



STATE OF HAWAII
DEPARTMENT OF HEALTH
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In reply, please refer to:
File:

**Testimony COMMENTING on SB0388
RELATING TO WASTE DISPOSAL FACILITIES**

SENATOR MIKE GABBARD, CHAIR
SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT
SENATOR KARL RHOADS, CHAIR
COMMITTEE ON JUDICIARY

Hearing Date: 2/22/2023

Room Number: CR 224

1 **Fiscal Implications:** Unknown.

2 **Department Testimony:** The purpose of this measure is to prohibit the construction,
3 modification, or expansion of any waste disposal facility that is near or above a significant
4 aquifer as determined by the Department of Health (Department) in consultation with the
5 Commission on Water Resource Management.

6 The Department offers the following comments:

7 1. Potential Application of Department's Interpretation of "Significant Aquifer." Hawaii

8 Administrative Rules (HAR) Section 11-23-03, Underground Injection Control (UIC) defines an
9 Aquifer as:

10 *"...a geological formation, group of formations, **or part of a formation** that is capable of*
11 *yielding a significant amount of water to a well, tunnel or spring."*

12 It is important to be able to compartmentalize a part of the aquifer that has "significance" to allow
13 for stewardship and protection based on potability. This allows leeway to accommodate a
14 modern and highly regulated waste and waste disposal facilities to co-exist above an aquifer
15 while still being protective of those parts that have "significant" use.

16
17 The following is an example on how such a determination could be made:

18 • Step 1: The Department of Health's Safe Drinking Water Branch is protective of sources
19 for drinking water use. Utilizing the University of Hawai'i Water Resource Research Center

1 Aquifer Classification System (Mink and Lau, 1990), the threat posed by a landfill would be to
2 unconfined aquifers with drinking water significance (see Figure 1).

3 • Step 2: For the Island of Oahu, the City and County has prepared a map of all applicable
4 Act 73, 2020 landfill restrictions (see Figure 2). According to the Figure there are 4 possible land
5 areas, shown in white, where a landfill could be sited.

6 • Step 3: An overlay of the Figure 1 and 2 provides a composite of the combined
7 restrictions, should the Department take the position that the entire aquifer formation is in play.
8 This closes any opportunities to site a landfill on Oahu and could lead to concerns of increased
9 dumping as disposal options for the public become cost prohibitive.

10 • Step 4: This figure shows the extent of drinking water capture zone influence
11 intersecting with the remaining “white” colored (available) areas. A buffer should be applied, as
12 well as any upgradient restrictions impacting the source well which are in line and which could
13 potentially intersect a capture zone (see Figure 4). This permits areas of possible landfill use and
14 allows the County to make planning decisions appropriate with their master planning.
15

16 2. Potential Unintended Consequences of Additional Location Restrictions on Waste Disposal

17 Facilities. The inability to accommodate responsible managed solid waste in Hawai`i could lead
18 to a rise in illegal dumping which could compromise the very aquifer that the subject Bill seeks to
19 protect. For example, Act 73, 2020 had established several State restrictions on the location and
20 extension of a waste and disposal facility. These include a ½ mile buffer from a resident, school,
21 hospital, and conservation land. The recent attempt to site a landfill by the City and County of
22 Honolulu (CCH) in 2022 had failed due to concerns of siting a landfill over an aquifer. If siting
23 restrictions prohibit the counties from implementing certain waste management strategies, then
24 other more likely expensive strategies, such as waste-to-energy via incineration or gasification,
25 shipment out of state, in addition to recycling and bioconversion will need to be considered.
26 Illegal dumping is typically a cost-avoidance activity.
27

28 **Offered Amendments:** None

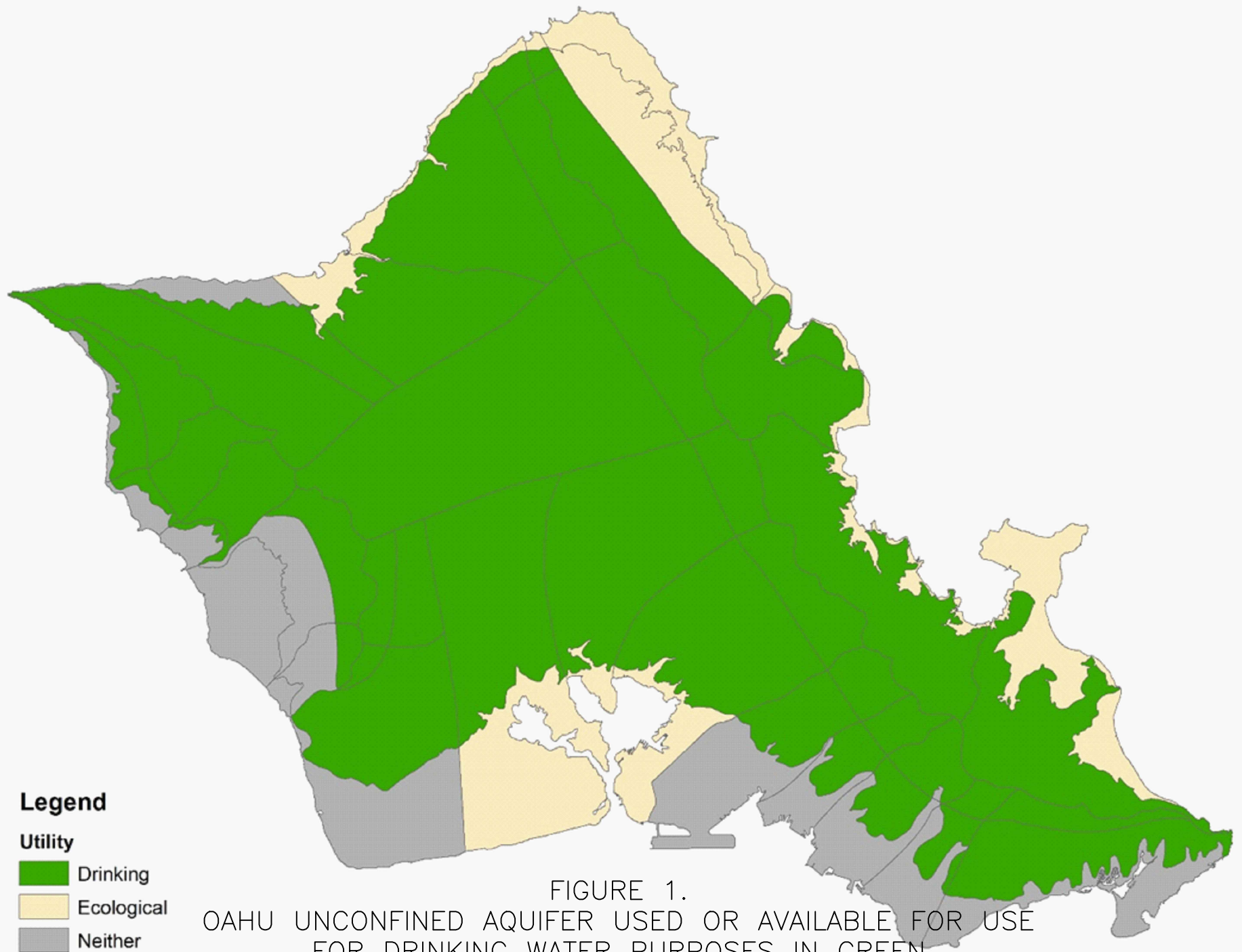


FIGURE 1.
OAHU UNCONFINED AQUIFER USED OR AVAILABLE FOR USE
FOR DRINKING WATER PURPOSES IN GREEN

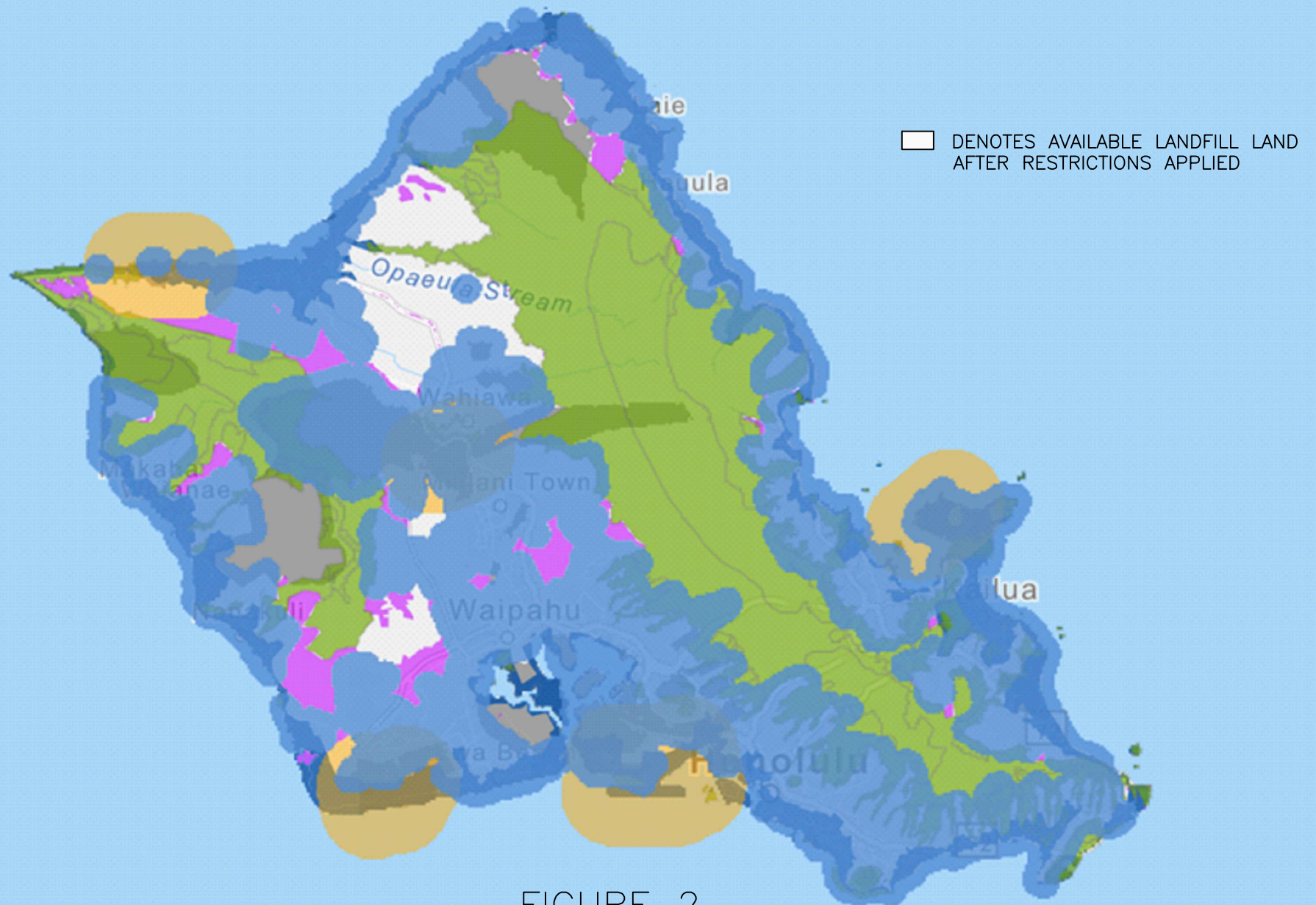


FIGURE 2.

OAHU ACT 73 IMPACT (FROM C&C HONOLULU LANDFILL SITING, 2022)

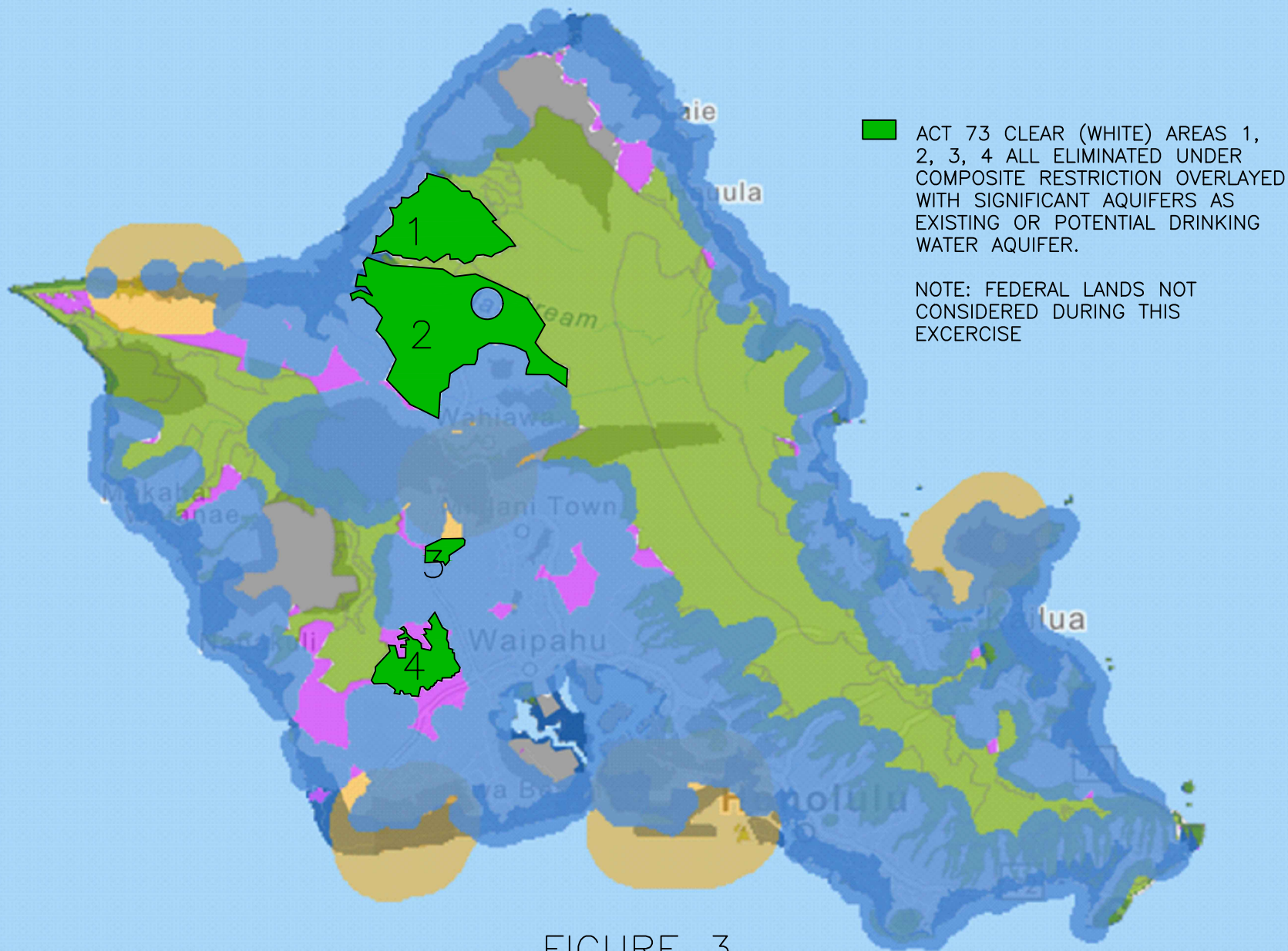


FIGURE 3.
 COMPOSITE OF OAHU ACT 73 AND UNCONFINED AQUIFERS USED OR AVAILABLE FOR USE FOR DRINKING WATER

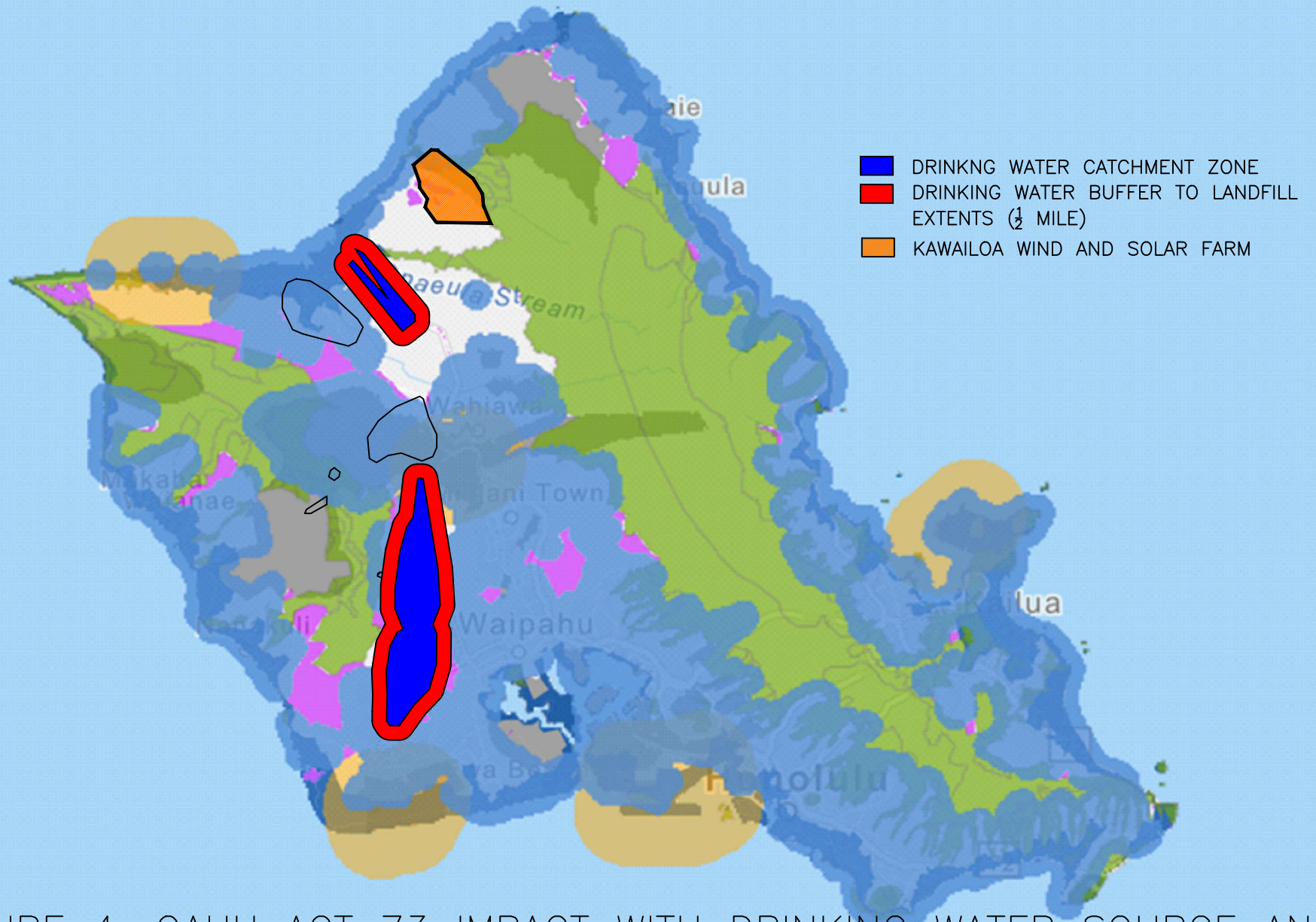


FIGURE 4. OAHU ACT 73 IMPACT WITH DRINKING WATER SOURCE AND CAPTURE ZONE CONSIDERATION (NOT ENTIRE AQUIFER)

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843
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February 22, 2023

RICK BLANGIARDI, MAYOR

BRYAN P. ANDAYA, Chair
KAPUA SPROAT, Vice Chair
MAX J. SWORD
NA'ALEHU ANTHONY
JONATHAN KANESHIRO

DAWN B. SZEWCZYK, P.E., Ex-Officio
EDWIN H. SNIFFEN, Ex-Officio

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

ERWIN M. KAWATA
Deputy Manager

The Honorable Mike Gabbard, Chair
and Members
Senate Committee on Agriculture and Environment
Hawaii State Capitol, Room 224
Honolulu, Hawaii 96813

The Honorable Karl Rhoads, Chair
and Members
Senate Committee on Judiciary
Hawaii State Capitol, Room 224
Honolulu, Hawaii 96813

Dear Chair Gabbard, Chair Rhoads and Members:

Subject: Senate Bill 388: Relating to Waste Disposal Facilities

The Honolulu Board of Water Supply (BWS) supports Senate Bill (SB) 388. This bill prohibits the construction, modification, or expansion of any waste or disposal facility for hazardous or solid waste on land that is near or above a significant aquifer.

Oahu's aquifers are irreplaceable. We are very blessed with high quality, large capacity underground aquifers. The people on Oahu depend on this water for survival. The BWS is extremely concerned about contaminants in our drinking water. We cannot jeopardize our water resources and put ourselves at risk. After the November 2021 Red Hill fuel release that contaminated Oahu's sole source aquifer and the Joint Base Pearl Harbor Hickam (JBPHH) water system, the U.S. Navy (Navy) reported that PFAS were detected in samples taken in 2020 and 2021 in the Navy's water distribution system. On November 29, 2022, some 1,300 gallons of PFAS containing aqueous film forming foam (AFFF) concentrate liquid spilled into the environment at the Navy's Red Hill Bulk Fuel Storage Facility. AFFF is used in firefighting and contains PFAS. To allow any waste or disposal facility for hazardous or solid waste on land that is near or above a significant aquifer would make the situation even worse for future generations to come. Once a landfill is put into place, it will never go away. There is no guarantee that when it rains and filters through wastes that leachate, or liquid that is highly toxic, will not leak into the underground aquifer.

The Honorable Mike Gabbard, Chair
The Honorable Karl Rhoads, Chair
and Members
February 22, 2023
Page 2

Thank you for the opportunity to testify in support of SB388.

Very truly yours,

A handwritten signature in blue ink, appearing to read 'Ernest Y. W. Lau', with a long horizontal flourish extending to the left.

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

A small, handwritten mark or signature in blue ink, possibly initials, located to the right of the typed name.

DEPARTMENT OF ENVIRONMENTAL SERVICES
CITY AND COUNTY OF HONOLULU

1000 ULUOHIA STREET, SUITE 308, KAPOLEI, HAWAII 96707
TELEPHONE: (808) 768-3486 • FAX: (808) 768-3487 • WEBSITE: <http://envhonolulu.org>

RICK BLANGIARDI
MAYOR



ROGER BABCOCK, JR., Ph.D., P.E.
DIRECTOR

MICHAEL O'KEEFE
DEPUTY DIRECTOR

IN REPLY REFER TO:
WAS 23-21

February 21, 2023

The Honorable Mike Gabbard, Chair
The Honorable Herbert M. "Tim" Richards, III, Vice Chair
and Members of the Committee on Agriculture and Environment
The Honorable Karl Rhoads, Chair
The Honorable Mike Gabbard, Vice Chair
and Members of the Committee on Judiciary
415 South Beretania Street
Honolulu, Hawaii 96813

Dear Chairs Gabbard and Rhoads, and Vice Chairs Richards and Gabbard:

SUBJECT: Senate Bill 388, Relating to Waste Disposal Facilities

The City and County of Honolulu's ("City") Department of Environmental Services ("ENV") submits the following comments SB 388.

SB 388 requires "(b) No person, including the State or a county, shall construct, modify, or expand a waste or disposal facility, including: (1) A municipal solid waste landfill unit; (2) Any component of a municipal solid waste landfill (3) A construction and demolition unit; or (4) Any component of a construction and demolition landfill unit; for solid waste or hazardous waste on land that is **near or above a significant aquifer**, as determined by the department, in consultation with the commission on water resource management." However, the meanings of "near" and "significant aquifer" are unclear and should be clarified or defined so that the full impact of this bill can be known.

Thank you for your consideration. Please feel free to contact me with any questions at (808) 768-3486.

Sincerely,

For Roger Babcock, Jr., Ph.D., P.E.
Director



Environmental Caucus of The Democratic Party of Hawai'i

To: The Honorable Mike Gabbard, Chair
The Honorable Herbert M. “Tim” Richards, Vice Chair
Members of the Committee on Agriculture and Environment

The Honorable Karl Rhoads, Chair
The Honorable Mike Gabbard, Vice Chair
Members of the Committee on Judiciary

Re: **SB 388 – RELATING TO WASTE DISPOSAL FACILITIES**

Hearing: Wednesday, February 22, 2023, 1:00 p.m., Conference Room 224 & Videoconference

Position: **Strong support**

Aloha, Chairs Gabbard and Rhoads, Vice Chairs Richards and Gabbard, and Members of the Committee on Agriculture and Environment and Committee on Judiciary:

The Environmental Caucus of the Democratic Party of Hawai'i stands in strong support of SB 388. This measure prohibits the construction, modification, or expansion of any waste or disposal facility for hazardous waste or solid waste on land that is near or above a significant aquifer as determined by the Department of Health, in consultation with the Commission on Water Resource Management.

The Democratic Party of Hawai'i Platform on the environment provides that its members are to “protect and preserve Hawai'i's environment and achieve energy sustainability, advance measures to re-establish a healthy climate and environment for humans and fellow species, including actions to urgently address climate change, and work towards 100% renewable energy goals.

We believe that all people have the right to live in a clean, healthy and safe environment. We believe that the preservation of our natural environment and its ecological well-being is essential to ensuring a safe, healthy, bountiful life for future generations in Hawai'i. We support policies that create a more sustainable society. We support the restoration, preservation, and protection of native ecosystems.

We believe in the resource management principles outlined in the Public Trust doctrine [in Article XI, Section 1 of] the Hawai'i State Constitution.” [OUR PLATFORM | DPH \(hawaiidemocrats.org\)](https://www.hawaiidemocrats.org)

In addition, Article XI, Section 7 entitled WATER RESOURCES of the Hawai'i State Constitution provides that the State has an obligation to protect, control and regulate the use of Hawai'i's water resources for the benefit of its people. [State Constitution – LRB Legislative Reference Bureau \(hawaii.gov\)](https://www.hawaii.gov/lrb/)

Similar to the contamination that stemmed from 80-years of leakage of jet fuel from the 20 Red Hill underground fuel storage tanks built a mere 100 feet above Honolulu's sole source aquifer, allowing the construction, modification, or expansion of any waste or disposal facility for hazardous waste or solid waste on land near or above a significant aquifer poses a risk of substantial and imminent endangerment to



February 22, 2023

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the aquifer and human life in violation of the Federal Clean Water Act and the Resource Conservation and Recovery Act.

Prohibiting the construction, modification, or expansion of any waste or disposal facility for hazardous waste or solid waste on land that is near or above a significant aquifer as determined by the Department of Health, in consultation with the Commission on Water Resource Management is consistent with the state and counties' duties under the Public Trust Doctrine and the DPH Environmental Platform plank that provides that members must protect and preserve Hawai'i's environment, and advance measures to re-establish a healthy climate and environment for humans and fellow species.

Please support and pass this bill.

Mahalo for the opportunity to testify on this measure.

/s/ Melodie Aduja and Alan Burdick
Co-Chairs, Environmental Caucus of the Democratic Party of Hawai'i

CARES

COMMUNITY ADVOCACY RESEARCH EDUCATION SERVICES

SB 388

Aloha Chairs, Vice Chairs & the Committee of JDC & AEN

to

CARES is providing comments for SB 388.

the SENATE
committees
on AEN &
JDC.

The Hawaii
State
Legislature

from

Zhizi Xiong
(Angela
Melody
Young)

Creator

We live in a culture of excess. And when we have excess, we have a lot of waste.

According to a report conducted by the World Bank, the planet produced 2.01 billion tons of waste in 2016. In 2016, Forbes published data declaring The US as the 2nd country to produce the most municipal waste in the world after Denmark. Oahu residents and businesses created 2.1 million tons of waste in 2020. A large amount of that trash goes to the landfill. In Hawaii, space is always a concern. By recycling, we keep waste out of the landfill. This past year, 214,252 tons of waste was sent to Oahu's Waimanalo Gulch Sanitary Landfill, a municipal solid waste landfill in Kapolei that was started in 1987. State Land Use Commission said that the city must identify an alternative landfill by the end of 2022 and close the WGSL by 2028.

In 2017, a report put together by a consulting group deemed 11 sites as potential locations. However, Act 73 from 2020 declared that landfills can't be in conservation zones or within a half-mile of a residential, school or hospital. The 11 sites are no longer available options and now, the City is assessing potential new locations.

H-POWER, which stands for Honolulu Program of Waste Energy Recovery, was built in 1990 at the Campbell Industrial Park in Kapolei and is run by Covanta. The waste-to-energy plant processes over 700,000 tons of waste annually, reducing the volume of trash taken to the landfill by 90%. Green waste is composted on Oahu to make soil products. It is sold by the name of Menehune Magic in garden shops across the island

CARES

or can be bought directly from Hawaiian Earth Recycling. All of the recyclables collected in the blue bin are sold by RRR Services to the mainland or foreign countries. The company sells glass to manufacturers in the United States. Aluminum is sold to manufacturers in Korea and the U.S. Plastics #1 and #2 are sold to markets in Indonesia and Malaysia. The U.S. Fiber products, such as corrugated cardboard, newspaper and office paper, are sold to manufacturers in Taiwan, Vietnam, China, Indonesia, Thailand and Korea.

To keep trash out of the landfill, Oahu has banned plastic bags and disposable food ware. "It reduces the amount of non-degradable and non-recyclables, which is consistent with the City's Integrated Waste Solid Management Plan and reduces marine litter." It is important to work with the City to collaborate on strategic plans to address this subject matter.

Blessings,




ANGELA MELODY YOUNG



CARES

Works cited

1. "Landfills: A Serious Problem for the Environment."
Www.activesustainability.com,
www.activesustainability.com/environment/landfills-serious-problem-environment/?_adin=02021864894.
 2. Bradley, Laura. "There's Nothing More Soothing than Zac Efron's Travel Show."
The Daily Beast, 11 Nov. 2022, www.thedailybeast.com/obsessed/zac-efrons-netflix-travel-show-down-to-earth-is-a-special-kind-of-soothing. Accessed 21 Feb. 2023.
- 



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e-mail info@hfbf.org; www.hfbf.org

February 22, 2023

HEARING BEFORE THE
SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT
SENATE COMMITTEE ON JUDICIARY

TESTIMONY ON SB 388
RELATING TO WASTE DISPOSAL FACILITIES

Conference Room 224 & Via Videoconference
1:00 PM

Aloha Chairs Gabbard and Rhoads, Vice Chair Richards and Gabbard, and Members of the Committees:

I am Brian Miyamoto, Executive Director of the Hawaii Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,800 farm family members statewide and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic, and educational interests of our diverse agricultural community.

The Hawaii Farm Bureau supports SB 388, which would prohibit the construction, modification, or expansion of any waste or disposal facility on land that covers a significant aquifer, as determined by the department of health.

HFB recognizes the need for future landfill locations, however, we have serious concerns about future waste or disposal facilities being sited on lands that provide groundwater for agriculture, drinking water, irrigation, and domestic, commercial, and industrial needs. To avoid potential health risks, our precious aquifers need to be protected, and preventing contaminants from reaching these waters in the first place is the best way to accomplish that.

Thank you for the opportunity to provide our comments and thank you for your continued support of Hawaii's agricultural community.



International Brotherhood of Electrical Workers

LOCAL UNION NO. 1186 • Affiliated with AFL-CIO

1935 HAU STREET, ROOM 401 • HONOLULU, HI 96819-5003
TELEPHONE (808) 847-5341 • FAX (808) 847-2224

TO: SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT.
SENATE COMMITTEE ON JUDICIARY
Hearing on Wednesday, February 22, 2023 at 1:00p.m., Conference Room 224

RE: TESTIMONY IN **SUPPORT** OF SB 388

Honorable Chairs Mike Gabbard and Karl Rhoads, Vice Chairs Herbert M. “Tim” Richards III and Mike Gabbard, and Members of the Committees:

The International Brotherhood of Electrical Workers Local Union 1186 (IBEW 1186), is comprised of over 3,600 men and women working in electrical construction, Spectrum, telecommunications, civil service employees, and educator and faculty associations.

IBEW 1186 **SUPPORTS** this bill in its effort to protect one of Hawaii’s most precious resource, our water. Recent events, such as the fuel storage leak at Red Hill, have shown us how vulnerable our limited water resources are if we don’t carefully plan, protect, and preserve these fresh water sources. Constructing or expanding solid or hazardous waste facilities should be prohibited near these aquifers, and should also carefully consider the health of the communities that live near them.

Promoting industry safety for our members and the public is a cornerstone principle of the IBEW 1186. SB 388 is a common-sense measure to protect the life, health, and safety of the public and the vital natural resource of the State’s freshwater aquifers.

While we understand the need for adequate waste disposal locations, we urge the Legislature to consider alternative methods such as waste-to-energy facilities that can also serve as an additional energy source.

Thank you for this opportunity to submit this testimony.

Sincerely,

Damien T.K. Kim
Business Manager/
Financial Secretary



HAWAII FIRE FIGHTERS ASSOCIATION

INTERNATIONAL ASSOCIATION OF FIRE FIGHTERS LOCAL 1463, AFL-CIO

1018 PALM DRIVE | HONOLULU, HAWAII 96814

TEL: (808) 949-1566 FAX: (808) 952-6003

www.hawaii firefighters.org

THE SENATE
THE THIRTY-SECOND LEGISLATURE
REGULAR SESSION OF 2022
February 22, 2023

Committees on Agriculture & Environment and Judiciary

Testimony by
Hawaii Fire Fighters Association

S.B. No. 388 RELATING TO WASTE DISPOSAL FACILITIES AEN/JDC

The Hawaii Fire Fighters Association (HFFA), Local 1463, IAFF, AFL-CIO, represents more than 1,900 professional active-duty fire fighters throughout the State. The HFFA, on behalf of our members, **supports S.B. No. 388** which prohibits the construction, modification, or expansion of any waste or disposal facility for hazardous waste or solid waste on land that is near or above a significant aquifer as determined by the Department of Health, in consultation with the Commission on Water Resource Management.

The preservation of Hawaii's fresh water supply for our community is an urgent concern for HFFA as it supplies our islands communities with safe drinking water as well as supplying the fire service with the critical resource needed to battle fires as well as. This measure is an added safeguard to protect Hawaii's precious water resources by mitigating the potential of contamination of any "significant" aquifers.

Thank you for the favorable consideration of S.B. No. 388 and for the opportunity to testify.

SB-388

Submitted on: 2/17/2023 5:57:35 PM

Testimony for AEN on 2/22/2023 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Victor T Kimura	Individual	Support	Written Testimony Only

Comments:

Aloha Chairs Rhodes and Gabbard,

Mahalo for the opportunity to submit testimony in favor of SB388. This bill is important to the residents of the State of Hawaii to insure that we protect our water resources for all residents of Hawaii. Having any consideration of placing a waste disposal of any kind, over an aquifer, will destroy our main water sources. Nothing man made with liners etc. every last, and I do not want to see our precious water sources contaminated. Mahalo for your kind consideration. Aloha

SB-388

Submitted on: 2/17/2023 8:42:32 PM

Testimony for AEN on 2/22/2023 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Dana Keawe	Individual	Support	Written Testimony Only

Comments:

support