



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. Box 3378
Honolulu, HI 96801-3378
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**Testimony in SUPPORT of HB2106 HD1
RELATING TO HEALTH**

REPRESENTATIVE NICOLE E. LOWEN, CHAIR
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

Hearing Date: 2/11/2020

Room Number: CR 325

1 **Fiscal Implications:** None.

2 **Department Testimony:** The Department supports this measure. Act 132, Session Laws of
3 Hawaii (SLH) 2018 established a Cesspool Conversion Working Group (CCWG) that is
4 administered by the Department, to develop a long-range, comprehensive plan for cesspool
5 conversion statewide of all cesspools by 2050. The CCWG is also responsible for evaluating
6 alternative wastewater equipment and technologies appropriate to the various areas where
7 cesspools are located that may better protect the environment at lower or comparable cost and
8 how the equipment or technologies can be incorporated as part of the long-term solution to
9 wastewater treatment issues. The Department believes that a pilot program that evaluates the
10 implementation and demonstration of economically feasible solutions for the conversion of
11 cesspools in the State will help the CCWG with meeting the objectives of Act 132 SLH 2018.
12 Measure HB1859 establishes a 3-year pilot project to demonstrate new toilet and sewage
13 treatment technologies and to expedite demonstration project. The Department recommends
14 merging this bill with HB1859.

15 **Offered Amendments:** Amend bill by merging with HB1859.

16 Thank you for the opportunity to testify on this measure.

COUNTY COUNCIL

Arryl Kaneshiro, Chair
Ross Kagawa, Vice Chair
Arthur Brun
Mason K. Chock
Felicia Cowden
Luke A. Evslin
KipuKai Kualii



OFFICE OF THE COUNTY CLERK

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February 6, 2020

TESTIMONY OF KIPUKAI KUALII
COUNCILMEMBER, KAUAI COUNTY COUNCIL
ON
HB 2106, HD1, RELATING TO HEALTH
House Committee on Energy & Environmental Protection
Tuesday, February 11, 2020
9:15 a.m.
Conference Room 325

Dear Chair Lowen and Members of the Committee:

Thank you for this opportunity to provide testimony in support of HB 2106, HD1, Relating to Health. My testimony is submitted in my individual capacity as a Member of the Kaua'i County Council.

The cost(s) to convert or upgrade a cesspool is a huge obstacle for many property owners. I support establishing a pilot program within the University of Hawai'i's Water Resources Research Center for the purpose of developing a cesspool system demonstration project, including an implementation and demonstration of an economically feasible solution for the conversion of cesspools in the State.

Thank you again for this opportunity to provide testimony in support of HB 2106, HD1. Should you have any questions, please feel free to contact me or Council Services Staff at (808) 241-4188.

Sincerely,

KIPUKAI KUALII
Councilmember, Kaua'i County Council

AMK:lc

COUNTY COUNCIL

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February 7, 2020

TESTIMONY OF FELICIA COWDEN
COUNCILMEMBER, KAUAI COUNTY COUNCIL
ON
HB 2106, HD1, RELATING TO HEALTH
House Committee on Energy & Environmental Protection
Tuesday, February 11, 2020
9:15 a.m.
Conference Room 325

Dear Chair Lowen and Members of the Committee:

Thank you for this opportunity to provide testimony in support of HB 2106, HD1, Relating to Health. My testimony is submitted in my individual capacity as a Member of the Kaua'i County Council.

I support establishing a pilot program for the implementation and demonstration of an economically feasible solution for the conversion of cesspools within the State. The University of Hawai'i's Water Resources Research Center is the most logical group that will be able to accomplish this task.

Thank you again for this opportunity to provide testimony in support of HB 2106, HD1. Should you have any questions, please feel free to contact me or Council Services Staff at (808) 241-4188.

Sincerely,

FELICIA COWDEN
Councilmember, Kaua'i County Council

AMK:lc

DEPARTMENT OF ENVIRONMENTAL SERVICES
CITY AND COUNTY OF HONOLULU

1000 ULUOHIA STREET, SUITE 308, KAPOLEI, HAWAII 96707
TELEPHONE: (808) 768-3486 • FAX: (808) 768-3487 • WEBSITE: <http://envhonolulu.org>

KIRK CALDWELL
MAYOR



LORI M.K. KAHIKINA, P.E.
DIRECTOR

TIMOTHY A. HOUGHTON
DEPUTY DIRECTOR

ROSS S. TANIMOTO, P.E.
DEPUTY DIRECTOR

IN REPLY REFER TO:
WAS 20-55

February 7, 2020

The Honorable Nicole E. Lowen, Chair
The Honorable Tina Wilderberger, Vice-Chair
and Members of the Committee on Energy & Environmental Protection
House of Representatives
State Capitol, Room 329
415 South Beretania Street
Honolulu, Hawaii 96813

Dear Chair Lowen, Vice-Chair Wilderberger, and Members of the Committee on Energy & Environmental Protection:

SUBJECT: HB 2106 HD1
Relating to Health

The Department of Environmental Services (ENV) of the City and County of Honolulu supports HB 2106 HD1, which would establish a pilot program for an economically feasible solution for the conversion of cesspools in Hawaii and appropriates funds.

In consideration of Act 125 requiring the replacement of all cesspools in Hawaii by 2050, ENV recognizes the need for creative approaches to achieving that goal. HB 2106 HD1 appears to be a step in the right direction in terms of helping to identify economically feasible and environmentally conscious solutions.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Lori M.K. Kahikina", is written over a white background.

Lori M.K. Kahikina, P.E.
Director



February 9, 2020

To: The Honorable Nicole E. Lowen, Chair,
The Honorable Tina Wildberger, Vice Chair, and Members of the HOUSE
COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION
And
The Honorable John M. Mizuno, Chair,
The Honorable Bertrand Kobayashi, Vice Chair, and Members of the
HOUSE COMMITTEE ON HEALTH

Re: **HB 1858– relating to cesspools**
Hearing: Thursday, February 11, 2020, 9:15 a.m. Room 325
Position: **Support**

Aloha, Chairs Lowen and Mizuno, Vice Chairs Wildberger and Kobayashi, and Members of the Committees,

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 supports this bill, because it provides funding for the Sea Grant College Program and the Department of Health to develop and conduct a two-year comprehensive statewide outreach program that provides science-based information and understanding of sewage contamination sources in nearshore marine areas; increases understanding of sewage capacity needs; and informs all stakeholders of appropriate solutions for cesspool conversion. HIROC also supports funding that this bill also provides for the Water Resources Research Center to research wastewater system technologies to determine the most cost-effective way to upgrade cesspools in Hawaii and reduce their impact on drinking water and groundwater.

Hawaii needs to address its worsening problem of sewage pollution running off into drinking waters and nearshore waters. Please pass this bill to help address this problem. Thank you for the opportunity to testify!

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

HB-2106-HD-1

Submitted on: 2/9/2020 2:14:32 PM

Testimony for EEP on 2/11/2020 9:15:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Lisa Bishop	Friends of Hanauma Bay	Support	No

Comments:



Email: communications@ulupono.com

HOUSE COMMITTEE ON ENERGY AND ENVIRONMENTAL PROTECTION
Tuesday, February 11, 2020 — 9:15 a.m. — Room 325

Ulupono Initiative supports HB 2106 HD 1, Relating to Health.

Dear Chair Lowen and Members of the Committee:

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 2106 HD 1, which establishes a pilot program for an economically feasible solution for the conversion of cesspools in Hawai'i.

Ulupono supports finding innovative solutions to transition Hawai'i's waste management from cesspools to other environmentally-friendly alternatives. Hawai'i has over 88,000 cesspools island wide that discharge more than 53 million gallons of untreated sewage into the State's waters each day. This poses a major health and environmental risk to our drinking water, groundwater, streams, and shore waters. This bill seeks house a pilot program at the University of Hawai'i Water Resources Center to seek economically feasible solutions for cesspool conversions through a series of demonstration projects. The information gathered and analyzed could serve as valuable tools in transitioning Hawai'i's cesspool systems.

Thank you for this opportunity to testify.

Respectfully,

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

Investing in a Sustainable Hawai'i



WAI WASTEWATER
ALTERNATIVES AND
INNOVATIONS

Feb. 10, 2020

LATE

In Support of **HB2106** Relating to Health
House Committee on Energy & Environmental Protection (EEP)
Tue., Feb. 11, 9:15am, Room 325

Aloha, Chair Lowen, Vice Chair Wildberger and Members of the Committee:

On behalf of the non-profit WAI: Wastewater Alternatives & Innovations, I am writing in **support of HB2106**, which would establish a pilot program for an economically feasible solution for the conversion of cesspools in Hawaii. I would amend the description to say “feasible solutions” (plural) because there will not be a one-size-fits-all project to address cesspools in all areas.

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 bill will help DOH to help fund pilot projects that can demonstrate multiple strategies for upgrading cesspools. These strategies can include more affordable existing facilities like composting toilets and improved leach fields with wood chips, while also testing 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 and Upcountry Maui. I’m not sure why the HD1 version specifies only Maui and only by Hawaii Water Resources Research Center (WRRC), but I do know the overall bill will make it easier to 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

WAI: Wastewater Alternatives & Innovations * 2927 Hibiscus Pl. * Honolulu, HI 96815
808-381-6220 * stuart@waicleanwater.org * www.WaiCleanWater.org



WAI WASTEWATER
ALTERNATIVES AND
INNOVATIONS

Stuart H. Coleman

LATE

HB-2106-HD-1

Submitted on: 2/10/2020 9:06:50 PM

Testimony for EEP on 2/11/2020 9:15:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Warren Watanabe	Maui County Farm Bureau	Support	No

Comments:



**HUMAN ENVIRONMENTAL IMPACTS COMMITTEE
ENVIRONMENTAL CAUCUS**

Tuesday, February 11, 2020

LATE

**House Bill 2108, HD1
Testifying in STRONG SUPPORT**

Aloha Chair Lowen, Vice Chair Wildberger, and Members of the Committee on Energy & Environmental Protection:

The Human Environmental Impacts Committee, Environmental Caucus of the Democratic Party of Hawai`i, stands in **STRONG SUPPORT** of HB2108, HD1. This measure establishes a cesspool system demonstration pilot project within the University of Hawai`i's water resources research center for purposes of: (1) the implementation and demonstration of an economically feasible solution for the conversion of cesspools in the State; (2) the administration of four to six cesspool conversion demonstration projects; and (3) the documentation, validation, and summarization by the University of Hawai`i's water resources research center of the various tests, research, and outcomes of each cesspool system demonstration project. Funds shall be appropriated for this purpose.

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 necessary to assist in meeting the legally mandated cesspool conversion requirement by 2050.

In May 5, 2018, at the O`ahu County Democrats Convention, out of dire concern for 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, the Human Environmental Impacts Committee of the Environmental Caucus, Democratic Party of Hawai‘i, supports the passage of this measure to establish a cesspool system demonstration pilot project within the University of Hawai‘i’s water resources research center for purposes of: (1) the implementation and demonstration of an economically feasible solution for the conversion of cesspools in the State; (2) the administration of four to six cesspool conversion demonstration projects; and (3) the documentation, validation, and summarization by the University of Hawai‘i’s water resources research center of the various tests, research, and outcomes of each cesspool system demonstration project. Funds shall be appropriated for this purpose.

Mahalo for the opportunity to testify,

/s/ Melodie Aduja

Chair, Human Environmental Impacts Committee
Environmental Caucus
Democratic Party of Hawai‘i

HB-2106-HD-1

Submitted on: 2/8/2020 12:52:31 PM

Testimony for EEP on 2/11/2020 9:15:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Andrea Quinn	Individual	Support	No

Comments:

Dear Honorable Committee Members:

Please support HB2106 to protect Hawaii's fragile marine ecosystem.

Thank you for the opportunity to present my testimony.

Andrea Quinn

Kihei