DAVID Y. IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

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CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA

JEFFREY T. PEARSON, P.E. 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 SUZANNE D. CASE Chairperson

Before the Senate Committees on
WATER AND LAND,
and
AGRICULTURE AND ENVIRONMENT,
and
PUBLIC SAFETY, INTERGOVERNMENTAL, AND MILITARY AFFAIRS

Thursday, February 16, 2017 1:15 PM State Capitol, Conference Room 229

In Consideration of SENATE BILL 635 RELATING TO WATER CONSERVATION

Senate Bill 635 proposes to establish within the Commission on Water Resource Management of the Department of Land and Natural Resources (Department) a two-year water conservation financial assistance pilot program for County-owned public water systems to implement their respective water conservation incentive programs. This measure also proposes to appropriate an unspecified amount out of the general revenues from Fiscal Year 2017-2018 and Fiscal Year 2018-2019 for this two-year pilot program. **The Department supports this initiative and respectfully suggests some modifications to this measure to streamline the process of providing assistance to the Counties.** Please refer to the attached markup.

Fresh water is Hawaii's most precious natural resource. It is imperative that water utilities and their customers become as efficient as possible when it comes to using water. Water conservation is one of the most cost-effective long-term water supply options for a utility. Successful water conservation incentive programs can help to preserve our limited water supplies to provide for society's growing needs while ensuring abundant water for future generations. County-owned water utilities can reduce their customer per-capita water use by carefully implementing demand-side water conservation incentive programs and measures – which will require funding resources.

The Department's proposed changes to this measure would provide funding directly to county-owned water utilities on a one-to-one cost share basis. Providing a state-funded cost share will incentivize these utilities to implement water conservation incentive programs and to stretch available county funding.

Thank you for the opportunity to comment on this measure.

STATE OF HAWAII

PROPOSED S.D. 1

A BILL FOR AN ACT

RELATING TO WATER CONSERVATION.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1	SECTION 1. As an island state, Hawaii has limited access
2	to natural fresh water. Competition for fresh water, increasing
3	population and development pressures, the rising awareness of
4	environmental and cultural water needs, and the impacts of
5	climate change require that Hawaii become as efficient as
6	possible in its uses of limited fresh water supplies. The
7	legislature finds that a water conservation program that
8	provides financial assistance to county-owned public water
9	systems and their customers to help implement water conservation
10	measures and practices will reduce water use or waste. County-
11	owned public water systems supply approximately two hundred
12	million gallons per day or eighty per cent of drinking water in
13	Hawaii.
14	SECTION 2. There is established within [the commission on
15	water resource management] each of the four county water supply
16	departments, a two-year water conservation financial assistance

1	pilot program to provide financial assistance to county-owned		
2	public water systems to implement their respective water		
3	conservation incentive programs.		
4	As used in this Act:		
5	["Commission" means the commission on water resource		
6	management.]		
7	"Public water system" has the same meaning as that term	is	
8	defined in section 340E-1, Hawaii Revised Statutes.		
9	SECTION 3. To carry out the purposes of this Act, [the		
10	commission] each county water supply department shall:		
11	[(1) Solicit proposals from county owned public water		
12	systems describing their proposed water conservation	n	
13	incentive programs;		
14	(2) Ensure that county-owned public water systems		
15	administer] (1) Administer and manage their water		
16	conservation incentive programs and [furnish		
17	information to the commission documenting] document	<u>.</u>	
18	the total estimated amount of water conserved under	•	
19	[this] their respective program; and		
20	[(3) Prioritize awards pursuant to this section for coun	.ty	
21	owned public water systems where state funds are		
22	matched or leveraged] (2) Provide matching funds of	n a	

1		one-to-one cost share basis to match or leverage with
2		[non-state] non-state funds[; and] appropriated for
3		the purposes of this conservation financial assistance
4		pilot program.
5	[(4)	Provide financial assistance pursuant to this section
6		to county owned public water systems on a reimbursable
7		basis through contracts or agreements.
8	Reim	bursements made pursuant to this Act shall not exceed
9	fifty per	cent of the total cost of each county water
10	conservat	ion incentive program, including administrative costs.
11	SECT	ION 4. A county-owned public water system water
12	conservat	ion incentive program may include:
13	(1)	Rebate programs where county-owned public water
14		systems refund customers no more than fifty per cent
15		of the cost to install water conserving technologies
16		in residential, commercial, institutional, or
17		industrial settings; and
18	(2)	Direct replacement programs where county-owned public
19		water systems pay for the total cost to install water
20		conserving technologies for customers in residential,
21		commercial, institutional, or industrial settings.

1	As u	sed in this section, "water conserving technologies"
2	means equ	ipment, appliances, and supplies that materially and
3	predictab	ly reduce potable water use as determined by the
4	[commissi	on] respective county water supply department and may
5	include r	ain barrels and cisterns, hot water circulation pumps,
6	soil mois	ture sensors, smart irrigation controllers, turf grass
7	replaceme	nt, air conditioning condensate capture, multi-unit
8	water sub	-meters, WaterSense® labeled water saving products,
9	high-effi	ciency toilets, grey-water systems, and other devices,
10	apparatus	, or materials [as determined and approved by the
11	commissio	n on water resource management].
12	SECT	ION 5. In order to evaluate [a] the program's
13	effective	ness, [the commission] each county water supply
14	departmen	t shall:
15	(1)	Review [the county owned public water system water]
16		its conservation incentive programs and determine the
17		amount of non-state matching funds;
18	(2)	Determine the impact of [the county owned public water
19		system] its water conservation incentive programs on
20		water conservation in terms of water saved; and
21	(3)	Make a recommendation to the legislature on whether
22		funding for the water conservation financial

1	assistance program should be expanded, extended, or
2	discontinued.
3	[The commission] Each county water supply department shall
4	submit a report of its findings and recommendations, including
5	any proposed legislation, to the legislature no later than
6	twenty days prior to the convening of the regular session of
7	2019.
8	SECTION 6. There is appropriated out of the general
9	revenues of the State of Hawaii the sum of \$ or so much
10	thereof as may be necessary for fiscal year 2017-2018 and the
11	same sum or so much thereof as may be necessary for fiscal year
12	2018-2019 for the two-year water conservation financial
13	assistance pilot program.
14	The sums appropriated shall be expended $\underline{\text{equally}}$ by [the
15	commission on water resource management] each of the four county
16	water supply departments for the purposes of this Act.
17	SECTION 7. This Act shall take effect on July 1, 2017, and
18	shall be repealed on June 30, 2019.
19	

5

Report Title:

Water Conservation Rebate Program

Description:

Establishes a two-year water conservation financial assistance pilot program to provide financial assistance to county-owned public water systems.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.



DAVID TAYLOR, P.E. Director

GLADYS C.BAISA Deputy Director

DEPARTMENT OF WATER SUPPLY COUNTY OF MAUI

200 SOUTH HIGH STREET WAILUKU, MAUI, HAWAII 96793-2155 www.mauiwater.org

February 14, 2017

The Honorable Karl Rhodes Hawaii State Senate Honolulu, Hawaii 96837

Dear Senator Rhodes:

The proposed Bill S.B. No. 635 relating to water conservation is of paramount interest to the County of Maui Department of Water Supply, as we are tasked with ensuring the quality, reliability and affordability of our customers' water supply. We are intimately familiar with the needs of our customers and already manage numerous water conservation efforts targeting identified challenges and opportunities within our local community.

We support the intent of the proposed bill and acknowledge the lead role of the Commission on Water Resource Management as coordinator and collaborator for water conservation statewide. However, counties have a proven track record of efficiently and effectively managing conservation programs in a way that is responsible, responsive and contextualized to customer and community needs. Adding the administrative burden on the Commission while limiting the counties' flexibility with regard to how appropriated funds are used and how water conservation programs are managed will hinder innovation and diminish efficiency. We therefore request that S.B. NO. 635 be amended to allow the counties to self-manage their water conservation programs and to use State appropriated funds in ways that are in the best interest of their respective communities.

Thank you for your consideration of our viewpoint on this matter. We believe it is an important issue, and would like to see the legislation amended to ensure effective and efficient implementation of water conservation programs throughout the State of Hawaii.

Respectfully submitted,

David Taylor, P.E.

Director of Water Supply

BOARD OF WATER SUPPLY

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



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

ELLEN E. KITAMURA, P.E.
Deputy Manager and Chief Engineer

The Honorable Karl Rhoads, Chair and Members Committee on Water and Land State Senate Hawaii State Capitol, Room 204 Honolulu, Hawaii 96813

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

The Honorable Clarence K. Nishihara, Chair and Members
Committee on Public Safety, Intergovernmental, and Military Affairs State Senate
Hawaii State Capitol, Room 214
Honolulu, Hawaii 96813

Dear Chair Rhoads, Chair Gabbard, Chair Nishihara, and Members:

Subject: Senate Bill 635, Relating to Water Conservation

We strongly support Senate Bill 635, which establishes a two-year water conservation financial assistance pilot program, within the Commission on Water Resource Management, to provide financial assistance to county-owned public water systems to implement their respective water conservation incentive programs. This financial assistance program will provide incentives to encourage a greater number of residents to take part in an important sustainability goal to improve Hawaii's long-term water security.

Thank you for your consideration of our testimony on Senate Bill 635.

PRNESTY. W. LAU, P.E.

Very truly yours

Manager and Chief Engineer



Feb. 15, 2017

To: The Chairs and members of the WTL / PSM / AEN Committees

Position: Strong Support for SB 635 (Relating to Water Conservation)

Dear Chairs Rhoads, Nishihara & Gabbard, Vice Chairs and Committee members,

On behalf of Surfrider Foundation's Hawai'i Chapters and our supporters across the state, I am writing in strong support of SB 635, which creates a water conservation rebate program for newly constructed water conservation systems under the Commission on Water Resource Management. Surfrider worked last year with the Hawaii Fresh Water Initiative to bring diverse parties together to develop innovative and consensus-based strategies to increase water conservation for Hawaii.

The beauty of this new program is that it allows the counties to help homeowners conserve water on their own property by offering rebates for newly constructed water conservation systems (like rain barrels, low-flow spray nozzles and high efficiency toilets). These innovations will save water, recharge our aquifer and reduce the amount of stormwater pollution flowing into our oceans. This is a top priority of the Surfrider Foundation.

The rebate program will also be evaluated by the Commission on Water Resource Man. to make sure that it is successful and cost-effective by:

- Reviewing the rebate program and determine the amount of matching funds;
- Determining the impact of the rebate program in terms of water saved; and
- Making a recommendation to the legislature on whether it should be extended.

SB 635 requires the Commission on Water Resource Management to submit reports on the amount of water conserved, recharged, or reused, and requires the Commission to submit a report of its findings to the Legislature. In traditional Hawaiian culture, the word for wealth was "wai wai," which was based on water and its conservation, and this rebate program will help ensure the future wealth and health of our Islands for generations to come.

This rebate program will help empower residents to do their own water conservation; so it has an educational aspect as well. On behalf of Surfrider and our coalition of groups, we ask you to support SB 635. Mahalo for your consideration.

Aloha, Stuart Coleman Hawaii Regional Manager















The Nature Conservancy Hawai'i Program 923 Nu'uanu Avenue Honolulu, HI 96817 Tel(808) 537-4508 Fax(808) 545-2019 nature.org/hawaii

Testimony of The Nature Conservancy of Hawai'i
Supporting S.B. 635 Relating to Water Conservation
Senate Committee on Water and Land
Senate Committee on Public Safety, Intergovernmental and Military Affairs
Senate Committee on Agriculture and Environment
Thursday, February 16, 2017, 1:150PM, Room 229

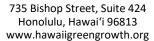
The Nature Conservancy of Hawai'i is a private non-profit conservation organization dedicated to the preservation of the lands and waters upon which life depends. The Conservancy has helped to protect nearly 200,000 acres of natural lands in Hawai'i. We manage 40,000 acres in 14 preserves and work in 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 S.B. 635 that would provide funding for county-owned public water systems to offer rebates or direct replacement programs for installation of water conserving technologies in homes and businesses.

Easily available fresh water is not a limitless resource here in the middle of the Pacific. In recent years, several locations in the state experienced prolonged drought. The University of Hawai'i's Rainfall Atlas catalogues fewer trade wind days and declining rainfall over the past century. Temperature records were broken across the state in recent summers and increased heat brings greater evaporation of surface water and soil moisture. Native 'ōhi'a and koa forests that are proving to be better at capturing and retaining rain water and moisture are being impaired by non-native plants like strawberry guava, ginger and albizia.

In response to these conditions, we must plan and implement mitigative and adaptive measures to ensure the resilience of our natural and human systems. One important strategy is to ensure that we have healthy Hawaiian forests that act like a sponge, collecting rain and moisture and delivering fresh water into streams and aquifers. Additionally, we must improve efficiencies and reuse of our fresh water resources. An incentive program to support the installation of water conserving technologies in our homes, businesses and other institutions is an excellent step in this direction.

Thank you for the opportunity to testify in support of this bill.





Hawai'i Green Growth is a public-private partnership that catalyzes action across government, private sector and civil society to achieve Hawai'i's Aloha+ Challenge 2030 sustainability goals and serve as a model for integrated green growth

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Testimony of Hawai'i Green Growth
In Support of SB635 Relating to Water Conservation
Senates Committees on Water and Land, Public Safety, Intergovernmental, and
Military Affairs, & Agriculture and Environment
16 February 2017, 1:15 pm, Room 229

Aloha Chairs, Vice Chairs, and Members of the Committee:

Hawai'i Green Growth strongly supports SB635 to establish a two-year water conservation financial assistance pilot program for county-owned public water systems.

The quantity and quality of fresh water directly impacts the health, welfare and quality of life of Hawai'i's residents and the affects the economy. Based on global climate disruption, increasingly severe weather and natural disasters, and projected long-term decline of rainfall, there is an urgency to invest in Hawai'i's freshwater supplies. Water conservation is among the least expensive and most efficient ways to increase the available supply of fresh water.

Hawai'i Green Growth partners agreed that fresh water security, including **SB635**, is an important priority to support implementation on Hawaii's *Aloha+ Challenge* 2030 sustainability goals. The *Aloha+ Challenge* is a joint leadership commitment launched by the State Legislature (SCR69), Governor, four County Mayors, Office of Hawaiian Affairs and Hawai'i Green Growth public-private partners. This statewide framework outlines six ambitious 2030 sustainability goals in the areas of clean energy, local food, natural resource management, solid waste, smart sustainable communities, and green education and workforce. The Aloha+ Challenge has been recognized nationally and internationally as model that can be scaled to support the implementation of the United Nations 2030 Sustainable Development Goals (SDGs) and the Paris Climate Agreement.

With leadership and support from the State Legislature, Hawai'i hosted the first U.S. held IUCN World Conservation Congress with over 10,000 global partners from 190 countries in 2016. This bill is an opportunity to continue important local action on sustainable development and resiliency.

As a public-private partnership, Hawai'i Green Growth strongly supports **SB635** and appreciates the opportunity to provide testimony.



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Testimony of the Hawaiʻi Community Foundation

S.B. 635

Relating to Water Conservation
Senate Committee on Water and Land
Senate Committee on Agriculture and Environment
Senate Committee on Public Safety, Intergovernmental, and Military Affairs
Thursday, Feb 16, 2017
1:15 P.M.
Conference Room 229

The Hawaii Community Foundation strongly supports S.B. 635, which establishes a rebate program to support the adoption of residential water conservation systems.

The Hawaii Community Foundation (HCF) became concerned about long-term fresh water security issues in 2012, as research emerged from the University of Hawaii linking climate change and negative trends in Hawaii's fresh water supply. HCF assembled a blue ribbon panel of water stakeholders to provide collaborative solutions, and in concert with their recommendations launched the Hawaii Fresh Water Initiative in 2014. The Fresh Water Initiative has a goal of creating 100 million gallons per day in additional, reliable fresh water capacity by 2030.

HCF supports the findings of the Fresh Water Council and strongly supports the policy recommendations found in their "Blueprint for Action." One of the key recommendations from the Council is the establishment a statewide program to encourage the adoption of water saving devices in residential and commercial properties. H.B. 635 will establish this important program.

HCF strongly supports S.B. 635 and urges passage, and we stand ready to assist in helping implement this important program and all elements of the Council's "Blueprint for Action."



Fresh Water Council Members

William Aila

Stephen Anthony*

Michael Buck

Suzanne Case

Reginald Castanares

Meredith Ching

Derek Chow

Ka'eo Duarte

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 Hawai'i Fresh Water Council on S.B. 635

Relating to Water Conservation
Senate Committee on Water and Land
Senate Committee on Agriculture and Environment
Senate Committee on Public Safety, Intergovernmental, and Military Affairs
Thursday, Feb 16, 2017
1:15 P.M.
Conference Room 229

The Hawaii Fresh Water Initiative strongly supports S.B. 635, which proposes to establish a water conservation device rebate program.

The Hawaii Fresh Water Initiative was launched in 2013 and assembled our diverse Fresh Water Council to develop a forward-thinking and consensus-based strategy to increase water security for Hawaii. Our Council jointly and unanimously recommended 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 key strategies to achieve this statewide water goal is to increase water conservation by 40 mgd over the next 15 years.

Several states facing water supply issues have successfully promoted the adoption of water saving devices, including rainwater harvesting systems to replace potable water use for yards and landscaping, soil moisture sensors for landscape irrigation, and water circulation pumps. The following considerations convinced the Council that encouraging water saving device adoption in Hawai'i homes should be a top priority:

- Among all 50 states, Hawaii ranks in the top five in terms of our daily per capita water use at 156 gallons per day. Forty-four states use less than 120 gallons per day.
- The Honolulu Board of Water Supply estimates that up to half of all potable water delivered to residences is actually used for landscape irrigation.
- A single hot water recirculation pump is estimated to save 11,000 to 15,000 gallons of water per year in a typical home.

The rebate program established by S.B. 635 has the potential to preserve hundreds of millions of gallons of fresh water per year, and is a critical component of a multi-pronged strategy to improve Hawaii's long-term water security.

For these reasons, we strongly support S.B. 635, and request that the committees pass this measure.





Email: communications@ulupono.com

SENATE COMMITTEES ON WATER & LAND, AGRICULTURE & ENVIRONMENT, AND PUBLIC SAFETY, INTERGOVERNMENTAL, & MILITARY AFFAIRS
Thursday, February 16, 2017 — 1:15 p.m. — Room 229

Ulupono Initiative **Strongly Supports** SB 635, Relating to Water Conservation

Dear Chair Rhoads, Chair Gabbard, Vice Chair Riviere, Chair Nishihara, Vice Chair Wakai, and Members of the Committees:

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 reduce waste. 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 <u>strongly supports</u> **SB 635**, which provides funding for water conservation for county owned public water systems because it aligns with our goal of creating more locally produced food.

Hawai'i's agricultural industry relies on a constant supply of water, but in times of drought, 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 climate change continues to contribute to increased droughts, it becomes more important for the Legislature to fund water conservation measures to protect our island's most valuable natural resource.

As Hawai'i's local food issues become more complex and challenging, organizations need additional resources and support to address and overcome them. We appreciate this committee's efforts to look at policies that support local food production.

We believe that by collaborating, we can help produce more local food and support an economically robust homegrown agriculture industry, which strengthens our community with fresh, healthy food. Thank you for this opportunity to testify.

Respectfully,



Kyle Datta General Partner