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DEPARTMENT OF LAND AND NATURAL RESOURCES  
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FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

Testimony of  
RYAN K.P. KANAKA'OLE  
Acting Chairperson

Before the Senate Committee on  
WAYS AND MEANS

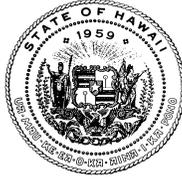
Tuesday, March 3, 2026  
10:17 AM  
State Capitol, Conference Room 211

In consideration of  
SENATE BILL 2096, SENATE DRAFT 1  
RELATING TO WASTEWATER MANAGEMENT

Senate Bill 2096, Senate Draft 1 proposes to require certain wastewater treatment works to test sewage sludge and any other residual material for the presence of perfluoroalkyl and polyfluoroalkyl substances (PFAS); to require the Department of Health to adopt administrative rules for the monitoring, sampling, testing, and data collection of sewage sludge and other residual material that contain specific amounts of PFAS; and to prohibit the issuance or renewal of permits if testing yields PFAS in sewage sludge or other residual material on land used for agronomic purposes, on land where drainage tiles have been installed, on land that drains into waters of the State, or land in a five hundred-year floodplain. **The Department of Land and Natural Resources supports this bill.**

PFAS are known as “forever chemicals” because they do not break down easily in the environment. PFAS pose severe risks to marine life by bioaccumulating in tissues and magnifying up the food chain, causing immune system suppression, reproductive failure, and hormonal disruption in marine species like dolphins, whales, seals, and fish. PFAS enter the marine environment through a variety of ways, including agricultural runoff. Rainwater washes PFAS from contaminated sites, such as agricultural fields (where sewage sludge and biosolids are used as fertilizer), into streams and rivers that flow into the ocean. This measure would help to reduce the amount of PFAS entering the marine environment, thereby reducing harmful impacts to marine life.

Mahalo for the opportunity to comment on this measure.



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**Testimony COMMENTING on SB2096 SD1  
RELATING TO WASTEWATER MANAGEMENT.**

SENATOR DONOVAN M. DELA CRUZ, CHAIR  
SENATE COMMITTEE ON WAYS AND MEANS

Hearing Date, Time and Room Number: 03/03/2026, 10:17 am, 211

1 **Fiscal Implications:** Undetermined.

2 **Department Position:** The Department of Health (“Department”) offers comments and  
3 proposed amendments.

4 **Department Testimony:** The Environmental Management Division, Wastewater Branch (“EMD-  
5 WWB”) provides the following testimony on behalf of the Department.

6 The Department supports the intent of this proposed measure. However, at this time  
7 there are no federal wastewater and sludge regulations for perfluoroalkyl and polyfluoroalkyl  
8 substances (“PFAS”). The U.S. Environmental Protection Agency (“EPA”) has taken steps  
9 towards PFAS restrictions, remediation, and research and has outlined its three (3) year plan in  
10 the EPA’s PFAS Strategic Roadmap: Three Years of Progress.<sup>1</sup>

11 On January 14, 2025, the EPA released the Draft Sewage Sludge Risk Assessment for  
12 Perfluorooctanoic Acid (“PFOA”) and Perfluorooctane Sulfonic Acid (“PFOS”) for public  
13 comment<sup>2</sup>. The draft risk assessment reflects the agency’s latest scientific understanding of the

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<sup>1</sup> [https://www.epa.gov/system/files/documents/2024-11/epas-pfas-strategic-roadmap-2024\\_508.pdf](https://www.epa.gov/system/files/documents/2024-11/epas-pfas-strategic-roadmap-2024_508.pdf)

<sup>2</sup> <https://www.epa.gov/biosolids/draft-sewage-sludge-risk-assessment-perfluorooctanoic-acid-pfoa-and-perfluorooctane>

1 potential risks to human health and the environment posed by the presence of PFOA and PFOS  
2 in sewage sludge that is land applied as a soil conditioner or fertilizer (on agricultural, forested,  
3 and other lands), surface disposed (e.g., placed in a sewage sludge-only landfill called a  
4 monofill), or incinerated. The public comment period ended on August 14, 2025.

5 The Department's Hazard Evaluation and Emergency Response Office has taken action  
6 to better understand PFAS in Hawai'i, including initial work to characterize PFAS in wastewater  
7 effluent and biosolids<sup>3</sup>.

8 The Department supports monitoring, sampling, testing, and data collection of  
9 wastewater sludge intended for land application for PFAS. However, without wastewater-  
10 specific PFAS regulation or guidance from the EPA, the Department will need time to gather  
11 data in order to possibly manage a pilot study to evaluate and determine appropriate limits for  
12 rules.

13 **Offered Amendments:** The Department respectfully recommends deleting Section 4 of the  
14 measure (Page 2, line 11 through Page 3, line 17) until there is greater clarity on regulatory  
15 standards.

16 Thank you for the opportunity to testify on this measure.

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<sup>3</sup> <https://health.hawaii.gov/heer/environmental-health/highlighted-projects/pfas/>



# Environmental Caucus of The Democratic Party of Hawai'i

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## Environmental Caucus of the Democratic Party of Hawai'i In Strong Support of SB2096 SD1 RELATING TO WASTEWATER MANAGEMENT

**Senate Committee on Ways and Means (WAM) Chair Donovan Dela Cruz, Vice  
Chair Sharon Moriwaki**

**Hearing: Tuesday, March 3, 2026, at 10:17 AM Conference Room 211 &  
Videoconference**

Aloha Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee,

The Environmental Caucus of the Democratic Party of Hawai'i submits this testimony in **strong support** of **SB2096 SD1**, which requires PFAS testing of sewage sludge and other residual materials, directs the Department of Health to adopt rules for monitoring and data collection, and prohibits permits for land application when PFAS contamination is detected.

The Caucus supports this measure for the following reasons:

1. The EPA's National Primary Drinking Water Regulation establishes an enforceable Maximum Contaminant Level (MCL) of 4 parts per trillion (ppt) for PFOA and PFOS, reflecting the scientific consensus that even extremely low concentrations pose significant risks to human health, including cancer, immune suppression, thyroid disruption, and developmental harm. Hawai'i's wastewater and biosolids oversight must align with these federal standards to protect public health and agricultural lands.
2. The Hawai'i Department of Health's Environmental Action Levels (EALs) for PFOA and PFOS remain at 40 ppt, which is ten times higher than the federal EPA standard. This discrepancy creates regulatory inconsistency and risks allowing PFAS-contaminated wastewater and biosolids to be used on agricultural lands under state thresholds even when they exceed federal health-protective limits.
3. Aqua Engineers, Inc., which operates the Schofield Barracks Wastewater Treatment Facility, receives wastewater from five military installations: (1) Schofield Barracks, (2) Wheeler Army Airfield, (3) Helemano Military Reservation, (4) East Range, and (5) Field Station Kunia. Wastewater from these installations

is fundamentally different from residential wastewater. It contains industrial-strength contaminants associated with military operations, including solvents, degreasers, petroleum hydrocarbons, PFAS-bearing firefighting foam residues, aircraft wash water, vehicle and machinery maintenance effluent, industrial cleaning agents, and other chemicals not typically found in household wastewater.

4. Despite the known presence of PFAS and other persistent contaminants in military wastewater nationwide, Aqua Engineers produces reclaimed water and sewage sludge for agricultural use without any requirement to test for PFAS or to filter PFAS out of the treatment stream. This creates a direct pathway for PFAS to enter soil, crops, livestock, groundwater, and ultimately the human food chain, as has occurred in multiple states where PFAS-contaminated biosolids were applied to farmland.
5. SB2096 SD1 establishes a necessary regulatory framework requiring DOH to adopt rules for sampling, testing, monitoring, and data collection. Without mandatory PFAS testing, Hawai'i risks repeating the severe agricultural and groundwater contamination events seen in Maine, Michigan, and New Mexico, where PFAS-laden biosolids caused long-term soil contamination, livestock poisoning, and multi-million-dollar losses for farmers.
6. The prohibition on issuing or renewing permits for land application when PFAS is detected is a prudent safeguard. PFAS contamination is extremely difficult and costly to remediate once it enters soil or groundwater. Preventing contamination at the source is far more protective of public health and fiscally responsible for the State.
7. The effective date of July 1, 2050, inserted for discussion, should be amended to take effect immediately. PFAS contamination is already present in wastewater systems nationwide, and Hawai'i must adopt protective measures without delay to safeguard agricultural lands, rural communities, and downstream ecosystems.

For these reasons, the Environmental Caucus respectfully urges the Committee to **pass SB2096 SD1** and restore an immediate effective date.

Mahalo nui loa for the opportunity to testify.

Alan Burdick, Co-chair

Mike Ewall, Co-chair

Melodie Aduja, Co-chair Emerita

**SB-2096-SD-1**

Submitted on: 3/1/2026 2:58:31 PM

Testimony for WAM on 3/3/2026 10:17:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Ted Bohlen	Testifying for Hawaii Reef and Ocean Coalition	Support	Written Testimony Only

Comments:

SUPPORT!

**SB-2096-SD-1**

Submitted on: 3/1/2026 7:02:58 PM

Testimony for WAM on 3/3/2026 10:17:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Marvin Heskett	Individual	Support	Written Testimony Only

Comments:

Aloha Chair and Members of the Hawai‘i WAM Committee,

As an environmental chemist with over 30 years of professional experience, I write in strong support of SB2096. Earlier in my career, I supported the beneficial reuse of wastewater byproducts as a means of recycling nutrients. However, advancements in analytical science—and the growing body of peer-reviewed research—have made it clear that biosolids and sludge generated by wastewater treatment plants contain recalcitrant chemicals that are not removed or degraded through conventional treatment processes.

Of particular concern are per- and polyfluoroalkyl substances (PFAS), which are among the most persistent and toxic of these contaminants. PFAS preferentially partition into solids during treatment, resulting in their concentration in biosolids. Numerous studies worldwide now demonstrate that nearly all domestic wastewater is impacted by PFAS contamination.

The Hawai‘i Department of Health has conducted studies at local wastewater treatment facilities that confirm Hawai‘i is not immune to this global issue. Given the persistence, bioaccumulation potential, and health risks associated with PFAS, the reuse of biosolids must be carefully regulated. SB2096 provides an appropriate and necessary framework to ensure public health and environmental protection.

I respectfully urge the committee to support the passage of SB2096.

Mahalo nui loa,

Marvin Heskett

**SB-2096-SD-1**

Submitted on: 3/1/2026 10:57:58 PM

Testimony for WAM on 3/3/2026 10:17:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Johnnie-Mae L. Perry	Individual	Support	Written Testimony Only

Comments:

I, Johnnie-Mae L. Perry, Support

2096 SB RELATING TO WASTEWATER MANAGEMENT



Date of Hearing: March 3, 2026

To: Chair Dela Cruz, Vice Chair Moriwaki, and the Senate Committee on Ways and Means

Subject: **SB2096 SD1**, Relating to Wastewater Management

Aloha,

I am writing **in support of SB2096 SD1**. This measure tests for PFAS-contaminated sewage sludge in order to prevent perfluoroalkyl and polyfluoroalkyl substances from being spread across 'āina – in land used for agronomic purposes, on land where drainage tiles have been installed, on land that drains into waters of the State, or lands in a five hundred-year floodplain. This bill would require the testing and safer disposal of such contaminated material to protect water, soil, and public health in Hawai'i. Furthermore, this measure clearly defines PFAS, requires updates to wastewater permits, mandates safe handling of contaminated sludge, and bans land application if PFAS is found. We recognize that amending the bill to focus on monitoring, sampling, testing, and data collection, rather than immediate safe disposal and containment requirements, may help alleviate initial administrative and cost burdens.

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are associated with a variety of serious health effects, including developmental delays, reproductive harm, increased risk of certain cancers, and increased risk of obesity. While the Environmental Protection Agency has already conducted extensive research to understand the harmful effects of PFAS, some of the long-lasting effects remain unknown due to their persistence in the environment and the human body.

PFAS are entirely man-made chemicals and do not occur naturally. Therefore, it is the responsibility of the State to enact strong safeguards to prevent these toxic substances from entering our drinking water, agricultural soils, and food system. Additionally, we must protect farmers, the core of our food system, from the occupational hazards associated with PFAS exposure.

Therefore, **I urge this committee to pass SB2096 SD1** to prevent PFAS contamination and protect the long-term health of Hawai'i's people, environment, and food system.

Mahalo,

Brandon Kindard & the Food+ Policy Team

#fixourfoodsystem

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**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 2026, 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.

**SB-2096-SD-1**

Submitted on: 3/2/2026 9:58:52 AM

Testimony for WAM on 3/3/2026 10:17:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Lucille Morelli-Vine	Individual	Support	Written Testimony Only

Comments:

Aloha Chair and Members of the Hawai'i WAM Committee,

I write in strong support of SB2096.

Numerous studies worldwide now demonstrate that nearly all domestic wastewater is impacted by PFAS contamination (it's toxic).

Research has made it clear that biosolids and sludge generated by wastewater treatment plants contain recalcitrant chemicals that are not removed or degraded through conventional treatment processes.

PFAS preferentially partition into solids during treatment, resulting in their concentration in biosolids.

The Hawai'i Department of Health has conducted studies at local wastewater treatment facilities & confirm it is not only a global issue but a Hawaii issue.

Given the persistence, bioaccumulation potential, & health risks associated with PFAS, the reuse of biosolids must be carefully regulated! SB2096 is needed to ensure our public health & our environmental protection.

I urge the committee to support the passage of SB2096.

Mahalo, Lucille Morelli-Vine



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March 2, 2026

To: Senate Committee on Ways and Means  
Senator Donovan M. Dela Cruz, Chair; Senator Sharon Y. Moriwaki, Vice Chair

Re: SB 2096 re Wastewater Management (PFAS)

Hearing: Tuesday, March 3, 2026, 10:17 am, Conference Room 211 & video

Position: STRONG SUPPORT

Aloha, Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Senate Committee on Ways and Means!

As you know, Americans for Democratic Action is a nationwide progressive organization dating back to the late 1940s, devoted to carrying on, and expanding on, the critical achievements of the New Deal that took America out of the Great Depression and won World War II. Hawai'i's own U.S. Representative Patsy T. Mink was ADA's national Chairperson from 1978 to 1982.

ADA Hawai'i Chapter strongly supports this bill, which would require certain wastewater treatment works to test sewage sludge and any other residual material for the presence of PFAS-type chemicals. It would also require the Department of Health to adopt administrative rules for the monitoring, sampling, testing, and data collection of sewage sludge and other residual material that contain specified amounts of PFAS. These are important first steps toward reducing the public's exposure to these harmful toxins. Thank you very much for the opportunity to testify on this bill.

Alan B. Burdick,  
President, Hawai'i Chapter  
Americans for Democratic Action  
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