



UNIVERSITY OF HAWAII SYSTEM

‘ŌNAEHANA KULANUI O HAWAII

Legislative Testimony

Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

Testimony Presented Before the
Senate Committee on Ways and Means
Friday, March 28, 2025 at 10:02 a.m.

By

Tao Yan, PhD

Director, Water Resources Research Center

And

Michael Bruno, Provost

University of Hawai'i at Mānoa

HB 736 HD1 – RELATING TO WASTEWATER SYSTEMS.

Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee:

The University of Hawai'i Water Resources Research Center (UH Mānoa WRRC) supports the intent of HB 736 HD1. This legislation proposes to establish a pilot program to evaluate and demonstrate new wastewater technologies and appropriates funding to address the critical issue of cesspool conversion in Hawai'i. The estimated total costs are \$745,325 for the three years.

The UH Mānoa WRRC is committed to implementing the pilot program should adequate funds are appropriated. UH Mānoa WRRC has extensive technical expertise in wastewater management, and has been instrumental in supporting the evaluation and demonstration of new wastewater technologies. Therefore, UH Mānoa WRRC is well-positioned to lead the technical aspects of this project, ensuring that the pilot program is executed with scientific rigor and practical effectiveness. We welcome the opportunity to take on this role and collaborate with relevant stakeholders to advance wastewater solutions in Hawai'i.

We strongly support the appropriation of funds for the UH Mānoa WRRC to establish and implement this pilot program, including necessary infrastructure, equipment, and administrative support, provided its adoption does not impact priorities as indicated in our Board of Regents Approved Budget.

Thank you for the opportunity to testify on this measure.



**STATE OF HAWAII
HAWAII CLIMATE CHANGE MITIGATION & ADAPTATION
COMMISSION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809**

**Testimony of
LEAH LARAMEE
Climate Change Coordinator on behalf of
Climate Change Mitigation and Adaptation Commission Co-Chair Mary Alice Evans and
Co-Chair Dawn N.S. Chang**

**Before the Senate Committee on
WAYS AND MEANS**

**Friday, March 28, 2025
10:02 AM**

State Capitol, Conference Room 211 & Videoconference

**In consideration of
HOUSE BILL 736 HOUSE DRAFT 1
RELATING TO WASTEWATER SYSTEMS**

House Bill 736 House Draft 1 establishes and appropriates funds for a three-year new wastewater system and individual wastewater system technology testing pilot program within the University of Hawaii Water Resources Research Center and requires interim and final reports to the Legislature.

The Hawai'i Climate Change Mitigation and Adaptation Commission (Commission) **supports** this bill provided that its passage does not replace or adversely impact priorities indicated in the Executive Budget request. The Hawai'i Climate Change Mitigation and Adaptation Commission consists of a multijurisdictional effort between 20 different departments, committees, and counties.

Removal of cesspools for all properties within the Sea Level Rise Exposure Area (SLR-XA), is imperative to the health of nearshore waters and for members of the public accessing coastal resources. Removal may not be achievable by 2050 as directed by state law without viable alternatives for replacement.

The Commission's 2022 update to the *Sea Level Rise Vulnerability and Adaptation Report* Recommended Action 6.1.1 states that the state should sponsor research and development efforts to expand affordable and actionable conversion options for shoreline property owners and

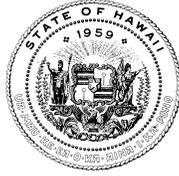
options should account for SLR-XA projections of coastal erosion and associated land loss, and potential failure of sewage treatment systems due to sea level rise groundwater inundation. Cesspools in the coastal zone will be an increasing source of nonpoint source pollution as groundwater rises and coastal erosion accelerates. The *Sea Level Rise Vulnerability and Adaptation Report* Recommended Action 6.4 urges the state to expand policy directives beyond the existing income tax credits and requirement for removal by 2050. Specifically, policy must address existing cesspools in the coastal zone in relation to enforcement of existing laws and regulations and removal of unpermitted shoreline hardening.

Connection to sewer lines is not always feasible and septic tanks while preferred to cesspools are not a perfect alternative. New innovative wastewater treatment systems designed for Hawai'i's unique landscape that are cost effective and protect our waters are needed. This bill will provide funding to ground truth this technology.

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

JOSH GREEN, M.D.
GOVERNOR
STATE OF HAWAII
*Ke Kia'āina o ka Moku'āina 'o
Hawaii*

SYLVIA J. LUKE
LT. GOVERNOR
STATE OF HAWAII
*Ka Hope Kia'āina o ka Moku'āina
'o Hawaii*



KALI WATSON
CHAIRPERSON, HHC
Ka Luna Ho'okele

KATIE L. LAMBERT
DEPUTY TO THE CHAIR
Ka Hope Luna Ho'okele

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
Ka 'Oihana 'Āina Ho'opulapula Hawaii'i

P. O. BOX 1879
HONOLULU, HAWAII 96805

TESTIMONY OF KALI WATSON, CHAIR
HAWAIIAN HOMES COMMISSION
BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS
DECISION MAKING ON MARCH 28, 2025 AT 10:02AM IN CR 211

HB 736, HD 1, RELATING TO WASTEWATER SYSTEMS

March 28, 2025

Aloha Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee:

The Department of Hawaiian Home Lands (DHHL) **supports** this bill which establishes and appropriates funds for a three-year new wastewater system and individual wastewater system technology testing pilot program within the University of Hawaii Water Resources Research Center and 2) requires interim and final reports to the Legislature.

Approximately 2,500 cesspools exist on Hawaiian Home Lands. Pursuant to Act 125 (SLH 2017), these cesspools are required to be converted to a septic system or aerobic treatment unit system or connected to a sewerage system before January 1, 2050.

DHHL supports the establishment of a three-year new wastewater system and individual wastewater system technology testing pilot program within the University of Hawaii Water Resources Research Center because it will provide the opportunity to test new wastewater technology systems and review and evaluate the affordability, feasibility, and efficiency of the treatment technologies for DHHL, current lessees residing on Hawaiian Home Lands, and potential beneficiaries to understand the challenges and financial costs of cesspool conversions and wastewater technologies.

DHHL understands that there is no simple, one method fits all ahupua'a (land division) solution toward addressing the cesspool conversion and wastewater needs of the State of Hawaii and we stand ready to work collaboratively on this issue.

Thank you for your consideration of our testimony

**Testimony of The Nature Conservancy
Supporting HB736 HD1, Relating to Wastewater Systems.
Committee on Ways and Means
March 28, 2025 at 10:02 am
Conference Room 211 and via Videoconference**

Dear Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee:

The Nature Conservancy (TNC), Hawai'i and Palmyra supports HB736 HD1, which would establish and appropriate funds for a three-year new wastewater system and individual wastewater system technology testing pilot program within the University of Hawai'i Water Resources Research Center. This bill would also require reports to the Legislature.

Science conducted by TNC and partners has shown that wastewater are detrimental to the coral reefs which protect our coastlines and underpin our economy. Without clean coastal waters, our reef ecosystems are put at even greater risk in the face of growing global stressors including climate change.

Wastewater can cause harm to water quality within adjacent groundwater, anchialine, coral reef systems and fisheries by introducing elevated amounts of organic nitrogen and phosphorus, pathogens, and other contaminants. Contaminants emitted from cesspools can harm aquatic ecosystems by encouraging excess algal and bacterial growth and can also pose a threat to human health. Our research in He'eia, Maunalua, Olowalu, Hana and South Kohala has shown direct evidence of cesspool contamination in streams and coastal waters using a variety of bioindicators and chemical signatures.

The Water Resources Research Center (WRRRC) at the University of Hawai'i at Mānoa has historically provided technical support to creating advanced onsite wastewater systems. This bill would allow the WRRRC to support new innovative technologies to be permitted in the State through advanced testing and pilot measures. New technologies could potentially offer substantial cost savings by clustering adjacent homes, or reducing the amount of excavation needed. The cost of the program would be small compared to the potential savings.

Mahalo for the opportunity to testify in support of HB736 HD1.

Guided by science, TNC is a non-profit organization dedicated to the preservation of the lands and waters upon which all life depends. The Conservancy has helped protect more than 200,000 acres of natural lands in Hawai'i and Palmyra Atoll. We manage 40,000 acres in 13 nature preserves and have supported over 50 coastal communities to help protect and restore the nearshore reefs and fisheries of the main Hawaiian Islands.

BOARD OF TRUSTEES

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Jean E. Rolles Crystal K. Rose Nathan E. Smith

Founders: Samuel A. Cooke Herbert C. Cornuelle



To: The Honorable Chair Donovan DelaCruz, the Honorable Vice Chair Sharon Moriwaki, and Members of the Committee on Ways and Means.

From: Hawai'i Reef and Ocean Coalition (by Ted Bohlen)

Re: Hearing **HB736 HD1 RELATING TO WASTEWATER SYSTEMS**

Hearing: Friday March 28, 2025, 10:02 a.m. Rm. 211

Aloha Chair DelaCruz, Vice Chair Moriwaki, and Members of the Committee on Ways and Means!

The Hawai'i Reef and Ocean Coalition (HIROC) is a group of scientists, educators, filmmakers and environmental advocates who have been working since 2017 to protect Hawaii's coral reefs and ocean.

The Hawai'i Reef and Ocean Coalition STRONGLY SUPPORTS HB736 HD1!

There are about 83,000 cesspools in Hawaii that are dumping about 50 million gallons every day into Hawaii's groundwater, drinking water, streams, and ocean and harming our coral reefs. By law (the mandate of section 342D-72, Hawaii Revised Statutes), all 83,000 cesspools must be upgraded to a system approved by the Department by 2050.

Cesspool upgrades are expensive. The cost depends on site-specific conditions, but the cost to convert a cesspool to a septic system or an aerobic treatment unit system is often over \$30,000. We need to try to find ways to **make upgrades more affordable** to homeowners and governments.

At a time when many residents of Hawaii are struggling to make ends meet, our State has an excellent opportunity to save cesspool owners and governments money by introducing new wastewater technologies. There are **new wastewater technologies** in cluster sewers, in individual wastewater systems, and in other wastewater systems **that can potentially reduce the costs of**

cesspool upgrades substantially without harming water quality and protect coral reefs by reducing nutrients.

The Department of Health must certify the new technology systems. The Department does not have sufficient resources and expertise to perform those certifications promptly and effectively, however.

The University of Hawaii's Water Resources Research Center (WRRC) has previously had a testing program for wastewater systems. **Guidance and studies by a revived UH WRRC testing program for new technologies can facilitate and accelerate DOH's certification of new technologies.**

The bill funds a three-year pilot program to test wastewater systems and individual wastewater systems technology at UH WRRC. UH WRRC, in coordination with other departments at UH, DOH, county agencies and others will review, document, and evaluate the affordability, feasibility, and efficiency of treatment technologies, perform tests and studies and submit results to the Department.

I understand that the testing program is estimated to cost **\$745,000 over three years**, with potential cost reduction benefits projected to be significantly larger.

This bill will enable Hawaii to achieve its goal of upgrading cesspools MORE AFFORDABLY without compromising water quality.

Please pass this bill!

Mahalo!

Hawai'i Reef and Ocean Coalition (by Ted Bohlen)

March 28, 2025

The Honorable Donovan M. Dela Cruz, Chair

Senate Committee on Ways and Means
State Capitol, Conference Room 211 & Videoconference

RE: House Bill 736, HD1, Relating to Wastewater Systems

HEARING: Friday, March 28, 2025, at 10:02 a.m.

Aloha Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee:

My name is Lyndsey Garcia, Director of Advocacy, testifying on behalf of the Hawai'i Association of REALTORS® ("HAR"), the voice of real estate in Hawaii and its over 10,000 members. HAR **supports** House Bill 736, HD1, which establishes and appropriates funds for a three-year new wastewater system and individual wastewater system technology testing pilot program within the University of Hawai'i Water Resources Research Center. Requires interim and final reports to the Legislature. Effective 7/1/3000.

Hawai'i REALTORS® supports the goal of protecting our drinking water, streams, ground water, and ocean resources. We recognize that cesspool conversion is important to preserve our environment. There are approximately 83,000 cesspools divided into three priorities¹ across the State and to convert 83,000 cesspools by 2050, at least 3,320 cesspools would need to be converted per year. It is crucial that we properly plan and find ways to assist communities and homeowners as resources and manpower are limited, especially on the neighbor islands. Costs will vary greatly depending on resources, labor, permitting delays, property terrain, and other variables. According to the Cesspool Conversions Finance Research Report prepared for the Department of Health, "historical costs of cesspool upgrades to approved systems range widely from approximately \$9,000 to \$60,000 or more depending on the wastewater system capacity (based on bedroom count), technology, and location or site constraints."²

As such, new wastewater and cesspool technology systems would be an important solution to help the State reach the goal of converting 83,000 cesspools by 2050, and to help address the large costs to convert.

Mahalo for the opportunity to testify on this measure.

¹ University of Hawai'i Sea Grant College Program. *Hawai'i Cesspool Prioritization Tool*.
<https://seagrant.soest.hawaii.edu/cesspools-tool/>

² Carollo. (January 21, 2021). *Cesspool Conversion Finance Research Report*.
<https://health.hawaii.gov/wastewater/files/2021/02/financefinalreportr.pdf>



TO: Senate Committee on Ways and Means
Senator Donovan Dela Cruz, Chair
Senator Sharon Moriwaki, Vice Chair

FROM: Lynn Miyahira representing Public Access to SunScreens (PASS) Coalition
DATE: March 26, 2025

Re: HB 736 HD 1

Position: SUPPORT

The [Public Access to SunScreens](#) (PASS) Coalition is a multi-stakeholder coalition composed of public health groups, dermatologists, sunscreen manufacturers, and leading advocates for skin cancer patients. We also support efforts that protect our coral reefs.

We support this measure.

Hawaii faces a severe cesspool pollution problem, with over 83,000 cesspools discharging approximately 50 million gallons of raw sewage daily into our groundwater, streams, and oceans. This not only threatens our drinking water but also harms coral reefs that are vital to Hawaii's ecosystem and tourism economy.

Cesspool upgrades are expensive, creating significant financial challenges for both homeowners and governments. HB 736 addresses this issue by encouraging the development and adoption of innovative wastewater technologies that can reduce the costs of cesspool upgrades while maintaining high water quality standards.

This bill establishes a three-year pilot program at the University of Hawaii Water Resources Research Center to test new wastewater technologies, including cluster sewers, individual wastewater systems, and other innovative approaches. By facilitating and accelerating the Department of Health's certification process for these technologies, this program can provide cost-effective solutions that benefit homeowners, governments, and the environment.

The cost of the testing program is reasonable, especially when compared to the potential benefits of reducing the financial burden on residents and ensuring cleaner water for future generations. Investing in this program is a proactive step toward solving Hawaii's cesspool pollution crisis. We urge your support for HB 736.

Mahalo you for the opportunity to testify.

Sincerely,

Lynn Miyahira
Public Access to SunScreens (PASS) Coalition



TO: Senate Committee on Ways and Means
Senator Donovan Dela Cruz, Chair
Senator Sharon Moriwaki, Vice Chair

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DATE: March 26, 2025

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The cost of the testing program is reasonable, especially when compared to the potential benefits of reducing the financial burden on residents and ensuring cleaner water for future generations. Investing in this program is a proactive step toward solving Hawaii's cesspool pollution crisis. We urge your support for HB 736.

Mahalo you for the opportunity to testify.

Sincerely,

Lynn Miyahira
Public Access to SunScreens (PASS) Coalition

HB-736-HD-1

Submitted on: 3/27/2025 8:56:23 AM

Testimony for WAM on 3/28/2025 10:02:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|---------------------|---------------------------|------------------------|
| Douglas Perrine | Individual | Support | Written Testimony Only |

Comments:

HB736 is an important step to making affordable and effective wastewater treatments available to residents who need to comply with the mandate to close all cesspools. I strongly support the passage of HB736.

HB-736-HD-1

Submitted on: 3/27/2025 11:41:26 AM

Testimony for WAM on 3/28/2025 10:02:00 AM

| Submitted By | Organization | Testifier Position | Testify |
|---------------------|---------------------|---------------------------|---------------------------|
| Kathleen M. Pahinui | Individual | Support | Written Testimony Only |

Comments:

Please support this very important bill.

Mahalo,

kathleen Pahinui