

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

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

REPRESENTATIVE AMY A. PERRUSO, CHAIR
HOUSE COMMITTEE ON HIGHER EDUCATION & TECHNOLOGY

Hearing Date: 3/20/2024

Room Number: 309

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) \$89,500 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

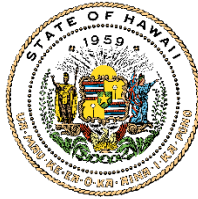
1 (2) \$82,700 or so much thereof as may be necessary for fiscal year 2024-2025 to
2 establish one full-time equivalent (1.0 FTE) engineer IV (SR-24) position within
3 the department of health's wastewater branch,
4 to support the approval of individual wastewater systems applications and the new wastewater
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.

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

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Testimony of
DAWN N. S. CHANG
Chairperson

Before the House Committee on
HIGHER EDUCATION & TECHNOLOGY

Wednesday, March 20, 2024
2:00 PM

VIA VIDEOCONFERENCE, Conference Room 309, 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>

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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.



To: The Honorable Chair Amy Perruso, the Honorable Vice Chair Jeanne Kapela, and Members of the Committee on Higher Education and Technology.

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

Re: **Hearing SB2513 SD2 HD1 RELATING TO WASTEWATER SYSTEMS**

Hearing: Wednesday March 20, 2024, 2:00 p.m., room 309

Aloha Chair Perruso, Vice Chair Kapela, and Members of the Committee on Higher Education and Technology!

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. HIROC is deeply concerned about the harm that cesspool and other wastewater pollution inflicts on our precious coral reefs and public health!

Hawai'i Reef and Ocean Coalition **STRONGLY SUPPORTS SB2513 SD2 HD1!**

Hawaii has over 80,000 cesspools that put about 53 million gallons of raw sewage into our groundwater, streams and ocean every single day! This discharge **exposes people to sewage pathogens that can make them sick.** The release of **nutrients** from cesspools through groundwater and streams into the ocean

fertilizes 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.** Sea level rise will further exacerbate the public health and environmental problems as it will cause more cesspools to overflow onto the surface.

Hawaii's reefs will die in warmer, more acidic, and rising oceans if we don't reduce cesspool pollution and other harmful factors now! Hawai'i needs to reduce cesspool pollution now in order to give coral reefs a chance to survive!

This bill would establish and fund a three-year new wastewater system and individual wastewater system technology demonstration and implementation pilot in the University of Hawai'i water resources research center. The pilot shall: examine and demonstrate new wastewater and individual toilet technology systems, ranging up to significantly larger multi-unit implement systems and options for community-scale solutions as appropriate, implement those technologies in wastewater system demonstration projects, and review and evaluate the affordability, feasibility, and efficiency of the treatment technologies in demonstration projects that include a cesspool identified as priority level 1 in the Hawaii Cesspool Prioritization Tool 2021, with no less than one cesspool on Molokai, and establish similar priority rankings for Mokokai, Lanai, and Niihau.

The bill also **appropriates monies for two full-time equivalent (2.0 FTE) positions at the Department of Health's Wastewater Branch for FY2024-2025.** 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.

This demonstration and implementation pilot is essential to determine the best and most affordable wastewater technologies to minimize the cost of cesspool upgrades while maximizing environmental protection. This pilot is essential for Hawaii, as the cost of upgrading all the cesspools is estimated to be well over \$2 billion (83,000 cesspools, with upgrade average costs of at least \$30,000)!

Please fund this research now to save cesspool owners substantial money in the future and pass this bill!

Mahalo!

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



Mar. 19, 2024

In Strong Support of **SB2513 SD2** Relating to Wastewater Systems
House Committee on Higher Education and Technology (HET)
Hearing on March 20, 2:00pm, Rm. 309

Aloha, Chair Perruso,, Vice-Chair Kapela 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**. This bill would establish and fund 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 (2.0 FTE) 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. As an amendment, I would suggest that the pilot project 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