

SCR 117 SD1

Measure Title: REQUESTS THE DEPARTMENT OF HEALTH TO CONVENE A TASK FORCE TO IDENTIFY BARRIERS AND SOLUTIONS TO EXPANDED WATER REUSE IN THE STATE.

Report Title: Water Reuse; Task Force; Report

Description:

Companion:

Package: None

Current Referral: WTL/AEN, CPH

Introducer(s): K. RHOADS, GABBARD, KEITH-AGARAN, S. Chang, Riviere, L. Thielen

STATE OF HAWAII
DEPARTMENT OF HEALTH
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WRITTEN
TESTIMONY ONLY

Testimony in SUPPORT of SCR117 SD1

REQUESTS THE DEPARTMENT OF HEALTH TO CONVENE
A TASK FORCE TO IDENTIFY BARRIERS AND SOLUTIONS
TO EXPANDED WATER REUSE IN THE STATE

SENATE COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH
SENATOR ROSALYN H. BAKER, CHAIR

Hearing Date: April 3, 2018
Time: 10:00 a.m.

Room Number: 229

- 1 **Fiscal Implications:** The Department of Health (Department) would need resources to support the
- 2 task force that is covered under this measure and defers to the Governor's Supplemental Budget
- 3 Request for appropriation priorities.

- 4 **Department Testimony:** The Department has always been an advocate for water reuse provided
- 5 that public health and water resources are not compromised. Water reuse has become more
- 6 significant due to the state's growing population, limited potable water resources, and wastewater
- 7 disposal issues. As water energy demands and environmental needs grow, water reuse will play a
- 8 greater role in our overall water supply. By working together to overcome obstacles, water reuse,
- 9 along with water conservation and efficiency, can help us to sustainably manage our vital water
- 10 resources. Therefore, the Department supports this measure that involves the development of a task
- 11 force that will identify barriers and solutions to expand water reuse in the State.

- 12 Thank you for the opportunity to testify on this measure.



Email: communications@ulupono.com

SENATE COMMITTEE ON COMMERCE, CONSUMER PROTECTION, & HEALTH
Tuesday, April 3, 2018 — 10:00 a.m. — Room 229

Ulupono Initiative Strongly Supports SCR 117 SD 1, Requests the Department of Health to Convene a Task Force to Identify Barriers and Solutions to Expanded Water Reuse in the State

Dear Chair Baker, Vice Chair Tokuda, and Members of the Committee:

My name is Kyle Datta and I am General 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 management of waste and fresh water. 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 strongly supports SCR 117 SD 1, which requests the Department of Health to convene a task force to identify barriers and solutions to expanded water reuse in Hawai'i.

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 using water.

Ulupono supports this resolution to convene a task force of experts to identify barriers and solutions for increased water reuse. Water stakeholders, including regulators, often work in silos and having these entities interact together will lead to better outcomes.

Hawai'i's agricultural industry relies on a constant supply of water as farmers and ranchers often struggle to keep their businesses alive. In recent years, the state has suffered through severe drought conditions including a two to three decade downward trend in rainfall, which heavily impacts our local agricultural communities. As droughts are increasing, it becomes more important for the Legislature to protect our island's most valuable natural resource.

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

Investing in a Sustainable Hawai'i



Thank you for this opportunity to testify.

Respectfully,

Kyle Datta
General Partner



HAWAI'I COMMUNITY FOUNDATION
Amplify the Power of Giving

**Testimony of the Hawaii Community Foundation on S.C.R. 117 SD1
Relating to Expanding Water Reuse
Senate Committee on Commerce, Consumer Protection, and Health
April 3rd, 2018
10:00am
Conference Room 229**

Aloha Chair Baker, Vice Chair Tokuda, and Members of the Committee,

The Hawaii Community Foundation (HCF) strongly supports **S.C.R. 117 SD1**, which requests the Department of Health to convene a task force to identify barriers and solutions to expanded water reuse in the state.

Studies have shown that Hawaii has seen an 18% reduction in rainfall from 1978 to 2007. Reduced precipitation, rising populations, and increased development of our land is making Hawaii's water security more vulnerable than ever. Hawaii Community Foundation has been a continued supporter and convener of Hawaii's Fresh Water Initiative, which is dedicated to increasing water security throughout the islands through initiatives and policies in water reuse, conservation, and recharge.

The Fresh Water Initiative has recognized that diverting wastewater to other freshwater applications is a valuable technique for both reusing and preserving water resources. Hawaii Community Foundation is in support of **S.C.R. 117 SD1** since its passage will help identify both the barriers and solutions to increasing water reuse on our islands. Collaboration, research, policies, and demonstrations will be invaluable to reaching Hawaii's goal of doubling the amount of wastewater currently being reused.

HCF strongly supports **S.C.R. 117 SD1** and we stand ready to collaborate and assist in moving Hawaii towards increased water reuse and strengthened water security.

For questions, please contact Dana Okano, PhD, AICP, Program Director, Hawai'i Community Foundation at dokano@hcf-hawaii.org.

SCR-117-SD-1

Submitted on: 4/2/2018 8:46:53 AM

Testimony for CPH on 4/3/2018 10:00:00 AM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------|---|--------------------|--------------------|
| Melodie Aduja | Testifying for Oahu County Committee on Legislative Priorities of the Democratic Party of Hawai'i | Support | No |

Comments:

To the Honorable Rosalyn H. Baker, Chair; the Honorable Jill N. Tokuda, Vice-Chair and the Members of the Committee on Commerce, Consumer Protection, and Health:

Good morning, my name is Melodie Aduja. I serve as Chair of the Oahu County Committee ("OCC") on Legislative Priorities of the Democratic Party of Hawaii. Thank you for the opportunity to provide written testimony on **SCR117 SD1** requesting the Department of Health to convene a task force to identify barriers and solutions to expanded water reuse in the State.

The OCC on Legislative Priorities is in favor of **SCR117 SD1** and supports its passage.

SCR117 SD1 requests the Department of Health to convene a task force to identify barriers and solutions to expanded water reuse in the State by: (1) collaborating with other federal, state, and county agencies and private entities; (2) reviewing findings regulations are localities, and of implementing of how water reuse and gray water administered in other states, countries, and assess the feasibility similar regulations in Hawai'i; (3) examining proposed language for future regulation or policy changes in Hawai'i; and (4) identifying and ranking potential demonstration projects for water reuse in Hawai'i.

Specifically, the Platform of the DPH provides that "[t]o ensure wise use and equitable distribution of our precious water, we must stress water conservation and alternative patterns of water treatment and consumption such as the use of recycled water for irrigation, water storage reservoirs, and the use of catchment systems by the public. (Platform of the DPH, P. 2, Lines 93-95 (2016)).

Given that **SCR117 SD1** requests the Department of Health to convene a task force to identify barriers and solutions to expanded water reuse in the State by: (1) collaborating with other federal, state, and county agencies and private entities; (2) reviewing findings regulations are localities, and of implementing of how water reuse and gray water administered in other states, countries, and assess the feasibility similar regulations in Hawai'i; (3)

examining proposed language for future regulation or policy changes in Hawai'i; and (4) identifying and ranking potential demonstration projects for water reuse in Hawai'i, it is the position of the OCC on Legislative Priorities to support this measure.

Thank you very much for your kind consideration.

Sincerely yours,

/s/ Melodie Aduja

Melodie Aduja, Chair, OCC on Legislative Priorities of the DPH

Email: legislativepriorities@gmail.com, Tel.: (808) 258-8889



Wai Maoli

HAWAII FRESH WATER INITIATIVE

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Fresh Water Council Members

William Aila

Stephen Anthony*

Michael Buck

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Sumner Erdman

Mark Fox

Thomas Giambelluca

Timothy Johns

Howard Killian

Patrick Kobayashi

Ernest Lau

Keith Okamoto

Jerry Ornellas

Monty Richards

Kapua Sproat

David Taylor

Dennis Teranishi

Barry Usagawa

*US Geological Survey
Liaison/Scientific Advisor to HCF

**Testimony of the Hawaii Fresh Water Initiative on S.C.R. 117 SD1
Relating to Expanding Water Reuse
Senate Committee on Commerce, Consumer Protection, and Health
April 3rd, 2018
10:00am
Conference Room 229**

Aloha Chair Baker, Vice Chair Tokuda, and Members of the Committee,

The Fresh Water Initiative strongly supports **S.C.R. 117 SD1**, which requests the Department of Health to convene a task force to identify barriers and solutions to expanded water reuse in the state.

The Hawaii Fresh Water Initiative was launched in 2013 and gathered a diverse Fresh Water Council to develop a forward-thinking and consensus-based strategy to increase water security for Hawaii. The blue-ribbon panel of water stakeholders jointly and unanimously recommend key strategies and policies with an ultimate goal of creating 100 million gallons per day (mgd) in additional, reliable fresh water capacity by 2030. One of the goals is to double the amount of wastewater reused in an effort to reduce the impact on Hawaii's groundwater.

S.C.R. 117 SD1 will help Hawaii reach this goal through a diverse task force that is committed to collaboration, research, and water reuse implementation. Water reuse will be an increasingly important technique to utilize in Hawaii as climate change persists, droughts intensify, and populations rise.

The Fresh Water Initiative is in support of **S.C.R. 117 SD1** and is open to partnering further on this resolution.

Respectfully,
Tim Johns, Chair
Fresh Water Council

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843
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April 3, 2018

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Deputy Manager and Chief Engineer

The Honorable Rosalyn H. Baker, Chair
and Members
Committee on Commerce, Consumer Protection,
and Health
Hawaii State Capitol, Room 229
Honolulu, Hawaii 96813

Dear Chair Baker and Members:

Subject: SCR 117, SD 1/ SR 74, SD 1 Requests the Department of Health to
Convene a Task Force to Identify Barriers and Solutions to
Expanded Water Reuse In The State

The Honolulu Board of Water Supply (BWS) supports Senate Concurrent Resolution (SCR) 117, Senate Draft (SD) 1/ Senate Resolution (SR) 74, SD 1, which requests the Department of Health to convene a task force to identify barriers and solutions to expanded water reuse in the state.

The State Department of Health (DOH) has been working diligently in regulating expanded water reuse. In our experience with recycled water on Oahu, there are areas in the DOH Reuse Guidelines where best management practices could be improved to reduce the regulatory and reporting requirements such as allowing irrigation of R-1 recycled water during the day so that irrigation systems can be adjusted and maintained. We note that R-1 recycled water is disinfected and poses no impact to public health relative to other types of nonpotable irrigation water supplies.

Because recycled water extraction may impact wastewater treatment and collection systems, we have no objections if a wastewater agency is represented on the proposed task force.

Thank you for your consideration of our testimony on SCR 117, SD 1/ SR 74, SD 1.

Very truly yours,



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

SCR-117-SD-1

Submitted on: 4/3/2018 7:19:58 AM

Testimony for CPH on 4/3/2018 10:00:00 AM

| Submitted By | Organization | Testifier Position | Present at Hearing |
|---------------------|---------------------|---------------------------|---------------------------|
| Chad Morrow | Individual | Support | No |

Comments:

Aloha, my name is Chad Morrow & I am a civil engineering graduate of UH MÄ• noa currently working with HDR engineering in downtown Honolulu. I support SCR117 for a few reasons:

1. We live on an island with a limited amount of available resources, with water being the most precious. Although we enjoy some of the world's cleanest and abundant sources of water within the aquifers of O'ahu, we should not take it for granted & could experience fraught son the near future, so preparing for climate change should be priority to conserve our natural resources, or at least have some type of contingency.
2. Other places within the mainland and other parts of the world have been using recycled water for quite some time now & if the technology exists to be more conservative & work toward being green leaders of the U.S. and meet the 2045 sustainability goal, then what better opportunity to take advantage of working toward that goal? San Diego has been working on a "toilet to tap" program in cooperation with Stone Brewing company to help gain the trust of the public as working on the initiative to make 1/3 of its wastewater drinkable by 2035.
3. We need advancements in the technology sector here in Hawai'i now more than ever. If we are ever to be struck by another hurricane and are not well prepared with the current population at a near capacity for this island, how would we be best prepared? An abundant supply of water would allow us all to survive for nearly a month without food, but without water, we would be lucky to survive 7 days. We have not invested in high efficiency reverse osmosis, so what are we doing to better protect and conserve our most valuable resource?

Mahalo,

Chad Morrow

Testimony of The Nature Conservancy of Hawai'i
Supporting SCR117 SD1/SR74 SD1 Requesting the Department of Health to Convene a Task
Force to Identify the Barriers and Solutions to Expanded Water Reuse in the State
Senate Committee on Commerce, Consumer Protection and Health
Tuesday, February 3, 2018, 10:00AM, Room 229

The Nature Conservancy of Hawai'i is a private non-profit conservation organization dedicated to the preservation of the lands and waters upon which life depends. The Conservancy has helped to protect nearly 200,000 acres of natural lands in Hawai'i. We manage 43,000 acres in 14 preserves and work in 19 coastal communities to help protect the near-shore reefs and waters of the main Hawaiian Islands. We forge partnerships with government, private parties and communities to protect Hawai'i's important watershed forests and coral reefs.

The Nature Conservancy supports SCR117 SD1/SR74 SD1.

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 were broken across the state and a record number of storms took 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.

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