

DAVID Y. IGE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

Testimony of
SUZANNE D. CASE
Chairperson

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

LATE

Before the Senate Committee on
WATER AND LAND

Friday, February 11, 2022
1:10 PM

State Capitol, Conference Room 229 & Videoconference

In consideration of
SENATE BILL 2135
RELATING TO THE OCEAN STEWARDSHIP SPECIAL FUND

Senate Bill 2135 proposes to authorize the Ocean Stewardship Special Fund (OSSF) to be used for planning, development, designing, or implementation of beach restoration projects, including the awarding of grants to nonprofit organizations for beach and nearshore environmental cleanup. **The Department of Land and Natural Resources (Department) supports this bill and provides the following comments.**

The purpose of the OSSF is to collect and use moneys for the conservation, restoration, and enhancement of the State's marine resources. Deposits into the OSSF will come from a variety of sources, including user fees collected from passengers or customers of commercial operators permitted by the Department's Division of Boating and Ocean Recreation. Many of these commercial operators conduct beach-based or shore-based activities such as surf schools and guided tours, so there is a direct nexus between the revenue source (user fees collected from customers of beach-based commercial operations) and the bill's proposed use of OSSF moneys for beach restoration and beach cleanup projects.

Thank you for the opportunity to comment on this measure.

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SB-2135

Submitted on: 2/9/2022 10:24:57 AM

Testimony for WTL on 2/11/2022 1:10:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Lauren Blickley	Testifying for Surfrider Foundation	Support	Yes

Comments:

Surfrider Foundation **strongly supports** this bill. The burden of cleaning our beaches falls disproportionately to nonprofit organizations and volunteers. Considering that Hawai‘i also receives large inputs of debris from the ocean, our volunteer organizations are removing significant amounts of trash from the shorelines. In 2021, for example, Surfrider Foundation’s Hawai‘i Chapters removed more than 60,000 pounds of debris off of our islands’ coastlines. In 2020, the Kaua‘i Chapter alone removed 120,000 pounds of debris, including 65,000 lbs of derelict fishing gear. Much of this debris was removed using helicopter lifts along remote coastlines. This demonstrates the ongoing need to support nonprofits and volunteer-led beach cleanups with a dedicated fund that is accessible to local cleanup organizations. Mahalo for your support of SB2135.

SB-2135

Submitted on: 2/10/2022 6:34:56 AM

Testimony for WTL on 2/11/2022 1:10:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Christopher Dean	Testifying for Clean The Pacific	Support	Yes

Comments:

Thank you for considering this bill! As the founder of Clean the Pacific, I have spent over \$8,000 of my own money on equipment and maintenance. I don't get paid for my time. I work in the construction industry and on my days off, I put in 12 hour days working even harder, wrestling with huge bundles of industrial fishing gear and plastics. I've realized in my work that the Hawaiian Islands are like a giant filter, straining out flotsam and jetsam. Long ago, the Hawaiians would find gigantic Douglas fir logs on the beaches and they used them for canoes. Today, it's mostly industrial fishing tackle. These bundles of polypropylene ropes and nets are so large, they can't be moved without heavy equipment. I just bought a new winch after my old one burned out and it cost over \$1000.

There is kind of a silver lining to all this plastic piling up on our beaches though, at least it's not in the ocean. This is how I envision cleaning the ocean. By cleaning our beaches, we're actually cleaning the ocean. I think we've all seen these heart breaking videos of whales and dolphins being slowly strangled to death, or dead sea birds with their stomachs packed full of plastic. Here's a chance for the State of Hawaii to help us, the community of environmental activists, clean our beloved ocean. Think of it, you're not just doing a service for Hawaii, making our beaches beautiful again, you're actually saving life on Earth. The ocean is the mother of all life on Earth, and she's in trouble. We're the reason she's in trouble and it's incumbent upon us to stand up, admit our failings and make it right. That's what SB2135 is all about.



Mālama Pūpūkea-Waimea
Post Office Box 188
Hale'iwa, HI 96712

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Community Outreach*

Federal Nonprofit Organization
501(c)(3) FEIN 27-0855937
www.pupukeawaimea.org
info@pupukeawaimea.org

February 9, 2022

Senator Lorraine R. Inouye, Chair
Senator Gilbert S.C. Keith-Agaran, Vice Chair
Hawai'i State Senate Committee on Water and Land
Hearing: Friday, Feb. 11, 2022, 1:10 p.m.

Re: SB2135 – OCEAN STEWARDSHIP SPECIAL FUND

Aloha Chair Inouye, Vice Chair Keith-Agaran, and Members of the
Committee,

Mālama Pūpūkea-Waimea (MPW) strongly supports SB2135 with one
suggested **minor amendment** (see page 2).

MPW is a Hawai'i non-profit organization founded on the North Shore of O'ahu in 2005. Our mission is "working to replenish and sustain the natural and cultural resources of the Pūpūkea and Waimea ahupua'a for present and future generations through active community stewardship, education, and partnerships." For eighteen years, we have focused our stewardship and education efforts on the Pūpūkea Marine Life Conservation District (MLCD), one of only three MLCDs on O'ahu and eleven statewide.

MPW conducts frequent beach clean ups and native plant restoration projects along the shoreline of the MLCD and, with City permission, in Pūpūkea City Beach Park. With the help of donations, grants -- especially from the Community Restoration Partnership, overseen by the Hawai'i Community Foundation, and a GIA from the Legislature in 2017 -- MPW has completed four successful phases of native plant landscaping projects along the Sharks Cove area, planting over 4,500 native plants with over 200 community volunteers. Please watch this short video about our native plant projects:

<http://pupukeawaimea.org/programs/native-plant-coastal-restoration-project/>

Groups like MPW need additional support for maintain and continue these kinds of beach restoration and native plant projects that have numerous ecological, scenic, and recreational benefits, particularly reducing erosion that damage coral reefs. These projects do need funding even if they are highly leveraged by community volunteer and in-kind contributions. Expanding the Ocean Stewardship Special Fund scope would amplify these kinds of impactful community-led efforts.

MPW recommends that the bill be slightly amended to clarify that **native plant projects** would clearly be eligible for coastal restoration funding, in addition to beach clean ups, as follows:

Current draft: Page 2, line 18: "(4) Plan, design, develop, or implement beach restoration projects, including the awarding of grants to nonprofit organizations for beach and nearshore environmental cleanup."

Proposed amendment (**bolded**): Page 2, line 18: "(4) Plan, design, develop, or implement beach restoration projects, including the awarding of grants to nonprofit organizations for beach and nearshore environmental cleanup **and native plant projects.**"

Without this clarification, long-term restoration projects such as restorative native plant landscaping projects may be unintentionally excluded or given second priority by the Fund because beach clean ups are the only listed example of beach restoration projects.

Mahalo nui and best regards,



Denise Antolini
President, MPW

MPW's Sharks Cove Native Plant Coastal Restoration Projects



SB-2135

Submitted on: 2/10/2022 9:01:51 AM

Testimony for WTL on 2/11/2022 1:10:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Lisa Bishop	Testifying for Friends of Hanauma Bay	Support	No

Comments:

Aloha Chair, Vice Chair, and Committee Members,

Friends of Hanauma Bay **supports SB135** that would allow DLNR to help fund NGO's to do beach and near-shore environmental clean-ups that DLNR does not have the resources to do.

Mahalo for the opportunity to testify in **support of SB2135!**

Lisa Bishop

President



Hawai'i Wildlife Fund

PO Box 1801, Kealahou HI 96750 (Hawai'i) & PO Box 790637, Paia HI 96779 (Maui)

Celebrating 25+ years of protecting Hawai'i's native wildlife
through research, education and conservation.

LATE

10 February 2022

Re: Senate Bill 2135

Aloha Chair Inouye, Vice Chair Keith-Agaran, and other Senators within the Committee on Water and Land,

Many thanks for this opportunity to provide testimony of support on Senate Bill 2135. The Ocean Stewardship Fund that was created in the past legislative session was a HUGE success, and this SB2135 amendment would provide for monies to support for coastal restoration efforts. This bill is long-awaited and much needed. For many decades, nonprofit organizations across Hawai'i have been removing marine debris from across our reefs and shoreline. The bulk of the effort and support, if any, is coming from volunteers and community groups.

The state has been supportive, but has had limited financial contribution towards the collective nonprofit cleanup activities across the Main Hawaiian Islands over the past several decades. As such, nonprofits have had to rely mainly on private donations, business support, and highly-competitive federal marine debris program awards from NOAA. This bill would change all that. It would allow for the small pilot program by DLNR's Division of Aquatic Resources (DAR) that was started a couple years ago on O'ahu for rapid response to net bundles and large marine debris items (between DAR and Sustainable Coastlines Hawai'i) to expand across the island chain.

DLNR is charged with protecting the natural and cultural resources throughout Hawai'i for past, current, and future generations. Yet the onus and burden of removing plastic pollution - the bulk of which is coming from elsewhere - falls on each of us who live in Hawai'i Nei. Realistically, it should be co-managed by community groups and government agencies, including DLNR's DAR and Division of Boating and Ocean Recreation (DOBOR), DOH's Hazard Evaluation and Emergency Response (HEER), NOAA's Marine Debris Program, and each of the County's respective environmental department. NOAA already coordinates the statewide Hawai'i Marine Debris Action Plan (as they have since it was formally signed in 2010) but it's due time for the state to step up as an equal partner. This bill would provide some of the backbone and funding capacity to do just that.

In summary, this Senate bill 2135 would allow for expanded capacity for both state agencies and NGO partners to remove debris and restore habitats without incurring excessive costs. The state now operates a hotline where nonprofits and DLNR divisions are able to respond to reports of large marine debris accumulations. The rapid response program was already successful in O'ahu and expanded to Maui last year (in partnership with the Maui Ocean Center's Marine Institute). The programs are already in place; they just need state leadership and funding to reach their capacity, and help ensure clean beaches and safe habitats for our native wildlife, residents, and visitors alike. Support SB2135 to help achieve this goal.

Please help “shore up” the current gap in funding and capacity within our state for beach restoration efforts. It’s far time to give DLNR divisions the funding they need to be able to support beach restoration and / or contract the job out to community NGOs.

Hawai’i Wildlife Fund (HWF) is a small nonprofit organization that has been working to conserve native species in Hawai’i since 1996. During that time, we have been actively involved in research, education, restoration and advocacy projects related to the protection of coastal and nearshore habitats. We are not in the waste management business, however we began community-based cleanup events in the 1990s because of the direct and indirect impacts that marine debris had on our native wildlife. Since that time, we have removed over 360 tons (720,000 pounds) from the shores of Hawai’i Island, Maui and Midway, and collaboratively on the French Frigate Shoals.

Thanks for your time, consideration, and support of SB2135!

Me ka mahalo pumehana,

Megan Lamson, M. Sc. | HWF President & Program Director (megan@wildhawaii.org) – Kealahou, Hawai’i
Hannah Bernard | HWF Co-founder & Executive Director (wild@aloha.net) – Paia, Maui

SB-2135

Submitted on: 2/9/2022 9:56:06 PM

Testimony for WTL on 2/11/2022 1:10:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Kimeona Kane	Individual	Support	Yes

Comments:

Aloha Chair, Members of the Committee,

mahalo nui for this bill and for recognizing the critical importance of the work that is necessary to ensure that these resources are available for generations after us. It is very important that we acknowledge the power in utilizing the nonprofit realm to assist and lead these types of efforts to preserve these spaces. These types of investments and partnerships have incredible value to building stronger relationships and connection. I support this bill and strongly urge the Committee to pass this bill in support.

me ka ha'aha'a,

kimeona kane

SB-2135

Submitted on: 2/9/2022 8:33:03 AM

Testimony for WTL on 2/11/2022 1:10:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Pieter Meinster	Individual	Comments	No

Comments:

Simply adding verbiage that allows the "awarding of grants to nonprofit organizations for beach and nearshore environmental cleanup". Opens the door to further exploitation by what is becoming an industry of non profit organizations.

The proposed amendment requires language that defines the measurable outcomes when funding is made available to non-profit groups or entities.

For any given project, there should be a project scope, with specific metrics that need to be tracked and a final review accomplished post fact, to ensure that the project was completed and satisfies the base requirements.

Who decides whether a grant is awarded and how much to award? Who defines the benchmarks or completion criteria for this project? Who monitors that these funds are being employed to conduct the chartered project? Who ensures that this project has been completed to the standards defined prior to awarding the grant?

Mahalo

Pete Meinster

SB-2135

Submitted on: 2/10/2022 7:13:52 AM

Testimony for WTL on 2/11/2022 1:10:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Drew Wilkinson	Individual	Support	No

Comments:

I am in full support of SB2135. The oceans need stewardship and funding to help achieve these goals. This bill is a great step in the right direction to help amazing organizations like Surfrider and Sustainable coastlines.

thank you,

Drew Wilkinson

Testimony of Sustainable Coastlines Hawai'i

LATE

2/10/2022

Bill: **SB 2135**

Committee: Senate Water & Land

Position: **Support**

Hearing Date: 2/11/22 1:10 PM

Aloha Chair

My name is Rafael Bergstrom, the Executive Director of Sustainable Coastlines Hawai'i (SCH) and a member of the State's Plastic Source Reduction Working Group (PSRWG). SCH is in strong support of SB 2135 and the expansion of the Ocean Stewardship Special Fund. The mission of SCH is to inspire communities to care for coastlines and we have a vision of a world of inspired people, clean beaches, and healthy coastlines. Ocean stewardship is a core principal of how we achieve our mission. Over the past 10 years SCH has removed 625,000 lbs. of debris from our coastlines, united 40,000 volunteers, educated 44,000 students, and waded through a destructive mess of plastic pollution. We are experts on plastic pollution, the consequences of inaction, and the solutions we have at our fingertips.

SCH is known for hosting the largest and most engaging beach and coastal cleanups across the State. We work directly with a diverse range of community partners and sponsors to create experiences that leave lasting impressions. Our goal is to do more than just clean up the coastlines, we want those who clean with us to understand that the actions we take on a daily basis are responsible for the damage being done to our coastal ecosystems. This is always framed as an opportunity for change.

While we will continue to do this work the costs are often extensive to do event management, staffing, and remote area removals. A fund that could assist nonprofits like ours would serve to advance our efforts and deepen our impact. SCH often times goes where others won't, removing thousands of lbs. of debris from coastlines across the islands including lesser served islands like Molokai. There is still a large gap in conservation funding and capacity compared to the exploitative industries that put constant pressure on our natural resources. It is a positive step to see movement towards addressing these shortfalls. Mahalo for your consideration.

With Aloha,



Rafael Bergstrom

Executive Director

Sustainable Coastlines Hawai'i

LATE

SB-2135

Submitted on: 2/11/2022 7:43:40 AM

Testimony for WTL on 2/11/2022 1:10:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
George "Bud" Antonelis. PhD	Testifying for Na Kama Kai	Support	No

Comments:

Plastic pollution is undermining human health and threatening the stability of the Earth's systems. A global plastics treaty is coming.

More than 100 countries, including the US and UK, major corporations and investors, along with environmental organizations all agree on the need for a global treaty to address the dangers of plastic pollution.

Plastic pollution is found everywhere researchers look: from the remotest parts of the Antarctic, to the summit of Mount Everest and to the bottom of the deepest oceans. Consider two recent studies:

f 43 trillion miniature-plastic particles rain down on Switzerland from the remote Alps to the urban lowlands every year. About 10% of these wind-driven particles traveled over 2,000 kilometers, including some from the Atlantic ocean.

*f*The majority of macroplastics (large plastic pieces) found in Mediterranean marine protected areas came from other countries.

Of the 10 billion tons of petrochemical-based plastics produced since 1950, only 2 billion tons have been recycled or were incinerated. Although unmeasured, several billion tons of plastics likely contaminate our planet's soil, water and air. As a result, micro- and nanoplastic particles are in the air we breathe, the water we drink, the food we eat.

Micro- and nanoplastic particles (MNP) are now so ubiquitous that a 2021 study in the Journal of Hazardous Materials estimated each of us could be ingesting as much as a credit card-sized amount (5 grams) of microplastics every week, as we wrote in WILTW August 26, 2021.

We also listed many of the known and potential health impacts including links to the shocking decline in male fertility due to exposure from hormone-disrupting chemicals that are common in plastics. Reproductive health expert Dr. Shanna

Swan warned this ongoing decline could result in wide-spread male sterility by 2045.

Additional health research has since come to light. The same hormone- disrupting chemicals in plastics—bisphenol A and phthalate plasticizers—have been linked to higher levels of cholesterol and cardiovascular disease. A NYU Grossman School of Medicine study found that people aged between 55 and 64, with the highest concentrations of phthalate in their urine, were more likely to die of heart disease than those with lower levels. The resulting annual economic burden was estimated at \$40 to \$47 billion in the US alone.

The plastic particles themselves appear to be causing chronic inflammation of the digestive tract. Inflammatory bowel disease (IBD) which includes Crohn's disease and ulcerative colitis, is rising globally, and growing fast in Asia and in Brazil. A Chinese study found that IBD patients had 50% more plastic particles in their feces. These particles came from plastic bottles and food containers and packaging. Those who used these products the most had higher levels of particles in their feces.

We previously quoted Rolf Halden, Director of the Biodesign Center for Environmental Health Engineering at Arizona State University: "Everyone on Earth is increasingly exposed to microplastics and nanoplastics...We are in for a really tough time."

Global plastic production increased 79% between 2000 and 2015 and now exceeds 370 million tons a year but recycling has not kept pace, remaining around 9%.

The US is the top plastic-waste producer with more than 42 million metric tons a year. Between 1.0 and 1.5 million tons of this waste ends up in the ocean every year, according to a 2020 report from the U.S. National Academy of Sciences. In total, 11 million tons of plastics are added to the world's oceans annually. This could triple by 2040, according to a recent United Nations assessment. Should that happen then plastics in the seas could exceed the collective weight of all fish in the ocean.

The impacts of marine plastic-pollution are already profound: \$500 billion to \$2,500 billion is the estimated annual loss from the reduction in marine ecosystem services. That does not include impacts on tourism or shipping or on local communities. The true costs are still being discovered, the assessment concluded.

Less well known is plastic's double-pronged impact on the global climate system:

1. The ocean is the planet's largest carbon sink, storing as much as 90% of the additional heat that carbon emissions have trapped in our atmosphere. Mangroves, seagrasses, salt marshes and coral reefs are key components of this carbon sink.

Plastic pollution pours out of the world's rivers burying marshes, mangroves, seagrasses and corals in plastic litter, impairing their ability to function.

2. More than 90% of plastics are made from fossil fuels. The lifecycle carbon emissions of the plastics sector was estimated at 1.78 billion tons in 2015 and likely reached 1.9 billion tons in 2020. That's nearly twice the emissions of the global aviation industry. If the plastics industry was a country, it would be the fifth largest carbon emitter. On the business-as-usual trajectory, these emissions would grow to 6.5 billion tons by 2050.

Plastics and associated chemicals are novel substances, created by human activities over the past 100 years. Their impacts on the Earth's systems remain largely unknown. The staggering volumes of novel substances being released into the environment is cause for alarm as these pose a threat to the integrity of the global ecosystem and to human well being, according to a panel of experts. Urgent action is needed to reduce the production and release of plastics and other chemicals they concluded.

More than 1,000 organizations have taken significant steps towards a circular economy for plastic through the Ellen MacArthur Foundation's Plastics Pact Network. The use of "virgin" plastics by Nestlé, PepsiCo and Unilever and others has fallen and they have increased their use of recycled plastic which has pushed up its price. While that may encourage more recycling, voluntary agreements cannot reach the scale needed. Only a global treaty can address the enormous scale of plastic pollution by setting the right conditions and incentives to create a circular economy for plastics.

The United Nations Environment Assembly conference at the end of February is expected to establish an international negotiating committee on a global plastics treaty. According to the Foundation, the U.N. treaty must address the full lifecycle of plastics and include three main principles:

f Eliminate all problematic and unnecessary plastic items

f Innovate to ensure that the plastics we do need are reusable, recyclable

or compostable

f Circulate all plastics items we use to keep them in the economy and out of the environment

More than 70 leading businesses and financial institutions, three-quarters of U.N. member states and more than two million people support these principles and want a legally binding treaty, according to the Foundation. This would include a

cap on virgin-plastic production and control the use of toxic chemicals that are added into plastic products.

The U.S. and other large plastic-producing countries like Saudi Arabia and China currently prefer a waste-management approach, according to media reports.

We quote Greenpeace USA Oceans Director John Hocevar: “The US has an obligation to fix the crisis they have had an outsized role in creating....A piecemeal approach that solely focuses on waste management will be a missed opportunity.”

Despite the urgency and wide agreement a new U.N. treaty will take years not months to negotiate. Cities, regions and countries are already banning various types of plastic products. The EU is banning a range of single-use plastic products, requiring 100% reusable or recyclable plastic in all products by 2030. See WILTW July 15, 2021.

We remain bullish on bioplastics from Danimer Scientific. It’s PHA bioplastic, Nodax, is the first bioplastic to be certified biodegradable and compostable in all mediums, giving it a three- to five-year lead in the field. Danimer’s recent Novomer acquisition will boost its finished production capacity to 390 million pounds. Danimer holds more than 390 granted patents and pending patent applications in more than 20 countries (see WILTWs January 21, 2021, April 29, 2021, August 19, 2021).

The booming market for recycled plastic will soon benefit from a new machine that can visually distinguish 12 different types of widely-used plastics in a waste stream. Denmark’s Aarhus University developed the hyper-spectral camera for the sorting machine and says it will increase the rate of recycling of plastics immensely. Danish company PLASTIX, a manufacturer that recycles marine-plastic waste, will be the first to install it.