

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. Box 3378
Honolulu, HI 96801-3378
doh.testimony@doh.hawaii.gov

**Testimony in SUPPORT of HB1859 HD1
RELATING TO ENVIRONMENTAL PROTECTION**

REPRESENTATIVE SYLVIA LUKE, CHAIR
HOUSE COMMITTEE ON FINANCE

Hearing Date: 2/24/2020

Room Number: CR 308

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

Department Testimony: The Department supports this measure. Act 132, Session Laws of Hawaii (SLH) 2018 established a Cesspool Conversion Working Group (CCWG) that is administered by the Department, to develop a long-range, comprehensive plan for cesspool conversion statewide of all cesspools by 2050. The CCWG is also responsible for evaluating alternative wastewater equipment and technologies appropriate to the various areas where cesspools are located that may better protect the environment at lower or comparable cost and how the equipment or technologies can be incorporated as part of the long-term solution to wastewater treatment issues. The Department believes that funding a pilot project by the University of Hawaii Water Resources Research Center which involves evaluating various available wastewater treatment alternative technologies will assist the CCWG with meeting the objectives of Act 132 SLH 2018.

Offered Amendments: None.

Thank you for the opportunity to testify on this measure.



February 23, 2020

To: The Honorable Sylvia Luke, Chair,
The Honorable Ty J.K. Cullen, Vice Chair, and Members
House Committee on Finance

Re: **HB 1859– relating to new toilet technologies**

Hearing: Monday, February 24, 2020, 1:00 p.m. Room 308

Position: **Strong Support**

Aloha, Chair Luke, Vice Chair Cullen, and Members of the Committee,

The HAWAI'I REEF AND OCEAN COALITION – HIROC – was formed in 2017 by coral reef scientists, educators, local Hawaii environmental organizations, elected officials, and others to address a crisis facing Hawaii's coral reefs and ocean – namely, the pollution of our near-shore environment by sunscreens that are literally killing our marine life. We are currently asking the Legislature to pass a handful of very important bills to save our coral reefs – they are bills relating to sunscreens, plus bills on cesspools, plastic marine debris, the climate crisis and sea-level rise.

HIROC strongly supports this bill, which would establish a 3-year pilot project to demonstrate new toilet and sewage treatment technologies and to expedite demonstration projects. Hawaii needs to consider new solutions to its old wastewater and sewage problems. Toilets and sewage treatment have not advanced much, but there is a great potential for technological advances that would save water, energy and money.

This bill will provide needed funding to investigate and demonstrate new solutions. Please restore a reasonable sum for an appropriation plus an early effective date, and pass this bill. Thank you for the opportunity to testify.

Alan B. Burdick, for HIROC
Burdick808@gmail.com 486-1018

HB-1859-HD-1

Submitted on: 2/23/2020 2:29:34 PM

Testimony for FIN on 2/24/2020 1:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Alexandra Kahn	Surfrider Oahu	Support	No

Comments:

HB-1859-HD-1

Submitted on: 2/21/2020 7:42:55 PM

Testimony for FIN on 2/24/2020 1:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Benton Kealii Pang, Ph.D.	Individual	Support	No

Comments:

HB-1859-HD-1

Submitted on: 2/21/2020 2:19:36 PM

Testimony for FIN on 2/24/2020 1:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Bronson Kainoa Kiyoshi Azama	Individual	Support	No

Comments:

Aloha mai kakou,

Aloha my name is Bronson Azama and I am a student at James B. Castle High School. I would like to voice my support for this bill as it relates to protecting our environment and Natural Resources. I strongly support research into how we can reduce to minimal, if not zero negative environmental impact. It is becoming all too common to hear about a sewage spill and an e.colli, warning. If we were to find better practices we could see these incidents reduced.

We live on an island we need to act like it, so we need more initiatives like these to reduce our footprint on this very fragile ecosystem that we are apart of.

Mahalo,

Bronson Azama

HB-1859-HD-1

Submitted on: 2/23/2020 2:31:06 PM

Testimony for FIN on 2/24/2020 1:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Marvin Heskett	Individual	Support	No

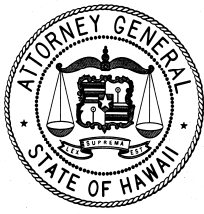
Comments:

Aloha,

Please support this improtant bill to help improve and protect our coastal water quality.

Thank You,

Marvin Heskett



**TESTIMONY OF
THE DEPARTMENT OF THE ATTORNEY GENERAL
THIRTIETH LEGISLATURE, 2020**

LATE

ON THE FOLLOWING MEASURE:

H.B. NO. 1859, H.D. 1, RELATING TO ENVIRONMENTAL PROTECTION.

BEFORE THE:

HOUSE COMMITTEE ON FINANCE

DATE: Monday, February 24, 2020 **TIME:** 1:00 p.m.

LOCATION: State Capitol, Room 308

TESTIFIER(S): Clare E. Connors, Attorney General, or
Lori N. Tanigawa, Deputy Attorney General

Chair Luke and Members of the Committee:

The Department of the Attorney General provides the following comments.

The purpose of this bill is to establish a 3-year pilot project by the University of Hawai'i Water Resources Research Center to demonstrate new toilet and sewage treatment technologies and to expedite demonstration projects.

Article X, section 6, of the Hawai'i Constitution, gives the University of Hawai'i Board of Regents "exclusive jurisdiction over the internal structure, management, and operation of the university." Section 6 further provides: "This section shall not limit the power of the legislature to enact laws of statewide concern. The legislature shall have the exclusive jurisdiction to identify laws of statewide concern." We therefore suggest that the Legislature consider amending this bill to add a statement identifying this bill as a law of statewide concern.

Thank you for the opportunity to provide these comments.



LATE

Email: communications@ulupono.com

HOUSE COMMITTEE ON FINANCE
Monday, February 24, 2020 — 1:00 p.m. — Room 308

Ulupono Initiative supports HB 1859 HD 1, Relating to Environmental Protection.

Dear Chair Luke and Members of the Committees:

My name is Amy Hennessey, and I am the Senior Vice President of Communications & External Affairs at Ulupono Initiative. We are a Hawai'i-based impact investment firm that strives to improve our community's quality of life by creating more locally produced food; increasing affordable clean renewable energy and transportation options; and better managing waste and fresh water resources.

Ulupono supports HB 1859 HD 1, which establishes a 3-year University of Hawai'i pilot project to demonstrate new toilet and sewage treatment technologies and to expedite demonstration projects.

Hawai'i has over 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.

As an island state, Hawai'i is responsible for handling and diverting its waste streams. With the passage of Act 132, Session Laws of Hawai'i 2018, a cesspool conversion working group was formed and tasked to develop a comprehensive plan to address cesspool conversions in an environmentally-responsible manner. Allowing this solution-based approach will help to find new, innovative technologies in the State's push to transition cesspools statewide to eco-friendly alternatives.

Thank you for this opportunity to testify.

Respectfully,

Amy Hennessey, APR
Senior Vice President, Communications & External Affairs

Investing in a Sustainable Hawai'i

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
February 24, 2020

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Deputy Manager and Chief Engineer 

The Honorable Sylvia Luke, Chair
and Members
Committee on Finance
House of Representatives
State Capitol, Room 308
Honolulu, Hawaii 96813

LATE

Dear Chair Luke and Members:

Subject: House Bill 1859, House Draft 1: Relating to Environmental Protection

The Honolulu Board of Water Supply (BWS) supports House Bill (HB) 1859, House Draft (HD) 1. The purpose of this bill is to establish and appropriate funds for a New Waste Management Solution Pilot Project to be conducted by the University of Hawaii Water Resources Research Center (WRRC) to conduct the 3-year pilot project that tests new toilet and sewage technologies and to expedite demonstration projects.

According to a 2017 Department of Health (DOH) Report Relating to Cesspools and Prioritization For Replacement submitted to the Legislature (2018, Session Laws of Hawaii (SLH)), there are nearly 88,000 inventoried cesspools in the State. These cesspools discharge 53.0 million gallons of raw sewage into the groundwater and surface water every day. Oahu has 11,300 cesspools that discharge 7.5 million gallons per day of raw sewage into the groundwater and surrounding environment. Act 132, 2018 SLH, established a Cesspool Conversion Working Group within DOH to develop a comprehensive plan for conversion of all statewide cesspools by 2050. Accordingly, "replacement of each existing cesspool with an improved treatment method could cost \$20,000 or more per system, for a total cost around \$1.75 billion." DOH has partnered with several state and county agencies to resolving these issues, which are complex.

A 3-year pilot project and additional funding to research and find new toilet and sewage treatment technologies would allow the WRRC to continue to find new waste management solutions that can preserve local water quality and protect our environment.

The Honorable Sylvia Luke, Chair
and Members
February 24, 2020
Page 2

Thank you for your consideration of our testimony in support of HB 1859, HD 1.

Very truly yours,

A handwritten signature in blue ink, appearing to read 'Ernest Y. W. Lau', is positioned above the printed name.

ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

LATE



Environmental Caucus of The Democratic Party of Hawai'i

Monday, February 24, 2020

House Bill 1859, HD 1
Testifying in Strong Support

Aloha Chair Luke; Vice Chair Cullen; and Members of the Committee on Finance:

The Environmental Caucus of the Democratic Party of Hawaii stands in **STRONG SUPPORT** of HB 1859, HD 1. This measure establishes a 3-year pilot project by the University of Hawaii Water Status Resources Research Center to demonstrate new toilet and sewage treatment technologies and to expedite demonstration projects and appropriates funds.

This measure is reasonable and justifiable considering the 88,000 existing cesspools within the State of Hawai'i making Hawai'i the number one state in the nation with the greatest number of cesspools per capita than any other state in the Union. This measure is also needed to assist in meeting the mandated cesspool conversion requirement by 2050.

In May 5, 2018, at the O'ahu County Democrats Convention, out of dire concern of the continuous environmental damage and immediate future risk to the environment, to human life, and to wildlife and marine life, as already witnessed by the environmental demise of Kane'ohe Bay and illnesses and sores suffered by individuals who live, swim, play, fish, pick limu, and boat in Kane'ohe Bay through staphylococcus aureus and other bacterial skin infections, and MRSA, the Methicillin-resistant Staphylococcus aureus (resistant to many antibiotics), and in Upcountry Maui, where its drinking water aquifer is at risk of fecal coliform bacteria contamination from human sewage, the following OCC Resolution was adopted:

OC 2018-5. Urging Cesspool Abatement Measures

Whereas, Thousands of cesspools throughout the islands are threatening drinking water supplies, coral reefs and the health of the people who swim, surf, and consume the marine life in popular places; and

Whereas, This is a serious public safety issue, environmental problem and economic danger that is exacerbated by the effects of climate change; and

Whereas, The impact to coral reefs affects the state's economy, shoreline protection, recreation and habitat for important marine life; and

Whereas, Coral reefs around the state, including Kahalu'u Lagoon and Diamond Head on O'ahu, are threatened as cesspools overload nearby waters with nutrients - nitrogen and phosphorous - that cause algae to smother new growth; and

Whereas, The State Department of Health estimates \$1.75 billion is needed to replace all 88,000 cesspools around Hawai'i, with upgrades required urgently for about half of them; and

Whereas, Approximately 53 million gallons of raw sewage are being discharged each day into cesspools which are basically holes in the ground for wastewater; and

Whereas, One of highest priority area is in upcountry Maui, where 7,400 cesspools have caused nitrate levels in well water to spike dangerously close to safe-drinking limits; and

Whereas, The other area of the highest priority is in Kahalu'u, on the east side of O'ahu, where there have been incidents of skin infections consistent with sewage-contaminated surface water; and

Whereas, The risk of disease is expected to increase as cesspools deteriorate and become more prone to flooding as sea level rises and storms intensify as a result of Climate Change; and

Whereas, Hawai'i depends on wells for more than 90 percent of its drinking water and the vast majority of homes are near the ocean subject to sea level and water table rise causing an increase in wastewater contamination on healthy sources; and

Whereas, Both cesspools and septic tank upgrades still allow for effluent to leach into the ground into groundwater and into the ocean; and

Whereas, Connecting to local wastewater systems is best; and

Whereas, All cesspools are banned by 2050; now, therefore, be it

Resolved, That the O'ahu County Democrats of the Democratic Party of Hawai'i urge the Hawai'i State Legislature, in collaboration with the County of Honolulu, to seek cesspools abatement measures such as connecting to the local wastewater systems to totally eliminate the problem of leaching, coral damage, and wastewater contamination; and be it

Ordered, That copies of this resolution be transmitted to the members of the Hawai'i Congressional Delegation, the Governor of the State of Hawai'i, the Lt. Governor of the State of Hawai'i, Hawai'i Legislators who are members of the Democratic Party; the Mayor of the City and County of Honolulu; and Members of the City Council of the County of Honolulu, and the 2018 convention resolutions committee of the Democratic Party of Hawai'i.

For these reasons, we urge you to vote favorably on this bill which establishes a 3-year pilot project by the University of Hawaii Water Status Resources Research Center to demonstrate new toilet and sewage treatment technologies and to expedite demonstration projects, and appropriates funds.

Mahalo for the opportunity to testify,

/s/ Melodie Aduja

Environmental Caucus
Democratic Party of Hawai'i



WAI

WASTEWATER ALTERNATIVES AND INNOVATIONS

LATE

Feb. 24, 2020

In Support of **HB1859 HD1** Relating to Environmental Protection
House Committees on Finance (FIN))
Feb. 24, 1:00pm, Room 308

Aloha, Chair Luke, Vice Chair Cullen and Members of the Finance Committee:

On behalf of the non-profit WAI: Wastewater Alternatives & Innovations, I am writing in **strong support of HB1859 HD1**, which would establish a pilot program review and test new toilet and sewage treatment technologies in different locations across the state with UH's Water Resources Research Center and UH Sea Grant College.

I serve on the Cesspool Conversion Working Group, and this bill would help us find better and more affordable solutions to our serious wastewater management problem. Hawaii has more than 88,000 cesspools across the state, and these substandard systems discharge 53 million gallons of raw sewage each day into Hawaii's waters. That's like a massive sewage spill every day! Although most of us don't see the effects, this sewage pollution poses serious risks to water quality, human health and the resilience of our coral reefs.

WAI: Wastewater Alternatives & Innovations is dedicated to protecting our waters and near-shore ecosystems by reducing sewage pollution from cesspools and failing septic systems. Our goal is to help communities and homeowners find more innovative, affordable and eco-friendly solutions to wastewater management. Better sanitation systems reduce sewage pollution and makes properties more valuable, while also protecting our groundwater, streams and the health of our coral reefs and coastal areas.

This crucial bill will help DOH to help fund pilot projects that allow us to test new technology like the Gates Foundation's Reinvented Toilets. These and other innovative circular systems separate liquids and solids, burn the solids as fuel and then pasteurize the water, producing pathogen-free biochar and clean, recycled water. The mandate to convert all cesspools is 2050, but with 30-year mortgages, we need to start testing new solutions now, especially in high-priority areas like Kahalu'u. This bill will make it easier to do that and provide critical information for the Cesspool Conversion Working Group to help us in selecting the best new sanitation technologies for the state.

Mahalo for your leadership on this issue and consideration of this bill. Please let me know if you have any questions or concerns.

Aloha,
Stuart Coleman
Stuart H. Coleman