



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
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WRITTEN  
TESTIMONY ONLY

**Testimony in SUPPORT of HB0445 HD1  
RELATING TO CAPITAL IMPROVEMENT PROJECTS FOR WATER REUSE**

REPRESENTATIVE SYLVIA LUKE, CHAIR  
HOUSE COMMITTEE ON FINANCE

Hearing Date: February 20, 2019

Room Number: CR 308

- 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.
  
- 4 **Department Testimony:** Water is a precious resource that needs to be preserved and conserved
- 5 to ensure sustainability for future generations. The Department is an advocate for promoting the
- 6 use of recycled water in Hawaii. The implementation of the two demonstration water reuse
- 7 projects noted in the measure would help to conserve our water resource.
  
- 8 The Department strongly supports this measure as long as it does not impact the priorities
- 9 identified in the Governor's Executive Budget Request.
  
- 10 **Offered Amendments:** No amendments offered.
  
- 11 Thank you for the opportunity to testify on this measure.



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

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

**Ulupono Initiative Supports HB 445 HD 1, Relating to Capital Improvement Projects for 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 445 HD 1**, which authorizes the issuance of general obligation bonds for two water reuse demonstration projects, 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.

Funding for the Kanaha beach park greywater reuse project and the Kealakehe wastewater treatment facility will help to demonstrate that we can preserve water as a resource for the people of Hawai'i.

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>

Testimony of The Nature Conservancy of Hawai'i  
Supporting HB 445 HD1 Relating to Capital Improvement Projects for Water Reuse  
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 445 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 our efficiencies and reuse of our fresh water resources, including the types of reuse demonstration projects proposed in this measure.

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**HOUSE FINANCE COMMITTEE**

Date: Wednesday, February 20, 2019

Time: 2:00 pm

Place: Conference Room 308

Re: HB 445 HD1 Relating to Capital Improvement Projects for Water Reuse

Aloha! The Fresh Water Initiative **strongly supports HB 445 HD1** which authorizes the issuance of general obligation bonds for two water reuse demonstration projects. The two projects, Kanaha Beach Park and Kealekehe Wastewater Treatment Facility, were chosen by the 2018 Water Reuse Task Force as projects that will not only help provide water security for the state but will also showcase the safety and feasibility of water reuse. The Water Reuse Task Force was tasked with designing strategies for scaling water reuse, and a priority goal was providing more public outreach so that both the public and practitioners are aware of the benefits of non-potable water reuse systems.

Both the Kanaha Beach Park project and the Kealekehe Wastewater Treatment Facility will act as demonstration projects to highlight the safety of utilizing recycled water and were chosen for their public outreach potential and water saving impacts. The Kanaha Beach Park project will reuse 30-40% of the greywater from the park's showers, sinks, spigots, and hose bibs for local irrigation- showcasing to the public the safety of grey water for certain irrigation projects. The Kealekehe Demonstration Project will also help increase the public's acceptance of water reuse through providing R-1 recycled water for irrigating a nearby regional park in Kona. The Kealekehe project would design and develop dual pipes for the park so that they can irrigate with recycled water while also having safe access to potable water. By servicing a local park that has constant visitation this project is ideal for demonstrating the safety of water reuse for irrigation.

Since water reuse is still considered new and innovative in Hawaii, demonstration projects will be a key aspect in ensuring that the public feels safe as we increase its usage. We believe that demonstration projects generate visible results on the ground and are an effective mechanism for forging partnerships between the public, private, and community sectors.

The Hawai'i Fresh Water Initiative (Initiative) was launched in 2013 to bring diverse parties together to develop a forward-thinking and consensus-based strategy to increase water security for the Hawaiian Islands. Organized by the independent, nonprofit Hawai'i Community Foundation (HCF), the Initiative relied on a blue ribbon advisory panel of individuals (Hawai'i Fresh Water Council or Council) with deep knowledge of water and a collaborative spirit to articulate a vision for a more secure and sustainable water future based on shared values, and shared sacrifice.

We strongly support **HB 445 HD1** and the authorization of obligation bonds for the Kanaha and Kealekehe demonstration projects. Hawaii is committed to water security, and we believe that this funding will be critical to increasing the statewide usage of alternative water sources.

Should you have any questions about these demonstration projects, 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 HB445 HD1  
Relating to the Capital Improvement Projects for Water Reuse

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

**Subject:** House Bill (HB) 445 HD1 Relating Capital Improvement Projects for Water Reuse

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 **HB445 HD1** that authorizes general obligation bonds for capital improvements to Hawaii's water reuse systems.

Water reuse has been recognized internationally as a strategy for combatting climate change, drought, and reduced fresh water supplies. Since water reuse is still considered new and innovative in Hawaii, demonstration projects will be a key aspect in ensuring that the public feels safe as we increase its usage. We believe that demonstration projects generate visible results on the ground and are an effective mechanism for forging partnerships between the public, private, and community sectors.

This bill will help Hawaii become more resilient to climate change and will help us reach the goals of the Fresh Water Initiative, so as an organization committed to improving our water systems **we ask your support of HB445 HD1** to invest in Hawaii's future.

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*

**HB-445-HD-1**

Submitted on: 2/19/2019 11:45:22 AM

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>
Melodie Aduja	O`ahu County Committee on Legislative Priorities of the Democratic Party of Hawai`i	Support	No

Comments:

# BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU  
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February 20, 2019

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Deputy Manager and Chief Engineer *Ellen*

**LATE**

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

Dear Chair Luke and Members:

Subject: House Bill 445, House Draft 1, Relating To Capital Improvement  
Projects for Water Reuse

The Honolulu Board of Water Supply (BWS) supports House Bill (HB) 445, House Draft (HD) 1, relating to capital improvement projects for water reuse demonstration projects.

Reuse projects on Maui and Hawaii island will advance reuse throughout the state by demonstrating the feasibility of new technologies that could be applied in other areas where reuse could provide quality irrigation water and reduce potable water use.

Thank you for your consideration of our testimony on HB 445, HD 1.

Very truly yours,

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