



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

**Testimony in SUPPORT of HB0444-HD1  
RELATING TO ONSITE NON-POTABLE WATER REUSE SYSTEMS**

REPRESENTATIVE SYLVIA LUKE, CHAIR  
HOUSE COMMITTEE ON FINANCE

Hearing Date: February 20, 2019

Room Number: CR 308

1 **Fiscal Implications:** None.

2 **Department Testimony:** The Department of Health (Department) supports this measure with  
3 comments. The Department has regulations for the treatment of domestic wastewater for onsite  
4 water reuse. The National Blue Ribbon Commission's guidance expands the treatment to  
5 include other non-potable waters such as stormwater and roof runoff. Given the complexity of  
6 promulgating rules for an expanded program and the need to consult with affected parties, the  
7 process to adopt new rule amendments will likely require two to three years to complete. Based  
8 on current resources, the Department could possibly adopt rules for onsite non-potable water  
9 reuse system based on the National Blue Ribbon Commission's guidance, but would likely need  
10 until January 1, 2022 to complete the task effectively.

11 **Offered Amendments:** Revise the date in Section 1, Page 3, Line 12 and Section 2, Line 14  
12 from January 1, 2021 to January 1, 2022.

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

Testimony of The Nature Conservancy of Hawai'i  
Supporting HB 444 HD1 Relating to Onsite-Non-Potable Water Reuse Systems-  
House Committee on Finance  
Wednesday, February 20, 2019, 2:00 PM, Room 308

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*The Nature Conservancy of Hawai'i is a non-profit conservation organization dedicated to the preservation of the lands and waters upon which all life depends. The Conservancy has helped protect more than 200,000 acres of natural lands in Hawai'i and Palmyra Atoll. We manage 40,000 acres in 13 nature preserves and work in over 30 coastal communities to help protect the near-shore reefs, waters and fisheries of the main Hawaiian Islands. We forge partnership with government, private parties and communities to protect forests and coral reefs for their ecological values and the many benefits they provide to people.*

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The Nature Conservancy supports HB 444 HD1

Easily available fresh water is not a limitless resource here in the middle of the Pacific. Several locations in the state have experienced prolonged drought in recent years. Science indicates that the likely effects of climate change in Hawai'i will include:

- More frequent and more severe storms that can increase runoff and siltation; but
- Overall, less rainfall in many locations and therefore less fresh water; and
- Higher temperatures that affect watershed health and can be beneficial to pests.

Hawai'i is already exhibiting telltale signs of climate change. UH's Rainfall Atlas catalogues a century of declining rainfall and fewer trade wind days. Summer temperature records have been broken across the state and a record number of storms have taken aim at Hawai'i over the last few years.

In response to these conditions, we must plan and implement mitigative and adaptive measures to ensure the resilience of our natural and human systems. Healthy Hawaiian forests that are not overrun by invasive species act like a sponge, collecting rain and moisture, slowly delivering fresh water into streams and aquifers, absorbing greenhouse gases, and reducing runoff and siltation into near shore waters during storm events.

Additionally, we must improve efficiencies and reuse of our fresh water resources, including through the types of on-site non-potable water reuse systems that will be guided by Department of Health rules contemplated in this measure.

Thank you.

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HOUSE COMMITTEE ON FINANCE  
Wednesday, February 20, 2019 — 2:00 p.m. — Room 308

**Ulupono Initiative Supports HB 444 HD 1, Relating to Onsite-Non-Potable Water Reuse**

Dear Chair Luke, Vice Chair Cullen, and Members of the Committee:

My name is Murray Clay and I am Managing Partner of Ulupono Initiative, a Hawai'i-based impact investment firm that strives to improve the quality of life for the people of Hawai'i by working toward solutions that create more locally produced food; increase affordable, clean, renewable energy; and better manage waste and fresh water resources. Ulupono believes that self-sufficiency is essential to our future prosperity and will help shape a future where economic progress and mission-focused impact can work hand in hand.

**Ulupono supports HB 444 HD 1**, which requires the Department of Health to adopt rules for onsite non-potable water reuse systems, because it aligns with our goal of preserving Hawai'i's water resources.

Water is the most important natural resource and critical to the survival of the people of Hawai'i. Therefore, water must be protected and managed in a diligent manner. Water reuse is often the most environmentally prudent method of caring for our fresh water supply. Climate change, which has led to a 23 percent decrease in rainfall on O'ahu from 1980 to 2010<sup>1</sup>, highlights the need for water preservation measures.

As Hawai'i's water issues become increasingly complex and challenging, we appreciate this committee's efforts to look at policies that protect our water resources.

Thank you for this opportunity to testify.

Respectfully,

Murray Clay  
Managing Partner

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<sup>1</sup> Board of Water Supply 2016 Water Master Plan,  
<https://www.boardofwatersupply.com/bws/media/files/water-master-plan-final-2016-10.pdf>



**HAWAI'I COMMUNITY FOUNDATION**  
*Amplify the Power of Giving*

**HOUSE FINANCE COMMITTEE**

Date: Wednesday, February 20, 2019

Time: 2:00 pm

Place: Conference Room 308

Re: HB 444 Relating to Onsite Non-Potable Water Reuse Systems

Aloha Finance Committee! The Fresh Water Initiative of Hawai'i Community Foundation **strongly supports HB 444** which requires the Department of Health to adopt the National Blue Ribbon Commission for Onsite Non-potable Water Systems rules by January 1, 2021.

Last year various agencies across the state were brought together to form the Water Reuse Task Force in an effort to scale water reuse across the state. Water reuse has been identified as a key strategy for water security and is part of Hawaii's Fresh Water Initiative - the statewide goal of reaching 100 million gallons per day in additional, reliable fresh water capacity by 2030.

Since other states have also recognized the benefits of water reuse there has been a lot of research conducted on the safest and most efficient designs of reuse systems. At the forefront of research is the National Blue Ribbon Commission for Onsite Non-Potable Water Systems, a nationally recognized partnership made up of representatives from municipalities, public health agencies, water utilities along with support from the Water Research Foundation, Water Environment & Reuse Foundation, and the US Water Alliance.

With the goal of supporting the adoption of onsite recycled water, the National Blue Ribbon Commission has developed 'A Guidebook for Developing and Implementing Regulations for Onsite Non-potable Water Systems'. Created by and for utility leaders and state and local public health regulators, this guidebook presents a concrete and actionable framework that localities can utilize for regulating and managing onsite non-potable water systems based on best-in-class science and research. Having a consistent policy framework across cities and states is one of the best ways that we can integrate onsite systems in a way that protects public health and meets our water needs.

Since there are currently no national standards for onsite non-potable water systems in the United States, these guidelines provide vetted public health-based standards and a streamlined permitting process. In order to safely and efficiently increase water reuse in Hawaii we greatly support **HB 444** which requires Hawaii Department of Health to adopt the National Blue Ribbon Commission Guidebook by January 1, 2021. We're confident that this resource will help guide Hawaii in developing and implementing regulations and oversight programs for onsite non-potable water systems that are both scientifically rigorous and protective to public health.

In addition to supporting this bill, Hawaii Community Foundation and Hawaii's Fresh Water Initiative are simultaneously supporting Hawaii's plumbing code updates so that by the time the National Blue Ribbon Commission's reuse guidelines are implemented the current plumbing code will include the necessary regulations for onsite reuse systems.

Should you have any questions about this testimony, please feel welcome to contact me at [dokano@hcf-hawaii.org](mailto:dokano@hcf-hawaii.org).

Sincerely,

Dana Okano, PhD, AICP  
Program Director of Strategies, Initiatives and Networks  
Hawai'i Community Foundation



ONE WORLD ONE WATER  
677 Ala Moana Blvd, Suite 1100  
Honolulu, Hi 96713

Testimony in Support of HB444 HD1  
Relating to the Onsite Nonpotable Water Reuse Systems

House Committee on Finance  
February 20<sup>th</sup>, 2019  
2:00pm  
Conference Room 308

**Subject:** House Bill (HB) 444 HD1 Relating to Onsite Nonpotable Water Reuse Systems

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

At One World One Water we are dedicated to reinvesting in water infrastructure and restoring natural environments, and we strongly support **HB444 HD1** which requires the Department of Health to adopt the National Blue Ribbon Commission for Onsite Non-potable Water Systems rules by January 1, 2021.

Water reuse has been recognized internationally as a strategy for combatting climate change, drought, and reduced fresh water supplies. Since other states have also recognized the benefits of water reuse there has been a lot of research conducted on the safest and most efficient designs of reuse systems. At the forefront of research is the National Blue Ribbon Commission for Onsite Non-Potable Water Systems, a nationally recognized partnership made up of representatives from municipalities, public health agencies, water utilities along with support from the Water Research Foundation, Water Environment & Reuse Foundation, and the US Water Alliance.

In order to safely and efficiently excel water reuse in Hawaii we greatly support **H.B. 444 HD1** which requires Hawaii Department of Health to adopt the National Blue Ribbon Commission Guidebook. We're confident that this resource will help guide Hawaii in developing and implementing regulations and oversight programs for onsite non-potable water systems that are both scientifically rigorous and protective to public health.

Please contact us at [globalwater@gmail.com](mailto:globalwater@gmail.com) should you have any questions or require additional information regarding this matter.

Sincerely,  
*One World One Water*

**LATE**

**HB-444-HD-1**

Submitted on: 2/20/2019 1:29:46 PM

Testimony for FIN on 2/20/2019 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jeanelle Miller	Individual	Support	No

Comments: