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SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



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

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BOARD OF LAND AND NATURAL RESOURCES
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FIRST DEPUTY

CIARA W.K. KAHAHANE
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
RYAN K.P. KANAKA'OLE
Acting Chairperson

Before the Senate Committees on
AGRICULTURE AND ENVIRONMENT
and
WATER, LAND, CULTURE AND THE ARTS

Wednesday, February 11, 2026
3:00 PM
State Capitol, Conference Room 224

In consideration of
SENATE BILL 2426
RELATING TO ENVIRONMENTAL PROTECTION

Senate Bill 2426 proposes to allow the Department of Land and Natural Resources (Department) to contract or form a partnership with private parties to assist with the maintenance and management of sunscreen dispensers at all state beaches, as well as publicize that the mineral-based sunscreen in these dispensers is more protective of the coral reefs of the State; and appropriates funds for the installation, maintenance, management, and operation of non-chemical sunscreen dispensers on all state beaches. **The Department supports this measure provided that its passage does not replace or adversely impact priorities indicated in the Executive Supplemental Budget request.**

Based on recent scientific findings, the Department agrees that less use of sunscreens containing certain chemicals would benefit the health and resiliency of Hawai'i's coral reef ecosystems. The Department supports the use of sunscreens that do not contain chemicals that are harmful to marine life, particularly non-nano particle, mineral-based sunscreens, as alternatives to chemical-based sunscreens.

The cost of installing, maintaining, managing, and operating mineral-based sunscreen dispensers at state beaches varies greatly depending on location, level of use, and availability of staff or volunteers to assist with installing and refilling dispensers. The Department believes that there are many community groups and individuals willing to volunteer their time to refill sunscreen dispensers. If labor is donated, the Department

estimates the average annual costs could be as low as \$2,000 per dispenser. An appropriation of \$100,000 per year could fund the installation and operation of up to 50 sunscreen dispensers at beaches throughout the State.

Mahalo for the opportunity to comment on this measure.



To: The Honorable Chairs Senators Chris Lee and Mike Gabbard, the Honorable Vice Chairs Lorraine Inouye and Herbert M. "Tim" Richards III, and Members of the Water, Land, Culture and the Arts and Agriculture and Environment Committees.

From: Hawai'i Reef and Ocean Coalition (by Ted Bohlen)

Re: **Hearing SB2426 RELATING TO ENVIRONMENTAL PROTECTION.**

Hearing: Wednesday February 11, 2026, 1:00 p.m., room 224

Aloha Chairs Lee and Gabbard, Vice Chairs Inouye and Richards, and Members of the Water, Land, Culture and the Arts and Agriculture and Environment Committees!

The Hawai'i Reef and Ocean Coalition (HIROC) is a group of scientists, educators, filmmakers and environmental advocates who have been working since 2017 to protect Hawaii's coral reefs and ocean.

The Hawai'i Reef and Ocean Coalition STRONGLY SUPPORTS SB2426!

Mineral sunscreens (primarily those containing zinc oxide as their primary filter) are less damaging to corals than chemical sunscreens. The Legislature in Act 104 of 2018 banned the sale of certain chemical sunscreens because of their impact on corals. Deploying sunscreen dispensers at state beaches, as has been done in part since 2021, will ease the burden of securing reef-safe sunscreens for use by residents and visitors alike, as well as further protect Hawai'i's coral reef ecosystems.

This bill would allow the Department of Land and Natural Resources to contract or form a partnership with private parties to assist with the maintenance and management of sunscreen dispensers at all state beaches, as well as publicize that the mineral-based sunscreen in these dispensers is more protective of the coral reefs of the State. It appropriates funds (\$100,000) for the installation, maintenance, management, and operation of non-chemical sunscreen dispensers on all state beaches.

Please pass this bill to help preserve Hawai'i's reefs and marine ecosystems!

Mahalo!

Hawai'i Reef and Ocean Coalition (by Ted Bohlen)



TO: Senate Committee on Agriculture & Environment
Senator Mike Gabbard, Chair
Senator Tim Richards, Vice Chair

TO: Senate Committee on Water, Land, Culture and the Arts
Senator Chris Lee, Chair
Senator Lorraine Inouye, Vice Chair

FROM: Lynn Miyahira representing Public Access to SunScreens (PASS) Coalition
DATE: Wednesday, February 11, 2026
TIME: 3:00 PM
PLACE: Conference Room 224 & Videoconference

Re: SB 2426

Position: COMMENT

The [Public Access to SunScreens](#) (PASS) Coalition is a multi-stakeholder coalition composed of public health groups, dermatologists, sunscreen manufacturers, and leading advocates for skin cancer patients.

We support public access to all sunscreens with FDA-approved UV filters. While we support the intent of SB 2426 to provide free, public access to sunscreen for residents and visitors via dispensers at state beaches, sunscreens should not be limited to only mineral ingredients under the assumption they are “reef-safe.” **There is no scientifically meaningful definition for the term “reef-safe sunscreen.”**

As the Centers for Disease Control and Prevention (CDC) advises the use of broad-spectrum sunscreen to help prevent skin cancer, the most effective sunscreen is the one people are willing to use often. By providing a range of sunscreen options, encompassing both mineral and chemical UV filters, we increase the likelihood that individuals will consistently use sun protection.

SB 2426 provides for funding and a public awareness campaign, which we believe should be carefully examined to avoid unintended public health and scientific consequences:

1. **Appropriation of \$100,000 Annually:** We support public funding to promote skin cancer prevention and sun safety. However, limiting sunscreen dispensers to mineral-only formulations may inadvertently reduce public usage due to

personal preferences, skin compatibility issues, cosmetic concerns, and product performance. Reduced usage undermines the bill's public health objective.

2. **Publicizing "Reef-Safe" Benefits:** While public education about sunscreen use is valuable, promoting the term "reef-safe" as scientifically validated is misleading. The National Academies of Sciences, Engineering, and Medicine (NASEM) has stated that there is insufficient evidence to conclude that sunscreens cause harm to coral reefs in natural marine environments. "Reef-safe" is not a scientifically defined or regulated term.

We believe the following recommendations would strengthen SB 2426 and improve its effectiveness in achieving both public health and environmental protection goals. To ensure effective implementation of this bill's intent, we recommend:

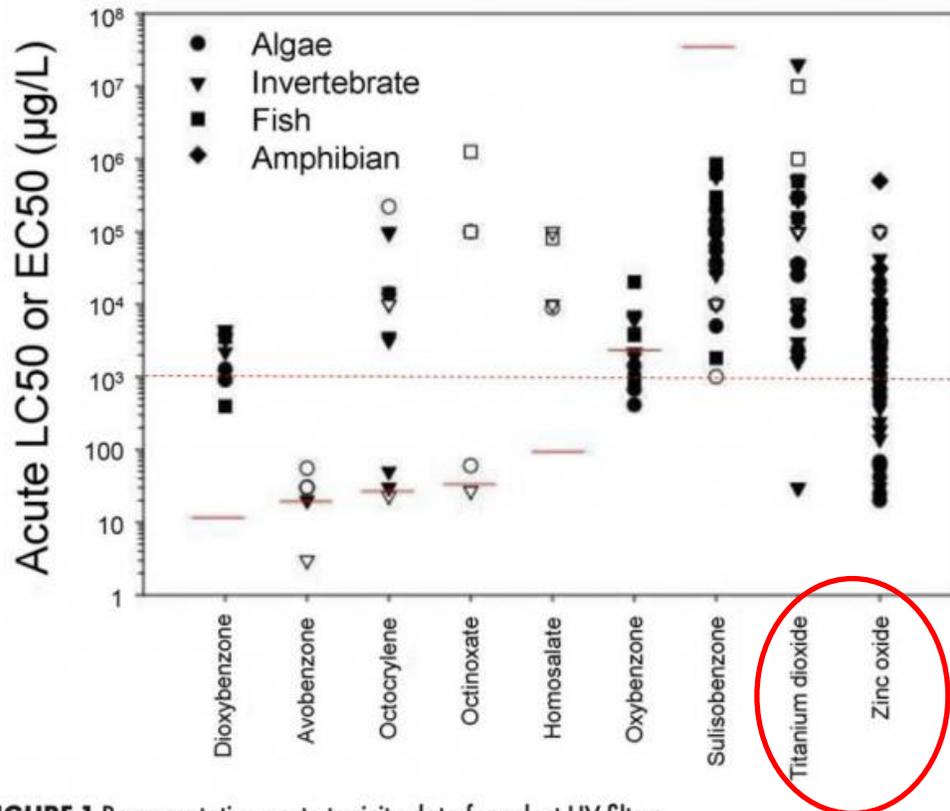
- Including both mineral and chemical sunscreen options in public dispensers to maximize accessibility and consistent use.
- Clarifying public education materials to avoid overstating the scientific basis for "reef-safe" claims.
- Allocating additional resources to address well-documented threats to coral reefs, such as wastewater management, cesspools, stormwater runoff, and other land-based pollution.

In August 2022, the National Academies of Sciences, Engineering, and Medicine issued a report titled "[Review of Fate, Exposure, and Effects of Sunscreens in Aquatic Environments and Implications for Sunscreen Usage and Human Health](#)," which examined existing data on the environmental impacts of UV filters. The report concluded that the science is still evolving and that there is insufficient evidence to support definitive conclusions about environmental harm. **The report called for the need for a more comprehensive ecological risk assessment of ALL UV filters, including mineral formulations.**

The report acknowledges that mineral UV filters (titanium dioxide and zinc oxide) could potentially affect aquatic environments because they aggregate with other particles and can accumulate in sediment.

In addition, the NASEM report includes the following chart summarizing acute toxicity data for various UV filters on marine life. This data shows that zinc oxide and titanium dioxide, the UV filters in mineral sunscreens, may pose hazards to marine life. (see next page)

Figure 1: Acute toxicity data for UV filters in sunscreens on marine life.
 Source: [National Academies of Sciences, Engineering and Medicine, 2022](#)



Mineral sunscreens use titanium dioxide and/or zinc oxide. This graph shows the acute toxicity data for these UV filters on marine life.

FIGURE 1 Representative acute toxicity data for select UV filters.
 NOTES: 1,000 µg/L is used as a threshold for comparison across UV filters (red dashed line); toxicity at lower concentrations indicates a more toxic UV filter. However, due to the low water solubility of some UV filters (red solid lines), the potential environmental concentrations could be below toxic levels. LC/EC50 results that were unbounded (not < or >) values are displayed with closed (black) symbols whereas greater than (>) values are displayed as open (white) symbols. LC50 = Lethal concentration for 50 percent of the test population; EC50 = Concentration of nonlethal effects on 50 percent of the test population that are effectively equivalent to mortality.

The report also highlights that many laboratory studies done to date, often use concentrations far exceeding those typically found in the ocean, which can produce outlier results.

Scientific research consistently demonstrates that environmental factors such as cesspools, wastewater management failures, stormwater runoff, overfishing of herbivorous fish, coastal development, and other land-based pollutants are the primary contributors to coral reef degradation. A November 2024 article in Honolulu Civil Beat titled "[Hawaii's Love Affair with Cesspools is Ruining Its Reef](#)" underscores the urgency of addressing these threats. An excessive focus on sunscreen risks diverting attention and resources from these significant drivers of reef decline.

Nial Wheate, PhD, Associate Professor of Pharmaceutical Chemistry at Macquarie University, highlighted this in an article titled [No, Sunscreen Chemicals Are Not Bleaching the Great Barrier Reef](#) (The Conversation, March 27, 2022):

“The greatest threats to the reef are climate change, coastal development, land-based run-off like pesticides, herbicides, and other pollutants, and direct human use like illegal fishing. Laboratory-only studies are not giving us a reliable indication of what happens to these chemicals in real-world conditions.” – Nial Wheate, PhD.

While we understand and support the intent of SB 2426 to increase sunscreen access and protect coral reefs, we urge our legislators to thoroughly examine all available data—not just selected findings—on sunscreens and the marine environment.

We urge lawmakers to safeguard public access to all sunscreens containing FDA-approved UV filters, which include both organic chemical and inorganic chemical (mineral) UV filters.

Mahalo for the opportunity to comment.

Sincerely,

Lynn Miyahira
Public Access to SunScreens (PASS) Coalition



FRIENDS of HANAUMA BAY

CONSERVE • PROTECT • RESTORE

*Dedicated to the conservation of coastal and marine environments,
emphasizing stewardship of the natural resources of Hanauma Bay*

February 10, 2026

Regarding: SB2426 Relating to Environmental Protection - Mineral Sunscreen Dispensers at State Beaches

Aloha Chairs Lee and Gabbard, Vice Chairs Inouye and Richards, and Members of the Water, Land, Culture and the Arts and Agriculture and Environment Committees

The Friends of Hanauma Bay STRONGLY SUPPORTS SB2426!

Mineral sunscreens (primarily those containing zinc oxide as their primary filter) are less damaging to corals than chemical sunscreens.

In Act 104 of 2018, the Legislature led the world in banning the sale of certain chemical sunscreens because of their impact on corals, paving the way for similar bans in several other countries and jurisdictions. Deploying sunscreen dispensers at state beaches, as has been done in part since 2021, will ease the burden of securing and making available reef-friendly sunscreens for use by residents and visitors alike, as well as further protect Hawai'i's coral reef ecosystems for current and future generations.

This bill would allow the Department of Land and Natural Resources to contract or form a partnership with private parties to assist with the maintenance and management of sunscreen dispensers at all state beaches, as well as publicize that the mineral-based sunscreen in these dispensers is more protective of the coral reefs of the State. It appropriates funds (\$100,000) for the installation, maintenance, management, and operation of non-chemical sunscreen dispensers on all state beaches.

Please pass this common sense bill to help preserve Hawai'i's reefs and marine ecosystems!

Mahalo!

Lisa Bishop, MS
Friends of Hanauma Bay | President y

TO: Senate Committee on Agriculture & Environment
Senator Mike Gabbard, Chair

Senator Tim Richards, Vice Chair

Senate Committee on Water, Land, Culture and the Arts
Senator Chris Lee, Chair

Senator Lorraine R. Inouye, Vice Chair

FROM: The Members of the Hawaii Skin Cancer Coalition

DATE: February 11, 2026

TIME: 3:00 PM

PLACE: Conference Room 224 & Videoconference

Re: SB 2426

Position: **OPPOSE**

The Hawaii Skin Cancer Coalition is a collaborative effort between concerned local organizations and businesses including, the University of Hawai'i Cancer Center, American Cancer Society, Hawai'i Pathologists' laboratory, the Friends of the University of Hawai'i Cancer Center, the Hawai'i Dermatological Society, Kaiser Permanente, Kuakini Health System, the Hawai'i Lifeguard Association, Queen's Healthcare Plan, the Hawai'i Ophthalmological Society. All of these organizations share a common goal to help prevent skin cancer.

We support public access to all sunscreens with FDA-approved UV filters. While we support the intent of providing free, public access to sunscreen for the general public via dispensers, sunscreens should not be limited to only mineral ingredients under the assumption they are "reef-safe." There is no scientifically meaningful definition for the term "reef-safe sunscreen."

As the CDC advises the use of broad-spectrum sunscreen to help prevent skin cancer, the most effective sunscreen is the one people are willing to use often. By providing a range of sunscreen options, encompassing both mineral and/or chemical ingredients, we increase the likelihood of people utilizing sun protection.

The 2026 bill provides for funding and a public awareness campaign, which we believe should be carefully examined to avoid unintended consequences:

1. **Appropriation of \$100,000 Annually:** We support public funding to promote skin cancer prevention but encourage the inclusion of diverse sunscreen options. Limiting dispensers to mineral-only sunscreens may inadvertently reduce public usage due to personal preferences and skin compatibility.
2. **Publicizing "Reef-Safe" Benefits:** While education about sunscreen use is valuable, promoting the term "reef-safe" as scientifically validated is misleading. The National

Academies of Sciences, Engineering, and Medicine (NASEM) report states there is insufficient evidence that sunscreens harm coral reefs in natural environments, and "reef-safe" is not a scientifically defined term. This report resulted from 2 years of study by the top scientists in the US on environmental science and human health.

To ensure effective implementation of this bill's intent, we recommend:

- Including mineral and chemical sunscreen options in dispensers to maximize public accessibility and use.
- Clarifying public education materials to avoid overstating an unfounded scientific basis for "reef-safe" claims.
- Allocating additional resources to address broader threats to coral reefs, such as wastewater management and land-based pollution.

In August 2022, the National Academies of Sciences, Engineering and Medicine (NASEM), issued a report, "Review of Fate, Exposure, and Effects of Sunscreens in Aquatic Environments and Implications for Sunscreen Usage and Human Health." which examined the existing data on the environmental impacts of UV filters. The report concluded that the science is still evolving, which means that there was not sufficient evidence to support the current claims concerning mineral sunscreens. **The report called for the need for a more comprehensive ecological risk assessment of All UV filters, including mineral formulations.**

The report acknowledges that mineral UV filters (titanium dioxide and zinc oxide) could potentially affect aquatic environments because they aggregate with other particles and can accumulate in sediment.

In addition, the NASEM report includes the following chart summarizing acute toxicity data for various UV filters on marine life. This data shows that zinc oxide and titanium dioxide, the UV filters in mineral sunscreens, may pose hazards to marine life.

(see next page)

Figure 1: Acute toxicity data for UV filters in sunscreens on marine life.
 Source: National Academies of Sciences, Engineering and Medicine, 2022

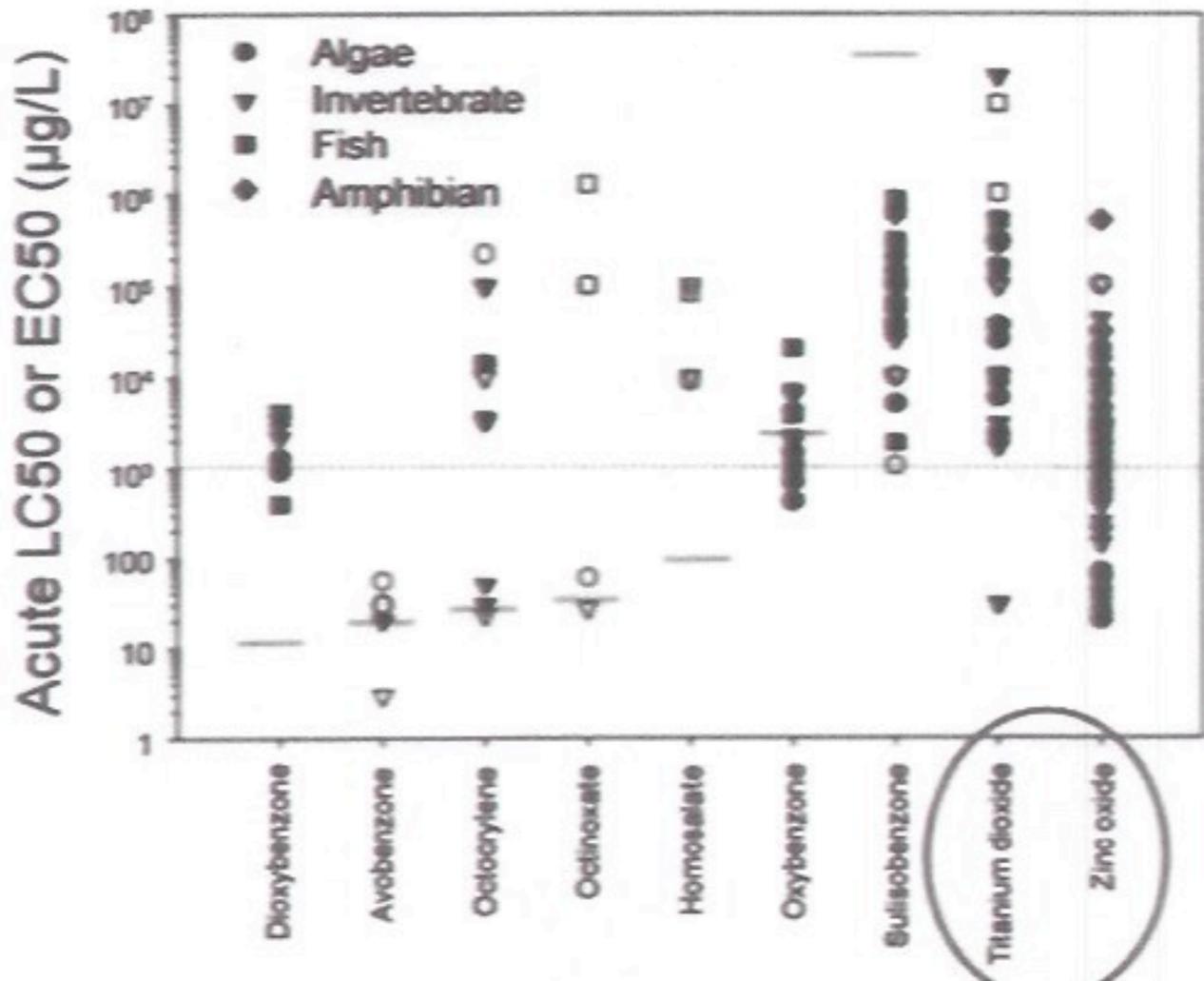


FIGURE 1 Representative acute toxicity data for select UV filters.
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The report also highlights that many laboratory studies done to date, often use concentrations far exceeding those typically found in the ocean, which can produce outlier results.

Research demonstrates that environmental factors such as cesspools, wastewater management, storm run-off, overfishing of herbivorous fish, and other land-based pollutants are the primary contributors to coral reef degradation. A November 2024 article in Honolulu Civil Beat titled **"Hawaii's love Affair with Cesspools is Ruining Its Reef"** underscores the

urgency of addressing these threats. Focusing on sunscreens risks diverting attention from these significant issues.

Nial Wheate, PhD, Associate Professor of Pharmaceutical Chemistry at Macquarie University, highlighted this in an article titled "No. Sunscreen Chemicals Are Not Bleaching the Great Barrier Reef" (The Conversation, March 27, 2022):

"The greatest threats to the reef are climate change, coastal development, land-based run-off like pesticides, herbicides, and other pollutants, and direct human use like illegal fishing. Laboratory-only studies are not giving us a reliable indication of what happens to these chemicals in real-world conditions." - **Nial Wheate, PhD.**

More recent studies further describe the effects of climate change on the Great Barrier, which is not exposed to anthropogenic disturbances Catastrophic bleaching in protected reefs of the Southern Great Bania Reef - Byrne - Limnology and Oceanographv Letters - Wiley Online Library (Accessed 16 January 2025).

While we understand and support the intent of this bill to increase sunscreen access and protect coral reefs, we urge our legislators to thoroughly examine all available data-not just selected findings-on sunscreens and the marine environment.

We urge lawmakers to safeguard public access to all sunscreens containing FDA-approved UV filters, which include both organic chemical and inorganic chemical (mineral) UV filters.

Mahalo you for the opportunity to testify in Opposition.

Sincerely,

The Members of the Hawaii Skin Cancer Coalition
Hawaii Skin Cancer Coalition