

**BOARD OF WATER SUPPLY  
KA 'OIHANA WAI  
CITY AND COUNTY OF HONOLULU**

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January 29, 2024

The Honorable Mike Gabbard, Chair  
and Members  
Committee on Agriculture and Environment  
Hawaii State Capitol, Room 201  
Honolulu, Hawaii 96813

The Honorable Lorraine R. Inouye, Chair  
and Members  
Committee on Water and Land  
Hawaii State Capitol, Room 210  
Honolulu, Hawaii 96813

Dear Chair Gabbard, Chair Inouye and Members:

Subject: Senate Bill 2147: Relating to Reuse Zones

The Honolulu Board of Water Supply (BWS) supports Senate Bill (SB) 2147, which proposes to require nonpotable water users or developers of real property located within certain distances of a wastewater treatment plant to use R-1 water for nonpotable water usage. The creation of Reuse Zones, will help to expand reuse in Hawaii, which have plateaued. The establishment of Water Reuse Zones and mandate to use recycled water was evaluated and recommended in the Water Reuse Task Force (WRTF) report to the Legislature, dated December 2018.

In 2018, the Legislature passed House Concurrent Resolution 86 creating the WRTF to evaluate policy changes or recommendations that increase water reuse. The WRTF report prepared by the Department of Health and submitted to the 2019 Legislature ranked 10 top recommendations and addressed barriers to water reuse – the latter included regulations, financial, social and infrastructure. The WRTF agreed demonstration projects were needed to raise awareness about the safety and feasibility of water recycling and enable “opportunities for public engagement and education, and will result in multiple benefits for the local community.” In 2019, SB935 proposed

The Honorable Mike Gabbard, Chair  
The Honorable Lorraine R. Inouye, Chair  
and Members  
January 29, 2024  
Page 2

funding for two demonstration projects, but unfortunately this measure died in the House. 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.

The appropriations in Act 164, Regular Session of 2023, to the Department of Land and Natural Resources to conduct a statewide assessment to utilize reclaimed water for uses other than drinking and potable water needs in 100% of state and county facilities should pave the way to accelerate the implementation of sustainably managed water resource system using both nonpotable and potable reuse.

Thank you for your consideration of our testimony on SB 2147.

Very truly yours,

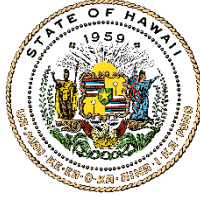


ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer



JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA

P.O. BOX 621  
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DAWN N.S. CHANG  
CHAIRPERSON  
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ACTING DEPUTY DIRECTOR - WATER

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KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

Testimony of  
DAWN N. S. CHANG  
Chairperson

Before the Senate Committees on  
AGRICULTURE AND ENVIRONMENT  
and  
WATER AND LAND

Monday, January 29, 2024  
1:00 PM

State Capitol, Conference Room 229 & Videoconference

In consideration of  
SENATE BILL 2147  
RELATING TO REUSE ZONES

Senate Bill 2147 proposes to require nonpotable water users or developers within certain distances from a wastewater treatment plant to use recycled wastewater, classified as "R-1 water," for nonpotable water usage by amending Chapter 342D, Hawai'i Revised Statutes. This bill also appropriates an unspecified amount of general funds and full-time employee positions to the Department of Land and Natural Resources (Department) for enforcement of this bill's provisions. **The Department acknowledges the intent of this measure and offers the following comments.**

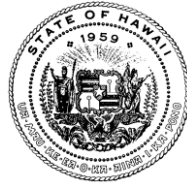
The Commission on Water Resource Management (Commission) supports the appropriate use of recycled wastewater, which reduces the use of potable water for nonpotable demands, is resilient to drought, and prevents potential pollution of nearshore waters by reducing wastewater injection and ocean outfalls. Increasing the reuse of recycled water across the state is essential because climate change is expected to reduce future freshwater availability in many areas of the state and may also cause an increase in frequency and severity of drought events.

The practicability of mandating the use of recycled water within a specified distance of a wastewater recycling facility (WWRF) is affected by several factors, including the existence of suitable infrastructure to store and distribute recycled water, the salinity and quality of the finished recycled water, and current reuse guidelines. We understand that in many areas across the state, infrastructure for the distribution of recycled water does not currently exist. The largest WWRFs are county-owned,

and infrastructure varies greatly between the existing WWRFs. To better understand the state of water reuse in Hawai'i, the Commission completed its 2013 Update of the Hawai'i Water Reuse Survey and Report, which provided an inventory of the WWRFs in the state and described existing water reuse projects and opportunities associated with these WWRFs.

To better understand the potential expansion of recycled water reuse, the Legislature approved funding for Fiscal Year 2024-2025 for additional planning and study on this matter. Specifically, the funding is to conduct a statewide assessment to utilize reclaimed water for uses other than drinking and potable water needs in 100% of State and County facilities by December 31, 2045; and to conduct a study for water security. The Department recommends waiting for the results of this study before establishing reuse zones.

Thank you for the opportunity to comment on this measure.



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DEPARTMENT OF HEALTH  
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In reply, please refer to:  
File:

**Testimony COMMENTING on SB2147  
RELATING TO REUSE ZONES**

SENATOR MIKE GABBARD, CHAIR  
SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

SENATOR LORRAINE R. INOUE, CHAIR  
SENATE COMMITTEE ON WATER AND LAND

Hearing Date: 1/29/2024

Room Number: 229

**Fiscal Implications:** This measure may impact the priorities identified in the Governor's Executive Budget Request for the Department of Health's (Department) appropriations and personnel priorities.

**Department Testimony:** The Department acknowledges the intent of this measure to require nonpotable water users or developers of real property located within certain distances of a wastewater treatment plant to use R-1 water for nonpotable water usage and respectfully submits the following comments.

It is our understanding that the various County Wastewater Divisions and the Honolulu Board of Water Supply have and are constructing the R-1 infrastructure for potential users, but existing infrastructure does not yet serve all existing nonpotable water users. Additionally, all wastewater treatment plants do not treat the wastewater to R-1 quality and therefore clarification of the requirement within certain distances of a wastewater treatment plant is needed. The transmission of R-1 water may not extend to the specific distances of those wastewater treatment plants which do treat the wastewater to R-1 quality.

The Department is concerned that the cost to install infrastructure for nonpotable water users or developers to use R-1 water from a wastewater treatment plant could be exorbitant. If the intent of this measure is also to allow nonpotable users to construct their own infrastructure

to connect to the wastewater treatment plant, the Department believes that it is much more efficient and practical to have the R-1 transmission lines be provided by the Counties.

Water is a precious resource that needs to be preserved and conserved to ensure sustainability for future generations. The Department is an advocate for promoting the use of recycled water in Hawaii, and believes that a study should first be conducted to determine the feasibility of implementing indirect and direct potable reuse in the State.

If the Committees do not wish to revise this bill to a study, the sums appropriated in the bill should be provided to the Department of Health instead of the Department of Land and Natural Resources (DLNR). The Department, not DLNR, has the authority to enforce laws under Hawaii Revised Statutes (HRS) Chapter 342D. The Department also recommends amending the definition of R-1 water to be similar to the definition that is provided under Section 11-62-03, Hawaii Administrative Rules.

**Offered Amendments:** The Department respectfully suggests the following revisions to the proposed HRS amendments. Additions appear as underlined and deletions appear as strikeouts.

SECTION 2, Page 2, lines 5-7: §342D-\_\_\_\_(b) “For purposes of this section, “R-1 water” means recycled water that ~~is at all times oxidized, then filtered, and finally exposed to a disinfection process~~has been oxidized, filtered, and disinfected to meet the corresponding standards set in Section 11-62, Hawaii Administrative Rules.”

SECTION 5, Page 3, lines 11-19: “There is appropriated out of the general revenues of the State of Hawaii the sum of \$ \_\_\_\_\_ or so much thereof as may be necessary for fiscal year 2024-2025 for the establishment of \_\_\_\_\_ full-time equivalent ( \_\_\_\_\_ FTE) positions within the ~~commission on water resource management~~department of health to enforce the provisions of section 342D- \_\_\_\_\_, Hawaii Revised Statutes.

The sums appropriated shall be expended by the department of ~~land and natural resources~~health for the purposes of this Act.”

Thank you for the opportunity to testify.



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

SENATE COMMITTEES ON AGRICULTURE & ENVIRONMENT AND WATER & LAND  
Monday, January 29, 2024 — 1:00 p.m.

**Ulupono Initiative supports the intent of SB 2147, Relating to Reuse Zones.**

Dear Chair Gabbard, Chair Inouye, and Members of the Committees:

My name is Micah Munekata, and I am the Director of Government Affairs at Ulupono Initiative. We are a Hawai'i-focused impact investment firm that strives to improve the quality of life throughout the islands by helping our communities become more resilient and self-sufficient through locally produced food, renewable energy, clean transportation choices, and better management of freshwater resources.

**Ulupono supports the intent of SB 2147 and offers amendments for consideration.**

This bill requires non-potable water users and developers of real property located within a certain distance of wastewater treatment plants to use R-1 water.

Increasing non-potable water use is a viable solution to offset the demand on our potable water supplies, thus increasing our resilience to impacts from climate change. To implement the goal of this bill, which is to expand the use of recycled water and increase our water, we would like to suggest the following amendments:

- Change the responsible agency from the Department of Land and Natural Resources, Commission on Water Resource Management (CWRM), to the Department of Health (DOH), Wastewater Branch. We suggest this because:
  - DOH is responsible for administering Chapter 342D per statute (HRS §342D-2);
  - DOH permits, regulates, and collects data on recycled water use and production;
  - DOH created recycled water management zones to guide the safe application of recycled water; and
  - CWRM does not have a regulatory vehicle outside of the water use permit process to require the use of recycled water.
- Include language requiring an update to the 2013 Water Reuse Survey and Report, as this document provides:
  - important information on recycled water production capability and areas that can be served currently by recycled water facilities; and

*Investing in a Sustainable Hawai'i*

- an invaluable guide for regulators and developers to understand where current capacity exists to connect to a recycled water system.

Thank you for the opportunity to testify.

Respectfully,

Micah Munekata  
Director of Government Affairs





Environmental Caucus of  
The Democratic Party of Hawai'i

## Agriculture & Food Security Committee

Monday, January 29, 2024, 1:00 pm

Senate Committees on Agriculture and Environment and on Water and Land

SENATE BILL 2147 – RELATING TO REUSE ZONES

Position: Support Intent; recommend alternative solution

Me ke Aloha Chairs Gabbard and Inouye, Vice-Chairs Richards and Elefante, and members of the Senate Committees on Agriculture and Environment and on Water and Land:

SB147 requires new construction projects to tie in to R-1 treated used water if within a certain distance from an existing line.

The Agriculture & Food Security Committee supports the use of R-1 treated waste water for irrigation, but believes that this bill unfairly burdens new development. Rather we prefer that counties impose a surcharge on all fresh water users to fund the extension of R-1 lines to expanding development areas, as well as to retro-plan the installation of alternative irrigation water lines to areas with existing fresh water service.

Such a fund should be planned to provide alternative laterals to all properties presently served solely by freshwater lines, so that all irrigation uses, even those in areas solely served by drinking water, are limited to qualified treated water. It may be that a blend of treated waste water plus diverted stream flow or captured storm water will be needed to meet irrigation demand. In any case, the addition of treated waste water is an important component of meeting irrigation needs in the immediate future. The availability of fresh ground water is projected to continue diminishing as the climate changes; rainfall and stream flow are both on long-term decline in the islands. This long-standing dilemma needs to be resolved at a broader scale.

Mahalo for the opportunity to address this matter.

/s/ Charley Ice Acting Chair, Agriculture and Food Security Committee  
Environmental Caucus of the Democratic Party