



*The Judiciary, State of Hawai‘i*

**Testimony to the House Committee on Water, Land & Hawaiian Affairs**

Representative Ryan I. Yamane, Chair

Representative Chris Todd, Vice Chair

**House Committee on Energy & Environmental Protection**

Representative Nicole E. Lowen, Chair

Representative Tina Wildberger, Vice Chair

Wednesday, February 5, 2020, 11:00 a.m.

State Capitol, Conference Room 325

by

Rodney A. Maile

Administrative Director of the Courts

**WRITTEN TESTIMONY ONLY**

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**Bill No. and Title:** House Bill No. 2704, Relating to State Facilities.

**Purpose:** Proposes for the Department of Land and Natural Resources and the Judiciary to set goals for reclaiming water and achieving net-zero energy status in all their respective facilities by 2035 (for energy) and 2045 (for water reclamation). The bill also requires annual reports to the legislature, which include progress towards meeting the water reclamation and net-zero energy goals, as well as plans and recommendations to advance these goals.

**Judiciary's Position:**

The Judiciary appreciates the intent of the bill and offers the following comments and concerns.

The bill would benefit from clearer definitions of the goals of “reclaiming water” and “water reclamation.” Specifically, it would help to discuss what water or waste streams are primarily targeted for reuse. For example, it would be reasonable to assume rain water or storm water runoff should be reclaimed for reuse, but what of other water/waste streams such as sanitary waste and air conditioning drains? Storm water harvesting and reuse can be



House Bill No. 2704, Relating to State Facilities  
House Committee on WLH/EEP  
Wednesday, February 5, 2019  
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accomplished through modest, catchment systems. But, processing sanitary waste and air conditioning drains, which can contain chemicals, would involve more complex processes to make the water reusable. Installing water and waste treatment systems, which would include storage infrastructure for each facility, is a significant investment. It would require more land area, stringent permitting, additional personnel, and safeguards, which collectively may go beyond what this bill intended.

Limiting the scope of this bill to reclaiming rainwater, or storm water could be a meaningful and pragmatic strategy. As an alternative, consideration should be given to a central station approach similar to the Honouliuli Water Recycling Facility, which recycles treated wastewater to serve irrigation and industrial needs in West Oahu. Leaving operation of complex and potentially hazardous water treatment facilities to the experts would seem more appropriate. Once a source of reclaimed water becomes available and a means for distributing the water is established, State facilities could then be required to use the water for non-potable use in new facilities. However, trying to make use of reclaimed water for non-potable use within existing facilities is still a significant undertaking and funding concern, as it would require retrofitting additional supply plumbing into existing structures.

Finally, the Judiciary respectfully requests the Committee reconsider requiring the Judiciary to prioritize “improvements that advance the water reclamation and net-zero energy goals.” Historically, the Judiciary has struggled to keep-up with its backlog of deferred maintenance, some of which pose risks to health, safety, and welfare. Prioritizing water reclamation and energy goals above existing health, safety and welfare priorities, many of which go unaddressed due to limited resources, is a major concern. As well, the bill as written would require a significant financial commitment over time to a requirement to plan, design, report and build the upgrades required to meet such goals.

Thank you for the opportunity to testify on this measure.

DAVID Y. IGE  
GOVERNOR OF  
HAWAII



**STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES**

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

**SUZANNE D. CASE**  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

**ROBERT K. MASUDA**  
FIRST DEPUTY

**M. KALEO MANUEL**  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
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CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

**Testimony of  
SUZANNE D. CASE  
Chairperson**

**Before the House Committees on  
WATER, LAND, & HAWAIIAN AFFAIRS  
and  
ENERGY & ENVIRONMENTAL PROTECTION**

**Wednesday, February 5, 2020  
11:00 AM  
State Capitol, Conference Room 325**

**In consideration of  
HOUSE BILL 2704  
RELATING TO STATE FACILITIES**

House Bill 2704 proposes that the Department of Land and Natural Resources (Department) and the Judiciary set goals for reclaiming water and becoming net-zero with respect to energy use in all their respective facilities by 2035 (energy) and 2045 (water reclamation). This measure also requires annual reports to the legislature which include the progress towards meeting the water reclamation and net-zero energy goals and plans and recommendations to advance these goals. **The Department appreciates the intent of this measure to increase fresh water security while maximizing taxpayer savings and offers the following comments limited to the proposed amendments to Chapters 174C, Hawai‘i Revised Statutes (HRS).**

The definitions of the terms “reclaiming water” and “water reclamation” should be clarified. Water reclamation can refer to many types of practices ranging from simple rainwater catchment to tertiary treatment of wastewater via decentralized on-site wastewater treatment plants. It is important to note that there is a huge range of infrastructure capital and operation and maintenance costs associated with these different practices.

The Department believes that passive, low-impact development reclamation practices, such as storm water cisterns, rain gardens and permeable pavement are feasible and effective ways to reclaim storm water. Conversely, actively treating facility wastewater from existing facilities or a cluster of facilities could be prohibitively expensive to build and operate and infeasible when considering the cost to construct and operate an onsite wastewater reclamation facility, develop storage, and retrofit each facility with a dual water system. In addition, the largest component of

non-potable water needs at most Department facilities is for irrigation, which is consumed by plants and therefore not available for reclamation.

To meet the intents of this measure and develop a realistic reclamation goal and benchmark, for each facility operated and managed by divisions within the Department, the Commission on Water Resource Management (Commission) of the Department would need to:

- Inventory each facility's water system
- Characterize existing water usage and 2020-2021 consumption data
- Assess the various non-potable water uses and identify significant uses
- Identify applicable water reclamation measures
- Conduct a feasibility assessment for applicable measures – cost benefit analysis
- Develop a facility water reclamation plan:
  - Select water reclamation measures and incentives
  - Project water reclamation and cost savings
- Develop a facility reclamation plan implementation schedule

House Bill 2704 also recognizes that another cost-effective means to augment natural supplies and reduce both potable and non-potable uses is through water conservation. This is an enormous opportunity given that O'ahu's per capita water use is around 150 gallons per person per day. Contrast this with California's per capita water use of around 85 gallons per person per day. It would be much more cost-effective to aggressively pursue water conservation efforts than to construct wastewater treatment plants at each department facility. The Commission recommends that appropriate water conservation measures also be considered for inclusion in the study.

The Commission lacks the capacity and staff resources to undertake such a comprehensive study and would require funding support to hire a contractor to assist in the development of this study. Planning, design, and construction of prioritized measures would require additional funding and would be carried out by those divisions that currently have the capacity and resources to accomplish such activities.

Thank you for the opportunity to comment on this measure.

**HB-2704**

Submitted on: 2/1/2020 5:01:46 PM

Testimony for WLH on 2/5/2020 11:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Ted Bohlen	Climate Protectors Coalition	Support	No

Comments:

**HEARING**

DATE: Wednesday, February 5, 2020

TIME: 11:00 AM

Conference Room 325

PLACE: State Capitol

415 South Beretania Street

Dear Chair Yamane, Vice Chair Todd, and Water, Land and Hawaiian Affairs Committee members and

Chair Lowen, Vice Chair Wildberger, and Energy and Environmental Protection Committee members:

The Climate Protectors Coalition **strongly supports HB 2704!**

The Climate Protectors Coalition is a new group inspired by the Mauna Kea Protectors but focused on reversing the climate crisis. As a tropical island State, Hawaii will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, and rising sea levels. We must do all we can to reduce our carbon footprint and become at least carbon neutral as soon as possible and conserve supplies of fresh water that will dwindle with climate change, including by setting goals for DLNR and the Judiciary to reach zero net use of energy by 2035 and 100% water reuse by 2045. Please pass this bill. Mahalo!

**HB-2704**

Submitted on: 2/1/2020 7:00:27 AM

Testimony for WLH on 2/5/2020 11:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Benton Kealii Pang, Ph.D.	Individual	Support	No

Comments: