **Flow Patterns:** Water in an aquifer moves through underground channels. The monitoring program will collect data on **flow patterns**, including direction, speed, and volume, helping assess how the aquifer is being utilized. This is important for both **water quality** and **quantity** management.
- **Water Quality:** Aquifers naturally filter water, but human activities and land use can introduce pollutants. The monitoring wells will test for:
  - **Nitrate contamination** from agriculture and wastewater.
  - **Heavy metals** or chemicals from industrial activity.
  - **Salinity levels** to detect potential **saltwater intrusion**, especially near coastal areas.

The **Keauhou Aquifer System Monitoring Program** represents a proactive and holistic approach to managing this crucial water resource. By integrating **hydrological monitoring**, **economic planning**, and **community engagement**, the program not only helps protect the environment but also supports the local economy and society. Early detection of threats like saltwater intrusion, over-extraction, or contamination will prevent costly consequences, ensuring that the aquifer remains a viable resource for future generations.

Mahalo,

\_\_\_\_\_/s/\_\_\_\_\_  
Cindy Freitas