DAVID Y. IGE GOVERNOR OF HAWAII



BRUCE S. ANDERSON, PHD DIRECTOR OF HEALTH

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

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

REPRESENTATIVE RYAN I. YAMANE HOUSE COMMITTEE ON WATER, LAND & HAWAIIAN AFFAIRS Hearing Date: January 30, 2019 Room Number: CR 325

1

2 Fiscal Implications: This measure may impact the priorities identified in the Governor's

3 Executive Budget Request.

4 **Department Testimony:** Water is a precious resource that needs to be preserved and conserved

5 to ensure sustainability for future generations. The Department of Health (Department) is an

6 advocate for promoting the use of recycled water in Hawaii. The implementation of the two

7 demonstration water reuse projects noted in the measure would help to conserve our water

8 resource.

9 The Department strongly supports this measure as long as it does not impact the priorities

10 identified in the Governor's Executive Budget Request.

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



COMMITTEE ON WATER, LAND, & HAWAIIAN AFFAIRS

DATE: Wednesday, January 30, 2019

TIME: 9:00 am

PLACE: Conference Room 325

RE: HB 445 RELATING TO CAPITAL IMPROVEMENT PROJECTS FOR WATER REUSE.

Aloha! The Fresh Water Initiative **strongly supports H.B. 445** 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. We have attached a proposed revision to the description of the Kanaha project (see Exhibit 1), replacing the references to "Launiupoko."

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 **H.B. 445/ S.B. 935** 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 <u>dokano@hcf-hawaii.org</u>.

Sincerely,

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

Exhibit 1

Kanaha Beach Park's Greywater Demonstration Project

In order to increase the public's acceptance of water reuse, funding for Kanaha Beach Park's greywater demonstration project is requested. Through this project, 30-40% of the greywater from the park's showers, sinks, spigots, and hose bibs will be reused for local irrigation. \$350,000-\$450,000 is requested for the design and construction of this project along with the development of signage, interactive stations, and other audio-visual devices to help educate the public about water reuse. This project will not only help with public outreach but will also drive down potable water costs and repurpose up to 9 million gallons of water annually with appropriate designs and maintenance.



The Nature Conservancy Hawai'i Program 923 Nu'uanu Avenue Honolulu, HI 96817

Testimony of The Nature Conservancy of Hawai'i Supporting HB 445 Relating to Capital Improvement Projects for Water Reuse Committee on Water, Land, and Hawaiian Affairs Wednesday, January 30, 2019, 9:00 AM, Room 325

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.

The Nature Conservancy supports HB 445.

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 HB 445.

BOARD OF TRUSTEES

Mark E. Agne Duke E. Ah Moo Paul D. Alston Dr. C. Tana Burkert Richard A. Cooke III Ka'iulani de Silva Brian J. Doyle Robert J. Dzielak Dr. Alan M. Friedlander James J.C. Haynes III Sean A. Hehir Brett MacNaughton Kathy M. Matsui Janet Montag Alicia Moy James C. Polk Dustin E. Sellers Nathan E. Smith (Chair) Peter K. Tomozawa Richard N. Zwern

Ihupani Advisory Council: Christopher J. Benjamin Kenton T. Eldridge Eiichiro Kuwana Duncan MacNaughton Jean E. Rolles Crystal K. Rose Founders: Samuel A. Cooke Herbert C. Cornuelle



Testimony in Support of HB445 Relating to the Capital Improvement Projects for Water Reuse

House Committee on Water, Land, and Hawaiian Affairs January 30th, 2019 9:00am Conference Room 325

Subject: House Bill (HB) 445 Relating Capital Improvement Projects for Water Reuse; AMENDMENT REQUESTED

Aloha Chair Yamane, Vice Chair Todd, and Members of the House Committee on Water, Land, and Hawaiian Affairs,

At One World One Water we are dedicated to reinvesting in water infrastructure and restoring natural environments, and we strongly support **HB445** that authorizes general obligation bonds for capital improvements to Hawaii's water reuse systems. This measure supports the implementation of two projects, the Launiupoko beach park and Kealekehe Wastewater Treatment Facility, but recently Maui County has requested that the Launiupoko project be changed to a project at Kanaha Beach Park. Below is the revised language for the new project at Kanaha Beach Park which we request replaces Launiupoko.

Revised Language: Kanaha Beach Park's Greywater Demonstration Project

In order to increase the public's acceptance of water reuse, funding for Kanaha Beach Park's greywater demonstration project is requested. Through this project, 30-40% of the greywater from the park's showers, sinks, spigots, and hose bibs will be reused for local irrigation. \$350,000-\$450,000 is requested for the design and construction of this project along with the development of signage, interactive stations, and other audio-visual devices to help educate the public about water reuse. This project will not only help with public outreach but will also drive down potable water costs and repurpose up to 9 million gallons of water annually with appropriate designs and maintenance.

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** to invest in Hawaii's future.

Please contact us at globalwater@gmail.com should you have any questions or require additional information regarding this matter.

Sincerely, One World One Water



January 29, 2019

COMMITTEE ON WATER, LAND & HAWAIIAN AFFAIRS

TESTIMONY IN SUPPORT of HB445

Dear Chair: Senator Yamane

Roth Ecological Design Intl. provides strategic water planning and integrated water management design. We believe responsible and sustainable water management is a key component of sustainable development and protecting natural resources for future generations. As Hawaii continues to develop, there is expected to be increased demands on our precious water supplies and, moreover, research regarding the impacts of climate change in the Hawaiian Islands suggest a significant decline in participation over the next decades. It is imperative to implement water reuse projects and innovation that will support the sustainable management of our water resources.

I'd also like to acknowledge that this bill upholds the Hawaii State Constitution by helping to protect water resources for the benefit of the people and Hawaii's native ecosystems that rely on clean water. We strongly support HB 445!

Sincerely,

Tarta

Lauren C. Roth Venu President 808-781-7583 lauren@rothecological.com

<u>HB-445</u> Submitted on: 1/29/2019 9:01:39 AM Testimony for WLH on 1/30/2019 9:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Robert De Robles	Individual	Support	No

Comments:

As a water resouces planning professional, I strongly support **HB445** that authorizes general obligation bonds for capital improvements to Hawaii's water reuse systems. This measure supports the implementation of two projects, the Launiupoko beach park and Kealekehe Wastewater Treatment Facility, but recently Maui County has requested that the Launiupoko project be changed to a project at Kanaha Beach Park. Below is the revised language for the new project at Kanaha Beach Park which we request replaces Launiupoko.

In order to increase the public's acceptance of water reuse, funding for Kanaha Beach Park's greywater demonstration project is requested. Through this project, 30-40% of the greywater from the park's showers, sinks, spigots, and hose bibs will be reused for local irrigation. \$350,000-\$450,000 is requested for the design and construction of this project along with the development of signage, interactive stations, and other audio-visual devices to help educate the public about water reuse. This project will not only help with public outreach but will also drive down potable water costs and repurpose up to 9 million gallons of water annually with appropriate designs and maintenance.