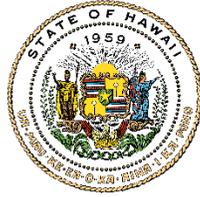


JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



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

P.O. BOX 621
HONOLULU, HAWAII 96809

DAWN N.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

LAURA H.E. KAAKUA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE
MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

Testimony of
DAWN N. S. CHANG
Chairperson

Before the Senate Committee on
WAYS AND MEANS

Tuesday, February 28, 2023
10:00 AM

State Capitol, Conference Room 211 & Videoconference

In consideration of
SENATE BILL 1066, SENATE DRAFT 1
RELATING TO FRESH WATER SECURITY

Senate Bill 1066, Senate Draft 1 proposes to: 1) establish within the Department of Land and Natural Resources (Department) a Water Security Working Group to study and recommend priority capital improvement projects for legislative consideration and approval that leverage public-private investment to increase Hawai'i's water security; and 2) appropriate \$200,000 of general funds to the Department for the purposes of this bill. **The Department supports this measure, provided that its passage does not replace or adversely impact priorities indicated in the Executive Budget request, and offers the following amendments.**

A variety of planning documents already exist to assist in the generation of a priority capital improvement projects list. This includes components of the Department's Commission on Water Resource Management's (Commission) Hawai'i Water Plan (HWP) such as the:

- State Water Projects Plan (SWPP) – includes an inventory of state water resources including wells, stream diversions and state water systems and an inventory of state projects and water demands over the next 20 years.
- Agriculture Water Use and Development Plan (AWUDP) – includes an inventory of agricultural water systems, rehabilitation costs, and long-range strategies for irrigation system repairs and management.
- County Water Use and Development Plans (WUDPs) – includes an inventory of future water demands within each county and development strategies to meet projected demands.

Other supporting documents and initiatives include:

- Water Reuse Task Force Legislative Report – identifies potential demonstration projects for water reuse in Hawai‘i.
- Division of Forestry and Wildlife’s (DOFAW) Watershed Initiative – DOFAW curates and updates a list of priority watershed capital improvement projects statewide (aka: watershed fences).
- Commission’s Water Audit Data – provides data on water loss and recommendations for public water system improvements.
- Act 170, Session Laws of Hawaii 2016, requires that the Hawaii Water Plan be directed toward achieving the utilization of reclaimed water for uses other than drinking and for potable water needs in 100% of state and county facilities by December 31, 2045. Since the Act was put in place, there has been no coordinated strategy with state and county agencies to meet this goal.

The Department acknowledges that these documents and initiatives do not represent the full suite of potential water capital improvement projects. The Water Security Working Group could synthesize these existing resources to begin to generate a list of priority projects.

Given that a variety of plans, documents and initiatives already exist to assist in the generation of a priority capital improvement project list, the Department recommends reducing the amount of funding to \$50,000 since most of this work can be done in-house by amending (highlighted in gray) SECTION 3 to read as follows:

SECTION 3. There is appropriated out of the general revenues of the State of Hawaii the sum of [~~\$200,000~~] \$50,000 or so much thereof as may be necessary for fiscal year 2023-2024 for the working group’s support, travel, meeting, and operational costs;

Another bill, House Bill 1212, House Draft 1 proposes to establish a task force within the Commission to create a water neutrality plan. The purposes of House Bill 1212, House Draft 1, to develop a plan to reduce water usage and increase fresh water supply, has overlap with Senate Bill 1066, Senate Draft 1 and could be informed by the list of projects and developed by the water security working group. Since the Commission is assigned to lead the water neutrality plan task force, the Department recommends the water security working group be established within the Commission to ensure continuity by amending (highlighted in gray) SECTION 1 to read as follows:

SECTION 1. Accordingly, the purpose of this Act is to establish within [~~the department of land and natural resources~~] the commission on water resource management a water security working group to study and recommend priority capital improvement projects, including funding and financing strategies for each project, for legislative

consideration and approval that leverage public-private investment to increase Hawaii's water security.

Mahalo for the opportunity to provide testimony in support of this measure.

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843
www.boardofwatersupply.com



February 28, 2023

RICK BLANGIARDI, MAYOR

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KAPUA SPROAT, Vice Chair
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NA'ALEHU ANTHONY
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DAWN B. SZEWCZYK, P.E., Ex-Officio
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ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

ERWIN M. KAWATA
Deputy Manager

The Honorable Donovan M. Dela Cruz, Chair
The Honorable Gilbert S. C. Keith-Agaran, Vice Chair
and Members
Senate Committee on Ways and Means
Hawaii State Capitol, Room 211
Honolulu, Hawaii 96813

Dear Chair Dela Cruz, Vice Chair Keith-Agaran and Members:

SUBJECT: Senate Bill 1066, SD1: Relating to Fresh Water Security

The Honolulu Board of Water Supply (BWS) supports Senate Bill (SB) 1066, Senate Draft (SD) 1, which establishes within the Department of Land and Natural Resources a water security working group to study and recommend priority capital improvement projects, including funding and financing strategies for each project, for legislative consideration and approval that leverage public-private investment to increase Hawaii's water security.

For your information, the State's Hawaii Water Plan component plans for resource protection, State water projects and agriculture and county water use and development plans, and the Hawaii Community Foundation's Freshwater Initiative and water security strategies will provide important guidance to the proposed water security working group. Current focus of the Freshwater initiative involves on-site stormwater and gray water reuse and opportunities exist in the transit oriented development areas of Honolulu. Expansion of R-1 recycled water projects in the Ewa and Wahiawa-Whitmore areas for urban and agriculture uses can be more collaboratively supported by the objectives of this bill and the working group.

Thank you for the opportunity to testify in support of SB 1066, SD1.

Very truly yours,

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

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LATE

DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII

345 KEKŪANAŌ`A STREET, SUITE 20 • HILO, HAWAII 96720

TELEPHONE (808) 961-8050 • FAX (808) 961-8657

February 27, 2023

TESTIMONY OF KEITH K. OKAMOTO, MANAGER-CHIEF ENGINEER
DEPARTMENT OF WATER SUPPLY, COUNTY OF HAWAII

HEARING BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS

DATE: Tuesday, February 28, 2023

TIME: 10:00 a.m.

PLACE: Conference Room 211 & Videoconference

SB1066 SD1 - RELATING TO FRESH WATER SECURITY

Honorable Chair Donovan Dela Cruz, Vice-Chair Gilbert Keith-Agaran, and committee members of the Senate Committee on Ways and Means,

I am submitting testimony in support of SB1066 SD1 which proposes to establish a working group to evaluate and recommend priority capital improvement projects to improve fresh water security.

As you are all aware, our islands' fresh water resources are not unlimited and must be protected and preserved for current and future generations. This bill is a step in the right direction to accomplishing this vital goal.

Thank you for your time and consideration of my testimony.

...Water, Our Most Precious Resource...Ka Wai A Kāne...

The Department of Water Supply is an Equal Opportunity provider and employer.



Email: communications@ulupono.com

SENATE COMMITTEE ON WAYS & MEANS
Tuesday, February 28, 2023 — 10:00 a.m.

Ulupono Initiative supports SB 1066 SD1, Relating to Fresh Water Security.

Dear Chair Dela Cruz and Members of the Committee:

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 and clean transportation choices, and better management of freshwater resources.

Ulupono supports SB 1066 SD1, which establishes within the Department of Land and Natural Resources a Water Security Working Group to study and recommend priority capital improvement projects, including funding and financing strategies for each project, for legislative consideration and approval that leverage public-private investment to increase Hawai'i's water security.

Ulupono supports the State's efforts to increase our water security for the health and well-being of our communities. This working group seeks to identify priority infrastructure projects to support our important watersheds, dams and reservoirs, water transmission, and irrigation systems, all while encouraging responsible water re-use and increasing our quality and quantity of community water supply. With recent events such as the Red Hill fuel contamination as well as longer term trends such as declining rainfall over the last 20 years due to climate change, there is more need to protect and enhance our freshwater resources than ever before. This group will be beneficial as we look to meet our sustainability goals around water security here in Hawai'i.

Thank you for the opportunity to testify.

Respectfully,

Micah Munekata
Director of Government Affairs

Investing in a Sustainable Hawai'i



**HAWAI'I COMMUNITY
FOUNDATION**

To: The Honorable Donovan M. Dela Cruz, Chair
The Honorable Gilbert S.C. Keith-Agaran, Vice Chair
And Members of the Senate Committee on Ways and Means

From: Micah Kāne, Chief Executive Officer & President
Hawai'i Community Foundation

Re: Testimony in Support to SB 1066, SD1, Relating to Fresh Water Security

Date: Tuesday, February 28, 2023

Time: 10:00 A.M.

Place: Via Conference Room 211 and Videoconference

Hawai'i Community Foundation supports SB 1066, SD1, which requires the Department of Land and Natural Resources to conduct a study to recommend priority capital improvement projects to invest in our water security statewide.

As climate change persists and droughts intensify, water capital improvement planning and investment will be critical to ensuring water security across the islands. Hawai'i's statewide goal for water security, known as the Fresh Water Initiative, is seeking to increase conservation, reuse, and recharge to provide an additional 100 million gallons a day in increased water availability. Support resulting from this bill will help Hawai'i reach its water security goal which will help ensure sustainability and resiliency throughout our islands. Land use changes, increased populations, reduced rainfall, and increased evapotranspiration are all factors that make water security a critical issue. The financial support from this bill will help develop future capital projects, which will ultimately preserve the resource for future generations.

HCF supports SB 1066, SD1 and we stand ready to collaborate and assist in moving Hawai'i towards strengthened water security.

Mahalo for the opportunity to testify.

SB-1066-SD-1

Submitted on: 2/25/2023 4:35:30 PM

Testimony for WAM on 2/28/2023 10:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Will Caron	Individual	Support	Written Testimony Only

Comments:

Please support SB1066 SD1.

Testimony of Michael G. Buck
on
S.B. 1066.SD1
Relating to Fresh Water Security
Senate Committee on Ways and Means
Tuesday, February 28, 2023
Conference Room 211

Thank you for the opportunity to submit testimony in strong support of SB 1066, SD1. I have been involved in freshwater security issues in Hawaii for over 30 years working professionally for DLNR and currently serving my second term as a Water Commissioner. During the last 8 years on the Water Commission, the majority of the conflicts we have dealt with have been aggravated by the lack of investment in our freshwater security infrastructure.

The deliverable, if this measure is passed, is a priority list of CIP projects for legislative consideration, that increase Hawai'i's water security through projects that increase recharge, boost water reuse, and improve water efficiency across the state. These projects can kick start public-private partnerships that utilizes the full spectrum of investment capital, ranging from State capital improvement funds to leverage other grants, loans, and in-kind services from funding partners.

The DLNR is the best Department to administer this bill as it already has done extensive work that can produce meaningful results in the short time frame called for to get priority projects for your consideration next session.

One current example is the Watershed Partnerships the source of all of Hawaii's fresh water, where public capital improvement bond funding is currently providing a key source of support that encourages public, private, and non-governmental entities to actively participate.

Attached to this testimony is a Honolulu Star-Advertise September 2022 editorial that provides context for this measure, which I strongly support.

Michael Buck

Honolulu Star-Advertiser - 09/11/2022

By Michael Buck, Neil Hannahs and En Young

The continuing Red Hill saga and Ka‘eo Duarte’s recent appeal to “Protect Hawaii’s water supply before it’s too late” bring needed attention to the urgency and challenges of ensuring water security (Star-Advertiser, Island Voices, Aug.7). Optimizing recharge, prudent use and future abundance involves multi-party, inter-disciplinary issues that cut across myriad agencies and public/private interests. Here are four priority action areas that will increase our water supply, modernize essential infrastructure and catalyze co-investment from diverse sources.

>> ***Protect and manage Hawaii’s forested watersheds.*** Mauka forests are the source of Hawaii’s fresh water. Watershed partnerships have formed across the state, but erratic funding compromises the efficacy of these voluntary agreements between public and private landowners. Funding should be increased and sustained to not simply delay the inevitable impacts of existential threats, but produce compelling and enduring returns. A University of Hawaii Economic Research Organization (UHERO) study estimated that investing \$43.2 million in watershed restoration in the Koolau mountains alone could result in over \$900 million in realized water value for Oahu.

>> ***Renovate dams and reservoirs.*** Most reservoirs are privately owned, unlined, not maintained to current safety standards, and more liabilities than assets for the owners. Many have been decommissioned or are operated at reduced capacities. Public/private investments can address safety concerns, provide flood control and energy, capture episodic deluges and store water for agriculture and recreation. Reservoirs should have intakes that can be opened in real time to divert and capture water during storm events and closed to limit diversion and ensure streamflow through extended dry periods.

>> ***Improve efficiency of irrigation systems.*** Most surface water delivery systems are ancient, inefficient, privately owned, and not designed for our changing climate. Losses from open ditches and leaky infrastructure typically exceed 20%, often by a lot! These systems need to be piped, lined, and patched. Modernized infrastructure will benefit our agricultural economy, as well as constitutionally protected public trust requirements of ecosystems, traditional cultural practices, Department of Hawaiian Homelands, drinking water and food production. All have cause to make proportional contributions to defray costs.

>> ***Increase gaging and monitoring.*** It is difficult to manage what is not measured. An unpredictable climate requires consistent and comprehensive gathering and analysis of water data. More gaging stations, monitoring wells and reporting from private users are needed to inform sound decision-making. The state Water Commission and county agencies should be provided sufficient staffing to implement Hawaii's progressive water laws.

In 2016, the Fresh Water Council recommended a pilot Natural Capital Investment Partnership to leverage state funds with federal, county, and private dollars. The goal was to amass, coordinate and unleash public and private resources. This was a good idea six years ago and a better one today. Watershed partnerships have proven that collaborative funding works. We should now broaden the spectrum of financial tools to include grants, loans, guarantees, and interest subsidies ... investments seeking a blend of outcomes, as well as capital expecting commercial returns.

Capital improvement bonds could be deployed to create a water security project fund that enables government appropriation to pay for societal benefits and private capital to finance impacts that generate business revenue streams or land value appreciation. The risks of doing nothing are enormous. The Red Hill fuel leak and the climate change-induced water crisis unfolding around the globe offer potent reminders of the human, economic and environmental harms of dramatic reduction in fresh water supply. These alarming circumstances demand innovative strategies that braid streams of capital to make long-needed projects viable.

We call upon political officials, as well as business and community leaders to invest cooperatively and equitably in the water needed to support our existence.
Ola i ka wai!

LATE

Date: 2/27/23

TO: Hawai'i Ways and Means Committee

FROM: Parker Miles Smith, Hawai'i Preparatory Academy Student, Class of 2023

SUBJECT: Testimony in Support of SB1066 SD1

Dear Hawai'i Legislators:

This testimony is in support of SB1066 SD1. SB1066 SD1, whose objective is to create a task force within the DLNR focussed on the planning and funding of water improvement projects (associated with wells, pipelines, etc.), is salient and timely for the well-being of the state of Hawai'i. Groundwater provides 99% of Hawai'i's domestic water.

As a high school senior on the island of Hawai'i, I have spent five months studying past and present water protection in Hawai'i as part of my capstone thesis. I was born and raised on the Big Island, and want to preserve our freshwater resources. I believe that bill SB1066 SD1 will be a positive first step toward ensuring water security for future generations. SB1066 SD1 emphasizes the crucial goal of proactive, rather than reactive water legislation.

Water in Hawai'i is taken for granted by industry and most of the private sector. In Hawai'i, water protection is under-planned and underfunded in improvement projects. The current infrastructure is in need of revamping and modernization to improve water security in Hawai'i, such as near-shore transmission lines, water lines, sewer lines, water retaining structures, etc. We can not wait until the next water disaster (contamination or aquifer depletion) to improve projects in the state. By establishing a committee, as proposed in SB1066 SD1, effective use of financial resources may be achieved to improve industrial projects that impact water security in Hawai'i.

Sincerely,
Parker Miles Smith