

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

Testimony of
DAWN N. S. CHANG
Chairperson

Before the House Committee on
FINANCE

Tuesday, April 2, 2024
4:00 PM

VIA VIDEOCONFERENCE, Conference Room 308, State Capitol

In consideration of
SENATE BILL 2513, SENATE DRAFT 2, HOUSE DRAFT 1
RELATING TO WASTEWATER SYSTEMS

Senate Bill 2513, Senate Draft 2, House Draft 1 proposes to 1) establish a 3-year new wastewater system technology demonstration and implementation pilot program within the University of Hawai'i Water Resources Research Center to examine and demonstrate new wastewater and cesspool technology systems; 2) implement those technologies in demonstration projects in areas across the State that are identified as priority level 1 in the 2021 Hawai'i Cesspool Hazard Assessment and Prioritization Tool Report, 2021 Report & Technical Appendices; 3) establish similar prioritization categories for the islands of Moloka'i, Lāna'i, and Ni'ihau; 4) require the University of Hawai'i Water Resources Research Center to submit annual interim reports and a final report to the Legislature; 5) establish positions; and 6) make appropriations. **The Department of Land and Natural Resources (Department) supports this bill provided that it does not replace or adversely impact priorities indicated in the Executive FY 2025 Supplemental Budget Request.**

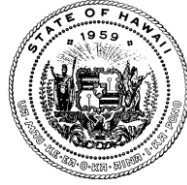
Clean nearshore waters are vital to both public health and the health of nearshore reefs and associated fisheries. Wastewater systems have the potential to pollute groundwater and nearshore waters by introducing elevated levels of contaminants such as nitrogen, phosphorus, and pathogens. A 2023 Hawai'i-based study¹ found that septic and cesspool pollution is a major driver of coral reef decline along the West Hawai'i coastline. When excess nutrients, such as nitrogen, from these wastewater systems enter nearshore waters, they stimulate the growth of algae, which can smother coral. Establishing a wastewater demonstration and implementation

¹ Gove, J.M., Williams, G.J., Lecky, J. *et al.* Coral reefs benefit from reduced land-sea impacts under ocean warming. *Nature* **621**, 536–542 (2023). <https://doi.org/10.1038/s41586-023-06394-w>

DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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MANAGEMENT
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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

pilot program within the University of Hawai‘i Water Resources Research Center will hopefully lead to new insights and methods for more efficient disposal of contaminating pollutants that damage Hawai‘i’s valuable reef ecosystems. By encouraging this project, the Department hopes that the University of Hawai‘i’s Water Resources Research Center will discover innovative methods to reduce the amount of contaminants entering Hawai‘i’s nearshore waters and support more resilient coral reef ecosystems.

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



STATE OF HAWAII
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In reply, please refer to:
File:

**Testimony COMMENTING on SB2513 HD1
RELATING TO WASTEWATER SYSTEMS**

REPRESENTATIVE KYLE T. YAMASHITA, CHAIR
HOUSE COMMITTEE ON FINANCE

Hearing Date: 4/2/2024

Room Number: 308

1 **Fiscal Implications:** This measure may impact the priorities identified in the Governor's
2 Executive Budget Request for the Department of Health's (Department) appropriations and
3 personnel priorities.

4 **Department Testimony:** The Department acknowledges the intent of this measure and provides
5 comments to establish and appropriate funds to implement a three-year new wastewater system
6 technology demonstration and implementation pilot program within the university of Hawaii
7 water resources research center and appropriate moneys for two full-time equivalent (2.0 FTE)
8 positions within the Department's Wastewater Branch. The Department is concerned about the
9 fiscal implications generated by this proposal as it may adversely impact priorities indicated in
10 the Governor's Executive Budget. However, without the necessary full-time equivalent
11 positions, the Department will be unable to process the impending increase of up to 5,000
12 individual wastewater system applications.

13 **Offered Amendments:** The Department respectfully suggests the following revisions to the
14 proposed HRS amendments. Additions appear as underlined and deletions appear as strikeouts.

15 SECTION 5, Page 10, lines 11-20 and Page 11, lines 1-6: "There is appropriated out of
16 the general revenues of the State of Hawaii the sum of:

17 (1) \$94,356 or so much thereof as may be necessary for fiscal year 2024-2025 to fund
18 one full-time equivalent (1.0 FTE) engineer V (SR-26) position within the
19 department of health's wastewater branch; and

1 (2) \$87,312 or so much thereof as may be necessary for fiscal year 2024-2025 to
2 establish one full-time equivalent (1.0 FTE) engineer IV (SR-24) position within
3 the department of health's wastewater branch,
4 to support the approval of individual wastewater systems applications and the new wastewater
5 system and individual wastewater system technology demonstration and implementation pilot
6 program established pursuant to this Act.

7 The sums appropriated shall be expended by the department of health for the purposes of
8 this Act.”

9 Thank you for the opportunity to testify.

SB-2513-HD-1

Submitted on: 3/31/2024 6:46:41 PM

Testimony for FIN on 4/2/2024 4:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Ted Bohlen	Hawai'i Reef and Ocean Coalition	Support	In Person

Comments:

Re SB2513 SD2 HD1

Aloha Chair Yamashita, Vice Chair Kitagawa, and members of the Finance Committee!

The Hawai'i Reef and Ocean Coalition **STRONGLY SUPPORTS** SB2513 SD1HD2!

As we begin to upgrade our cesspools as required by law, Hawai'i needs to determine what are the best, most affordable technologies--for everything from individual wastewater systems to community/package treatment systems. This demonstration and implementation pilot by the University of Hawai'i's Water Resources Research Center, working with UH Sea Grant College, will help provide that information on what will work best in Hawai'i.

Investment in determining this information now will likely save owners and governments costs many times over and help improve our environment and protect our reefs.

Please pass this essential bill!

Mahalo!

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

SB-2513-HD-1

Submitted on: 4/1/2024 1:10:47 PM

Testimony for FIN on 4/2/2024 4:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Lisa Gibson	Indivisible Hawaii	Support	Written Testimony Only

Comments:

STRONG SUPPORT

Statement of
Gregory Wong
Co-Founder and New Product Introduction Engineer
WaiHome LLC
before the
House Committee on Finance

Tuesday, April 2nd, 2024
4:00 PM
State Capitol, Conference Room 308 & Videoconference

In consideration of
SB2513 SD2 HD1
RELATING TO WASTEWATER SYSTEMS

Chair Yamashita, Vice Chair Kitagawa, and Members of the Committee on Finance.

WaiHome **supports** SB2513 SD2 HD1 that (1) establishes and funds a three-year waste management solution and cesspool system demonstration pilot in the University of Hawai'i Water Resources Research Center to examine, demonstrate, and implement new innovations in wastewater and cesspool technology in Priority 1 Areas and (2) appropriates funding for two full-time positions at the Department of Health's Wastewater Branch.

According to Act 125, all cesspools are mandated for replacement by 2050, but under current replacement trends, this Act is starting to look unobtainable. One of the main barriers to conversion for most homeowners is affordability. While this bill would appropriate the necessary funds to the WRRC and the DOH in the short term, Bill SB2513 could save the State hundreds of millions more if affordable technologies are investigated and utilized in the replacement of the remaining 83,000 documented cesspools in Hawaii.

Thank you for the opportunity to offer these comments,



Gregory Wong
Co-founder and New Product Introduction Engineer
WaiHome LLC



April 1, 2024

In Strong Support of **SB2513 SD2 HD1** Relating to Wastewater Systems
House Committee on Finance (FIN)
Hearing on April 2, 4:00pm, Rm. 308

Aloha, Chair Yamashita, Vice-Chair Kitagawa and Committee Members:

On behalf of the non-profit WAI: Wastewater Alternatives & Innovations and the Cesspool Legislative Task Force, I am writing in **strong support of SB2513 SD2 HD1**. This bill would establish a three-year waste management solution and cesspool system demonstration pilot in the University of Hawai'i Water Resources Research Center. The pilot will demonstrate new wastewater technology systems, implement those technologies in demonstration projects in Priority 1 Areas and establish similar rankings for Mokokai, Lanai, and Niihau. The bill also **appropriates funding for two full-time equivalent positions at the Department of Health's Wastewater Branch**. These positions are critical to the department's ability to handle the additional work that will come with the thousands of cesspool conversions that will be necessary to comply with the law.

Hawaii has more than 83,000 cesspools across the state, discharging 52 million gallons of raw sewage each day into Hawaii's waters. That's similar to a massive sewage spill every day! Along with threats to public health and drinking water resources, new research in *Nature* shows that this polluted wastewater poses significant harm to coral reefs and the near-shore environment (see also [my article in Hawaii Business Magazine](#)). The people of Hawaii need this law to make sure their wastewater systems aren't polluting the groundwater or nearby surface waters.

Under Act 125 (2017), all cesspools are mandated to be converted by 2050. To do this logistically, the state will need to explore more decentralized "package treatment" systems that can convert hundreds of cesspools, instead of trying to convert each of the 83,000 across the state. We agree that the pilot projects be shared between UH Sea Grant and the Water Resources Research Center (WRRC) for research and implementation. WAI will work with both groups to come up with efficient and affordable solutions to our wastewater management issues.

WAI is an environmental non-profit dedicated to protecting our drinking water, groundwater and near-shore ecosystems by reducing sewage pollution from cesspools and failing septic systems. Our goal is to help find more innovative, affordable, and eco-friendly solutions to wastewater management and help homeowners with the conversion process. Better sanitation systems reduce sewage and nutrient pollution and make properties more valuable, while also protecting public health and valuable natural resources like groundwater, streams, coral reefs and coastal areas.

Hawaii is struggling with serious sewage pollution problems, and the state has to ensure all cesspools are converted in the next 26 years. This bill will provide the necessary pilot projects to convert cesspools across the state. Mahalo for your leadership on this issue and support of this bill.

Aloha,

Stuart Coleman

Stuart H. Coleman, Executive Director

SB-2513-HD-1

Submitted on: 3/30/2024 7:33:42 AM

Testimony for FIN on 4/2/2024 4:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Lisa Bishop	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Yamashita, Vice Chair Kitagawa, and FIN Committee members,

Mahalo for the opportunity to testify in strong support of this bill. I urge your unanimous support!

With Aloha,

Lisa Bishop

Oahu resident

SB-2513-HD-1

Submitted on: 3/30/2024 1:43:06 PM

Testimony for FIN on 4/2/2024 4:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Lois Crozer	Individual	Support	Written Testimony Only

Comments:

So many people are getting sick from the oceans nowadays!! Just ask the doctors. I have several friends who have serious medical issues from Kailua Bay. I also have seen issues with water on the big island from cesspools, even though the water looks clean, it's not! How do people know before they swim. Signs aren't posted. We need to fix the water, and most of the issue is cesspools. PLEASE let's move ahead.

SB-2513-HD-1

Submitted on: 4/1/2024 12:20:47 AM

Testimony for FIN on 4/2/2024 4:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Barbara Shimei	Individual	Support	Written Testimony Only

Comments:

IN SUPPORT

SB-2513-HD-1

Submitted on: 4/1/2024 1:07:50 PM

Testimony for FIN on 4/2/2024 4:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Betsy Scolnik	Individual	Support	Written Testimony Only

Comments:

STRONG SUPPORT FOR THIS AND ALL CESSPOOL CONVERSION BILLS. STOP WAITING. APPROVE THESE BILLS THIS SESSION!!!!!!!!!!!!!!

SB-2513-HD-1

Submitted on: 4/1/2024 1:37:26 PM

Testimony for FIN on 4/2/2024 4:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Arianna Feinberg	Individual	Support	Written Testimony Only

Comments:

Please support this bill as we need better individual wastewater systems created and approved.

SB-2513-HD-1

Submitted on: 4/1/2024 1:45:52 PM

Testimony for FIN on 4/2/2024 4:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Mirah Horowitz	Individual	Support	Written Testimony Only

Comments:

- This is a financial issue: SB2513 and SB2332 are my top priority not only because of cesspools' significant threat to public health and the environment, but also because of the financial impacts contaminated water may have on our local economy. For example, the significant health risks of swimming in (or even just walking by) contaminated water could impact the tourism industry.
- Association of Hawaiian Civic Clubs Resolution: The Association of Hawaiian Civic Clubs, a Native Hawaiian advocacy group and large organization, passed a resolution in 2023 recommending that the legislature fund a grant program to convert cesspools. The resolution notes that cesspools are prevalent in low-income, rural communities in which Native Hawaiians live. The large costs of cesspool conversion thus can exacerbate the issue of Native Hawaiians moving to the mainland because of economic constraints. Therefore, cesspool conversion is a social justice issue.
- State's duty: The state has a mandate to make sure all cesspools are converted in the next three decades.
- Earlier conversion mandates would ensure we resolve the cesspool issue more quickly: The deadline to convert cesspools is 2050. Establishing 2035 and 2040 intermediate deadlines for Priority 1 and 2 cesspools, however, will ensure the State is on track to tackle this issue.
- Pervasiveness: Hawaii has more than 83,000 cesspools across the state, discharging 52 million gallons of raw sewage each day into Hawaii's waters. That's similar to a massive sewage spill every day. Around [half of these cesspools](#) pose a risk to water resources.
- Threat to public health: Cesspool discharge directly impacts human health by contaminating drinking water or waters used for swimming, exposing the citizens of Hawai'i to sewage pathogens. Untreated wastewater from cesspools [contains pathogens such as bacteria, protozoa and viruses](#) that can cause gastroenteritis, Hepatitis A, conjunctivitis, leptospirosis, salmonellosis and cholera.
- Threat to the environment: A [2023 Hawai'i-based study published by Nature](#) found that septic and cesspool pollution is a major driver of coral reef decline. The release of nutrients from cesspools through groundwater and streams into the ocean causes algae growth, which can smother the coral reefs that are essential to protecting our shorelines, nurturing our fisheries, preserving water quality and enabling our lucrative recreational economy.

SB-2513-HD-1

Submitted on: 4/1/2024 2:17:24 PM

Testimony for FIN on 4/2/2024 4:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Lois Langham	Individual	Support	Written Testimony Only

Comments:

I support this bill to improve wastewater technology and provide additional staff to implement it.

SB-2513-HD-1

Submitted on: 4/1/2024 2:46:30 PM

Testimony for FIN on 4/2/2024 4:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Martha Nakajima	Individual	Support	Written Testimony Only

Comments:

I strongly support this bill. Cesspools are awful but expensive, ruinous for many, to replace and yet replacement does public good way beyond helping the individual concerned. This is a place where government can and must help. Thank you. Sincerely, Martha Nakajima, Honolulu

SB-2513-HD-1

Submitted on: 4/1/2024 3:14:08 PM

Testimony for FIN on 4/2/2024 4:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Carolyn Lewis	Individual	Support	Written Testimony Only

Comments:

I strongly support this bill. More boots on the ground to help would be great. Mother earth needs this. Our oceans are in huge danger.

Mahalo