

**BOARD OF WATER SUPPLY
KA 'OIHANA WAI
CITY AND COUNTY OF HONOLULU**

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February 4, 2026

The Honorable Carol Fukunaga, Chair
and Members
Senate Committee on Public Safety and Military Affairs
Hawai'i State Capitol, Room 016
Honolulu, Hawai'i 96813

The Honorable Chris Lee, Chair
and Members
Senate Committee on Water, Land, Culture and the Arts
Hawaii State Capitol, Room 016
Honolulu, Hawai'i 96813

Dear Chair Fukunaga, Chair Lee and Members:

Subject: Senate Bill 2475: Relating to Red Hill

The Board of Water Supply (BWS) is in strong support of Senate Bill (SB) 2475, which appropriates funds for studies on remediation of substances released from the Red Hill Bulk Fuel Storage Facility.

Based on the Red Hill Water Alliance Initiative (WAI) Report published in November 2023, it was estimated that up to 1.94 million gallons of fuel have spilled into the environment at the Red Hill Bulk Fuel Storage Facility (Facility) over its 80 years of operation. This estimate does not even include the known and unknown hazardous materials that have been released, such as the 1,300 gallons of aqueous film forming foam (AFFF) concentrate that contains per- and polyfluoroalkyl substances on November 29, 2022.

BWS is deeply grateful to the past and current administration, in which under Act 164 (2023, Session Laws of Hawai'i) and Act 250 (2025, Session Laws of Hawai'i), a total of \$12 million in general obligation bond funds were awarded to BWS to install monitoring wells and an exploratory well to meet future potable water demands. To date, \$10 million dollars of this funding has been used toward construction of three monitoring wells and one exploratory well. The remaining \$2 million dollars has been allocated to future monitoring wells that are currently in design.

The Honorable Carol Fukunaga, Chair

The Honorable Chris Lee, Chair
and Members

February 4, 2026

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Although the Facility was defueled in 2024 and is in the process of being decommissioned for permanent closure, the type, volume, and location of past releases and its impact to the environment and underground sole source aquifer remains largely unknown. Funds appropriated from this bill will support the Red Hill WAI's goals, in studies into the full characterization of our sole source aquifer, additional environmental monitoring and testing, and further enhance ongoing research in groundwater modeling that will help expedite the full remediation of our environment.

Thank you for the opportunity to testify in strong support of SB 2475.

Very truly yours,



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

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



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CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
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DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
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STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA
P.O. BOX 621
HONOLULU, HAWAII 96809

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

**Before the Senate Committee on
WATER, LAND, CULTURE AND THE ARTS
and
PUBLIC SAFETY AND MILITARY AFFAIRS**

**Wednesday, February 4, 2026
3:01 PM**

State Capitol, Conference Room 016 and Videoconference

**In consideration of
SENATE BILL 2475
RELATING TO RED HILL**

Senate Bill 2475 proposes to appropriate funds to the Red Hill Remediation Special Fund to support studies on remediation, environmental monitoring and testing, groundwater modeling and sampling, and independent testing and verification of water data related to substances released from the Red Hill Bulk Fuel Storage Facility. The measure also requires the Department of Land and Natural Resources (Department) to seek reimbursement from the United States Department of Defense for these costs. **The Department supports this measure and offers the following comments.**

The State of Hawai'i (State) has a constitutional duty to conserve and protect its natural resources, including wai. As stewards of Hawai'i's groundwater aquifers and ecosystems, the Department recognizes that while defueling the Red Hill Bulk Fuel Storage Facility marked a significant milestone, decades of research, remediation, and monitoring remain necessary to restore 'āina and rebuild public trust.

Act 197, Session Laws of Hawai'i (SLH) 2025, codified as Section 174E, Hawai'i Revised Statutes (HRS), directs the Department to facilitate implementation and monitoring of the Red Hill Water Alliance Initiative (WAI) initiatives identified in the WAI's November 2023 report. This measure supports that work by funding coordinated research and monitoring to inform post-defueling remediation, assess ecosystem health in the surrounding ahupua'a, and strengthen public information throughout remediation phases. The approach developed through these projects may also inform place-based, multi-stakeholder responses to other complex, multi-jurisdictional contamination impacts to the environment statewide.

If funded, the Department will implement this work in collaboration with stakeholders and research teams from the University of Hawai'i (UH), including the School of Ocean and Earth Science and Technology (SOEST) Departments of Oceanography and Earth Sciences; SOEST research institutes and centers such as the Hawai'i Institute of Geophysics and Planetology (HIGP), Pacific Biosciences Research Center (PBRC), and Hawai'i Sea Grant Ulana 'Ike Center of Excellence; the UH Departments of Civil, Environmental and Construction Engineering (CECE), Geography, and Natural Resources and Environmental Management (NREM); the UH Water Resources Research Center (WRRC); UH Community Colleges (Leeward and Honolulu); and the U.S Geological Survey Pacific Islands Water Science Center.

The Department also appreciates the measure's reimbursement requirement that reinforces federal responsibility while allowing the State to proceed without delay on priority initiatives.

For these reasons, the Department respectfully supports Senate Bill 2475.

Mahalo for the opportunity to comment on this measure.



UNIVERSITY OF HAWAII SYSTEM

‘ÖNAEHANA KULANUI O HAWAII

Legislative Testimony
Hō‘ike Mana‘o I Mua O Ka ‘Aha‘olelo

Testimony Presented Before the
Senate Committee on Water, Land and the Arts
and
Senate Committee on Public Safety and Military Affairs
Wednesday, February 4, 2026 at 3:01 p.m.
By
Tao Yan, PhD
Director, Water Resources Research Center
and
Brennon Morioka, PhD
Dean, College of Engineering
and
Vassilis L. Syrmos, PhD
Interim Provost
University of Hawai'i at Mānoa

SB 2475 – RELATING TO RED HILL

Chairs Lee and Fukunaga, Vice Chair Inouye, and Members of the Committees:

The University of Hawai'i at Mānoa supports the intent of SB 2475. This measure proposes to appropriate funds for studies on remediation of substances released from the Red Hill Bulk Fuel Storage Facility; environmental monitoring and testing; research on groundwater modeling and sampling; and independent testing and verification of water data, to be published on a public dashboard that supports accountability, public trust, and informed decision-making.

A collaborative team with diverse expertise across the University stands ready to support these efforts, including the Water Resources Research Center (WRRC), the College of Engineering, and the School of Ocean and Earth Science and Technology (SOEST), including all of their respective departments.

Groundwater is the most important drinking water resource for Hawai'i, and its protection is a core mission of many of our units. The University of Hawai'i plays a critical role in supporting public-interest research and education. We are committed to providing expertise and supporting the State to protect irreplaceable water resources from future impacts.

Thank you for the opportunity to testify in support of these measures.



SENATE COMMITTEE ON WATER, LAND, CULTURE AND THE ARTS
SENATE COMMITTEE ON PUBLIC SAFETY AND MILITARY AFFAIRS

February 4, 2026

3:01 PM

Conference Room 016

In SUPPORT of SB2475: RELATING TO RED HILL

Aloha Chair Lee, Chair Fukunaga, Vice Chair Inouye, and Members of the Committees,

On behalf of our over 20,000 members and supporters, the Sierra Club of Hawai'i **SUPPORTS SB2475**, which provides funding for remediation research as well as for independent expert review and assessment of water data collected as part of the governmental Red Hill response effort.

Over four years since the Red Hill catastrophe, the Navy has still provided no meaningful strategy or specific plans for the remediation of the mess it has inflicted upon our water - and that of our children, grandchildren, and future generations. In terms of remediation research, the Red Hill WAI Policy Coordinator has only identified an unpublished, unreviewed study on bacteria found in O'ahu's soil that *could* biodegrade JP-5 (and none of the other compounds released from the Red Hill Facility), without any investigation into the continued toxicity of the degraded fuel or strategy for using such bacteria for groundwater remediation. Meanwhile, **the Navy's "soil vapor extraction" pilot program will have no effect on the contamination plume in O'ahu's sole-source aquifer**. It is clear that we cannot wait for the Navy to clean up its mess in a timely manner, and must take the initiative to protect our water future.

This measure would accordingly fund groundwater monitoring and remediation research, both critically needed to ensure our present and future generations do not inherit a contaminated aquifer that was poisoned on our watch. It will also provide for independent expert review and assessment of highly technical water data and to make such assessments accessible to the public. This latter investment is particularly necessary given the myriad and ongoing "irregularities" in the Navy's water testing procedures, which have severely eroded public confidence in the integrity of their water monitoring efforts.

Accordingly, the Sierra Club of Hawai'i urges the Committees to **PASS SB2475**. Mahalo nui for the opportunity to testify.

SB-2475

Submitted on: 1/30/2026 7:20:47 PM
Testimony for WLA on 2/4/2026 3:01:00 PM

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

Comments:

I, Johnnie-Mae L Perry Support

2475 SB RELATING TO RED HILL.	WLA/PSM	CR 016 & Videoconference	Feb 4, 2026 3:01 PM
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SB-2475

Submitted on: 1/31/2026 8:48:05 AM
Testimony for WLA on 2/4/2026 3:01:00 PM

Submitted By	Organization	Testifier Position	Testify
lynne matusow	Individual	Support	Written Testimony Only

Comments:

Please move this important bill forward. Our water supply is in danger and we need to know more about the dangers.

**Testimony on SB 2475
Relating to Red Hill**

To: Senate Committee on Public Safety and Military Affairs (PSM) and the Senate Committee on Water and Land (WLA)

Date: February 04, 2026 **Time:** 3:01 pm **Location:** Conference Room 016 & Videoconference

Testifier: Yinphan Tsang **Position:** Hydrologist at University of Hawai‘i at Mānoa

Measure: SB 2475

Chair Fukunaga, Chair Lee, Vice Chair Lee, Vice Chair Inouye, and members of the committees:

I am writing in **strong support** of SB 2475. My name is **Yinphan Tsang**, and I am a researcher and Hydrologist at the University of Hawai‘i at Mānoa. I am testifying in my individual capacity.

For the past four years, a significant part of my work has focused specifically on **monitoring Halawa Stream**. This research is vital for understanding current stream biodiversity and, crucially, the potential long-term effects of **Granular Activated Carbon (GAC) discharge** on the health of the stream ecosystem.

This measure is critical because:

- **Impact of Remediation:** While GAC is a necessary tool for treating contaminated water, we must monitor the resulting discharge to ensure we aren’t trading one environmental issue for another. My research provides the baseline data needed to protect the diverse species and habitats within Halawa Stream.
- **Complex Hydrology and Connected Systems:** As a hydrologist, I can attest that contaminant transport through surface and subsurface water paths is incredibly complex. It can take years for the full breadth of impacts on ecosystem processes and organisms, such as fish and algae, to emerge, making long-term monitoring efforts critical.
- **Scientific Accountability:** The public dashboard funded by this bill ensures that our findings are used to build public trust through transparent, verified data.



The University of Hawai‘i is the only entity with the local expertise and public-interest mandate to conduct this long-term oversight. I urge you to pass SB 2475 to ensure the continued stewardship of our water resources.

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

SB-2475

Submitted on: 2/1/2026 10:07:14 PM
Testimony for WLA on 2/4/2026 3:01:00 PM

Submitted By	Organization	Testifier Position	Testify
Craig Nelson	Individual	Support	Written Testimony Only

Comments:

I am submitting testimony as a private citizen, and am strongly in favor of DLNRs measure proposing a combination of ecosystem, testing, remediation and modelling to ensure that we fully understand the potential impacts of the Red Hill Fuel Storage facility on water, watershed and coastal ecosystems. I am a Professor of Oceanography and my laboratory was heavily engaged in supporting community tapwater monitoring and the development of a rapid detection protocol for petroleum contamination for citizens on the Navy water supply after the 2021 contamination of Red Hill shaft. I worked as part of the Red Hill task force addressing the lack of transparency and testing offered by the Navy after the spill, and we developed a public facing dashboard showing where and for how long people's taps showed evidence of diesel contamination. My work on ecosystem impacts of pollution, ranging from cesspool contamination to the Lahaina fires, has reinforced the potential for complex material to linger in the environment with complex impacts for years, and this bill will address those issues.

1 Feb 2026

Chairs Lee and Fukunaga, Vice Chairs Inouye and Lee, and members of the committees:

SB 2475 proposes to appropriate funds to support research on Red Hill remediation, environmental monitoring and testing, groundwater modeling and sampling, and transparent data verification and sharing via a public dashboard that supports accountability, public trust, and informed decision-making. I am writing today to **comment** on this measure an individual citizen, although I also served on the state Water Commission (2021-2025) and work at the University of Hawai‘i.

Following the 2021 fuel release at the Red Hill Bulk Storage Facility, an alliance of University of Hawai‘i faculty, staff, students, and community volunteers collaborated to respond quickly with a diverse and relevant set of skills to support community concerns related to the crisis. Our ad hoc group included individuals from across the UH Mānoa campus and Leeward Community College, and our response included public informational webinars¹, collaborative tap water screening², and the development of an online info hub to help the public navigate the complex information environment surrounding Red Hill³.

Since 2021, various UHM-based research groups have been carrying out research: lab-based experiments on fuel biodegradation and fuel-chlorination interactions, field-based dye tracer studies and geophysics, as well as interviews and surveys on impacts of the disruption on human health and wellbeing, and monitoring of Hālawa Stream chemistry and ecology. More recently, the Red Hill Registry⁴ has begun to address support for long term human health concerns and needs, drawing on public health and medical expertise. Some of these projects benefited from defense funding; others did not. Importantly, all of them understood the critical need for independent investigation by entities not directly involved in the incident or ongoing litigation. The state’s present willingness to direct and fund DLNR-supported monitoring could augment existing DOH-led efforts and allow for independent, more publicly-responsive and precautionary efforts than previously possible.

Regional monitoring beyond the footprint of the Red Hill fuel storage facility is the only way to reliably assess contamination impacts to the diverse streams, springs, groundwater, and coastal waters of Māmala and Pu‘uloa, and to ensure the long-term stewardship of these interconnected water resources. Long-term monitoring efforts are key because the emergence of the full breadth of impacts on ecosystems and human health can take years. Data from monitoring complements bench/modeling work. Research that addresses the complexity of contaminant release and transport through aquifers, the biochemistry of contaminant breakdown, and the diversity of chemical compounds detected as a result of multiple releases is critical. This foundational work can and should inform the development of island-appropriate remediation solutions that account for our hydrogeology and geochemical context, biological systems, and cultural as well as social-political context.

Mahalo for your time. Ola i ka wai,

Aurora Kagawa-Viviani

¹ UH Water Resources Research Center Spring 2022 seminar series: <https://www.wrrc.hawaii.edu/spring-2022-wrrc-seminar-schedule/>

² UH Red Hill Tap Water Screening Dashboard: <https://red-hill-fuel-spill-information-hub-uhm.hub.arcgis.com/pages/tap-water-dashboard-faqs> ; also <https://swift-test.shinyapps.io/redhill/>

³ UH Red Hill Info Hub: <https://redhill.hawaii.edu>

⁴ Red Hill Registry: <https://redhillregistry.org>

SB-2475

Submitted on: 2/2/2026 9:03:37 AM
Testimony for WLA on 2/4/2026 3:01:00 PM

Submitted By	Organization	Testifier Position	Testify
Eileen Nalley	Individual	Support	Written Testimony Only

Comments:

SB 2475 - RELATING TO RED HILL

To Chair Fukunaga, Vice Chair Lee, and Members of the Committee:

I am writing in strong support of SB 2475 as a member of the community of Hawai‘i, O‘ahu, and Honolulu and also as an individual with expertise in contaminants, risk assessments, and environmental health. This measure will appropriate funds to support continued research, monitoring, and transparent data sharing that is critical to our community following the Red Hill fuel disaster.

Following the 2021 fuel spill at Red Hill, which was preceded by other fuel spill incidents at the Red Hill Bulk Storage Facility, researchers were able to respond quickly and with the necessary expertise to support the state as they worked to understand the impacts and mitigate risks. The support of this bill will ensure research and monitoring continue to aid communities and ensure safe drinking water for our island.

Monitoring is absolutely critical for assessing contamination impacts to streams, springs, groundwater, and coastal areas, especially in this area where they are so complex and poorly understood. It can take years for the full breadth of impacts on ecosystem processes and organisms to manifest. That makes this type of work absolutely critical to support remediation, accurate modeling, and the development of risk prevention strategies.

As a member of the community and resident of Hawai‘i, I strongly support this measure and appreciate your consideration.

Sincerely,

Eileen Nalley, PhD

Testimony Presented Before the
Senate Committee on Water, Land and the Arts
Senate Committee on Public Safety and Military Affairs
Wednesday, February 4, 2026; 3:01 PM
Donald Thomas, PhD

SB 2475 – RELATING TO RED HILL

Chairs Lee and Fukunaga, Vice Chairs Inouye and Lee, and members of the committees:

I support the intent of SB 2475, to appropriate funds necessary for: continued investigation and analysis of the groundwater hydrogeology of the aquifers impacted by past fuel/contaminant releases from the Red Hill Bulk Fuel Storage Facility; ecological monitoring of the ecosystems impacted by those releases; communication and outreach to the communities impacted by past releases; and the investigation and development of productive remediation strategies to treat the impacted aquifers. This work will lay the foundation for the remediation and long-term restoration of the impacted aquifers to a condition that will ensure their future sustainability as a critical resource for the residents of Honolulu and Oahu.

During past decades I have provided subject matter expertise to both the staff of the DLNR Commission on Water Resources Management, and to the Department of Health, Solid and Hazardous Waste Branch to assist them in meeting their resource management and health and safety responsibilities. I anticipate that this work will also be conducted in close coordination with these agencies to ensure that they, and the community, will directly benefit from the new insights produced by this research.

Thank you for this opportunity to testify in support of this measure.

Although I am affiliated with the School of Ocean and Earth Sciences and Technology (SOEST) at the University of Hawaii, this testimony is mine alone and does not reflect an official position of the University of Hawaii or SOEST.

SB-2475

Submitted on: 2/2/2026 11:45:32 PM

Testimony for WLA on 2/4/2026 3:01:00 PM

Submitted By	Organization	Testifier Position	Testify
Sherry Pollack	Individual	Support	Written Testimony Only

Comments:

It is critical we ensure that steps are taken for the full remediation of our lands and waters contaminated by the Navy's Red Hill Bulk Fuel Storage Facility.

SB-2475

Submitted on: 2/3/2026 7:37:27 AM
Testimony for WLA on 2/4/2026 3:01:00 PM

Submitted By	Organization	Testifier Position	Testify
Sean Swift	Individual	Support	Written Testimony Only

Comments:

Chairs Lee and Fukunaga, Vice Chairs Inouye and Lee, and members of the committees:

My name is Sean Swift and I am PhD candidate here in Hawai‘i.

Four years ago, I was part of a group of UH researchers that responded to community members who were asking us to analyze samples of their tap water, which they suspected were contaminated with jet fuel. In our lab, we responded by adapting our methods to detect fuel components in water samples and created an online dashboard to share our results with the public. We went on to run an experiment looking at how the diverse chemical components of jet fuel are consumed and transformed by naturally occurring bacteria from Oahu’s groundwater aquifers. These years of research effort have drastically altered the focus of my graduate work. Our collaborative group developed and shared highly technical expertise in environmental chemistry, hydrology, and ecology and I would encourage the committee to see this proposed funding as an opportunity for graduate students to become multifaceted experts in understanding water contaminants. I have become painfully aware of how few chemists there are in the state who can assist when there is a contaminant related crisis. We need this type of hands on training to be available locally and, importantly, we need experts across multiple disciplines to form a cohesive working group here in the islands.

Mahalo for listening and for your consideration of this bill.

SB-2475

Submitted on: 2/3/2026 10:08:32 AM
Testimony for WLA on 2/4/2026 3:01:00 PM

Submitted By	Organization	Testifier Position	Testify
Skye Inn	Individual	Support	Written Testimony Only

Comments:

Aloha,

I am in strong support of this bill as a scientist specializing in the microbial ecology of diesel fuel degradation. Hawai'i's groundwater systems are incredibly complex and it can take years for the effects of contamination to emerge, especially from a large-scale event like November of 2021. The Red Hill Shaft draws on the most critical aquifer supplying water to O'ahu as an EPA designated sole source aquifer. Thus, it is essential that monitoring O'ahu's aquifers are continued on a long-term scale. Furthermore, the Red Hill Shaft has impacts on the environment from mauka to makai, calling for monitoring of not just groundwater, but the soil, the Halawa stream in which the Navy is discharging water to, and the oceans that ultimately receive the runoff. Such changes to the sensitive landscape, flora, and fauna of O'ahu could have significant impacts, changing ecological and ecosystem processes for creatures like o'opu, limu, and humans alike. Research is essential for investigating these impacts as we know a concerningly little amount about the multiple processes at play, such as the release and movement of contaminants within the groundwater, how JP-5 degrades and transforms into a slew of chemical compounds that we don't understand, and more. It is critical that we continue to assess, analyze, and investigate the disastrous impacts of Red Hill on O'ahu, and it is vital that funds are allocated for this purpose.

LATE

SB-2475

Submitted on: 2/3/2026 5:39:10 PM
Testimony for WLA on 2/4/2026 3:01:00 PM

Submitted By	Organization	Testifier Position	Testify
Salu Salu Malo Fosi	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Fukunaga, Chair Lee, Vice Chair Inouye, and members of the Public Safety and Military Affairs Committee and Water, Land, Culture, and the Arts Committee,

My name is Salu Salu Malo Fosi and I strongly SUPPORT SB2475: Relating to Red Hill. I am a student at the University of Hawai‘i at Manoa and a member of the community in Manoa. I support this bill because it would establish funds for remediation studies, environmental monitoring and testing, groundwater modeling and sampling research, and independent testing and verification of data to be published for the public to access. I believe the independent testing and data verification is necessary because the U.S. government hasn’t always been truthful in the past, especially when they harm Indigenous communities.

There should have been no spillage especially when Hawai‘i’s residents have objected to the Red Hill Bulk Fuel Storage Facility operation for years.

I urge you to PASS SB2475: Relating to Red Hill.

Sincerely,

Salu Salu Malo Fosi