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GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ESTHER KIA'AINA
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

Testimony of
WILLIAM J. AILA, JR.
Chairperson

Before the House Committee on
ENERGY & ENVIRONMENTAL PROTECTION

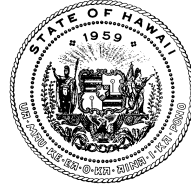
Tuesday, March 12, 2013
8:30 AM
State Capitol, Conference Room 325

In consideration of
SENATE BILL 454, SENATE DRAFT 1
RELATING TO WATER CONSERVATION

The purpose of Senate Bill 454, Senate Draft1 is to encourage the widespread use of gray water to irrigate lawns and gardens, which would help conserve potable water. The Department of Land and Natural Resources (Department) supports this measure and defers to the Department of Health (DOH) on matters related to public health and this measure's relationship to the DOH's *Guidelines for the Reuse of Gray Water, 2007*.

Using gray water for appropriate irrigation purposes is a suitable substitution for any potable water being used for this purpose. According to the Honolulu Board of Water Supply, about half of a household's water use is for outdoor irrigation. The Landscape Industry Council of Hawaii's publication, *Landscape Irrigation Conservation Best Management Practices, 2012*, recommends using non-potable water for irrigation. Allowing sensible and safe use of gray water for irrigation would help to decrease irrigation uses of potable water and conserve our precious fresh water resources.

Thank you for the opportunity to testify on this measure.



STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
File:

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

S.B. 454 SD1, RELATING TO WATER CONSERVATION

Testimony of Loretta J. Fuddy, A.C.S.W., M.P.H.
Director of Health

March 12, 2013
8:30 am

- 1 **Department's Position:** The Department of Health (Department) strongly supports this measure
2 with suggestions.
- 3 **Fiscal Implications:** None.
- 4 **Purpose and Justification:** The bill amends Section 342D-1, Hawaii Revised Statutes (HRS) by
5 adding a new definition of gray water. The bill also amends Section 342D-70 by stating that the use of
6 gray water shall conform to the latest edition of the Uniform Plumbing Code, as copyrighted and
7 published by the International Association of Plumbing and Mechanical Officials, including its
8 appendices. This bill will conflict with HRS 107, Part II, "State Building Code and Design Standards,"
9 which established the State Building Council within the Department of Accounting and General
10 Services. The council's purpose was to establish administrative rules for statewide codes applicable to
11 all counties. The council's efforts resulted in the adoption of the State Plumbing Code (Chapter 3-183,
12 Hawaii Administrative Rules) effective, April 16, 2012. The code incorporates the 2006 Uniform
13 Plumbing Code standards for gray water systems (Chapter 16, "Gray Water Systems"). We recommend

1 that the use of gray water should conform to the latest version of the State Plumbing Code (Chapter 3-
2 183, Hawaii Administrative Rules) instead of the latest edition of the Uniform Plumbing Code.

3 In summary, the Department strongly supports this measure with suggestions. Thank you for the
4 opportunity to testify on this measure.



SB454 SD1
RELATING TO WATER CONSERVATION
House Committee on Energy and Environmental Protection

March 12, 2013

8:30 a.m.

Room325

The Office of Hawaiian Affairs (OHA) **SUPPORTS** SB454 SD1, which would encourage more efficient use of our limited fresh water resources.

Fresh water is unquestionably one of Hawai'i's most valuable resources. The importance of fresh water to Hawai'i and its people is reflected in the 'ōlelo noeau, "Ola i ka Wai (Water is Life)." Accordingly, traditional water sharing and management practices reflected the critical nature of fresh water to these islands, and helped to ensure sufficient fresh water for food production, drinking, and other domestic uses, as well as numerous ecological services. Fortunately, despite the disruption of these traditional practices and many mauka to makai surface water resources, the discovery and utilization of Hawai'i's groundwater aquifer system has continued to bless its residents with potable fresh water of the highest quality.

Unfortunately, our ever-growing agricultural and municipal water needs and practices have begun to raise the substantial possibility of fresh water shortfalls for many regions within these islands, potentially in the very near future. The consequences and costs of such shortfalls counsel critical and timely examination of our water use and watershed conservation practices. The use of our limited supply of pure, potable fresh water for agricultural irrigation purposes has fallen under particular criticism in recent years. Failure to reuse gray or treated water for non-drinking purposes, such as large-scale agriculture, has been cited as a contributing factor in our potential fresh water shortfalls.

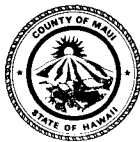
This bill is a small step forward to encourage Hawai'i's residents and policymakers to adopt more efficient water use practices, in order to mitigate or avoid the costs of potentially imminent groundwater shortfalls. By encouraging and setting guidelines for the use of untreated gray water for water conservation purposes, this bill will promote the exploration and widespread acceptance of water conservation measures already taken in many other jurisdictions. This in turn may lead to the necessary infrastructure upgrades for a more modern, efficient, and sustainable water supply system in Hawai'i nei.

Therefore, OHA urges the Committee to **PASS** SB454 SD1. Mahalo for the opportunity to testify.

Council Chair
Gladys C. Baisa

Vice-Chair
Robert Carroll

Council Members
Elle Cochran
Donald G. Couch, Jr.
Stacy Crivello
Don S. Guzman
G. Riki Hokama
Michael P. Victorino
Mike White

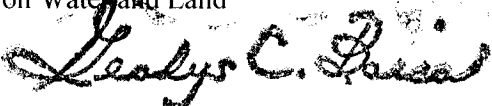


Director of Council Services
David M. Raatz, Jr., Esq.

COUNTY COUNCIL
COUNTY OF MAUI
200 S. HIGH STREET
WAILUKU, MAUI, HAWAII 96793
www.mauicounty.gov/council

March 9, 2013

TO: The Honorable Chris Lee, Chair
House Committee on Energy and Environmental Protection
The Honorable Cindy Evans, Chair
House Committee on Water and Land

FROM: Gladys C. Baisa
Council Chair 

SUBJECT: **HEARING OF MARCH 12, 2013; TESTIMONY IN SUPPORT OF SB 454, SD1,
RELATING TO WATER CONSERVATION**

Thank you for the opportunity to testify in support of this important measure. The purpose of this measure is to encourage the Department of Health ("Department") and the counties to promote the widespread reuse of gray water, with some provisions, in accordance with the conditions set forth by the Department for the use of gray water for irrigation purposes.

The Maui County Council has not had the opportunity to take a formal position on this measure. Therefore, I am providing this testimony in my capacity as an individual member of the Maui County Council.

While I generally support the concept of this measure, I cannot fully support the measure for the following reasons:

1. Maui County has been subject to drought conditions for a number of years. The use of gray water for landscape irrigation promotes water conservation by lessening the need to use potable water, thereby increasing municipal water supply. However, requiring all use of gray water to conform to the latest edition of the Uniform Plumbing Code is costly and onerous and will discourage the use of gray water.
2. Implementation of gray water recycling programs needs to be affordable and easy to promote the establishment of this program.
3. I strongly encourage you to modify the required conformance with the latest edition of the Uniform Plumbing Code to encourage the use of gray water

For the foregoing reasons, I cannot fully support this measure.

thielen3 - Charles

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 11, 2013 10:16 AM
To: EEPtestimony
Cc: bobbiepatnode@fastmail.fm
Subject: Submitted testimony for SB454 on Mar 12, 2013 08:30AM

SB454

Submitted on: 3/11/2013

Testimony for EEP on Mar 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Bobbie Patnode	Kula Community Association	Oppose	No

Comments: The Kula Community Association initially supported this bill, but now cannot due to the change to require all to conform with the Uniform Plumbing Code. Home owners find this to be onerous and often impossible. We would support a bill that exempted small residential systems, therefore enabling easy and affordable grey water use.

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

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Hawaii Chapter of the American Society of Landscape Architects

Committee on Energy & Environmental Protection
Chris Lee, Chair
Senate District 51
Hawaii State Capitol, Room 436

Hearing Date: Tuesday, March 12, 2013, 8:30 am

RE: SB454 SD1: Relating to Water Conservation – Reuse of gray water to irrigate lawns and gardens.

Chairperson and Committee Members,

On behalf of landscape architects and members of the Hawaii Chapter of the American Society of Landscape Architects, I am writing to inform you that our members support SB454 SD1 which encourages the reuse of gray water to irrigate lawns and gardens.

Water is a precious resource that we should be using to its full extent. With rising water rates and parts of the Hawaiian Islands facing drought conditions, we can no longer take the availability of fresh water for granted.

Respectfully submitted,

Kyle Sasaki, ASLA
ASLA Hawaii Chapter President
kyles@kilandarch.com
447-5955



LANDSCAPE INDUSTRY COUNCIL OF HAWAII

March 9, 2013

TESTIMONY FOR SENATE BILL N.O. 454 SD 1

HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

The Landscape Industry Council of Hawaii supports Senate Bill 454 SD 1 Relating to Water Conservation by encouraging the use of graywater for irrigation purposes.

The Landscape Industry Council of Hawaii has led the state on Irrigation Water Conservation being the first industry sector to produce comprehensive water conservation measures. The LICH Irrigation Conservation BMPs can be found online at: www.landscapehawaii.org/library/documents/lich_irrigation_conservation_bmps.pdf.

Graywater is wastewater generated from domestic activities such as laundry or bathing, which can be recycled on-site for uses such as landscape irrigation. Graywater usage is essential with the rising cost of water & sewer, increase in population & strains on water supply and the high cost of energy to transport water. It saves our precious water for human consumption. Graywater is actively being used in many parts of the United States, Europe and Asia.

Currently, the State Department of Health (DOH) does not allow graywater usage unless granted a special permit from DOH. For generations, Hawaii families have conserved water by recycling washing machine water for watering plants. This graywater activity should be exempt from permits. Landscape Industry Council of Hawaii supports Senate Bill 454 SD 1 and proposes amending the bill to exempt all permits for graywater systems in a one or two-family residential dwellings that are supplied only by a clothes washer water system, provided the system does not require cutting of the existing plumbing.

If you have questions, please contact me at me at 799-3101 or email address chris.dacus@gmail.com.

Chris Dacus, President
Landscape Industry Council of Hawaii
P. O. Box 22938, Honolulu, Hawaii 96823-2938

Landscape Industry Council of Hawaii

Hawaii's landscape industry has an economic impact of over \$520 million annually and full time employment of over 11,000 landscape professionals. Formed in 1986, LICH is a statewide alliance representing Hawaii's landscape trade associations. LICH can be found online at www.landscapehawaii.org

thielen3 - Charles

From: mailinglist@capitol.hawaii.gov
Sent: Friday, March 08, 2013 4:19 PM
To: EEPtestimony
Cc: irrighi@gmail.com
Subject: Submitted testimony for SB454 on Mar 12, 2013 08:30AM

SB454

Submitted on: 3/8/2013

Testimony for EEP on Mar 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Allan Schildknecht	Individual	Support	No

Comments: We urge you to support this bill as it will help save our water resources within the State.

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thielen3 - Charles

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 11, 2013 8:48 AM
To: EEPtestimony
Cc: mauicrowe@mailshack.com
Subject: Submitted testimony for SB454 on Mar 12, 2013 08:30AM

SB454

Submitted on: 3/11/2013

Testimony for EEP on Mar 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
james crowe	Individual	Support	No

Comments: Exempt homeowners from the Uniform Plumbing Code. It is common sense to be making proper use of precious water

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thielen3 - Charles

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 11, 2013 8:27 AM
To: EEPtestimony
Cc: jason@uchawaii.com
Subject: *Submitted testimony for SB454 on Mar 12, 2013 08:30AM*

SB454

Submitted on: 3/11/2013

Testimony for EEP on Mar 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Jason Umemoto	Individual	Support	No

Comments:

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thielen3 - Charles

From: mailinglist@capitol.hawaii.gov
Sent: Saturday, March 09, 2013 12:05 PM
To: EEPtestimony
Cc: matt@performancels.com
Subject: *Submitted testimony for SB454 on Mar 12, 2013 08:30AM*

SB454

Submitted on: 3/9/2013

Testimony for EEP on Mar 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Matt Lyum	Individual	Support	No

Comments:

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thielen3 - Charles

From: mailinglist@capitol.hawaii.gov
Sent: Friday, March 08, 2013 6:46 PM
To: EEPtestimony
Cc: nredfeather@kohalacenter.org
Subject: *Submitted testimony for SB454 on Mar 12, 2013 08:30AM*

SB454

Submitted on: 3/8/2013

Testimony for EEP on Mar 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Nancy Redfeather	Individual	Support	No

Comments:

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thielen3 - Charles

From: mailinglist@capitol.hawaii.gov
Sent: Saturday, March 09, 2013 10:06 AM
To: EEPtestimony
Cc: rdcarter.rc@gmail.com
Subject: Submitted testimony for SB454 on Mar 12, 2013 08:30AM

SB454

Submitted on: 3/9/2013

Testimony for EEP on Mar 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Robin Carter	Individual	Support	No

Comments: This is a great idea, it has the prospects of saving thousands of gallons of water. I believe it could be perpetuated by means of a tax credit.Thank you.

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thielen3 - Charles

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, March 10, 2013 5:02 PM
To: EEPtestimony
Cc: TABRAHAM08@GMAIL.COM
Subject: Submitted testimony for SB454 on Mar 12, 2013 08:30AM

SB454

Submitted on: 3/10/2013

Testimony for EEP on Mar 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
TROY ABRAHAM	Individual	Support	No

Comments: i support passage of bill to protect and preserve water for generations to come

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thielen3 - Charles

From: mailinglist@capitol.hawaii.gov
Sent: Sunday, March 10, 2013 8:22 PM
To: EEPtestimony
Cc: jacinthow001@hawaii.rr.com
Subject: Submitted testimony for SB454 on Mar 12, 2013 08:30AM

SB454

Submitted on: 3/10/2013

Testimony for EEP on Mar 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
William Jacintho	Individual	Oppose	No

Comments: I like the concept of using gray water; that's great! The problem would be complying with the plumbing code. I don't have that code in hand, but if they were to make the bill mandatory, it would mess up my house, because the pipes are all concreted in the tile walls and under my cement slab. I could never re-do my plumbing without causing lots of damage to my floor and walls.....I'd like to change it because I would like to use more of my gray water, but I'm stuck with what I have, due to the code we had to follow in the mid 1980's. We need a bill that would take care of gray water usage, and still be user friendly on private property. Thank you, William

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thielen3 - Charles

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 11, 2013 3:56 PM
To: EEPtestimony
Cc: csawai@hawaii.rr.com
Subject: *Submitted testimony for SB454 on Mar 12, 2013 08:30AM*

SB454

Submitted on: 3/11/2013

Testimony for EEP on Mar 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
cat sawai	Individual	Support	No

Comments:

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thielen3 - Charles

From: mailinglist@capitol.hawaii.gov
Sent: Monday, March 11, 2013 4:54 PM
To: EEPtestimony
Cc: boydready@hawaii.rr.com
Subject: *Submitted testimony for SB454 on Mar 12, 2013 08:30AM*

SB454

Submitted on: 3/11/2013

Testimony for EEP on Mar 12, 2013 08:30AM in Conference Room 325

Submitted By	Organization	Testifier Position	Present at Hearing
Boyd Ready	Individual	Support	No

Comments:

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