JOSH GREEN, M.D. GOVERNOR OF HAWAII KE KIA'ĀINA O KA MOKJ'ĀINA 'OHAWAI'I



KENNETH S. FINK, MD, MGA, MPH DIRECTOR OF HEALTH KA LUNA HO'OKELE

STATE OF HAWAII DEPARTMENT OF HEALTH KA 'OIHANA OLAKINO P. O. Box 3378 Honolulu, HI 96801-3378 doh.testimony@doh.hawaii.gov

Testimony COMMENTING on SB0547 RELATING TO WATER CONSERVATION.

SENATOR MIKE GABBARD, CHAIR SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

SENATOR BRANDON J.C. ELEFANTE, CHAIR SENATE COMMITTEE ON PUBLIC SAFETY AND MILITARY AFFAIRS

SENATOR LYNN DECOITE, CHAIR SENATE COMMITTEE ON ECONOMIC DEVELOPMENT AND TOURISM

February 10, 2025; 1:00 pm; Room Number: 224

- 1 Fiscal Implications: None.
- 2 **Department Position:** The Department of Health ("Department") offers comments on this

3 proposed measure.

4 **Department Testimony:** The Environmental Management Division ("EMD") provides the

5 following testimony on behalf of the Department.

This measure is to "encourage the installation and use of gray water recycling systems
and atmospheric water generators in the State." The Department has concerns and provides
comments on this measure.

In Chapter II on page 2 of the Guidelines for the Reuse of Gray Water¹ (2009), the
 Department "defines gray water as wastewater discharged from: showers and bathtubs;

¹ <u>https://health.hawaii.gov/wastewater/files/2016/03/14_Gray_Water_GL.pdf</u>

hand-washing lavatories; wastewater that has not contacted toilet waste; sinks (not used for
disposal of hazardous, toxic materials, food preparation, or food disposal) and clothes-washing
machines (excluding wash water with human excreta e.g., diapers)."

4 The American National Standard, National Sanitation Foundation / American National 5 Standards Institute ("NSF/ANSI") 350²: "Onsite Residential and Commercial Water Reuse 6 Treatment Systems", has been developed as part of the ongoing efforts of interested parties to 7 establish **minimum** material, design and construction, and performance requirements for 8 onsite residential and commercial water reuse treatment systems. Actual performance for any 9 site or system may vary, depending on variations in local water supply, wastewater constituents (i.e., blackwater and graywater constituents), and local patterns of use. The end use of the 10 treated effluent is the responsibility of the property owner, licensed engineer-of-record, 11 12 licensed contractor, and regulatory officials.

The Department utilizes NSF/ANSI 40³ (i.e., aerobic residential wastewater treatment 13 systems) and NSF/ANSI 245 (i.e., aerobic residential wastewater treatment systems – nitrogen 14 reduction) certifications for individual wastewater systems ("IWS"), which currently treat 15 domestic wastewater (i.e., domestic "blackwater" and "gray water"). IWS are for wastewater 16 17 flows of 1,000 gallons per day ("gpd") or less and disposal of the treated effluent into 18 subsurface disposal systems (e.g., absorption beds, absorption trenches, and seepage pits), which are three (3) feet or more from any groundwater. If groundwater is less than three (3) 19 feet from the disposal system, then ultraviolet ("UV") disinfection is required. 20

NSF/ANSI 350 is for wastewater flows of 1,500 gpd. Therefore, projects that want to
utilize NSF/ANSI 350 certification are for small projects, which have more in common with an
IWS than a wastewater treatment works ("WWTW").

² <u>https://www.nsf.org/knowledge-library/nsf-ansi-350-standard-certification-water-reuse-treatment-systems</u> <u>https://nsfinternational.widen.net/s/tshphxrsvx/ww---water-reuse_lt_en</u>

³ <u>https://www.nsf.org/knowledge-library/standards-updates-nsf-ansi-40-245-350-41</u>

1	If recycled and reuse projects are being planned as WWTW, then the current Hawai'i
2	Administrative Rules, Title 11, Chapter 62 ("HAR 11-62") are applicable and available. The
3	following NSF/ANSI 350 certification effluent criteria are not compliant with HAR 11-62:
4	• Turbidity (nephelometric turbidity unit (NTU)):
5	 Class R is not compliant.
6	 Class C is only compliant for media filtration.
7	• Design UV dose: No criteria.
8	Filter UV transmittance: No criteria.
9	Chlorine residual: Not compliant for R-1 water.
10	Modal contact time: No criteria.
11	Contact time: No criteria.
12	Fecal coliform:
13	• E. coli is a type of fecal coliform, but only represents one specific type of
14	bacteria.
15	• Class R is not compliant for R-1 and R-2 water.
16	HAR 11-62 does not have rules for recycled and reuse projects, which are planned as
17	IWS. The Guidelines for the Reuse of Gray Water (2009) may be used for IWS, but the following
18	conditions from Chapter V apply when reusing treated gray water effluent for irrigation:
19	"Never use spray irrigation to apply gray water. Application of gray water must
20	be done by utilizing a subsurface system.
21	• Gray water should never be used to irrigate root crops, vegetables that will be
22	eaten raw, or other crops where the consumed portion of the plant rests on the
23	ground.
24	Gray water should be used to irrigate established lawns and plants. Seedlings
25	and barren areas where a potential for runoff and/or ponding exists should not
26	be irrigated with gray water."

The Department suggests including a new definition in SECTION 2 to clarify the method of using
 recycled water generated by the NSF/ANSI 350-certified gray water recycling system.

As mentioned in Chapter IV of the Guidelines for the Reuse of Gray Water (2009), "[n]ot all gray water is the same. Several studies have confirmed that the amount of contaminants in the gray water mainly depends on the lifestyle and activities of the occupants. For instance, a study done in 2001 by the University of Arizona found that a home with two adults and a child had a significantly higher concentration of fecal coliform (microorganisms found in human waste) in the gray water than did a household of just two adults."

Reusing recycled gray water for toilet and urinal flushing and surface irrigation poses a
much greater risk to the public than subsurface disposal or irrigation. The success of any
WWTW that produces recycled water is in the ongoing monitoring, sampling, testing,
operations, and maintenance by a qualified and certified wastewater operator (i.e., "direct
responsible charge") and independent laboratory. The NSF/ANSI 350 certification does not
require the same level of ongoing monitoring, sampling, testing, operations, and maintenance
by a qualified and certified wastewater operator and independent laboratory as HAR 11-62.

The Department has recently begun discussions with NSF International about
 NSF/ANSI 350 and other wastewater certifications.

Offered Amendments: The Department respectfully suggests the following revisions to
 proposed measure. Additions appear as double underlined and deletions appear as bracketed
 strikeouts.

- SECTION 2, Page 4, lines 8-11: <u>""NSF/ANSI 350-certified" means certified to meet the</u>
 <u>National Sanitation Foundation [International Standard]/American National Standards Institute</u>
 <u>350_certification for onsite residential and commercial water reuse treatment systems.</u>
 <u>"NSF/ANSI 350-certified gray water recycling system effluent" means effluent from a</u>
- 25 gray water recycling system which meets the NSF/ANSI 350 certification and shall only be used

- 1 for subsurface disposal or subsurface irrigation in compliance with department of health rules
- 2 <u>and recycle/reuse water guidelines.</u>"
- 3 Thank you for the opportunity to testify on this measure.

SYLVIA LUKE LT. GOVERNOR



GARY S. SUGANUMA DIRECTOR

KRISTEN M.R. SAKAMOTO DEPUTY DIRECTOR

STATE OF HAWAI'I DEPARTMENT OF TAXATION Ka 'Oihana 'Auhau P.O. BOX 259 HONOLULU, HAWAI'I 96809 PHONE NO: (808) 587-1540 FAX NO: (808) 587-1560

TESTIMONY OF GARY S. SUGANUMA, DIRECTOR OF TAXATION

TESTIMONY ON THE FOLLOWING MEASURE:

S.B. No. 547, Relating to Water Conservation

BEFORE THE:

House Committees on Agriculture and Environment, Public Safety and Military Affairs, and Economic Development and Tourism

DATE:	Monday, February 10, 2025
TIME:	1:00 p.m.
LOCATION:	State Capitol, Room 224

Chairs Gabbard, Elefante, and DeCoite; Vice-Chairs Richards, III and Wakai; and Members of the Committees:

The Department of Taxation (DOTAX) offers the following <u>comments</u> regarding S.B. 547 for your consideration.

Section 2 of S.B. 547 amends chapter 235 Hawaii Revised Statutes, (HRS), by adding a new section to create a water conservation income tax credit. The credit amounts are as follows:

- Commercial property The lesser of \$50,000 or 20% of the cost of installing an NSF/ANSI 350-certified gray water recycling system or an atmospheric water generator that meets NSF P343 test results and component standards (qualifying device).
- Residential property The lesser of \$10,000 or 25% of the cost of installing a qualifying device.
- Residential property owned by a low-income homeowner The lesser of \$12,500 or 35% of the cost of installing a qualifying device.

Department of Taxation Testimony S.B. 547 February 10, 2025 Page 2 of 4

to:

The credit is nonrefundable and may be carried forward until exhausted.

For purposes of this bill, "low-income homeowner" means a homeowner that earns 80 percent or less of the area median income. The bill also states only atmospheric water generators that are fully NSF P343-cerfitied are eligible for credits beginning July 1, 2028.

The bill takes effect on July 1, 2025, with the water conservation tax credit in Section 2 applying to taxable years beginning after December 31, 2025.

DOTAX recommends several amendments to the bill to assist with the administration of this measure.

First, DOTAX recommends that the bill be amended to clarify that the credit is only available to taxpayers who actually install a water conservation system and incur costs therefor. Specifically, DOTAX recommends that subsections (a) and (b) be amended to read as follows:

(b) The amount of the tax credit shall be equal

- (1) For each residential property in which an NSF/ANSI 350-certified gray water recycling system or an atmospheric water generator that meets NSF P343 test results and component standards is installed and placed in service, twenty-five percent of the cost of the installation or \$10,000, whichever is less; and
- (2) For each commercial property in which an NSF/ANSI 350-certified gray water recycling system or an atmospheric water generator that meets NSF P343 test results and component standards is installed and placed in service, twenty per cent of the cost of the installation or \$50,000, whichever is less.

(c) Notwithstanding subsection (b), a low-income homeowner who installs and places in service an NSF/ANSI 350-certified gray water recycling system or an atmospheric water generator that meets NSF P343 test results and component standards may qualify for a tax credit of thirty-five per cent of the cost of the installation or \$12,500, whichever is less. Department of Taxation Testimony S.B. 547 February 10, 2025 Page 3 of 4

Second, DOTAX recommends that the definition of low-income homeowner be amended to clarify that a homeowner owns and resides at the property. DOTAX also recommends clarifying that adjusted gross income should be used to measure whether the taxpayer qualifies as low income. Specifically, DOTAX recommends the definition of low-income homeowner be amended to read as follows:

> "Low-income homeowner" means person with an ownership interest in the property who resides at the property as their principal residence and whose adjusted gross income is eighty per cent or less of the area median income.

Third, DOTAX notes the bill does not define "area median income." DOTAX recommends the following definition:

"Area median income" means the median income for each of the counties of Honolulu, Hawaii, Maui, and Kauai as determined by the United States Department of Housing and Urban Development from time to time, and as adjusted by family size.

Fourth, DOTAX recommends adding a new subsection that clarifies how the claim may be claimed by entities, to read as follows:

> In the case of a partnership, S corporation, estate, or trust, the tax credit allowable shall be as provided under subsection (b) for the taxable year. The cost upon which the credit is computed shall be determined at the entity level. Distribution and share of the credit shall be determined pursuant to administrative rule. If a deduction is taken under section 179 (with respect to election to expense depreciable business assets) of the Internal Revenue Code, no tax credit shall be allowed for that portion of the qualified expense for which the deduction is taken.

Fifth, DOTAX recommends subsection (e) be amended as follows to limit claims to within 5 years after a water conservation system is placed in service:

Department of Taxation Testimony S.B. 547 February 10, 2025 Page 4 of 4

> (e) If the tax credit under this section exceeds the taxpayer's net income tax liability, the excess of the credit over liability may be used as a credit against the taxpayer's income tax liability in subsequent years until exhausted; <u>provided</u> <u>that no credit forward may be claimed more</u> than five years after the initial claim for credit is made under this section.

Sixth, DOTAX recommends subsection (g) be amended as specify that the taxable year in which the credit may be claimed is the taxable year in which the water conservation system is placed in service:

(g) All claims for the tax credit under this section, including amended claims, shall be filed on or before the end of the twelfth month following the close of the taxable year in which the water conservation system is placed in service. Failure to comply with this provision shall constitute a waiver of the right to claim the credit.

Seventh, DOTAX recommends a definition for water conservation system be included as follows:

"Water conservation system" means an NSF/ANSI 350 - certified gray water recycling system or an atmospheric water generator that meets NSF P343 test results and component standards.

Thank you for the opportunity to provide comments on this measure.

LEGISLATIVE TAX BILL SERVICE

TAX FOUNDATION OF HAWAII

735 Bishop Street, Suite 417

Honolulu, Hawaii 96813 Tel. 536-4587

SUBJECT: NET INCOME; Water Conservation Tax Credit

BILL NUMBER: SB 547

INTRODUCED BY: GABBARD, CHANG, HASHIMOTO, MCKELVEY, RHOADS, SAN BUENAVENTURA, Richards

EXECUTIVE SUMMARY: Incentivizes the installation and use of gray water recycling systems and atmospheric water generators in the State by establishing an income tax credit to be administered by the Department of Taxation. Requires the Department of Business, Economic Development, and Tourism to establish a rebate program. Requires the State Building Code Council to adopt certain standards on gray water recycling systems and atmospheric water generators in the State.

SYNOPSIS: Section 2 of the measure adds a new section to chapter 235, HRS, to establish a Water Conservation Income Tax Credit, ("Credit") for:

- Residential properties: \$10,000 or 25% of the cost of installing an NSF/ANSI 350certified gray water recycling system or an atmospheric water generator that meets NSF P343 test results and component standards, whichever is less; and
- Commercial properties: \$50,000 or 20% of the cost of installing an NSF/ANSI 350certified gray water recycling system or an atmospheric water generator that meets NSF P343 test results and component standards, whichever is less.
- Low- income homeowners may qualify for a tax credit of \$12,500, or 35% of the cost of installing an NSF/ANSI 350-certified gray water recycling system or an atmospheric water generator that meets NSF P343 test results and component standards, whichever is less.

Beginning July 1, 2028, only atmospheric water generators that are fully NSF P343-certified shall be eligible for the Credit.

The Credit is a nonrefundable tax credit against net income tax liability. Credits in excess of tax liability may be carried forward to subsequent years until exhausted.

The Department of Taxation shall prepare forms necessary to claim the credit, require information necessary to ascertain the validity of the credit and may adopt rules.

Definitions are provided for Atmospheric water generator; Gray water, Low-income homeowner, NSF/ANSI 350-certified, NSF P343, and NSF P343-certified.

Section 3 of the measure requires the Department of Business, Economic Development, and Tourism to establish a rebate program to be awarded as follows:

- For residential properties: \$7,500 or 30% of the cost of installing an NSF/ANSI 350certified gray water recycling system or an atmospheric water generator that meets NSF P343 test results and component standards, whichever is less; and
- For commercial properties: \$35,000 or 25% of the cost of installing an NSF/ANSI 350certified gray water recycling system or an atmospheric water generator that meets NSF P343 test results and component standards, whichever is less.
- Low- income homeowners may qualify for a rebate of \$10,000, or 40% of the cost of installing an NSF/ANSI 350-certified gray water recycling system or an atmospheric water generator that meets NSF P343 test results and component standards, whichever is less.

Beginning July 1, 2028 only atmospheric water generators that are fully NSF P343-certified shall be eligible for the Credit.

For purposes of this rebate, the definitions in section 235-__, HRS added by the bill shall apply.

Also requires the state building code council to adopt the International Association of Plumbing and Mechanical Officials' 2023 water efficiency and sanitation standard, incorporating provisions regulating the design, installation, and maintenance of gray water recycling systems and atmospheric water generators in the State.

EFFECTIVE DATE: July 1, 2025, provided that section 2 shall apply to taxable years beginning after December 31, 2025.

STAFF COMMENTS: This measure attempts to address water scarcity resulting from chronic drought conditions by providing incentives for the use of gray water recycling systems and atmospheric water generators.

Two incentives are offered by way of a tax credit to be administered by the Director of Taxation and a rebate to be administered by the Department of Business, Economic Development, and Tourism. Both incentives are available for identical types of properties.

As summarized below, the offering of both a tax credit and rebate for a residential property could cover over half of the cost. Additionally, as currently drafted the same cost could be used for both the tax credit and rebate.

	Residential Properties	Commercial Properties	Low-income homeowners
Tax Credit	25%	20%	35%
Max Credit	10,000	50,000	12,500
Rebate	30%	25%	40%
Max Rebate	7,500	35,000	10,000

Re: SB 547 Page 3

We question why the tax credit and the rebate are allowed to apply to the same expenditure. Having those two programs run concurrently raises the risk that the two implementing agencies (DBEDT and DOTAX) will come to conflicting conclusions about aspects of the same incentive.

We believe that only the rebate program should move forward. That program would provide a clearer and transparent total cost of providing the incentive. The new Credit would require changes to tax forms and instructions, reprogramming, staff training, and other costs that could be massive in amount.

Digested: 2/9/2025



February 8 2025

RE: Testimony in Strong Support of SB547 - Water Conservation Incentives and Standards

Aloha Senate Members of the Agriculture and Environment, Public Safety and Military Affairs, and Economic Development and Tourism Committees,

I am submitting testimony in **strong support of SB547**, which incentivizes water conservation through the establishment of an income tax credit for graywater recycling systems and atmospheric water generators, creates a rebate program under the Department of Business, Economic Development, and Tourism (DBEDT), and requires the State Building Code Council to adopt water efficiency and sanitation standards. This bill is a critical step toward ensuring Hawai'i's water sustainability, particularly as climate change continues to intensify drought conditions and water scarcity.

Hawai'i's freshwater resources are finite, and the increasing threats of drought, rising temperatures, and overuse demand proactive solutions. **SB547** directly addresses these challenges by:

- Encouraging Water Conservation By offering financial incentives for homeowners and businesses to install graywater recycling systems and atmospheric water generators, the bill promotes efficient water use and reduces strain on freshwater supplies.
- Reducing Dependence on Limited Water Resources The bill supports alternative water sources, such as graywater reuse and atmospheric water generation, which can help offset potable water consumption and extend the lifespan of existing water infrastructure.
- Creating Cost Savings for Residents and Businesses With the introduction of rebates and tax credits, this bill makes it financially feasible for more households and businesses to invest in water conservation systems, ultimately reducing long-term utility costs.
- Strengthening Resilience Against Climate Change Hawai'i is particularly vulnerable to extreme weather conditions, and establishing sustainable water management practices will help buffer communities against drought and water shortages.

A real-world example of water conservation success in Hawai'i is the Kuilei Place condominium development, which will be the first residential community in the state to feature an onsite graywater treatment, recycling, and reuse system (Spectrum News, 2024). This innovative system will:

The Food+ Policy internship develops student advocates who learn work skills while increasing civic engagement to become emerging leaders. We focus on good food systems policy because we see the importance and potential of the food system in combating climate change and increasing the health, equity, and resiliency of Hawai'i communities.

In 2025, the cohort of interns are undergraduate and graduate students and young professionals working in the food system. They are a mix of traditional and nontraditional students, including parents and veterans, who have backgrounds in education, farming, public health, nutrition, and Hawaiian culture.



- Recycle water from sinks, showers, and washing machines and reuse it for toilet flushing and irrigation.
- Save nearly 11 million gallons of water annually—the equivalent of more than 16 Olympic-sized swimming pools.
- Serve as a model for future sustainable development across the state, demonstrating that large-scale residential projects can integrate graywater recycling to reduce potable water demand.

This development was made possible through collaboration between state agencies, the City and County of Honolulu, and private sector partners, proving that government-supported water conservation policies can lead to real, impactful change. If SB547 is passed, more homeowners and businesses will be able to adopt similar conservation technologies, helping to scale these benefits across the islands.

Hawai'i's communities are already experiencing the effects of water shortages, with restrictions and increased costs placing additional burdens on families and businesses. If we fail to act now, the problem will only worsen. By implementing financial incentives, SB547 makes it possible for more people to adopt water conservation technologies, reducing overall demand on our water supply while ensuring equitable access to conservation resources.

Additionally, integrating water efficiency and sanitation standards into the State Building Code Council ensures that future developments are built with sustainability in mind, preventing water waste and improving long-term resilience.

For many local families, the ability to afford water-saving technology can mean the difference between struggling with high utility bills or achieving long-term savings. This bill directly supports the working families, farmers, and businesses who are committed to preserving Hawai'i's natural resources.

The Food+ Policy internship develops student advocates who learn work skills while increasing civic engagement to become emerging leaders. We focus on good food systems policy because we see the importance and potential of the food system in combating climate change and increasing the health, equity, and resiliency of Hawai'i communities.

In 2025, the cohort of interns are undergraduate and graduate students and young professionals working in the food system. They are a mix of traditional and nontraditional students, including parents and veterans, who have backgrounds in education, farming, public health, nutrition, and Hawaiian culture.



I strongly urge the legislature to pass SB547 to promote water conservation and resilience. This bill provides the financial and regulatory support necessary to empower individuals, businesses, and communities to take action in reducing water waste and safeguarding Hawai'i's precious water resources for future generations.

Mahalo for your time and consideration.

Respectfully submitted,

Lea iaea & the Food + Policy Team #fixourfoodsystem

The Food+ Policy internship develops student advocates who learn work skills while increasing civic engagement to become emerging leaders. We focus on good food systems policy because we see the importance and potential of the food system in combating climate change and increasing the health, equity, and resiliency of Hawai'i communities.

In 2025, the cohort of interns are undergraduate and graduate students and young professionals working in the food system. They are a mix of traditional and nontraditional students, including parents and veterans, who have backgrounds in education, farming, public health, nutrition, and Hawaiian culture.

<u>SB-547</u> Submitted on: 2/7/2025 5:58:18 PM Testimony for AEN on 2/10/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Ji Yu	Testifying for ECO TECHNOLOGY	Support	Written Testimony Only

Comments:

Please pass this bill so that Hawaii can be a sustainable in our water resources are most essential resource we have so having a rebate fits much needed for eco friendly solutions for businesses to thrive and support a better future for generations to come. Having rebates will motivate consumers to be sustainable because it is very difficult right now for many consumers due to huge inflationary costs of living in Hawaii.

<u>SB-547</u> Submitted on: 2/9/2025 6:11:00 AM Testimony for AEN on 2/10/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Cynthia Viloria	Individual	Support	In Person

Comments:

Dear Chair and Members of the Committee,

I believe everyone, every person, every age from our children to our elderly parents and grandparents and future generations to come deserves clean pure drinking water. It is our responsibility to make it affordable tor all is Tati's low or high income and this bill will be a Segway to that !

heakth and wellness are crucial now and for future generations as well as sustainability ti protect our resources for generations to come.

I am expressing my strong support for SB 547, which proposes tax incentives for implementing gray water recycling systems and air-to-water generators in Hawaii. These technologies are crucial to addressing the ongoing water scarcity and environmental challenges facing our state. By incentivizing gray water recycling, Hawaii can significantly reduce its dependency on freshwater, lowering the strain on our limited water resources. Gray water systems offer an eco-friendly alternative for irrigation and non-potable uses, making them a sustainable solution for residential and commercial applications.

Furthermore, air-to-water generators provide an innovative method for producing potable water from the air, a technology that could greatly benefit communities in remote or drought-prone areas. By supporting the use of these systems through tax incentives, we can make clean, accessible water a reality for more residents and businesses across the islands.

In conclusion, I urge the Committee to support SB 547 and its proposed tax incentives, as they will play a vital role in ensuring the long-term sustainability of Hawaii's water resources. Thank you for your consideration.

Mahalo,

Cynthia VIloria (808)436-8678 94-1023 Kūhaulua Street Waipahu, HI 96797

TESTIMONY IN SUPPORT OF SB547

RELATING TO WATER SUSTAINABILITY

Hearing Date: Monday, February 10, 2025

Time: 1:00 PM

Place: Conference Room 224 & Videoconference

Committees:

- Committee on Agriculture and Environment
- Senator Mike Gabbard, Chair
- Senator Herbert M. "Tim" Richards, III, Vice Chair
- Committee on Public Safety and Military Affairs
- Senator Brandon J.C. Elefante, Chair
- Senator Glenn Wakai, Vice Chair
- Committee on Economic Development and Tourism
- Senator Lynn DeCoite, Chair
- Senator Glenn Wakai, Vice Chair

Aloha Chair Gabbard, Chair Elefante, Chair DeCoite, Vice Chairs Richards and Wakai, and Members of the Committees,

I am writing in strong support of SB547, which advances water sustainability and climate resilience through tax incentives for atmospheric water generators (AWGs) and gray water recycling systems and updates to building codes to encourage their widespread adoption.

As Hawai'i continues to experience water scarcity, climate change impacts, and increasing demand on freshwater resources, this bill represents a proactive solution to conserve water, reduce costs for residents and businesses, and enhance our long-term water security.

Why SB547 is Essential for Hawai'i

1. Water Security & Conservation

• AWGs provide a reliable, decentralized source of drinking water by harvesting moisture from the air, reducing our reliance on stressed groundwater sources.

• Gray water recycling systems help reduce potable water waste by up to 40%, making homes and businesses more water-efficient and lowering utility costs.

2. Economic & Environmental Benefits

• The bill's tax incentives make AWGs and gray water systems more accessible and affordable for residents, businesses, and agriculture.

• Reduced demand on municipal water infrastructure lowers long-term operational costs for the state and helps protect natural water resources.

3. Emergency Preparedness & Climate Resilience

• AWGs provide a crucial backup water source in case of droughts, infrastructure failures, or natural disasters.

• Decentralized water solutions enhance community resilience in times of crisis, ensuring that families and businesses have access to clean water when needed.

4. Modernizing Hawai'i's Building Codes

• Updating building codes to integrate water-saving technologies ensures that new developments are climate-resilient and resource-efficient, reducing water waste for future generations.

• Encouraging water sustainability in construction helps position Hawai'i as a national leader in eco-friendly urban planning.

Looking to the Future

While SB547 is a critical step toward securing Hawai'i's water future, there are exciting opportunities beyond this legislation. Looking ahead, Hawai'i has the potential to become a global leader in smart water management by integrating blockchain, decentralized finance (DeFi), and artificial intelligence (AI) to create a more efficient, transparent, and sustainable water infrastructure.

• Blockchain technology could be used to track and verify water usage, ensuring conservation efforts are measurable and accountable.

• DeFi models may help incentivize water conservation through tokenized credits or smart contracts that reward sustainable practices.

• Al-powered analytics can optimize AWG and gray water system performance, reducing costs and maximizing efficiency for homes and businesses.

Hawai'i is uniquely positioned to lead the world in sustainable, tech-driven water solutions. I look forward to continued discussions on how we can build on SB547's foundation and explore future opportunities to integrate these advanced technologies.

Conclusion

By passing SB547, the Legislature has the opportunity to enhance water security, promote sustainability, and support economic growth while ensuring Hawai'i remains a model for climate resilience and responsible resource management.

I strongly urge the committees to pass SB547 and take this important step toward a sustainable and water-secure Hawai'i.

I welcome further discussions on how innovative technologies can enhance our sustainability efforts. Please feel free to reach out with any questions or ideas on how we can continue to make Hawai'i a leader in this space.

Mahalo for your time and consideration.

Joshua Walter

waiea@protonmail.com

(808)800-1899

<u>SB-547</u> Submitted on: 2/8/2025 12:02:13 PM Testimony for AEN on 2/10/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Trinity Gatewood	Individual	Support	Written Testimony Only

Comments:

Dear Chair and Members of the Committee,

I am expressing my strong support for SB 547, which proposes tax incentives for implementing gray water recycling systems and air-to-water generators in Hawaii. These technologies are crucial to addressing the ongoing water scarcity and environmental challenges facing our state.

By incentivizing gray water recycling, Hawaii can significantly reduce its dependency on freshwater, lowering the strain on our limited water resources. Gray water systems offer an eco-friendly alternative for irrigation and non-potable uses, making them a sustainable solution for residential and commercial applications.

Furthermore, air-to-water generators provide an innovative method for producing potable water from the air, a technology that could greatly benefit communities in remote or drought-prone areas. By supporting the use of these systems through tax incentives, we can make clean, accessible water a reality for more residents and businesses across the islands.

In conclusion, I urge the Committee to support SB 547 and its proposed tax incentives, as they will play a vital role in ensuring the long-term sustainability of Hawaii's water resources.

Thank you for your consideration.

Sincerely, Trinity Gatewood

4127 Mission Ct Kissimmee FL 34751 tgatewood14@gmail.com

<u>SB-547</u> Submitted on: 2/8/2025 1:26:44 PM Testimony for AEN on 2/10/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Kenika Adam Murray	Individual	Support	Written Testimony Only

Comments:

Dear Chair and Members of the Committee,

I am expressing my strong support for SB 547, which proposes tax incentives for implementing gray water recycling systems and air-to-water generators in Hawai'i. These technologies are crucial to addressing the ongoing water scarcity and environmental challenges facing our state.

By incentivizing gray water recycling, Hawai'i can significantly reduce its dependency on freshwater, lowering the strain on our limited water resources. Gray water systems offer an eco-friendly alternative for irrigation and non-potable uses, making them a sustainable solution for residential and commercial applications.

Furthermore, air-to-water generators provide an innovative method for producing potable water from the air, a technology that could greatly benefit communities in remote or drought-prone areas. By supporting the use of these systems through tax incentives, we can make clean, accessible water a reality for more residents and businesses across the islands.

In conclusion, I urge the Committee to support SB 547 and its proposed tax incentives, as they will play a vital role in ensuring the long-term sustainability of Hawai'i's water resources.

Thank you for your consideration.

Sincerely,

Kenika Adam Murray

2136 Bannister Pl apt#6

ph#8083396477

<u>SB-547</u> Submitted on: 2/8/2025 3:16:03 PM Testimony for AEN on 2/10/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Lindsay Michelle Mattone	Individual	Support	Written Testimony Only

Comments:

Dear Chair and Members of the Committee,

I am expressing my strong support for SB 547, which proposes tax incentives for implementing gray water recycling systems and air-to-water generators in Hawaii. These technologies are crucial to addressing the ongoing water scarcity and environmental challenges facing our state.

By incentivizing gray water recycling, Hawaii can significantly reduce its dependency on freshwater, lowering the strain on our limited water resources. Gray water systems offer an eco-friendly alternative for irrigation and non-potable uses, making them a sustainable solution for residential and commercial applications.

Furthermore, air-to-water generators provide an innovative method for producing potable water from the air, a technology that could greatly benefit communities in remote or drought-prone areas. By supporting the use of these systems through tax incentives, we can make clean, accessible water a reality for more residents and businesses across the islands.

In conclusion, I urge the Committee to support SB 547 and its proposed tax incentives, as they will play a vital role in ensuring the long-term sustainability of Hawaii's water resources.

Thank you for your consideration.

Lindsay Michelle Mattone

714 Honua Street Honolulu, HI 96816

516-446-1965 Lmmattone@yahoo.com

<u>SB-547</u> Submitted on: 2/8/2025 4:34:42 PM Testimony for AEN on 2/10/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Brenda Avery	Individual	Support	Written Testimony Only

Comments:

Chairs Gabbard, Elefante, DeCoite, and Committee Members:

I would like to submit my testimony in support of SB547 – Relating to Water Conservation.

As a Big Island resident and GREEN designee with the National Association of REALTORS, my clients and 'ohana often ask me how they can both save money and create a more sustainable, eco-friendly home.

Unfortunately, the cost of new, sustainable technologies is often passed down to the consumer making them cost-prohibitive for the average resident. This is why I ask the legislature to support SB547.

Not only would passage of this bill allow us to help reduce the use of single-use plastics, it would provide some economic relief as we strive to create a stable and consistent drinking water resource for our homes.

As residents of the Big Island, we know all too well what happens when a drinking well goes off-line. By offering a tax credit that would allow us to purchase residential atmospheric water generators, the legislature demonstrates both their commitment to sustainable, eco-friendly living as well as supporting our local residents.

Respectfully submitted,

Brenda Avery, MS, RB-24339

Pacific Island Realty, LLC

Cottages on Ali'i Drive - Ali'i Partners, LP, an affiliate of Stanford Carr Development, LLC

<u>SB-547</u> Submitted on: 2/8/2025 4:35:04 PM Testimony for AEN on 2/10/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Victor Lesa Jr	Individual	Support	Written Testimony Only

Comments:

Testimony in Support of SB 547: Tax Incentives for Gray Water Recycling and Air-to-Water Generators

Date: February 8, 2025

Re: Testimony in Support of SB 547

Dear Chair and Members of the Committee,

I am expressing my strong support for SB 547, which proposes tax incentives for implementing gray water recycling systems and air-to-water generators in Hawaii. These technologies are crucial to addressing the ongoing water scarcity and environmental challenges facing our state.

By incentivizing gray water recycling, Hawaii can significantly reduce its dependency on freshwater, lowering the strain on our limited water resources. Gray water systems offer an eco-friendly alternative for irrigation and non-potable uses, making them a sustainable solution for residential and commercial applications.

Furthermore, air-to-water generators provide an innovative method for producing potable water from the air, a technology that could greatly benefit communities in remote or drought-prone areas. By supporting the use of these systems through tax incentives, we can make clean, accessible water a reality for more residents and businesses across the islands.

In conclusion, I urge the Committee to support SB 547 and its proposed tax incentives, as they will play a vital role in ensuring the long-term sustainability of Hawaii's water resources.

Thank you for your consideration.

Sincerely, Victor Lesa Jr 155 Meheu Circle Kahului, HI 96732

email: victorlesajr@gmail.com

<u>SB-547</u> Submitted on: 2/8/2025 5:01:51 PM Testimony for AEN on 2/10/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Kathleen Lopez Hart	Individual	Support	Written Testimony Only

Comments:

Dear Chair and Members of the Committee,

I am expressing my strong support for SB 547, which proposes tax incentives for implementing gray water recycling systems and air-to-water generators in Hawaii. These technologies are crucial to addressing the ongoing water scarcity and environmental challenges facing our state.

By incentivizing gray water recycling, Hawaii can significantly reduce its dependency on freshwater, lowering the strain on our limited water resources. Gray water systems offer an eco-friendly alternative for irrigation and non-potable uses, making them a sustainable solution for residential and commercial applications.

Furthermore, air-to-water generators provide an innovative method for producing potable water from the air, a technology that could greatly benefit communities in remote or drought-prone areas. By supporting the use of these systems through tax incentives, we can make clean, accessible water a reality for more residents and businesses across the islands.

In conclusion, I urge the Committee to support SB 547 and its proposed tax incentives, as they will play a vital role in ensuring the long-term sustainability of Hawaii's water resources.

Thank you for your consideration.

Kathleen Lopez Hart

3205 Castle St #5

Honolulu. Hawaii 96815

(808-216-8760

<u>SB-547</u> Submitted on: 2/9/2025 12:45:19 PM Testimony for AEN on 2/10/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Alicia Marshall	Individual	Support	Written Testimony Only

Comments:

Aloha Chair and Members of the Committee,

I strongly support this bill, which incentivizes the installation and use of gray water recycling systems and atmospheric water generators in Hawai'i. As a water, sanitation, and hygiene (WASH) professional with 20 years of experience working in corporate, nonprofit, foundation, and multilateral sectors in water, including the Clinton Global Initiative (CGI), I have seen firsthand how innovative water conservation strategies can enhance sustainability and resilience. Water scarcity is a growing challenge, and implementing practical, cost-effective solutions like gray water reuse and atmospheric water generation is important to ensuring long-term water security for Hawai'i's communities.

As a recent resident of Hawai'i, I understand the state's unique water challenges and the importance of maximizing available resources while protecting natural ecosystems. By establishing tax credits and rebates, this bill will encourage residents and businesses to invest in proven conservation technologies, reducing strain on freshwater supplies and supporting Hawai'i's climate resilience goals. I urge the Legislature to pass this measure and take an important step toward a more sustainable and innovative water future for the state. Mahalo for your time and consideration.

Alicia Marshall, MS, MBA

<u>SB-547</u> Submitted on: 2/10/2025 7:58:11 AM Testimony for AEN on 2/10/2025 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Curtis Miyashiro	Individual	Support	Written Testimony Only

Comments:

Testimony in Support of SB 547: Tax Incentives for Gray Water Recycling and Air-to-Water Generators

Date: February 10, 2025

Re: Testimony in Support of SB 547

Dear Chair and Members of the Committee,

I am expressing my strong support for SB 547, which proposes tax incentives for implementing gray water recycling systems and air-to-water generators in Hawaii. These technologies are crucial to addressing the ongoing water scarcity and environmental challenges facing our state.

By incentivizing gray water recycling, Hawaii can significantly reduce its dependency on freshwater, lowering the strain on our limited water resources. Gray water systems offer an eco-friendly alternative for irrigation and non-potable uses, making them a sustainable solution for residential and commercial applications.

Furthermore, air-to-water generators provide an innovative method for producing potable water from the air, a technology that could greatly benefit communities in remote or drought-prone areas. By supporting the use of these systems through tax incentives, we can make clean, accessible water a reality for more residents and businesses across the islands.

In conclusion, I urge the Committee to support SB 547 and its proposed tax incentives, as they will play a vital role in ensuring the long-term sustainability of Hawaii's water resources.

Mahalo & Aloha!

Curtis Miyashiro 1352 Ala Hoku Pl. Honolulu, HI 96819 Ph: 808-479-6666