

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

**Testimony in SUPPORT of SB0285 SD2  
RELATING TO WASTEWATER SYSTEMS**

REPRESENTATIVE NICOLE E. LOWEN, CHAIR  
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION  
REPRESENTATIVE LINDA ICHIYAMA, CHAIR  
HOUSE COMMITTEE ON WATER & LAND

Hearing Date: 2/16/2023

Room Number: 325

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. The measure establishes two full-time equivalent (2 FTE) positions within  
4 the Department's Wastewater Branch.

5 **Department Testimony:** The Department supports this measure that involves establishing and  
6 appropriating funds to implement a three-year demonstration pilot program within the University  
7 of Hawaii Water Resources Research Center to review, examine, and demonstrate new  
8 wastewater systems. The Department recognizes that there is a need for researching and testing  
9 new wastewater system options that may be affordable alternatives for cesspool conversions and  
10 upgrades.

11 The Department also supports the establishment of one full-time equivalent engineer  
12 position and one full-time equivalent planner position within the Department's Wastewater  
13 Branch to support the review and approval of individual wastewater system (IWS) applications.  
14 The Department anticipates a significant increase in the number of IWS applications that will be  
15 submitted as a result of the mandate to convert, upgrade or connect all cesspools in the State by  
16 2050 pursuant to Act 125, Session Laws of Hawaii 2017.

17 Thank you for the opportunity to testify.

18 **Offered Amendments:** None.



# UNIVERSITY OF HAWAII SYSTEM

## ‘ŌNAEHANA KULANUI O HAWAII

### Legislative Testimony

#### Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

Testimony Presented Before the  
House Committee on Energy & Environment Protection  
House Committee on Water & Land  
Thursday, March 16, 2023 at 9:00 a.m.

By

Thomas Giambelluca

Director, UH Water Resources Research Center

And

Darren T. Lerner, PhD

Director, University of Hawai'i (UH) Sea Grant College Program,  
School of Ocean and Earth Science and Technology

And

Michael Bruno, Provost

University of Hawai'i at Mānoa

### SB 285 SD2 – RELATING TO WASTEWATER SYSTEMS

Chairs Lowen and Ichiyama, Vice Chairs Cochran and Poepoe, and Members of the Committees:

The University of Hawai'i Water Resources Research Center and UH Sea Grant College Program (Hawai'i Sea Grant) **strongly support** SB 285 SD2, provided that its passage does not impact priorities as indicated in our Board of Regents Approved Budget.

The State of Hawai'i has shown its intention to improve water quality, mitigate drinking water risks, and join the other 49 states in addressing the known impacts of cesspools. However, Hawai'i's 88,000 cesspool owners are faced with a paradox, the State's approved list of replacement options includes systems such as Aerobic Treatment Unit's (ATU), which are effective at reducing nutrients but come with a high cost, or septic systems, which are less expensive but have been shown to have limited nutrient removal efficiency in Hawai'i's coastal environments.

The lack of affordable, effective technology options is a major impediment to Hawai'i's water quality improvement goals, and has the potential to result in a huge investment yielding little in return. This bill would leverage the University of Hawai'i's extensive research expertise to create an innovative pilot program that would test the safety and efficiency of new and emerging on-site wastewater technologies, determine which are best suited for Hawai'i's unique conditions, and ultimately support the Hawai'i Department of Health in approving new, more effective and less costly technologies for large-scale implementation.

While we cannot delay the process of replacing cesspools, a multi-pronged approach including policy changes, creating new financing options, and technology development is needed to successfully address this complex and challenging issue.

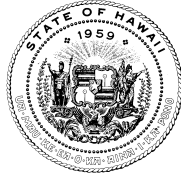
Additionally, since the bill delegates responsibility to the University of Hawai'i Water Resources Research Center (UH WRRC), it is worth noting that UH WRRC has significant experience in providing the state with useful research specifically relating to the impacts of cesspools and wastewater. This is demonstrated by our recently developed Hawai'i Cesspool Prioritization Tool created with the Hawai'i Department of Health, our wastewater outflow biomonitoring program that has continued for more than a decade with the City and County of Honolulu, and our faculty's numerous reports and publications that provide critical information on the water quality impacts of wastewater in the environment.

Additionally, we strongly support the appropriation of funds for two full-time equivalent (2.0 FTE) positions within the Hawai'i Department of Health's Wastewater Branch, which is in critical need of expansion in their personnel capacity in order to support the statewide transition away from cesspools.

Thank you for the opportunity to testify on this measure.

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

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



**IKAIKA ANDERSON**  
CHAIRMAN DESIGNATE, HHC  
*Ka Luna Ho 'okele*

**KATIE L. DUCATT**  
DEPUTY DESIGNATE TO THE  
CHAIRMAN  
*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 IKAIKA ANDERSON, CHAIRMAN-DESIGNATE  
HAWAIIAN HOMES COMMISSION  
BEFORE THE HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL  
PROTECTION AND  
THE HOUSE COMMITTEE ON WATER AND LAND  
HEARING ON MARCH 16, 2023 AT 9:00AM IN CR 325**

**SB 285, SD2, RELATING TO WASTEWATER SYSTEMS**

March 16, 2023

Aloha Chair Lowen, Chair Ichiyama, and members of the Committees:

The Department of Hawaiian Home Lands (DHHL) supports this measure which establishes a three-year New Wastewater System Demonstration Pilot Program within the University of Hawaii Water Resources Research Center to examine and demonstrate new wastewater technology systems; implement those technologies in demonstration projects in areas across the State that are identified as Priority Level 1 in the 2021 Hawaii Cesspool Hazard Assessment and Prioritization Tool Report; and establishes a similar ranking system for prioritization levels for the islands of Molokai, Lanai, and Ni'ihau. The measure appropriates funds for the pilot program and appropriates funds for FTE positions within the Department of Health's Wastewater Branch to support approval of individual wastewater systems applications.

There are approximately 2,500 cesspools that 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.

In consideration of the 2050 deadline to convert Hawaii's cesspools, DHHL supports the establishment of a three-year New Wastewater System Demonstration Pilot Program because it will provide the opportunity for alternative, financially feasible, and effective wastewater technologies to be evaluated and published in reports for the

State of Hawaii to understand the challenges and financial costs of cesspool conversions and wastewater technologies.

Furthermore, the pilot program will require that these technologies be implemented in areas across the State that are identified as Priority Level 1 in the 2021 Hawaii Cesspool Hazard Assessment and Prioritization Tool Report, many of which are located on Hawaiian Home Lands. DHHL supports fully comprehensive data and new technology demonstrations that will include the islands of Molokai, Lanai, and Ni'ihau.

Additionally, DHHL understands that there are approximately 88,000 cesspools statewide that will require cesspool conversion approvals. DHHL supports the appropriation of funds for FTE positions within the Department of Health's Wastewater Branch to support the approval of individual wastewater systems applications. DHHL is also aware that the State currently has a shortage of licensed engineers to execute the design plans and final construction inspections required by Act 125 (SLH 2017).

Lastly, 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 support this measure that will initiate the implementation of the diverse and feasible ways in which the requirements outlined in Act 125 (SLH 2017) can be completed.

Thank you for your consideration of our testimony.

March 16, 2023

**The Honorable Nicole E. Lowen, Chair**

House Committee on Energy & Environmental Protection

**The Honorable Linda Ichiyama, Chair**

House Committee on Water & Land  
State Capitol, Conference Room 211 & Videoconference

**RE: Senate Bill 285, SD2, Relating to Wastewater Systems**

**HEARING: Tuesday, March 16, 2023, at 9:00 a.m.**

Aloha Chair Lowen, Chair Ichiyama, and Members of the Joint Committees:

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 Hawai'i and its over 11,000 members. HAR **strongly supports** Senate Bill 285, SD2, which establishes a 3-year New Wastewater System Demonstration Pilot Program within the University of Hawaii Water Resources Research Center to examine and demonstrate new wastewater technology systems; implement those technologies in demonstration projects in areas across the State that are identified as Priority Level 1 in the 2021 Hawaii Cesspool Hazard Assessment and Prioritization Tool Report; and establish a similar ranking system for prioritization levels for the islands of Molokai, Lanai, and Niihau. Requires the University of Hawaii Water Resources Research Center to submit reports to the Legislature. Appropriates funds for the pilot program. Appropriates funds for 1 full-time equivalent (1.0 FTE) engineer position and 1 fulltime equivalent (1.0 FTE) planner position within the Department of Health's Wastewater Branch to support approval of individual wastewater systems applications. Effective 7/1/2050.

Hawai'i Association of 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 priorities<sup>1</sup> across the state (48,596 on Hawai'i Island; 14,300 on Kauai; 11,038 on Maui; 1,400 on Molokai; and 7,491 on O'ahu) with only 27 years to meet the state's mandate to convert all cesspools to a Director of Health approved wastewater system. To convert 83,000 cesspools by 2050, at least 3,000 cesspools would need to be converted per year.

Affordability and financial planning are key. The Cesspool Conversion Working Group conducted an affordability analysis for homeowners. Based on the analysis,

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

**97%<sup>2</sup> of homeowners would be financially burdened by cesspool conversion costs.** Equally concerning, even with a \$10,000 rebate 82% of homeowners would still be financially burdened. Costs to convert will vary greatly depending on resources, labor, permitting delays, property terrain, and other variables. Most homeowners will not be able to afford to do this alone. 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 and rural communities.

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, especially for communities with limited infrastructure. We applaud the legislature for taking leadership on this matter through the establishment of this pilot program.

For the foregoing reasons, Hawai'i Association of REALTORS® strongly supports this measure. Mahalo for the opportunity to testify.

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<sup>2</sup> Cesspool Conversion Working Group. (2022). *Final Report to the 2023 Regular Session Legislature*. State of Hawai'i Department of Health. <https://health.hawaii.gov/opppd/files/2022/12/Act-170-SLH-2019-Nov-2022.pdf>



Environmental Caucus of  
The Democratic Party of Hawai'i

To: The Honorable Nicole E. Lowen, Chair  
The Honorable Elle Cochran, Vice Chair  
Members of the Committee on Energy and Environmental Protection

The Honorable Linda Ichiyama, Chair  
The Honorable Mahina Poepoe, Vice Chair  
Members of the Committee on Water and Land

Re: **SB 285, SD2 – RELATING TO WASTEWATER SYSTEMS**

Hearing: Thursday, March 16, 2023, 9:00 a.m., Conference Room 325 & Videoconference

Position: **Strong support**

Aloha, Chairs Lowen and Ichiyama, Vice Chairs Cochran and Poepoe and Members of the Committee on Energy and Environmental Protection and Committee on Water and Land:

The Environmental Caucus of the Democratic Party of Hawai'i and its 7,500 voting enrolled members, stands in strong support of SB 285, SD2. This measure would establish a 3-year New Wastewater System Demonstration Pilot Program within the University of Hawai'i Water Resources Research Center to examine and demonstrate new wastewater technology systems; 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; and establish a similar ranking system for prioritization levels for the islands of Molokai, Lanai, and Niihau; and it requires the University of Hawai'i Water Resources Research Center to submit reports to the Legislature.

The Democratic Party of Hawai'i Platform plank on the environment provides that its members are to “protect and preserve Hawai'i's environment and achieve energy sustainability, advance measures to re-establish a healthy climate and environment for humans and fellow species, including actions to urgently address climate change, and work towards 100% renewable energy goals.

We believe that all people have the right to live in a clean, healthy and safe environment. We believe that the preservation of our natural environment and its ecological well-being is essential to ensuring a safe, healthy, bountiful life for future generations in Hawai'i. We support policies that create a more sustainable society. We support the restoration, preservation, and protection of native ecosystems.

We believe in the resource management principles outlined in the Public Trust doctrine of [Article XI, Section 1 of] the Hawai'i State Constitution.” [OUR PLATFORM | DPH \(hawaiidemocrats.org\)](#)





March 16, 2023

Page 2

Hawaii currently has an official goal to replace all its cesspools with better sewage treatment systems that cause less harm to the local environment and public health by 2050; however, as many as 83,000 cesspools release about 53 million gallons of untreated sewage into the islands' soil, streams and nearshore waters daily making the 2050 deadline too late to prevent substantial harm.

In the Report of the [Cesspool Conversion Working Group](#), nearly 14,000 of the worst Hawaii cesspools – the ones that would potentially cause the most damage based on their location – are to be removed by 2030; followed by more than 12,000 “priority two” cesspools to be removed by 2035; and the remaining “priority three” 55,000 cesspools are to be removed by the original 2050 deadline.

“There are no benefits to human health or the environment if homeowners wait or postpone conversion until closer to the 2050 ... deadline,” the 17-member task force of scientists, public health officials, private industry representatives, elected leaders and environmental advocates wrote in a new 1,182-page report to the Legislature. [Microsoft Word - Cesspool Conversion Plan Draft Final-copy-blue wave-FINAL use this one \(hawaii.gov\)](#)

Establishing a 3-year New Wastewater System Demonstration Pilot Program within the University of Hawai'i Water Resources Research Center to examine and demonstrate new wastewater technology systems; 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; and establishing a similar ranking system for prioritization levels for the islands of Molokai, Lanai, and Niihau; and it requires the University of Hawai'i Water Resources Research Center to submit reports to the Legislature are all consistent with the state and counties' duties under the Public Trust Doctrine under Article XI, Section 1, of the Hawaii State Constitution, and the DPH Platform environmental plank to restore, preserve, and protect our native ecosystem.

Please support and pass this bill.

Mahalo for the opportunity to testify on this measure.

/s/ Melodie Aduja and Alan Burdick

Co-Chairs, Environmental Caucus of the Democratic Party of Hawai'i



To: The Honorable Chairs Nicole Lowen and Linda Ichiyama, the Honorable Vice Chairs Elle Cochran and Mahina Poepoe, and Members of the Committees on Energy and Environment and Water and Land

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

Re: **Hearing SB285 SD2 RELATING TO WASTEWATER SYSTEMS.**

Hearing: Thursday March 16, 2023, 9:00 a.m., room 325

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Aloha Chairs Lowen and Ichiyama, Vice Chairs Cochran and Poepoe, and Members of the Committees on Energy and Environment and Water and Land:

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.

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**The Hawai'i Reef and Ocean Coalition STRONGLY SUPPORTS SB285 SD2 and proposes amendments to add outreach and education!**

Hawai'i has a significant public health and environmental problem with water pollution from cesspools. We have over 80,000 cesspools that discharge about 50 million gallons of raw sewage into our groundwater every day! This discharge exposes people to sewage pathogens that can make them sick. The release of nutrients from cesspools causes algae growth, which can smother the corals that

are essential to protecting our shorelines, nurturing our fisheries, 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. The recent report of the legislatively-appointed Cesspool Conversion Working Group recommended that Hawai'i upgrade the cesspools that cause the most pollution (Priority Level 1) by 2030.

This bill as drafted would:

- Establish a three-year pilot in the University of Hawai'i Water Resources Research Center to examine and demonstrate new wastewater technology systems;
- Implement those technologies in demonstration projects in Priority Level 1 areas across the State;
- Establish a similar ranking system for Molokai, Lanai, and Niihau; and
- Appropriate funds for one full-time engineer and one full-time planner to support approval of individual wastewater systems applications.

The examination, demonstration, and implementation of new wastewater technology systems in Priority 1 areas across the state will benefit everyone in Hawai'i. Funding staff is critically needed. This bill is important in facilitating the necessary cesspool conversions.

The Cesspool Conversion Working Group report also stated that **outreach and education are essential**; other jurisdictions have found that a robust public outreach was necessary for success. **The Hawai'i Reef and Ocean Coalition proposes the following amendments to incorporate an outreach and education program:**

"SECTION 3. Section 342D-59, Hawaii Revised Statutes, is amended to read as follows:

**" [{}§342D-59 [{}]** **Research, educational, and training programs.** The director may:

(1) Conduct and supervise research programs for the purpose of determining the causes, effects, and hazards of water pollution, the quality of the receiving water and

the means to monitor the quality of water, or to effect the proper disposal of sewage, drainage, and waste;

(2) With the approval of the governor, cooperate with, and receive money from the federal government, or any political subdivision of the State or from private sources for the study and control of water pollution;~~and~~

(3) Conduct and supervise state educational and training programs on water pollution prevention, control, and abatement, including the preparation and distribution of information relating to water pollution~~[-];~~ and

(4) Retain experts who shall, in consultation with counties, nonprofit organizations, and wastewater industry professionals:

(A) Identify necessary resources and tools for public outreach and education, including necessary funding and timelines, to meet the requirements of section 342D-72;

(B) Develop a comprehensive public outreach strategy for the State and counties to educate homeowners on cesspool conversion options and resources; and

(C) Develop a website to educate homeowners on why cesspools need to be converted, when conversions are required, options and resources available to help with the conversions, and other relevant information."

SECTION 34. There is appropriated out of the general revenues of the State of Hawaii the sum of \$ \_\_\_\_\_ or so much thereof as may be necessary for fiscal year 2023-2024 to implement the new wastewater

system demonstration pilot program established pursuant to this Act.

The appropriation made by this section shall not lapse at the end of the fiscal year for which the appropriation is made; provided that all moneys from the appropriation unencumbered as of June 30, 2026, shall lapse as of that date.

The sum appropriated shall be expended by the university of Hawaii water resources research center, in cooperation and consultation with the department of health, department of Hawaiian home lands, and the university of Hawaii college of engineering for the purposes of this Act.

SECTION 45. Notwithstanding section 342D-83, Hawaii Revised Statutes, or any other law to the contrary, there is appropriated out of the water pollution control revolving fund the sum of:

(1) \$ or so much thereof as may be necessary for fiscal year 2023-2024 and the same sum or so much thereof as may be necessary for fiscal year 2024-2025 to fund one full-time equivalent (1.0 FTE) engineer position within the department of health's wastewater branch; ~~and~~

(2) \$ or so much thereof as may be necessary for fiscal year 2023-2024 and the same sum or so much thereof as may be necessary for fiscal year 2024-2025 to fund one full-time equivalent (1.0 FTE) planner position within the department of health's wastewater branch[-] ;and

(3) \$ or so much thereof as may be necessary for fiscal year 2023-2024 and the same sum or so much thereof as may be necessary for fiscal year 2024-2025 for the department of health to retain experts to identify necessary public outreach and

education resources and tools and develop a comprehensive public outreach strategy and website to provide necessary information to educate homeowners to meet the State's cesspool conversion deadlines.

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

Mahalo to the Committee for hearing this important bill! **Please pass this bill with the above outreach and education amendments!**

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

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TO: House Committee on Energy & Environmental Protection  
Rep. Nicole Lowen, Chair  
Rep. Elle Cochran, Vice Chair

House Committee on Water & Land  
Rep. Linda Ichiyama, Chair  
Rep. Mahina Poepoe, Vice Chair

FROM: Lynn Miyahira representing Public Access to SunScreens (PASS) Coalition  
DATE: March 16, 2023

**Position: SUPPORT for SB 285 SD2**

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 stand in **support of SB 285 SD2**. This proposed bill aims to harness the extensive research expertise of the University of Hawai'i to establish a pilot program that evaluates the safety and efficacy of innovative on-site wastewater technologies. This program will play a crucial role in identifying the most suitable technologies for Hawai'i's specific conditions. To achieve this, the bill would also allocate funds to hire 1.0 FTE engineer and 1.0 FTE planner for the Hawai'i Department of Health Wastewater Branch. The roles of these professionals would be to support the approval of new, more efficient, and less expensive technologies, leading to their eventual large-scale implementation and cesspool conversion. Overall, this bill is a promising initiative that leverages the state's existing resources to address an essential environmental challenge.

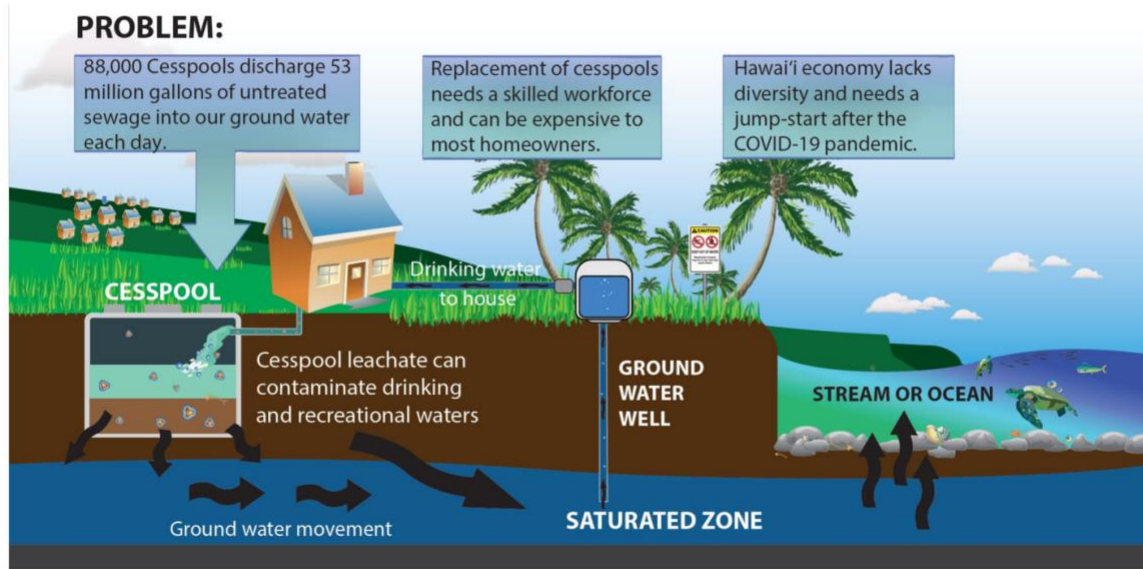
Cesspools are a pressing issue in Hawaii and impact our health, water quality, and coral reefs. With over 80,000 cesspools in the state, discharging about 50 million gallons of wastewater every day, immediate action is needed to mitigate their negative impact. Untreated wastewater leaking from cesspools into nearshore waters is causing high levels of nitrogen in the water (also known as eutrophication). This leads to algae blooms that suffocate and cover our coral reefs.

Focusing on efforts to significantly reduce the number of cesspools leaking untreated wastewater into our oceans, would have a much greater impact on our coral reefs than lesser impacts, such as sunscreen, which has not been shown in the overall scientific literature to damage reefs and have not been substantiated in the ocean (only in a lab).

We also encourage the state to look for meaningful ways to help homeowners mitigate the financial burden associated with converting cesspools to more advanced forms of wastewater treatment. Grants, tax incentives, rebates and other programs should be implemented with preference going to households in priority areas.

The state must also support workforce development programs, such as the [Workforce-4-Water \(W4W\) program](#), which is a collaborative program with Wastewater Alternatives and Innovation, the University of Hawaii and PICHTR, to ensure that Hawaii has enough skilled workers to complete all the necessary cesspool conversions. The wastewater industry has the potential to create much needed steady, professional jobs – especially on the neighbor islands – with promising career pathways to help develop an entire industry of skilled workers.

Below is an easy to understand graphic to explain the damage cesspools are doing to our groundwater, oceans and coral reefs.



Source: <https://waicleanwater.org/workforce4water>

Mahalo you for the opportunity to testify.

Sincerely,  
Lynn Miyahira  
Public Access to SunScreens (PASS) Coalition





Email: [communications@ulupono.com](mailto:communications@ulupono.com)

HOUSE COMMITTEES ON ENERGY & ENVIRONMENTAL PROTECTION AND WATER & LAND  
Thursday, March 16, 2023 — 9:00 a.m.

**Ulupono Initiative supports SB 285 SD2, Relating to Wastewater Systems.**

Dear Chair Lowen, Chair Ichiyama, and Members of the Committees:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve the quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food, renewable energy and clean transportation choices, and better management of freshwater resources.

**Ulupono supports SB 285 SD2**, which establishes a three-year New Wastewater System Demonstration Pilot Program within the University of Hawai'i Water Resources Research Center to examine and demonstrate new wastewater technology systems; 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; establish a similar ranking system for prioritization levels for the islands of Molokai, Lana'i, and Ni'ihau; requires the University of Hawai'i Water Resources Research Center to submit reports to the Legislature; appropriates funds for the pilot program; and, appropriates funds for one full-time equivalent (1.0 FTE) engineer position and one full-time equivalent (1.0 FTE) planner position within the Department of Health's Wastewater Branch to support approval of individual wastewater systems applications.

Ulupono supports finding innovative solutions to transition Hawai'i's waste management from cesspools to other environmentally friendly alternatives. Hawai'i has more than 88,000 cesspools statewide that discharge more than 53 million gallons of untreated sewage into the state's waters each day. This poses major health and environmental risks to our drinking water, groundwater, streams, and shore waters. The information gathered and analyzed through demonstration projects can serve as valuable tools in transitioning Hawai'i's cesspool systems.

Thank you for the opportunity to testify.

Respectfully,

Micah Munekata  
Director of Government Affairs

*Investing in a Sustainable Hawai'i*

**SB-285-SD-2**

Submitted on: 3/15/2023 9:42:00 AM

Testimony for EEP on 3/16/2023 9:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Manuel Mejia	CORAL (Coral Reef Alliance)	Support	Written Testimony Only

Comments:

Re: Hearing SB285 SD2 RELATING TO WASTEWATER SYSTEMS.

Hearing: Thursday March 16, 2023, 9:00 a.m., room 325

Aloha Chairs Lowen and Ichiyama, Vice Chairs Cochran and Poepoe, and Members of the Committees on Energy and Environment and Water and Land: We fully support this bill to

- Establish a three-year pilot in the University of Hawai'i Water Resources Research Center to examine and demonstrate new wastewater technology systems;
- Implement those technologies in demonstration projects in Priority Level 1 areas across the State;
- Establish a similar ranking system for Molokai, Lanai, and Niihau; and
- Appropriate funds for one full-time engineer and one full-time planner to support approval of individual wastewater systems applications.

The examination, demonstration, and implementation of new wastewater technology systems in Priority 1 areas across the state will benefit everyone in Hawai'i. Funding staff is critically needed. This bill is important in facilitating the necessary cesspool conversions.

Mahalo for your leadership. Now, more than ever, we need to restore public trust by taking care of both our waters and people's health and well-being. Our beloved island home needs this. Thank you for your bold and innovative and strong leadership in supporting SB285 SD2 and for all that you do in protecting our island home. We at CORAL urge you to please pass this bill.

Mahalo nui loa,

Manuel Mejia

Regional Program Director

Hawaii Islands Program (CORAL)

[mmejia@coral.org](mailto:mmejia@coral.org)





March 15, 2023

In Support of **SB285 SD2** Relating to Wastewater Systems  
House Committees on Energy & Environmental Protection (EEP) & WAL (Water & Land)  
Hearing on March 16, 9am, Rm. 325

Aloha, Chairs Lowen & Ichiyama, Vice-Chairs Cochran & Poepoe and Members of the Committees:

On behalf of the non-profit WAI: Wastewater Alternatives & Innovations, I am writing in **support of SB285**. This bill would leverage the University of Hawai'i's extensive research expertise to create a pilot program to test the safety and efficiency of innovative on-site wastewater technologies. This program would provide valuable information on which technologies are best suited for Hawai'i's unique conditions. In addition, this bill would appropriate funds for 1.0 FTE engineer position and 1.0 FTE planner position within the Hawai'i's Department of Health Wastewater Branch to support the permitting and approval of more efficient and less expensive technologies for large-scale implementation and cesspool conversions.

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! The people of Hawaii need this law to make sure their wastewater systems aren't polluting the groundwater or nearby surface waters. As a member of the State's Cesspool Conversion Working Group over the last four years, we believe that this kind of pilot project for individual wastewater systems will be more efficient and affordable in the long run. The lack of affordable and effective technologies (nutrient & nitrogen reducing) is a major impediment to Hawai'i's water quality improvement goals.

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. Better sanitation systems reduce sewage 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 a mandate to make sure all cesspools are converted in the next three decades. WAI is working with innovative sanitation companies from across the country and around the world to introduce more efficient and affordable alternatives for wastewater management. This bill provides funding for wastewater planning and management, incentivizes county-level action, and promotes partnerships between State and County wastewater management programs. I believe that SB285 is a crucial step in the right direction to solving Hawai'i's cesspool issue and sewage pollution problem. Mahalo for your leadership on this issue and support of this bill.

Aloha,

*Stuart Coleman*

Stuart H. Coleman, Executive Director

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Testimony Presented Before the  
House Committees on Energy and Environmental Protection and Water and Land  
Thursday, March 16th, 2023 at 9:00 a.m.

By  
Christopher Shuler of Haiku-Pawela, HI

SB 285 – RELATING TO WASTEWATER SYSTEMS

Chairs Lowen and Ichiyama, Vice Chairs Cochran and Poepoe, and Members of the Committees:

As an experienced water quality scientist with expertise in Hawaii and the Pacific, AND as a concerned citizen and user of our common wealth of drinking water and recreational waters, AND as a Hawaii homeowner who personally understands the challenges to affording and maintaining a home in Hawaii that are faced by myself and my peers, I **strongly support** SB 285.

This bill would create an innovative pilot program that would test the safety and efficiency of new and emerging on-site wastewater technologies, determine which are best suited for Hawaii's unique conditions, and ultimately support the Hawaii Department of Health in approving new, more effective and less costly technologies for large-scale implementation.

The lack of DoH approved, affordable, and effective technology options is a major impediment to Hawaii's homeowners who are faced with paying a huge out of pocket cost for a new system that may not even be much more effective in terms of positive impacts to the environment than their existing cesspool. The State's approved list of replacement options includes systems such as ATU's, which are effective at reducing nutrients but come at a cost of \$40,000-\$80,000, or septic systems, which are less expensive, at \$20,000 to \$40,000 but have been shown to have limited nutrient removal efficiency in Hawaii's coastal environments.

The need to develop, test, and permit emerging on-site wastewater technologies is clear, and this bill moves the needle in that direction.

Thank you for the opportunity to testify on this measure.

**SB-285-SD-2**

Submitted on: 3/14/2023 10:43:01 PM

Testimony for EEP on 3/16/2023 9:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Daniel Amato	Individual	Support	Written Testimony Only

Comments:

To: The Honorable Chairs Nicole Lowen and Linda Ichiyama, the Honorable Vice Chairs Elle Cochran and Mahina Poepoe, and Members of the Committees on Energy and Environment and Water and Land

From: Daniel Amato, PhD

Re: Hearing SB285 SD2 RELATING TO WASTEWATER SYSTEMS.

Hearing: Thursday March 16, 2023, 9:00 a.m., room 325

Aloha Chairs Lowen and Ichiyama, Vice Chairs Cochran and Poepoe, and Members of the Committees on Energy and Environment and Water and Land:

As a research scientist and a water quality professional, I strongly support SB285. This bill is essential to help Hawaii determine the best path forward regarding wastewater technology intended to upgrade cesspools. More importantly, a pilot study will help the residents of Hawaii understand how and why we need to upgrade cesspools. Please support SB285 in your committee. Mahalo -Dr. Daniel Amato