



SB376 SD1
RELATING TO THE ENVIRONMENT
Senate Committee on Judiciary

February 24, 2023

9:30 AM

Room 016

The Administration of the Office of Hawaiian Affairs (OHA) intends to recommend to the Board of Trustees to **STRONGLY SUPPORT** SB376 SD1, which would prohibit the mining, extraction, and removal of minerals from the seabed in all state marine waters while protecting the existing rights privileges, and practices of Native Hawaiians.

Hawaii State Constitution, Article XI, section 1 provides as follows: “For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals, and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people.”

The seabed in all state marine waters, are a part of the ceded lands¹ to Section 5(f) of the Act refers to the crown and government lands of the Hawaiian Kingdom, which had been designated “ceded” to the Republic of Hawai‘i, and then to the United States. The Act conveyed these lands to the new State of Hawai‘i with the caveat that revenues were to constitute a trust for five purposes. One of these was the betterment of the conditions of Native Hawaiians. By any measure, those conditions were sorely in need of improvement, but, by 1978, they had not changed for the better, as the state’s trust obligation went ignored.

The ceded lands, consisting of crown lands, once property of the Hawaiian monarchy, and of the government lands of the Kingdom of Hawai‘i, totaled 1.8 million acres upon annexation in 1898. Pursuant to the Joint Resolution of Annexation, all of these lands were considered transferred or “ceded” to the United States government “for the benefit of the inhabitants of the Hawaiian Islands.” Underscoring the federal trust responsibility are the findings of the US Congress in the Apology Resolution² (emphasis added):

¹ Note the term “ceded” is used to reference the classification of the lands in discussion and does not imply an acceptance of the illegal overthrow of the Hawaiian monarchy in 1893, the subsequent United States actions of annexation, territorial government and statehood. This testimony notes that the lands were ceded without the consent of or compensation to the Native Hawaiian people of Hawaii or other sovereign government (P.L. 103-15019)

² Public Law 103-150 (1993)

“Whereas, the Republic of Hawaii also ceded 1,800,000 acres of crown, government, and public lands of the Kingdom of Hawaii, without the consent of or compensation to the Native Hawaiian people of Hawaii or their sovereign government.”

“Whereas, the indigenous Hawaiian people never directly relinquished their claims to their inherent sovereignty as a people or over their national lands to the United States, either through their monarchy or through a plebiscite or referendum”

Upon statehood in 1959, the federal government returned to the State of Hawai‘i all ceded lands not set aside for its own use. Section 5(f) of the Admission Act, directed the state to hold the lands in trust, listed the following five purposes: 1. The support of public education; 2. The betterment of the conditions of native Hawaiians as defined in the Hawaiian Homes Commission Act of 1920; 3. The development of farm and home ownership; 4. The making of public improvements; and 5. The provision of lands for public use.

Thus, the Federal Government delegated a portion of its fiduciary duties to the indigenous peoples of Hawai‘i, which courts have found must be “judged by the most exacting fiduciary standards,” to the State of Hawai‘i via the Admissions Act, Section 5(f) of the public trust lands. Yet 63 years after statehood, the State does not have a complete inventory of classified public trust lands. In addition, a complete inventory of ceded lands, including classifications by former Kingdom Government and Crown lands, and by holdings by the federal, state and county governments, is critical for the federal government to uphold its federal trust responsibility to Native Hawaiians.

OHA works to advocate on behalf of the Native Hawaiian community for the protection of the Native Hawaiian culture, language, and people. The ocean and its resources are integral, not only to Native Hawaiian culture, but to the identity of the Native Hawaiian people. Protecting the health and life of the ocean is in essence, tantamount to protecting the health and life of the Native Hawaiians, Hawai‘i, and all those who call Hawai‘i home. Without the ocean, there is no life.

The global consensus on seabed mining has been moving toward a prohibition on the exploitation of seabed minerals to protect the health of the ocean, with indigenous peoples across the world leading the charge. Following a meeting of the International Group of Seven (G7) in Berlin from May 26-27, 2022, the G7 Ministers of Climate, Energy, and the Environment released a Communiqué highlighting the G7’s position that deep-sea mining could have **“potentially devastating impacts on marine ecosystems and the functioning of the ocean as a climate regulator”** and stated that the international regulation of deep-sea mining is necessary.³ During the 2022 UN Ocean Conference in Lisbon, the nations of Palau and Fiji launched an alliance advocating for a

³ International Group of Seven, “G7 Climate, Energy and Environment Ministers’ Communiqué”, G7 Germany 2022, May 27, 2022 (available at https://www.bmu.de/fileadmin/Daten_BMU/Download_PDF/Europa_International/g7_climate_energy_environment_ministers_communique_bf.pdf)

moratorium on deep sea mining.⁴ the Prime Minister of Fiji called for a ban on deep seabed mining by 2030, and it was noted by the conference that “[c]ivil society representatives almost uniformly advocated a moratorium on deep seabed mining.”⁵ Prior to the UN-affiliated International Seabed Authority Council in Kingston, Jamaica, from October 31 – November 11, 2022, 10 of the Council’s 36 member states took positions against deep sea mining, with **Germany, France, Spain, Costa Rica, New Zealand, Chile, Panama, Fiji, and the Federated States of Micronesia demanding “a moratorium on mining due to a lack of scientific data on the areas of the seabed targeted for exploitation”**, while at the 2022 United Nations Climate Change Conference, **President Emmanuel Macron of France “called for an outright ban on deep sea mining”**.⁶

OHA supports the purpose of this measure and the spirit of the language to ensure that Hawaii will align with the growing global consensus regarding seabed mining by prohibiting such practices, this prohibition will not detract from existing Native Hawaiian rights, practices, and privileges by explicitly exempting Native Hawaiian rights, practices, and privileges from the prohibition.

OHA appreciates the opportunity to support this measure and asks the Legislature to **PASS SB376 SD1** to preserve and protect Native Hawaiian cultural rights, practices, and traditions and our precious natural environment. Mahalo nui loa.

⁴ Catarina Demony et al, “‘Not worth the risk’: Palau, Fiji call for deep-sea mining moratorium”, Reuters, June 27, 2022 (available at <https://www.reuters.com/business/environment/not-worth-risk-palau-fiji-call-deep-sea-mining-moratorium-2022-06-27/>)

⁵ United Nations, “Report of the 2022 United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development”, UN Ocean Conference in Lisbon, Portugal, June 27 – July 1, 2022, (available at <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N22/454/51/PDF/N2245451.pdf?OpenElement>)

⁶ Woody, Todd, “More Governments Are Turning Against the Rush to Mine the Deep Sea”, Bloomberg News, November 7, 2022 (available at <https://www.bloomberg.com/news/articles/2022-11-07/more-governments-are-turning-against-the-rush-to-mine-the-deep-sea>)



UNIVERSITY OF HAWAII SYSTEM

‘ŌNAEHANA KULANUI O HAWAII

Legislative Testimony

Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

Testimony Presented Before the
Senate Committee on Judiciary
Friday, February 24, 2023 at 9:30 a.m.

By

Jeffrey Drazen, PhD

Department of Oceanography

And

Charles "Chip" Fletcher

Interim Dean

School of Ocean and Earth Science and Technology

And

Michael Bruno, Provost

University of Hawai'i at Mānoa

SB 376 SD1 – RELATING TO THE ENVIRONMENT

Chair Rhoads, Vice Chair Gabbard, and Members of the Committee:

The University of Hawai'i supports the intent SB 376 SD1.

My name is Jeffrey Drazen and I am a professor in biological oceanography at the Department of Oceanography, School of Ocean and Earth Science and Technology, and a deep-sea ecologist at University at Hawai'i. In these roles, I can attest to the amazing diversity of life that thrives in the deep waters of our state and beyond. The deep sea, waters below about 600 feet, are challenging for most of us to envision because we can't easily go there and nature documentaries provide us only snapshots of its inhabitants in a poorly lit realm. It's easy for this important habitat to be out of sight and thus out of mind. However, that does not make these waters any less important than our coral reefs.

The state's second largest fishery harvests snappers from depths of 300 to over 1000 feet down. The ahi that we enjoy often dive to depths of 1500 feet and opah and swordfish to 3000 feet to forage for squid, lanternfish and other deep-sea species. The ocean's ability to take up carbon dioxide and sequester it out of the atmosphere relies on the deep ocean. Its communities migrate from the shallows at night where they feed to the depths during the day and thus transport carbon deeper into the ocean. In short, though we may not easily see the deep sea, we are connected to it and we rely on it.

Deep-sea mining poses many risks to the deep sea. Industrial sized vehicles will crush corals, sponges and other seafloor animals. Some deep-sea corals in Hawai'i live for several thousand years. Studies of the resilience of deep-sea ecosystems suggests that

recovery will likely take many decades to hundreds of years. In the case of polymetallic nodules which form over millions of years and that are the habitat for much of the life in nodule beds, this fauna will not recover and biodiversity could be lost. The harvesting of metals and their return to a surface ship also recovers much unwanted mud which will then be discharged back into the ocean, possibly into deep midwaters. This mud will also contain an unknown amount of dissolved metals some of which are toxic to marine life. These could harm the midwater communities which provide food for the fish species we harvest, or even toxify our seafood supply.

Mining in state waters seems unlikely. However, should it occur, there is a high potential for this industrial activity to harm our deep waters and for mud plumes to affect shallow nearshore habitats as well.

Thank you for the opportunity to testify on SB 376 SD1.



Senate Committee on Judiciary

Hearing: Friday, February 24, 2023

TESTIMONY IN SUPPORT OF SB376: RELATING TO THE ENVIRONMENT

The Hawaii State Youth Commission (HiYC) was established to “advise the governor and legislature on the effects of legislative policies, needs, assessments, priorities, programs, and budgets concerning the youth of the state.” We are writing in strong support of SB376.

The youth of today and tomorrow deserve clean waters with healthy, robust ecosystems, and we believe that the government has an obligation to preserve our oceans. Seabed mining poses significant risks to the conditions of our waters, and particularly to the health of our fragile marine life ecosystems. The extraction of minerals from the seabed is a geologically disruptive process, resulting in the damage and possible destruction of our coral reefs and harm to our marine wildlife, the populations of which have long been at risk due to other issues such as overfishing, pollution, and ocean acidification. Allowing seabed mining would only serve to exacerbate these problems.

Furthermore, the ocean and the deep sea in particular hold significance to the Native Hawaiian community, culturally, socially, and politically. The continued degradation of our oceans and environment, often in the pursuit of profit, has caused many of the historical injustices and modern day disparities that the community experiences today. As such, it is even more necessary that our treatment of processes such as seabed mining is one of extreme caution. Banning seabed mining would be an important first step towards preventing these disparities from widening and promoting equity for our keiki.

We believe that the government has a responsibility to protect our oceans and communities by preventing the harm that seabed mining could create, and urge the Senate Judiciary Committee to pass SB376.

Thank you for your consideration of our testimony in support of this important bill.

The Hawai'i State Youth Commission
hawaiistateyc@gmail.com



To: The Honorable Chair Karl Rhoads, the Honorable Vice Chair Mike Gabbard, and members of the Senate Committee on Judiciary

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

Re: Hearing SB376 SD1 **RELATING TO THE ENVIRONMENT**

Hearing: Friday, February 24, 2023, 9:30 a.m.

Aloha Chair Rhoads, Vice Chair Gabbard, and members of the Committee:

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 SB376 SD1

This Act would prohibit the mining, extraction and removal of minerals from the seabed in all state marine waters.

Seabed mining poses an unacceptably high risk of damage and disruption to the marine environment, including our globally significant ecosystems that host thousands of species. It may harm coral reefs, release stored carbon dioxide, and its noise may disrupt whales, dolphins and other marine mammals. It also may harm ocean-dependent industries such as commercial and recreational fishing and tourism. The Legislatures of California, Oregon, and Washington have all passed similar legislation.

We thank the committee for hearing this important measure! We respectfully urge your passage of SB376 SD1 in order to protect our marine ecosystems and ocean-dependent industries.

Mahalo!

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

SB-376-SD-1

Submitted on: 2/22/2023 7:57:57 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Kahi Pacarro	Testifying for Parley for the Oceans	Support	Written Testimony Only

Comments:

As the lead for Parley for the Oceans in Hawaii and the Pacific Region, I humbly express my full support for this bill. This intelligent bill goes beyond just banning the extraction practices of corporations in our state waters but also negates their ability to use our ports at the expense of our community if they are somehow able to mine outside of our state waters. It is our hope that a global moratorium is held up to stop deep seabed mining, but proactive steps like these show that our State has the foresight to make sure we do our part to protect our oceans.



Environmental Caucus of
The Democratic Party of Hawai'i

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

Re: **SB 376 SD 1 – RELATING TO THE ENVIRONMENT**

Hearing: Friday, February 24, 2023, 9:30 a. m., Conference 016 & via Videoconference

Position: **Strong support**

Aloha, Chair Rhoads, Vice Chair Gabbard, and Members of the Committee on Judiciary:

The Environmental Caucus of the Democratic Party of Hawai'i stands in strong support of SB 376, SD1. This measure would prohibit the mining, extraction, and removal of minerals from the seabed in all state marine waters. It would also prohibit the issuance of any permit for or in connection with the development or operation of any facility or infrastructure associated with the mining, extraction, or removal of minerals from the seabed within state marine waters.

As provided in the Democratic Party of Hawai'i Platform adopted at the DPH State Convention on May 28, 2022, our policy is 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 of [Article XI, Section 1 of] the Hawai'i State Constitution. [State Constitution – LRB Legislative Reference Bureau \(hawaii.gov\)](#) We support policy that incorporates indigenous resource-management practices and technologies such as the Ahupua'a System in modern urban planning and development to create an ecologically sustainable balance between the needs of the people and the rights of nature. [OUR PLATFORM | DPH \(hawaiidemocrats.org\)](#)



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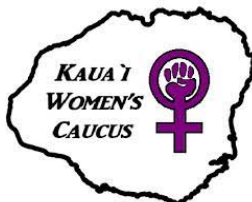
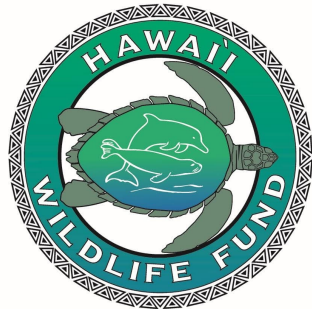
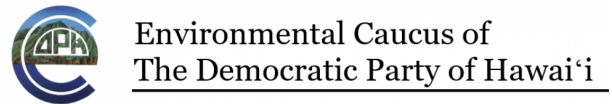
Prohibiting the mining, extraction, and removal of minerals from the seabed in all state marine waters and prohibiting the issuance of any permit for or in connection with the development or operation of any facility or infrastructure associated with the mining, extraction, or removal of minerals from the seabed within state marine waters are consistent with the Public Trust Doctrine and the policies of the Democratic Party of Hawaii Environmental Platform plank, to wit, that (1) all people have the right to live in a clean, healthy and safe environment; (2) 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; and (3) that enrolled members support the restoration, preservation, and protection of native ecosystems.

Here, mining, extracting, and removing minerals from the seabed in all state marine waters would be inconsistent with the Democratic Party of Hawaii Platform environmental plank that calls to restore, preserve, and protect our native ecosystems.

Please support and pass this bill.

/s/ Melodie Aduja & Alan Burdick

Co-Chairs, Environmental Caucus of the Democratic Party of Hawai'i



To: The Honorable Chair Karl Rhoads, the Honorable Vice Chair Mike Gabbard, and Members of the Senate Judiciary Committee

Aloha Chair Rhoads, Vice Chair Gabbard, and Members of the Judiciary Committee,

We write to express our thanks and support for your leadership in authoring Senate Bill 376 to 1) prohibit the mining, extraction, and removal of minerals from the seabed in Hawai'i's marine waters; and 2) prohibit the issuance of any permit for or in connection with the development or operation of any facility or infrastructure associated with the mining, extraction, or removal of minerals from the seabed within state marine waters.

Every new research dive to the seafloor reveals amazing wildlife and new discoveries about the role the deep sea plays in the health of our ocean and our lives. Seabed mining directly destroys whole communities of life on the seafloor, leaving behind habitat that may never recover. Mining also creates extremely large and potentially toxic sediment plumes; as well as noise, light, and thermal pollution that disrupt marine habitats. [More than 700 ocean scientists](#) have called for a halt to seabed mining citing the risks it poses to ocean health and the well-being of coastal communities.

Hawai'i cannot afford to risk losing our social, cultural, and economic connections to the sea. The seafloor and ocean underpin Hawai'i's cultural heritage, along with its multi-billion dollar tourism and fishing industries. As the extractive industry grows, seabed mining activities pose a large-scale disruption to these important ecosystems. Seabed mining would harm commercially and recreationally important species like tuna/ahi, mahi-mahi, billfish and other species as well as the overall health of our ocean.

The State of California passed a ban on seabed mining in state waters last year in 2022, following Washington's seabed mining ban in 2021 and Oregon's in 1991. The undersigned organizations urge Hawai'i to do the same and ensure passage of SB376 to protect Hawai'i's coastal waters.

Thank you.

Sincerely,

Koda Daily
Executive Director
Sustainable Ocean Alliance Hawai'i

Kahi Picarro
Director
Parley for the Oceans, Hawai'i

Wayne Tanaka
Director
Sierra Club of Hawai'i

Dyson Chee
Executive Director
Hawai'i Youth Climate Coalition

Megan Lamson
President
Hawai'i Wildlife Fund

Denise Antolini
Director
Mālama Pūpūkea-Waimea

Ted Bohlen
Co-founder
Hawai'i Reef and Ocean Coalition

Arnie Saiki
Management
Deep Sea Mining Campaign

Sherry Pollack
Co-founder
350Hawai'i

Alan Burdick & Melodie Aduja
Co-chairs
Environmental Caucus of the Democratic
Party of Hawai'i

Nina Jensen
Chief Executive Officer
Rev Ocean

Lisa Bishop
President
Friends of Hanauma Bay

Carissa Cabrera
Chief Executive Officer
The Conservationist Collective
Lance Morgan
President
Marine Conservation Institute

Laurel Brier
Chair
Kauai Women's Caucus

Donna Wong
Executive Director
Hawai'i's Thousand Friends

Rafael Bergstrom
Executive Director
Sustainable Coastlines Hawai'i

Neal Desai
Senior Director of Field Operations, Pacific
National Parks Conservation Association

Courtney Vail
Director of Strategic Campaigns
Oceanic Preservation Society

Lauren Blickley
Hawai'i Regional Manager
Surfrider Hawai'i

Stan Rowland
CEO; Chairman
Blue Climate Initiative; Tetiaroa Society

Douglas McCauley
Director
Benioff Ocean Science Laboratory

Jeff Boehm
Chief External Relations Officer
The Marine Mammal Center

Bobbi-Jo Dobush
Legal Officer
The Ocean Foundation

John Hocevar
Oceans Campaign Director
Greenpeace USA

Kelvin Passfield
Technical Director
Te Ipukarea Society

SB-376-SD-1

Submitted on: 2/22/2023 11:54:55 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Mike Nakachi	Testifying for Moana Ohana	Support	Written Testimony Only

Comments:

Support Kanaka in their beliefs of Aloha for Aina to Malama Aina that leads to the restoration of Aina Momona, if the green fee is another way to help and support this belief then I am in support of this,

NOT for Commerical gain! nuff already! Mahalo, Mike

SB-376-SD-1

Submitted on: 2/22/2023 11:28:07 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
LIBRADO COBIAN	Testifying for AAC	Oppose	Written Testimony Only

Comments:

I don't oppose the intent but I OPPOSE THE HYPOCRISY aid this Ban . It is proposed by the geen new seal folks that ar pushing EV's and Solar Panels who are OK with the Pillaging and devastation of Ocean waters just 12 miles outside Hawaii , so that there will be enough critical minerals supplies for EV's and Solar Panels .Unfortunately this is just a symbolic legislative gesture that will do absolutely nothing to protect our Ocean Waters . It's like the Consumer Products Plastic Ban bill for Hawaii when the real source of plastic of the Ocean is from foreign countries and especially the fishing industry, but that's not addressed , instead they force business to buy biodegradable cups , bags, spoons etc.... while we allow our neighboring countries to dump all their plastic in rivers and oceans . This Ban only covers Hawaii waters 12 miles around but right outside Mining corporation with stakeholders from China can contaminate and pillage the ocean floors . If the supporters of this ban are serious, this bill should also contain a provision of prohibiting Mining Company Ships and drill rigging barges and equipment from docking in the State of Hawaii for maintenance or operations support as well . Otherwise the Bill's prohibition serves absolutely no purpose with Hawaii allowing the rest of the Oceans outside our 12 mile zone to be destroyed and allowing those Mining Companies to use the Islands of Hawaii for docking support . Li Cobian



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

Re: **SB 376 – Relating to Environmental Protection; Seabed Mining; Permits; Prohibition**

Position: **Strong Support**

Aloha Chair Rhoads, Vice Chair Gabbard, and Members of the Committee,

Thank you for your leadership on this bill, SB 376, prohibiting the mining, extraction, and removal of minerals from the seabed in all state marine waters; and the issuance of any permit for or in connection with the development or operation of any facility or infrastructure associated with the mining, extraction, or removal of minerals from the seabed within state marine waters. I appreciate the opportunity to testify and express my strong support for this bill. Every new research dive to the seafloor reveals amazing wildlife and new discoveries about the role the deep sea plays in the health of our ocean and our lives. Seabed mining directly destroys whole communities of life on the seafloor, leaving behind habitat that may never recover. Mining also creates extremely large and potentially toxic sediment plumes; as well as noise, light, and thermal pollution that disrupt marine habitats. [More than 700 ocean scientists](#) have called for a halt to seabed mining citing the risks it poses to ocean health and the well-being of coastal communities. [Major companies](#) including Google, BMW, Philips, Volkswagen, and more also support an international moratorium, [alongside major NGOs](#) such as World Wildlife Fund, The Nature Conservancy, Conservation International, Pew Charitable Trusts, and many others.

This extractive industry of seabed mining poses many risks that are yet to be fully understood. The fishing and tourism industries are likely to feel the impacts of mining, even mining that happens in the high seas outside of the Hawaiian EEZ. I ask that you please pass this bill, reinforcing Hawai'i's role as leaders in environmental stewardship. Thank you for this opportunity.

Sincerely,
Douglas McCauley

A handwritten signature in black ink that reads "Douglas McCauley". The signature is written in a cursive, flowing style.

Director, Benioff Ocean Science Laboratory

SB-376-SD-1

Submitted on: 2/22/2023 1:48:10 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Lisa Bishop	Testifying for Friends of Hanauma Bay	Support	Written Testimony Only

Comments:

Aloha Chair Rhoads, Vice Chair Gabbard, and JDC Committe members,

Friends of Hanauma Bay strongly supports SB376 SD1!

Seabed mining poses an unacceptably high risk of damage and disruption to the marine environment, including our globally significant and highly endemic ecosystems that host thousands of species. It also may pose a threat to ocean-dependent industries such as commercial and recreational fishing and tourism.

The Legislatures of California, Oregon, and Washington have already passed similar legislation.

We thank the committees for hearing this important measure! We respectfully urge your passage of SB376 in order to protect our marine ecosystems and ocean-dependent industries.

With Aloha,

Lisa Bishop

President

Friends of Hanauma Bay

SB-376-SD-1

Submitted on: 2/22/2023 11:54:28 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Lauren Blickley	Testifying for Surfrider Foundation	Support	Written Testimony Only

Comments:

Surfrider Foundation strongly supports SB376. Seabed mining directly destroys whole communities of life on the seafloor, leaving behind habitat that may never recover. Mining also creates extremely large and potentially toxic sediment plumes; as well as noise, light, and thermal pollution that disrupt marine habitats. [More than 700 ocean scientists](#) have called for a halt to seabed mining citing the risks it poses to ocean health and the well-being of coastal communities.

The State of California passed a ban on seabed mining in state waters last year in 2022, following Washington's seabed mining ban in 2021 and Oregon's in 1991. Surfrider Foundation urges Hawai'i to do the same and ensure passage of SB376 to protect Hawai'i's coastal waters.

Mahalo,

Lauren Blickley

Hawai'i Regional Manager

Surfrider Foundation

SB-376-SD-1

Submitted on: 2/23/2023 8:53:02 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Inga Gibson	Testifying for For the Fishes, Animal Welfare Institute	Support	Written Testimony Only

Comments:

RE: SUPPORT SB376 RELATING TO THE ENVIRONMENT; Ocean mining

Dear Chair Rhoads, Vice Chair Gabbard and Senate Judiciary Committee members,

Opening our waters to ocean mining could have far-reaching detrimental impacts to many marine species, from fish to marine mammals. In addition to potential direct negative environmental impacts such as pollution and sedimentation clouds, the practice of mining itself could create noise pollution for many highly sensitive species, even disrupting larval dispersal.

Further, recent research suggests that deep-sea mining activities could impact species present from the surface of the ocean through the seabed, with deep-sea species being particularly vulnerable since they use natural sound to perform functions like detect food, and are not accustomed to anthropogenic noise at a close range. Many deep-sea species are also sessile, which means they wouldn't be able to evade the noise created by deep-sea mining activities. Even migratory species like whales, dolphins and turtles could be impacted, even if only briefly passing through a mining area to feed or breed.

Our marine resources and their sensitive, interconnected ecosystems are far too valuable to be subjected to such dangerous, extractive activities.

We urge the Committee's support of SB376.

Thank you, Inga Gibson

On behalf of Animal Welfare Institute and For the Fishes

Inga Gibson, Policy Director
Pono Advocacy LLC
808.922.9910
PonoAdvocacy@gmail.com
www.PonoAdvocacy.com



Aloha Committee Members,

My name is Arwen Revere and I am a high school student from Kailua. Today, I am representing the environmental organization Wild Kids. We strongly support SB376 which would prohibit mining, extracting, and removing minerals from the seabed in all state marine waters as well as prohibit the issuance of any permit for or in connection with the development or operation of any facility or infrastructure associated with the mining, extraction, or removal of minerals from the seabed within state marine waters.

Seabed mining poses an unacceptably high risk of damage and disruption to marine environments and the wildlife that inhabits them. Additionally, this practice is not consistent with the public interest, including the right that each person has to a clean and healthy environment as enshrined in Article XI, section 9, of our State Constitution.

Thank you for hearing our testimony,

Arwen Revere on behalf of Wild Kids

SB-376-SD-1

Submitted on: 2/23/2023 11:31:24 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

LATE

Submitted By	Organization	Testifier Position	Testify
Claudia Kalaola	Testifying for Na Mamo O Mu'olea - a non profit organization	Support	Written Testimony Only

Comments:

Mahalo for the opportunity to testify.

We, myself and members of Na Mamo O Mu'olea (28 people) are in support of this bill.

Aloha,

Claudia Kalaola

Na Mamo O Mu'olea

SB-376-SD-1

Submitted on: 2/23/2023 7:01:42 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Maki Morinoue	Testifying for HULI PAC	Support	Written Testimony Only

Comments:

The Honorable Chris Lee

Hawai'i State Senate

Hawai'i State Capitol, Room 219

415 S Beretania St, Honolulu, HI 96813

Dear Senators Lee, Chang, Kanuha, Keith-Agaran, McKelvey, Rhoads, Dela Cruz, Fukunaga, and Moriwaki:

We write to express our thanks and support for your leadership in authoring Senate Bill 376

to 1) prohibit the mining, extraction, and removal of minerals from the seabed in Hawai'i's marine waters; and 2) prohibit the issuance of any permit for or in connection with the development or operation of any facility or infrastructure associated with the mining, extraction, or removal of minerals from the seabed within state marine waters.

Every new research dive to the seafloor reveals amazing wildlife and new discoveries about the role the deep sea plays in the health of our ocean and our lives. Seabed mining directly destroys whole communities of life on the seafloor, leaving behind habitats that may never recover. Mining also creates extremely large and potentially toxic sediment plumes; as well as noise, light, and thermal pollution that disrupt marine habitats. [More than 700 ocean scientists](#) have called for a halt to seabed mining citing the risks it poses to ocean health and the well-being of coastal communities.

Hawai'i cannot afford to risk losing our social, cultural, and economic connections to the sea.

The seafloor and ocean underpin Hawai'i's cultural heritage, along with its multi-billion dollar tourism and fishing industries. As the extractive industry grows, seabed mining activities pose a large-scale disruption to these important ecosystems. Seabed mining would harm commercially

and recreationally important species like tuna/ahi, mahi-mahi, billfish, and other species as well as the overall health of our ocean.

The State of California passed a ban on seabed mining in state waters last year in 2022,

following Washington's seabed mining ban in 2021 and Oregon's in 1991. The undersigned organizations urge Hawai'i to do the same and ensure the passage of SB376 to protect Hawai'i's coastal waters.

Mahalo!

Sincerely,

Maki Morinoue

96725

HULI PAC

Koda Daily

Executive Director

Sustainable Ocean Alliance Hawai'i

Wayne Tanaka

Director

Sierra Club of Hawai'i

Kahi Picarro

Director

Parley for the Oceans, Hawai'i

Dyson Chee

Executive Director

Hawai'i Youth Climate Coalition

Megan Lamson

President

Hawai'i Wildlife Fund

Denise Antolini

Director

Mālama Pūpūkea-Waimea

Ted Bohlen

Co-founder

Hawai'i Reef and Ocean Coalition

Arnie Saiki

Management

Deep Sea Mining Campaign

Sherry Pollack

Co-founder

350Hawai'i

Alan Burdick & Melodie Aduja

Co-chairs

Environmental Caucus of the Democratic Party of Hawai'i

Nina Jensen

Chief Executive Officer

Rev Ocean

Lisa Bishop

President

Friends of Hanauma Bay

Carissa Cabrera

Chief Executive Officer

The Conservationist Collective

Lance Morgan

President

Marine Conservation Institute

Laurel Brier

Chair

Kauai Women's Caucus

Donna Wong

Executive Director

Hawai'i's Thousand Friends

Rafael Bergstrom

Executive Director

Sustainable Coastlines Hawai'i

Neal Desai

Senior Director of Field Operations, Pacific

National Parks Conservation Association

Courtney Vail

Director of Strategic Campaigns

Oceanic Preservation Society

Lauren Blickley

Hawai'i Regional Manager

Surfrider Hawai'i

Stan Rowland

CEO; Chairman

Blue Climate Initiative; Tetiaroa Society

Douglas McCauley

Director

Benioff Ocean Science Laboratory

Jeff Boehm

Chief External Relations Officer

The Marine Mammal Center

Bobbi-Jo Dobush

Legal Officer

The Ocean Foundation

John Hocevar

Oceans Campaign Director

Greenpeace USA

Kelvin Passfield

Technical Director

Te Ipukarea Society

SB-376-SD-1

Submitted on: 2/23/2023 1:19:06 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
John Starmer	Testifying for Maui Nui Marine Resource Council	Support	Written Testimony Only

Comments:

23 February 2023

Kihei, Maui, Hawaii

Dear Committee Members-

I am presenting this testimony on behalf of the Maui Nui Marine Resource Council to state our strong support for SB376 which would prohibit the mining, extraction, and removal of minerals from the seabed in all state marine waters.

Internationally, seabed mining is recognized as likely to cause irreparable harm and threaten the health of marine ecosystems. It is the marine equivalent of the discredited practice of terrestrial strip mining, in this case offshore and further from public scrutiny. Apart from its own direct impacts, such as light pollution, noise disturbance, sediment plumes, and biodiversity loss due to habitat destruction and fragmentation; it would add further burden to other stressors including ocean littering, chemical pollutants, negative effects on fisheries management, and climate change. The magnitude of this threat is greater still when taking into consideration that over 90% of our biosphere lies within the midwater ecosystems that this form of mining would affect- a habitat boasting fish biomass levels 100 times higher than yearly fishing catches worldwide - which link shallow-sea communities with deep-marine ones while playing a crucial role in nutrient renewal cycles and carbon export/storage processes.

It is worth additionally highlighting that the very justification for the supposed need to exploit deep-sea mineral deposits is waning. Cobalt, for example, is one of the minerals used to justify the need for deep-sea mining. It is, at present, a critical component of the batteries that power our computers, smartphones, and electric vehicles. While demand peaked during the Covid crisis, demand, along with price, has now plummeted while production continues to increase with the expansion of copper and nickel mines, of which cobalt is a byproduct. In addition, the electric vehicle batteries that this mineral is used in are starting to become a source of this mineral as older batteries reach their end of life and become available for recycling. The combination of increased terrestrial production and

the increasing availability of recycled cobalt make justifying the expensive and harmful practice of seabed mining this particular mineral increasingly difficult to rationally justify.

Again, we strongly support SB376 as legislation that will protect Hawai'i's vital ocean ecosystem from unnecessary harm.

Mahalo nui for allowing me to testify on this important matter.

John Starmer,

Chief Scientist, MNMRC



Aloha Committee Chair Rhoads, Vice Chair Gabbard, and members of the Committee,

I submit written testimony supporting SB376 as a marine biologist focused on the little-known habitats and animals of the deep ocean, and how our actions are impacting them. Although now based at the Benioff Ocean Science Laboratory at the University of California, Santa Barbara, I spent many years as a researcher at the School of Ocean and Earth Science and Technology at the University of Hawai'i at Manoa.

Thank you for the opportunity to testify and express my strong support for SB376 1) Prohibiting the mining, extraction, and removal of minerals from the seabed in all state marine waters; and 2) Prohibiting the issuance of any permit for or in connection with the development or operation of any facility or infrastructure associated with the mining, extraction, or removal of minerals from the seabed within state marine waters.

Most of Hawai'i's deep sea is unexplored and poorly understood, but despite this, we know it is home to incredible biodiversity. This includes some of the world's oldest gold and black corals, aged at many thousands of years old. The richness and diversity of life in Hawai'i's deep sea supports ecosystem processes necessary for ocean and planetary systems to function, and is connected to Hawai'i's shallow seas, coasts and land. It is also an integral part of the culture and well-being of local communities, as well as ocean-dependent industries.

Deep-sea mining would result in the irreversible loss of biodiversity, ecosystems and their functioning before we know, understand and value them. These impacts could have far-reaching effects, from the potential contamination of commercially important species of food fish, such as ahi and opah, to impacts on carbon sequestration dynamics and climate regulation.

As a scientist, I deeply value evidence-based decision making, especially in instances as consequential as a decision to open up an entirely new frontier of the ocean to large-scale industrial resource exploitation. This is why [more than 700 scientists](#) have signed a statement calling for a delay to the start of deep-sea mining in international waters. The sheer importance of the ocean to Hawai'i's planet and people, and the risk of large-scale and permanent loss of biodiversity and ecosystems necessitates a pause of all efforts to begin mining of the deep sea, in line with the precautionary principle, and an acceleration of research so that we can gain a better understanding of what is at stake.



Sincerely,

A handwritten signature in black ink, appearing to read "Diva Amon".

Diva Amon, Ph.D.

Science Advisor

Benioff Ocean Science Laboratory & Deep Ocean Stewardship Initiative

SB-376-SD-1

Submitted on: 2/21/2023 2:18:58 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
B.A. McClintock	Individual	Support	Written Testimony Only

Comments:

Please support this important bill. Mahalo.

SB-376-SD-1

Submitted on: 2/21/2023 3:02:40 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Jenny Yagodich	Individual	Support	Written Testimony Only

Comments:

Strong SUPPORT for SB376 to prohibit the mining, extraction, and removal of minerals from the seabed in all state marine waters which would have devastating impacts on marine ecosystems and the functioning of the ocean as a climate regulator.

Mahalo nui

SB-376-SD-1

Submitted on: 2/21/2023 4:05:03 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Scott Crawford	Individual	Support	Written Testimony Only

Comments:

I support this bill! Seabed mining has many uncertain impacts and consequences on our marine ecosystem, and we can be leaders in ocean protection by banning it in state waters.

SB-376-SD-1

Submitted on: 2/21/2023 5:25:17 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Kelvin Passfield	Individual	Support	Written Testimony Only

Comments:

Our Society strongly supports this bill. Seabed mining will have unknown consequences for our ocean and planet. Noise pollution for migratory species including whales, sediment plumes drifting accross national maritime boundaries and smothering living organisms not yet discovered, and many many more. Technology is evolving so fast thay by the time these seabed minerals are being mined, different types of batteries will be avialable made from materials available using methods that pose much less risk than mining our seabed.

SB-376-SD-1

Submitted on: 2/21/2023 8:23:21 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
KODA DAILY	Individual	Support	Written Testimony Only

Comments:

Dear Member of the Hawai'i State Legislature,

I am writing, as a citizen and voter, to express my strong support for Bills SB376 and HB186 prohibiting deep-seabed mining in Hawai'i state waters.

The deep ocean is home to a rich biodiversity that we are just starting to discover and to understand. It is also the primary regulator of our climate, therefore our greatest ally to achieve our climate goals and the Hawai'i carbon neutrality target by 2045.

Deep sea mining would have irreversible consequences on marine biodiversity and our global climate. Because of this, and the lack of scientific knowledge about deep ecosystems that we know less than the surface of Mars, the scientific community calls on World leaders to make the precautionary principle prevail and prevent this industry from starting [1].

Deep seabed mining could start as early as July 2023, and Hawai'i would be on the forefront of its impacts. It would take only three months for the pollution discharged by mining companies in the Clarion Clipperton Zone to reach Hawaiian waters. It would affect our fisheries and other marine industries on which our community depends [2].

Pacific Parliamentarians (Palau, Fiji, Samoa, Federated States of Micronesia) were the first to unite their efforts to protect their waters, and helped inspire the global coalition of 13 States (Chile, Costa Rica, Ecuador, Panama, New Zealand, Germany, Spain, France and Canada recently) now opposing the start of this industry at the International Seabed Authority [3].

In the United States, California, Oregon, and Washington have all passed similar legislation that prohibits deep-sea mining in state waters, and Guam passed a resolution calling on the US government to support a deep-sea mining moratorium in the high seas. [4]

Protecting the ocean runs deep in our cultural heritage, in who we are as people from Hawai'i: we have a historical responsibility to add our voices to this movement before the first deep sea mining licenses are issued.

We ask you to listen to the science and to ban deep sea mining, in Hawai'i's territorial waters as well as in the high seas. We are counting on you to preserve the deep ocean and its invaluable role in keeping the planet habitable.

Sources:

[1]<https://www.seabedminingsciencestatement.org>

[2]Carlos Muñoz-Royo et al, Extent of impact of deep-sea nodule mining midwater plumes is influenced by sediment loading, turbulence and thresholds, Communications Earth & Environment (2021)

[3]<https://savethehighseas.org/voices-calling-for-a-moratorium-governments-and-parliamentarians/>

[4]<https://www.pewtrusts.org/en/research-and-analysis/articles/2022/09/19/new-california-law-bars-seabed-mining-in-state-water>

SB-376-SD-1

Submitted on: 2/21/2023 10:36:02 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Will Caron	Individual	Support	Written Testimony Only

Comments:

Seabed mineral mining is not consistent with the public interest, including the right that each person has to a clean and healthy environment as enshrined in Article XI, section 9, of the State Constitution. Seabed mining poses an unacceptably high risk of damage and disruption to the marine environment of the state. It is in the best interest of the people and ecosystems of Hawai‘i that leasing for hard mineral mining on the seafloor be prohibited. Please support SB376 SD1.

SB-376-SD-1

Submitted on: 2/22/2023 12:02:55 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Arnie Saiki	Individual	Support	Written Testimony Only

Comments:

"Hānau kāne iā wai ‘ololī, ‘o ka wahine iā wai ‘ololā." --Kumulipo

As descendants of the ocean and the stream, we are a people of the water, deeply rooted in the shellfish, coral, clams, and all the dwellers of our seabeds. The seabed is our creation story. The seabed is our history and is rooted in our spirituality and philosophy. The commercial exploitation of our seabeds by industrial mining is a grave trespass upon an entire people. The noise and plumes alone will damage endemic species and the consideration of this technology to be used to extract minerals from our seabeds is not simply an economic consideration, it is an existential one. Until there is free prior and informed consent by our people, we must assert a ban on all seabed mining in our waters. The lessons of the industrial age in the 19th and 20th centuries should remind us that this is not the kind of technology we should be considering in the 21st century when climate change and the growing extinction of species threaten the biodiversity of life on our planet.

SB-376-SD-1

Submitted on: 2/22/2023 7:17:32 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Carissa Cabrera	Individual	Support	Written Testimony Only

Comments:

Aloha Chairs, Vice Chairs, and Members of the Committee,

Since the last hearing on these bills, Canada has employed a moratorium on deep seabed mining during the conclusion of the Fifth International Marine Protected Area Conference, setting the stage as a global leader in North America. It is time we do the same for the United States.

My name is Carissa Cabrera and I am a marine conservation biologist who has been working locally with ocean nonprofit in Hawai'i for over 8 years to scale their work. I am testifying in strong support of SB376 SD1 and urge committee leadership to protect our deep sea as the largest carbon sink on our planet and as an ecosystem that we do not understand well enough to disrupt at this scale.

For your awareness, it is unlikely that DSM operations would take place directly in Hawaii state waters, as we do not have coveted nodules or minerals directly here. However, the Clarion-Clipperton Zone is the most coveted place on the planet for these nodules, and is extremely close to Hawai'i. This means that mining groups sourcing minerals from that region could base their operations out of Hawai'i if this bill does not become law. Please pass this bill with no amendments.

With aloha,

Carissa Cabrera

The Conservationist Collective

SB-376-SD-1

Submitted on: 2/22/2023 8:01:11 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Cynthia Punihaole Kennedy	Individual	Support	Written Testimony Only

Comments:

I strongly support SB 376 prohibiting mining, extracting, and removing of minerals from the seabed.

SB-376-SD-1

Submitted on: 2/22/2023 9:12:02 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Alexandra Morales	Individual	Support	Written Testimony Only

Comments:

Aloha Ms. Inouye and Mr. Gabbard,

My name is Alexandra Morales. I am currently a sophomore at Kalaheo High School and I am testifying in support of Senate Bill 376 relating to the environment.

Mining, extracting, and removing minerals has detrimental impacts on our marine life. The Natural Library of Medicine explains that minerals allow marine life to maintain physiological and biochemical processes. Therefore, seabed minerals are vital for marine animals to function and thrive. In addition to this, mining destroys numerous habitats, further harming marine life. The International Union for Conservation of Nature says that seabed mining permanently alters and destroys deep sea habitats, wiping out species and impairing ecosystems.

The mining, extraction, and removal of minerals also has irreversible negative effects on our biodiversity. According to Hawaii.gov, the coastal waters which surround our islands are home to over 400 species of fish. Over 60% of coral reefs in the United States are located in the waters that surround our islands. The National Oceanic and Atmospheric Administration states that “coral reefs are considered to be the most biologically diverse of all marine ecosystems.” Because our waters are so biodiverse, it is important that we protect marine habitats by prohibiting seabed mining.

Lastly, seabed mining has a negative impact on our atmosphere and our species. The U.S. Government Accountability Office reports that seabed mining stirs up sediment clouds, spreading toxic metals into our atmosphere. The National Oceanic and Atmospheric Administration explains that Hawaiian seabeds host deposits of manganese, cobalt, and other metals which are used in production. According to the CDC, exposure to manganese damages the lungs, kidneys, and liver. The CDC also says that exposure to cobalt damages the lungs, heart, skin, eyes, and can even cause cancer. From this information it is clear that seabed mining has harmful impacts on our atmosphere and on humans in general.

In all, I fully support Senate Bill 376 relating to the environment. Mining, extracting, and removing minerals from marine waters has detrimental effects on our marine life, destroys biodiversity, and negatively affects our atmosphere and humans in general. I hope that you recognize the importance of passing this bill. Thank you for your time and consideration.

SB-376-SD-1

Submitted on: 2/22/2023 12:03:40 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Diane Kanealii	Individual	Support	Written Testimony Only

Comments:

February 22, 2023

Re: **SB376 SD1** RELATING TO THE ENVIRONMENT.

Hearing scheduled for Monday, January 30, 2023, 1:00 p.m

Aloha Honorable Chairs **Gabbard and Inouye**, Vice-chairs **Richards and Elefante**, and members of the Senate Committees on Agriculture and Environment, and Water and Land

On Behalf of our ‘Ohana, we request your Strong **support of SB376** which prohibits the mining, extraction and removal of minerals from the seabed in **all state marine waters which was introduced by LEE, CHANG, KANUHA, KEITH-AGARAN, MCKELVEY, RHOADS, Dela Cruz, Fukunaga, Moriwaki**

This Bill Prohibits the issuance of any permit for or in connection with the development or operation of any facility or infrastructure associated with the mining, extraction, or removal of minerals from the seabed within state marine waters

Seabed mining poses an unacceptably high risk of damage and disruption to the marine environment, including our globally significant ecosystems that host thousands of species. It may also threaten ocean-dependent industries such as commercial and recreational fishing and tourism.

Other State Legislators of California, Oregon, and Washington have all passed similar legislation. We thank the committees for hearing this important measure and respectfully urge and request YOUR VOTE to **pass SB432** to protect our marine ecosystems and ocean.

Mahalo for your support for the health of our Ocean and it's resources,

Life Long residents of Moku O Hawai'i Roger and Diane Kanealii & the Kanealii
'OhanaKawaihae, Hawaii

SB-376-SD-1

Submitted on: 2/22/2023 12:38:46 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Monika Frazier	Individual	Support	Written Testimony Only

Comments:

I am writing in strong support of SB376. Mining the sea bed would have a negative impact on our native ecosystems and species that inhabit the sea floor. Scientific studies have shown the potential impacts of these actions, such as those detailed in the Nature article entitled Deep-Sea Dilemma: Mining the ocean floor could solve mineral shortages and lead to epic extinctions in some of the more remote ecosystems on Earth.

I urge you to protect our marine ecosystems and support this bill.

SB-376-SD-1

Submitted on: 2/22/2023 1:25:56 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Cards Pintor	Individual	Support	Written Testimony Only

Comments:

Aloha,

I support this bill.

Mahalo nui,

Cards Pintor

SB-376-SD-1

Submitted on: 2/22/2023 1:29:51 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Mari	Individual	Support	Written Testimony Only

Comments:

I support this bill.

SB-376-SD-1

Submitted on: 2/22/2023 2:21:39 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Charles Young	Individual	Support	Written Testimony Only

Comments:

Aloha: My name is Charles Young. I reside in the Ahupua'a of Kealia 2 in south Kona, Hawaii Island. I am writing in support of SD 376-SD1. Deep sea mining is wrought with unknown consequences that will undoubtedly result in harming the oceans fragile ecosystems on a local and global scale. Proponents can not offer any scientific evidence of any possible consequences and therefore can not offer any mitigating initiatives. In a time when the world has embraced increasing conservation of the ocean resources to 30% deep sea mining is entirely out step with that effort and should be disallowed.

Sincerely

Charles Young

SB-376-SD-1

Submitted on: 2/22/2023 2:51:30 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Jaden Scott	Individual	Support	Written Testimony Only

Comments:

TESTIMONY SB376

Date: February 22, 2022

To: Ms. Inouye and Mr. Gabbard,

From: Jaden Scott

Subject: Environmental Protection; Seabed Mining; Permits; Prohibition

Hello my name is Jaden Scott and I am a student at Kalaheo High School. I am a sophomore and participate in student council and government. I strongly believe that environmental protection and prohibition of seabed mining should be noticed. Passing this bill would be incredibly beneficial to our islands. Mining our oceans creates major destruction of natural landforms and the wildlife they inhabit, compaction of the sea floor, and creation of sediment plumes that disrupt aquatic life. Keeping our oceans alive and healthy is important for survival. Without our oceans life would cease to exist and all life forms would disease and go extinct.

Prohibiting mining, extracting, and removal of minerals from the seabed would help preserve the natural resources and ecosystems of the habitats surrounding our islands. Coral reefs, seaweed forests and other organisms would suffer from the disruption of their

homes and resources. Mining noises and lights could destroy aquatic habitats and mislead sealife. Mining also creates toxic environments. When mining, toxic sediment clouds form and can be deadly to the organisms and animals in the area. Plumes rise and heavy metals are extracted poisoning the surrounding environment and animals that inhabit it.

Prohibiting seabed mining could help reduce the amount of compaction on the seafloor. Compaction of the sea floor could result in a loss in flow of nutrients. When the sea bed condenses elements, minerals, and nutrients are confined and lost. Compaction also reduces the soils or sands capacity to hold oxygen and even water for organisms that live under the surface, resulting in suffocation. Sediments form and many crucial aspects of the ecosystem are lost.

Another reason seabed mining should be prohibited is because explosives disrupt coral, seaweed forests, and other natural habitats. Coral is mined using explosives and results in erosion, sedimentation, and habitat disruptions. As a result of compaction sedimentary substances form and create plumes of toxicity that disrupt aquatic life. This leads to pollution and a large amount of sedimentary substances and metals.

In conclusion seabed mining should be prohibited because the amount of damage it does is far greater than the amount of good. Our oceans are full of life and we need to make sure that we are fully taking care of its inhabitants and its properties. Seabed mining could lead to drastic changes in the ecosystem and stopping it now will prevent further damage to our oceans and our islands.

Sources:

Team, R. (2021, April 20). What Is Coral Mining And What Can We Do To Fight It? - ReefCause. Conservation.Reefcause.com. <https://conservation.reefcause.com/what-is-coral-mining-and-what-can-we-do-to-fight-it/#:~:text=Physical%20image%20to%20reefs%20due>

Office, A. (2021). Deep-Sea Mining Could Help Meet Demand for Critical Minerals, But Also Comes with Serious Obstacles. Gao.gov. <https://www.gao.gov/blog/deep-sea-mining-could-help-meet-demand-critical-minerals%2C-also-comes-serious-obstacles>

SB-376-SD-1

Submitted on: 2/22/2023 3:45:58 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Aonani Vitch-Fernandez	Individual	Support	Written Testimony Only

Comments:

Aloha Kakou,

I support this bill as it protects the ocean that sustains us.

Mahalo for your time,

Aonani Vitch-Fernandez

SB-376-SD-1

Submitted on: 2/22/2023 10:03:46 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Tara Rojas	Individual	Support	Written Testimony Only

Comments:

Aloha,

I STRONGLY SUPPORT SB376 SD1 TO BAN DEEP SEA MINING. This is the foundation of Ocean Life, the Health of the Ocean Ecosystem, the Source of Mea'ai-Food Source in the Islands...and it NEEDS TO BE PROTECTED.

NO LEEWAY, NOR PERMITS, NO DESTRUCTION NOR DESECRATION OF THE OCEAN FLOOR.

Please SUPPORT SB376 SD1. Mahalo nui.

Tara Rojas

SB-376-SD-1

Submitted on: 2/22/2023 10:07:54 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Hannah Hartmann	Individual	Support	Written Testimony Only

Comments:

Aloha nui,

My name is Hannah Hartmann, I am a scholar-activist and Hilo resident testifying in overwhelming SUPPORT of SB 376 prohibiting the mining, extraction, and removal of minerals from the seabed in all state marine waters.

The deep sea, the world’s largest biome, accounts for approximately 90% of the marine environment, yet we know little to nothing about it. The species that thrive in these harsh environments have adapted to unique conditions, leaving them extremely vulnerable to disturbance. By banning seabed mining, we are saving the lives of hundreds of species we have yet to meet.

The nodules mined in these types of operations are also an invaluable resource to deep sea marine life, as they provide critical habitat in a place of scarcity. These nodules also form at a pace of 1 - 10 mm every 1 million years. If opened to mining, this ecosystem would take billions of years to recover.

I hereby urge the Judiciary committee to take a stand for Hawai‘i’s precious marine life and support SB 367.

Mahalo nui for your dedication to protecting the oceans of Hawai‘i.

SB-376-SD-1

Submitted on: 2/22/2023 10:53:27 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Clair Mason	Individual	Support	Written Testimony Only

Comments:

Aloha chair, vice chair, and members of the committee,

My name is Clair Mason and I am a resident of Kailua-Kona. I am testifying in support of SB376 to prohibit deep sea mining of Hawai'i waters. Deep sea mining is the latest environmental extortion method to hit our region, and it must be stopped before big industries attempt to normalize it. It's been proven that mining the deep sea for extraction of resources has incredibly negative affects on sea life of all kinds - including creatures that reside in the depths of the ocean, and those near the surface. There is no reason for Hawai'i to allow these heinous acts, and we must follow suit of states and nations around the world that are doing their due diligence to prohibit deep sea mining. Please pass SB376 to prohibit deep sea mining to save our ocean from further pollution and disturbance.

Mahalo for your work and for considering my testimony.

Clair Mason

808-741-0124

SB-376-SD-1

Submitted on: 2/22/2023 11:59:18 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Emma Stierhoff	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Rhoads, Vice Chair Gabbard, and members of the committee,

My name is Emma Stierhoff, and I am a conservation biologist and Hilo resident. I am writing to express my overwhelming SUPPORT of SB 376, which will prohibit the mining, extraction, and removal of minerals from the seabed in all state marine waters.

The deep sea is the world's largest biome, yet the one we know the least about. This biome contains a plethora of life that has adapted over billions of years to survive some of the most harsh and extreme conditions in the world, but we have yet to meet many of these species. Seabed mining would be highly disruptive to this vast and largely unknown biome, and the full impact cannot even be known given the current lack of knowledge on the deep sea. What we do know is that the polymetallic nodules extracted in deep sea mining operations form at a rate of just 1 to 10 millimeters every 1 million years. Thus, not only is deep sea mining not a sustainable business model, it is also not an ethical one; this ancient and crucial habitat would take billions of years to recover from such rapid destruction. For context, that is several orders greater than the span of human existence, which is just about 300,000 years.

Not only will deep sea mining harm this vast and enigmatic biome, but sediment plumes will negatively impact photosynthetic organisms much higher in the water column. Deep sea mining operations near Hawai'i would threaten our fisheries, reefs, and essentially all marine ecosystems since photosynthetic organisms make up the foundation of marine food chains. Many experts urge extreme caution considering the inevitable and likely irreversible biodiversity loss if deep-sea mining is permitted. Although we cannot control what happens in international waters, SB 367 would be a key step in ensuring that the waters that immediately surround Hawai'i are protected and set a precedent for others to follow.

I thereby urge the Judiciary committee to protect Hawai'i's precious marine life and support SB 367. Mahalo nui for the opportunity to testify, and for your dedication to protecting the oceans of Hawai'i.

Sincerely,

Emma Stierhoff

SB-376-SD-1

Submitted on: 2/23/2023 3:32:23 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
melissa tomlinson	Individual	Support	Written Testimony Only

Comments:

Please approve this Bill

SB-376-SD-1

Submitted on: 2/23/2023 5:19:12 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Summer Yadao	Individual	Support	Written Testimony Only

Comments:

Aloha, there should not be any drilling near or around our islands or anywhere else on the planet in the sea floor. The devastating effects are unrecoverable and humans have done enough to destroy our planet, food systems, water ways and life ways. Enough, no drilling ever.

SB-376-SD-1

Submitted on: 2/23/2023 6:12:44 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Lucy Chalgren	Individual	Support	Written Testimony Only

Comments:

Aloha nui,

My name is Lucy Chalgren, I am a scholar activist and Hilo resident testifying in overwhelming SUPPORT of SB 376 prohibiting the mining, extraction, and removal of minerals from the seabed in all state marine waters.

The deep sea, the world's largest biome, accounts for approximately 90% of the marine environment, yet we know little to nothing about it. The species that thrive in these harsh environments have adapted under unique conditions, leaving them extremely vulnerable to disturbance. By banning seabed mining, we are saving the lives of hundreds of species we have yet to meet.

The nodules mined in these type of operations are also an invaluable resource to deep sea marine life, as they provide critical habitat in a place of scarcity. These nodules also form at a pace of 1 - 10 mm every 1 million years. If opened to mining, this ecosystem would take billions of years to recover.

I thereby urge the Judiciary committee to take a stand for Hawai'i's precious marine life and support SB 367.

Mahalo nui for your dedication to protecting the oceans of Hawai'i.

SB-376-SD-1

Submitted on: 2/23/2023 6:39:13 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Solomon P. Kaho'ohalahala	Individual	Support	Written Testimony Only

Comments:

I strongly support this measure as necessary to prevent what is occurring as a global threat to our ocean ecosystems. The ocean is our family as described in our Kumulipo and as an aboriginal native Hawaiian, I am compelled to strongly support the protection of our ancestors and Kūpuna that begin with the first of our living creature, the Uku ko'a ko'a. I ask for your unanimous support.

O wau no me ka ha'a ha'a,

Solomon Kaho'ohalahala

SB-376-SD-1

Submitted on: 2/23/2023 8:19:37 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
David Girbino	Individual	Support	Written Testimony Only

Comments:

Aloha,

My name is David Girbino, I am a master's student and Hilo resident testifying in overwhelming SUPPORT of SB 376 prohibiting the mining, extraction, and removal of minerals from the seabed in all state marine waters.

The deep sea, the world's largest biome, accounts for approximately 90% of the marine environment, yet we know little to nothing about it. The species that thrive in these harsh environments have adapted under unique conditions, leaving them extremely vulnerable to disturbance. By banning seabed mining, we are saving the lives of hundreds of species we have yet to meet. We are also setting a precedent for the protection of seabeds globally.

The nodules mined in these type of operations are also an invaluable resource to deep sea marine life, as they provide critical habitat in a place of scarcity. These nodules also form at a pace of 1 - 10 mm every 1 million years. If opened to mining, this ecosystem would take billions of years to recover.

I thereby urge the Judiciary committee to take a stand for Hawai'i's precious marine life and support SB 367.

Mahalo nui for your dedication to protecting the oceans of Hawai'i."

SB-376-SD-1

Submitted on: 2/23/2023 8:20:14 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Taylor Sandon	Individual	Support	Written Testimony Only

Comments:

Date: Feb 23, 2023

To: Chairperson Karl Rhoads

Vice Chairperson Mike Gabbard

Members of the JDC committee

From: Taylor Sandon

Subject: Support of Senate Bill 376, Relating to THE ENVIRONMENT

Aloha. My name is Taylor Sandon. I attend Kalaheo High School in Kailua as a Freshman. I would like to testify showing approval of Senate Bill 376. I strongly believe that this Senate bill would benefit Hawaii and its' people.

Many sea organisms are being affected by the continuance of sea mining. "However, large amounts of mud and dissolved chemicals are released during mining and large equipment produces extraordinary noise—all of which travel high and wide." (hawaii.edu)

Our oceans are being damaged and sea life is being threatened when sea mining occurs. We need to fight for the safety and well-being of our beloved oceans.

Thank you for your time and deliberation, I ask for all your support in passing Senate Bill 376.

Taylor Sandon

SB-376-SD-1

Submitted on: 2/23/2023 8:32:40 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Ellie S. Jones	Individual	Support	Written Testimony Only

Comments:

To the Committee hearing SB376,

My name is Ellie and I am a resident of Senate District 11 and House District 22 in Mānoa Valley. I testify in strong support of this bill as a marine scientist, conservationist, fisher, diver, and science communicator living on O‘ahu.

I used to work in a laboratory studying deep-sea ecology for three years, and what was always the most striking to me was how fragile submarine environments are. Yes, the deep ocean is widely unexplored, and more new species are discovered each year in the deep than any other marine habitat, but from the research we have done with the advanced technology available, it is apparent that the deep sea houses a diverse set of invertebrates and fish unlike any other on earth.

Deep-sea mining poses an immediate threat to these diverse ecosystems by churning up the seafloor and wiping out any cold-water corals, sponges, crabs, and other small microfauna that live among the rocks and sediment. This method of mining is akin to bottom trawling for fish, a method of fishing that rakes a net across the seafloor and scoops up anything in its path. This method of fishing has been deemed massively destructive, and legislators are working globally to prohibit bottom trawling in fisheries. Why then would we utilize this same method for mining? The earliest research on deep sea mining from 1989 has shown over the years that the site ploughed for mining in the study has never recovered all the way up until 2015, causing serious harm to the environment.

The argument has been made that mining the deep ocean will not have that big of an impact because it is such a vast environment that our tiny impact will not matter in the grand scheme of the ecosystem itself - but haven't we heard this argument before? We humans thought the ocean was so massive that we would never be able to damage it with our carbon emissions, with our pollution, with our overfishing, and look at the consequences we are dealing with now. To this point, I published a paper in 2021 noting the presence of microplastics in deep-sea sediments at the bottom of a submarine canyon in the Atlantic - the deep sea is not out of our reach of potential destruction. The mindset that the ocean is so big that we cannot damage it is archaic and needs to be taken off the table in discussions about how we interact with the ocean.

The deep ocean ecosystems in Hawai‘i are unique and hold special cultural value. Mining them and seeing widespread loss of species and irreversible damage to marine ecosystems would be

devastating, but if we act now and prohibit mining in our state waters, we can join other US states such as Washington, Oregon, and California in setting an example for protecting our deeply important oceans. I strongly support this bill, and urge you to do the same to preserve the welfare of the deep oceans in Hawai'i and all of us who depend on them.

Mahalo nui for your time and consideration of this bill,

Ellie S. Jones

SB-376-SD-1

Submitted on: 2/23/2023 8:35:28 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Laila Kaupu	Individual	Support	Written Testimony Only

Comments:

As a lawai'a of the Kona Hema waters of Hawai'i moku, I STRONGLY SUPPORT SB 376.

SB-376-SD-1

Submitted on: 2/23/2023 9:11:33 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

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

Comments:

The rising ocean temperatures and increased acidification have already damaged Hawaii's coral reefs and marine ecosystems. Seabed mining poses an unacceptably high risk of further damage and disruption to the marine environment of the State. It is imperative that action be taken to ensure the protection of our environment for present and future generations. Please support this important measure.

SB-376-SD-1

Submitted on: 2/23/2023 9:25:32 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Alexia Akbay	Individual	Support	Written Testimony Only

Comments:

Aloha Committee Chair Senator Rhoades and Judiciary Committee Members,

My name is Alexia Akbay, I'm an environmental chemist and small business owner in Kailua-Kona, HI. **I strongly support SB376 to ban deep sea mining.** Hawai`i has the opportunity to follow Tahiti, California, and Canada in passing this historic legislation to preserve livelihood rooted in the ocean and the pristine waters we rely on in this home. We know less about deep sea mining than we do about space, there is not sufficient evidence to show that it is safe and without repercussions to allow commercial mining.

With gratitude,

Alexia

SB-376-SD-1

Submitted on: 2/23/2023 9:53:11 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Mio Kamioka	Individual	Support	Written Testimony Only

Comments:

Aloha nui,

My name is Mio Kamioka, I am testifying in overwhelming SUPPORT of SB 376 prohibiting the mining, extraction, and removal of minerals from the seabed in all state marine waters.

The deep sea, the world’s largest biome, accounts for approximately 90% of the marine environment, yet we know little to nothing about it. The species that thrive in these harsh environments have adapted under unique conditions, leaving them extremely vulnerable to disturbance. By banning seabed mining, we are saving the lives of hundreds of species we have yet to meet.

The nodules mined in these type of operations are also an invaluable resource to deep sea marine life, as they provide critical habitat in a place of scarcity. These nodules also form at a pace of 1 - 10 mm every 1 million years. If opened to mining, this ecosystem would take billions of years to recover.

I thereby urge the Judiciary committee to take a stand for Hawai‘i’s precious marine life and support SB 367.

Mahalo nui for your dedication to protecting the oceans of Hawai‘i!

-Mio Kamioka

SB-376-SD-1

Submitted on: 2/23/2023 9:53:36 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Nanea Lo	Individual	Support	Written Testimony Only

Comments:

Dear Members of the Hawai'i State Legislature,

I am writing, as a citizen and voter, to express my strong support for Bills SB376 and HB186 prohibiting seabed mining in Hawai'i state waters...:

- The deep ocean is not only a reservoir of biodiversity that we are just starting to discover and to understand. It is also the primary regulator of our climate: it stores around 38% of all greenhouse gasses we emit into the atmosphere every year and has absorbed 93% of the heat surplus induced by human activities. The ocean is our greatest ally to achieve our climate goals and the Hawai'i carbon neutrality target by 2045.
- Protecting the ocean runs deep in our cultural heritage, in who we are as people from Hawai'i: we have a historical responsibility to add our voices to this movement before the first deep- ocean exploitation permits are issued.
- We are already seeing many taking a stand against deep-sea mining. California, Oregon, and Washington have all passed similar legislation that prohibits deep-sea mining in state waters, and Guam passed a resolution calling on the US government to support a deep-sea mining moratorium internationally. The Coalition of Pacific Parliamentarians helped inspire 12 countries (Palau, Fiji, Samoa, Federated States of Micronesia, Chile, Costa Rica, Ecuador, Panama, New Zealand, Germany, Spain and France) to also take a strong stance.
- Against the rising interest of industrial groups to extract rare minerals (such as cobalt, copper, manganese or nickel) found in deep-sea ecosystems, scientists have called for a moratorium on deep-seabed mining.
- Our current state of knowledge of the deep sea is extremely limited. Far less than 1% of the deep ocean has ever been seen with human eyes and it is not mapped as well as the Moon, Mars and Venus. This not only prevents humankind from understanding and mitigating potential mining impacts, but also prevents us from knowing what we stand to lose.
- According to the rules of the International Seabed Authority, the first stages of deep sea mining will start in June 2023 because of the so-called "Two-Years Trigger Rule", giving mining companies two years to define the mining code that will govern their own practices, was set in motion last year. Is it urgent we take action to forbid access to our waters and infrastructures, as well as use our voice to push for a ban of those practices in international waters as well.

- Among the potential devastating consequences being uncovered by scientific studies are the sediment plumes, ie. sediment discharge resulting from deep-sea mining activity in the Clarion Clipperton Fracture Zone. BluePeril predicts that one year of #DeepSeaMining could destroy up to 600km² of seabed. It would take only three months for the pollution discharged by The Metals Company in its Tonga License area to reach Hawaiian waters and the Northern Line Islands of Kiribati and the United States. This could affect our fisheries and other marine industries on which our community depends.
- Some may view deep seabed mining as a topic that can be solved with strict regulation of this activity; but videos leaked from The Metals Company recently are proof that no matter how strict the Mining Code will be, mining companies are likely to act outside of these rules, which would be near impossible to enforce in the high seas anyways.
- Recent analysis has shown that seabed mining is not necessary to meet projected mineral demand in an electrified future. Innovation in renewables, battery technologies, and circular-economy strategies can together meet projected global demand without the creation of a new, environmentally destructive industry.
- We must apply the precautionary principle until we have enough information on the extent of the irreversible impacts that exploitation could have on a global scale - such as the destruction of biodiversity or the release of carbon captured in ocean sediments for thousands of years.
- Hawai'i still hasn't seized this opportunity to demonstrate its leadership in the protection of the ocean. This is why we are reaching out to you: we ask you to listen to the scientists and to support the establishment a ban on deep sea mining in Hawai'i's territorial waters, as well as in as well as in the high seas.

We are counting on you to preserve the deep ocean and its invaluable role in keeping the planet habitable.

me ke aloha 'āina,

Nanea Lo, Mō'ili'ili

SB-376-SD-1

Submitted on: 2/23/2023 9:55:54 AM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Alejandro Caamano	Individual	Support	Written Testimony Only

Comments:

Aloha nui,

My name is Alejandro Caamano, I am a graduate student studying marine conservation and Hilo resident testifying in overwhelming SUPPORT of SB 376 prohibiting the mining, extraction, and removal of minerals from the seabed in all state marine waters.

The deep sea, the world's largest biome, accounts for approximately 90% of the marine environment, yet we know little to nothing about it. The species that thrive in these harsh environments have adapted under unique conditions, leaving them extremely vulnerable to disturbance. By banning seabed mining, we are saving the lives of hundreds of species we have yet to meet.

The nodules mined in these type of operations are also an invaluable resource to deep sea marine life, as they provide critical habitat in a place of scarcity. These nodules also form at a pace of 1 - 10 mm every 1 million years. If opened to mining, this ecosystem would take billions of years to recover.

I thereby urge the Judiciary committee to take a stand for Hawai'i's precious marine life and support SB 367.

Mahalo nui for your dedication to protecting the oceans of Hawai'i.

SB-376-SD-1

Submitted on: 2/23/2023 12:01:27 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Avalon	Individual	Support	Written Testimony Only

Comments:

My name is Avalon Paradea, testifying in overwhelming SUPPORT of SB 376 prohibiting the mining, extraction, and removal of minerals from the seabed in all state marine waters.

The deep sea, the world's largest biome, accounts for approximately 90% of the marine environment, yet we know little to nothing about it. The species that thrive in these harsh environments have adapted under unique conditions, leaving them extremely vulnerable to disturbance. By banning seabed mining, we are saving the lives of hundreds of species we have yet to meet.

The nodules mined in these type of operations are also an invaluable resource to deep sea marine life, as they provide critical habitat in a place of scarcity. These nodules also form at a pace of 1 - 10 mm every 1 million years. If opened to mining, this ecosystem would take billions of years to recover.

I thereby urge the Judiciary committee to take a stand for Hawai'i's precious marine life and support SB 367.

Mahalo nui for your dedication to protecting the oceans of Hawai'i.

To: Lorraine R. Inouye, Chair
Brandon J.C. Elefante, Vice Chair
For: SB376
Date of Hearing: 02-24-23
Time: 9:30 AM
Room: CR 016
Position: IN SUPPORT

Dear Honorable Members of the Senate Committee on Water and Land,

My name is Kenji Kelii and I am an 8th grade student at Connections Public Charter School. I am writing in support of SB376. This bill would prevent seabed mining, or removing minerals from the seabed.

I am a 14 year old who likes to go fishing. Hawaii has a diverse and unique underwater ecosystem that my family has benefited from for years. If commercial mining were to happen in Hawaii's oceans, this could drastically impact our fragile reefs, corals and marine life. This would mean less fishing and food security for local families.

Thank you for the opportunity to submit testimony for this bill. I hope the members will consider supporting SB376.

Mahalo for your time and consideration,

Kenji Kelii
Student at Connections PCS

SB-376-SD-1

Submitted on: 2/23/2023 9:15:09 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Nyla Bonisa	Individual	Support	Written Testimony Only

Comments:

Date: Feb 22, 2023

To: Chairperson Karl Rhoads
Vice Chairperson Mike Gabbard
Members of the JDC Committee

From: Nyla Bonisa

Subject: Support of Senate Bill 376, RELATING TO THE ENVIRONMENT.

Aloha. My name is Nyla Bonisa, and I am currently a sophomore at Kalaheo High school in Kailua. I would like to ask for your support for senate bill 376. I strongly believe that this bill is important and should be implemented because it harms marine life, can permanently damage the aquatic ecosystem in Hawaii, and contaminates the ocean water.

The removal of minerals from the seabed is harmful to sea creatures. The machinery that is used to extract minerals from the seabed includes “dredge equipment, slurry pumps, trailer pumps [etc].” (EddyPump.com) The machinery to do the extraction will harm the sea animals in the sense that some sea creatures are dependent on vibrations and in order to communicate with each other they need to hear each other's vibrations. However, this will be interfered with by the loud machinery. Furthermore, loud machinery can also cause “temporary or permanent hearing loss, behavioural and physiological changes, injury, and even death.” (Earth.org 2022)

The mining of seabed can also permanently damage aquatic ecosystems. Sea life such as coral makes up sea floors and will be destroyed due to mining. Coral is one of the main sources of food for sea creatures. When food chains and nutrient cycles are destroyed, then it can affect everything else. According to Planet Home, “If one ocean species goes extinct, it can directly affect countless other species that rely on them.” (Planet Home 2020) This can affect aquatic ecosystems, as well as marine life.

Moreover, a negative outcome from mining minerals from the seabeds can contaminate the water. When the mining occurs, it disrupts the sediment on the seafloors and causes underwater sediment storms. Beachapedia states “The contaminants found in sediments have already led to human health problems.” (Beachapedia 2015) Not only does sea mining affect our marine life, but it also affects the people that live in Hawaii.

To conclude, Hawaii has always emphasized its love for the environment. There are so many creatures that are unique to Hawaii, that will be greatly affected by seabed mining. By passing this bill, we will protect the ocean waters that surround our Hawaiian Islands and its special creatures. I humbly ask for your support for Senate bill 376.

Thank you for your time and consideration,
Nyla Bonisa

Jessie Kekiwi-Aweau
Na Moku Aupuni o Ko'olau Hui
Secretary

February 23, 2023
RE: SB376

To: The Judiciary Committee,

My name is Jessie Kekiwi-Aweau, and I am the secretary for a non-profit organization known as Na Moku Aupuni o Ko'olau Hui. We are from the East side of Maui. I am submitting testimony supporting bill SB376. I believe that seabed mining activity will be devastating to the marine environment. Seabed mining will destroy benthic ecosystems and unique biodiversity on the sea floor. With this seabed mining, the sediment discharge plumes could cause major effects. Some effects could be like smothering deep ecosystems, smothering the forage base of economically important seafood species such as tuna, and they could release large amounts of toxins and heavy metals that are trapped on the seafloor, as well as the fragments of the metals/minerals of interest. This can eventually go up the food chain and reduce the quality and health of the seafood species. On top of this, there would be impacts on the cultural heritage of Hawai'i, which is deeply tied to the marine ecosystem, the coral polyp, and the oceanic web of life.

This means that we as Hawaiians respect all living things on land and in the ocean. We believe that the Kumulipo links us as Hawaiians to all living creatures of the deep dark blue sea, all the way up to the surface of the sea. The Kumulipo speaks of coral polys, sea cucumbers, different types of sea urchins, limu, different types of shellfish and fish, and many more. The Kumulipo links us back to our Ali'i and how life began. So with all this being said, I support bill SB376 and hope you take it into consideration in passing this bill. Thank you for your time and consideration.

Sincerely,
Jessie Kekiwi-Aweau

SB-376-SD-1

Submitted on: 2/23/2023 9:59:38 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Dyson Chee	Individual	Support	Written Testimony Only

Comments:

Honorable Senators, thank you for the opportunity to testify in strong support of SB376.

SB-376-SD-1

Submitted on: 2/23/2023 10:09:57 PM

Testimony for JDC on 2/24/2023 9:30:00 AM

Submitted By	Organization	Testifier Position	Testify
Kamalani Keliikuli	Individual	Support	Written Testimony Only

Comments:

I support this bill