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

#### **Before the House Committee on ENERGY & ENVIRONMENTAL PROTECTION**

Thursday, February 15, 2018 8:35 AM State Capitol, Conference Room 325

#### In consideration of **HOUSE BILL 1751, HOUSE DRAFT 1** RELATING TO AQUATIC RESOURCES

House Bill 1751, House Draft 1 proposes to require the Department of Land and Natural Resources (Department), through its Division of Aquatic Resources, to establish a network of marine protected areas which includes no-take areas and herbivore replenishment areas, in coastal fishing areas with the most critical fish depletion. The Department supports this measure and offers the following comments.

The Department appreciates the spirit of this measure and recognizes the benefits of a wellplanned network of marine managed areas to enhance fish biomass, ecosystem health, and biodiversity that support a sustainable nearshore environment. The Department is currently in the process of developing a plan to reach the goal of effectively managing thirty percent of the State's nearshore marine resources by 2030 (the Marine 30x30 Initiative). This plan involves a collaborative effort to develop a network of marine managed areas using marine spatial planning software. The software uses a robust dataset of fisheries, oceanographic, habitat, and socioeconomic data to help determine which nearshore marine areas would provide the most benefit to our nearshore marine resources. With this information, the Department will then work together with stakeholders to determine appropriate measure to achieve effective management in at least thirty percent of coastal waters.

As written, this measure would require marine protected areas to be established only in coastal fishing areas with the most critical depletion of fish stock. The Department has concerns with this provision, as fishing pressure is only one of many factors contributing to declines in fish stock. Often times, the most depleted areas are also areas most heavily impacted by coastal development, changes in freshwater input, pollution, and invasive species. Protecting these areas

## SUZANNE D. CASE

CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA

#### JEFFREY T. PEARSON P.E.

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

from fishing may not bring back fish populations and ecosystem health as intended. Our recommendation is to instead, rely on the spatial management approach the Department is currently pursuing that considers a whole suite of biophysical and socioeconomic factors in selecting a network of marine management sites. These spatial plans will be vetted by stakeholders, managers, and scientists for the appropriate designation within the Marine 30x30 Initiative. Spatial plans could entail the spatial designations listed in this measure if deemed appropriate by the various planning groups and the Department as well as supported by the biophysical and socioeconomic data used in the spatial analysis. The Department expects that the Marine 30x30 Initiative plan will be finalized by 2019.

Thank you for the opportunity to comment on this measure.

<u>HB-1751-HD-1</u> Submitted on: 2/12/2018 4:37:03 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Benton Kealii Pang, Ph.D.	Hawaiian Civic Club of Honolulu	Support	No

Comments:

Submitted on: 2/14/2018 1:24:22 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Dean Sensui	Hawaii Goes Fishing	Oppose	No

#### Comments:

I oppose HB1751 as it is not based on what's already known about fish behavior, and it unreasonably restricts access to fishing grounds.

Due to more than a decade of fish tagging data by the Division of Aquatics Resources, it's well known that various species of fish move from one island to the next. This includes papio and ulua which are often targeted by shoreline fishermen. HB1751's proposal to close specific areas does nothing to protect these migratory fish. It only makes it harder for fishermen to harvest what they need.

The same goes for bottomfish and all pelagics, or open-ocean species. These fish move. The only way to protect them is to set an annual catch limit based on what's known about demands of fishermen and the status of the fishery. And that's how our "Deep Seven" bottomfish species are being protected from overfishing.

When some say Hawaii is overfished, the next question should be, "what species?"

Taape, for example, are not overfished. Akule is not overfished. Papio, ulua and oio aren't overfished. "Overfishing" is a very specific term that's used much too loosely. And, "overfished" is also broadly misunderstood. Contrary to popular belief, it is not synonymous with "overfishing" although it is related. If the difference between these two concepts aren't understood, then do NOT pass HB1751 HD1.

I used to believe that Hawaii was overfished. And that overfishing was taking place. But that was 30 years ago, and I've since learned a lot about how fish move, how habitats change, and how fish will move to places where they can escape predation, find food, and find safe places to thrive.

Let's not legislate access to our fishing grounds through popular opinion. Instead, let's apply the best available science to truly understand what's out there and how it can be best managed. It should be to be done with peer-reviewed science and through the administrative rulemaking process. Because access to fishing grounds matters to the people who depend upon the availability of that resource in order to feed the rest of us.

Fisheries have to be properly managed to ensure an indefinitely sustainable level of fishing while also being productive to feed Hawaii's people. Gov. David Ige wants to

double food production in just a few years. Fishing plays a major role in that effort. Closing areas to fishing is the equivalent of paving over prime agricultural lands and hinders Gov. Ige's plans to make Hawaii less dependent upon imported food.

Thank you for your consideration.

Aloha, Dean Sensui, executive producer Hawaii Goes Fishing



February 14, 2018

House Committee on Energy and Environmental Protection

DATE: February 15, 2018

TIME: 8:35am

PLACE: Conference Room 325, State Capitol

HB 1751 - RELATING TO AQUATIC RESOURCES

Dear Chair Lee, Vice-Chair Lowen and Members of the House Committee on Energy and Environmental Protection:

Dolphin Quest strongly supports HB 1751. We understand first-hand the importance of conserving Hawaii's coastal marine resources. With two Dolphin Quest locations in the State of Hawaii, since 1988 our organization has educated and inspired hundreds of thousands of Hawaii residents, school children and tourists to preserve and protect our ocean and marine life. Dolphin Quest was conceived by two marine mammal veterinary specialists to provide an essential bridge between ecotourism, scientific study, conservation and education. In an era when even minimal funding for marine mammal research is difficult to acquire by scientists, our model of transforming tourist dollars into support for scientific study and conservation initiatives is more important than ever. To date, Dolphin Quest has contributed over \$4.1 million dollars in financial and in-kind support to critical marine mammal research, conservation, education and Hawaii's marine mammal rescue and response team.

As a resource for public education and an active steward of our ocean, Dolphin Quest recognizes that healthy coastal marine resources are absolutely vital for future generations of wild cetaceans and other marine life in Hawaii. The proposed HB 1751 will help ensure these resources are protected. Marine Protected Areas have been proven to be effective tools for preserving nearshore marine resources. The health of Hawaii's marine habitats and coral reefs are critically important to our wild spinner dolphins, whales and other cetacean populations that depend on stable and bio-diverse fish stocks, which this bill will help protect.

Marine Protected Areas around the world have contributed to large increases in biomass, density, size and biodiversity of marine organisms in those areas. Marine Protected Areas have also been shown to result in sustainable fisheries, promote marine education and recreation, and stimulate the economy through ecotourism and education.

Our ocean is under ever-increasing pressures. Hawaii should be a leader in preserving vital nearshore marine resources which supports the State's economic future and quality of life for future generations.

Thank you for the opportunity to provide our testimony. Please support HB 1751.

Respectfully,

Rae Stone, DVM

Rae Stone, D.V.M.

Co-Founder of Dolphin Quest / Quest Global Management

Submitted on: 2/14/2018 12:46:01 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Tina Owens	LOST FISH Coalition	Support	No

#### Comments:

The LOST FISH Coalition strongly supports this measure. Despite what those in opposition say, there has been plenty of science to uphold the recommendations in this bill.

A recent DAR initiative following the horrendous coral bleaching which occurred in East Maui and West Hawaii in 2015, polled the world's top coral reef scientists for their best recommendations as to how to build resiliency into our reefs to ameliorate impacts from climate change and rising temperatures. These answers were compiled into a document released by DAR last year and called the Coral Reef Recovery Plan 2017. It is available at DAR.

More than 20 years ago the LOST FISH Coaltion was instrumental in getting almost 35% of our West Hawaii shoreline closed off to aquarium fishing. Since then fish populations across the board have skyrocketed. Marine Protected Areas work and Hawaii is far too late in establishing such a network.

Submitted on: 2/14/2018 1:26:40 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Rick Gaffney	Hawaii Fishing & Boating Association	Support	No

#### Comments:

The Coral Bleaching Recovery Plan for Hawaii, which was requested by the legislature, and includes the expertise of the most knowledgeable coral reef experts on the planet, suggests that the most effective action the State could take is to preserve our essential coral reefs would be to create a network of marine protected areas.

This bill is essential to the health of Hawaii's coral reefs, and it should be passed and it should be initiated immediately, not in 2088.

Mahalo,

Rick Gaffney

President

Submitted on: 2/14/2018 3:05:39 PM

Testimony for EEP on 2/15/2018 8:35:00 AM



Submitted By	Organization	l estifier Position	Present at Hearing
Eric Dilley	The Uhu Conservancy	Support	No

#### Comments:

Coral reefs across the globe are in trouble due to an array of local and global threats ranging from ocean warming and acidification, stronger and more frequent storms, overfishing, pollution, coastal development, and poor watershed management. Corals are the main structure-forming organisms on coral reefs that provide habitat for about 25% of all marine life on earth and provide many services to society including protein, coastal protection from storms, tourism, and medicines for treating cancer and other deadly diseases just to name a few. In order to enhance coral reef resilience or their ability to withstand and recover from local and global stressors, we must address the threats that can potentially undermine corals.

One of the principal threats to corals on Hawaiian reefs is overfishing of algaeeating fishes and urchins. Parrotfish (uhu in Hawaiian) are herbivorous fishes that eat seaweeds that grow on coral reefs. The name parrotfish comes from their fused teeth that form a "beak-like" mouth that allows them to scrape or cut algae off dead coral pavement. Uhu are important to coral reefs because they serve as "lawnmowers of the sea" that keep seaweeds at bay to make space for corals to grow and thrive. Without herbivores like uhu, corals would likely struggle to form the large reef structures that are the backbone of coral reef ecosystems.

In Hawai'i, overfishing of herbivorous fishes like uhu continues to threaten the resilience of coral reefs to local and global stressors. To address this issue, the state of Hawai'i has put in place a management strategy that specifically protects herbivorous fishes and urchins from all fishing while allowing for recreational take of other permitted species. **The Kahekili Herbivore Management Area** 

(http://www.kahekilimarinereserve.com/) on the west coast of Maui is an example of how to protect herbivores for the benefit of coral reef health and resilience on the local level while still allowing for recreational harvest of other species. Since 2009 when Kahekili was established, uhu have increased in abundance along with other herbivorous fishes within the protected area. These early data from Kahekili support herbivore protection as a viable strategy for fostering coral resilience by increasing grazing on Hawaiian reefs.

The Uhu Conservancy strongly supports HB1751 to create a network of marine protected areas in Hawai'i. We currently have a separate ongoing petition that specifically requests that the DLNR create a herbivore marine protected area on O'ahu

by 2019 (https://www.change.org/p/herbivore-protection-for-healthy-hawaiian-coral-reefs). We hope that the state legislature seriously considers and passes this legislation to create momentum for coral reef conservation and to ensure the state will take necessary actions to foster the resilience of coral reefs to climate change.



The Nature Conservancy Hawai'i Program 923 Nu'uanu Avenue Honolulu, HI 96817 Tel(808) 537-4508 Fax(808) 545-2019 nature.org/hawaii

Testimony of The Nature Conservancy of Hawai'i Commenting HB 1751 HD1 Relating to Aquatic Resources House Committee on Energy and Environmental Protection Thursday, February 15, 2018, 8:35AM, Room 325



The Nature Conservancy of Hawai'i is a private non-profit conservation organization dedicated to the preservation of the lands and waters upon which life depends. The Conservancy has helped to protect nearly 200,000 acres of natural lands in Hawai'i. We manage 43,000 acres in 14 preserves and work in 19 coastal communities to help protect the near-shore reefs and waters of the main Hawaiian Islands. We forge partnerships with government, private parties and communities to protect Hawai'i's important watershed forests and coral reefs.

The Nature Conservancy appreciates the intent of H.B. 1751 HD1 and submits the following comments.

We agree that a well-designed and well-managed network of marine managed areas is one very effective tool, amongst others, for replenishing fish stocks and improving overall marine health and function. We encourage the Legislature to support the Department of Land and Natural Resources' robust process of using fisheries, oceanographic, habitat, and socioeconomic data, and broad stakeholder engagement to determine which nearshore location would provide the most benefit from marine managed area designation.

Hawai'i's coral reefs generate more than \$350 million of income annually in recreation, fishing, aquarium capture, research and other uses. They provide for our unique way of life in Hawai'i, and are a source of sustenance as well as recreation. Unfortunately, Hawai'i's marine environment faces threats from pollution, sedimentation, overharvesting, lack of community ownership, and invasive species. Scientists believe that reef fish stocks in the main Hawaiian Islands have decreased by 75% in the past century.

We believe that the most important steps we can take to help restore fish populations are:

- 1. **Encourage responsible fishing** Take what you need not what you can. Indiscriminate fishing methods, like lay gill nets and fishing on SCUBA, should be tightly controlled or banned.
- 2. **Support community-based marine management** Help the communities across the state that are managing marine resources, working to ensure compliance with laws, and monitoring human use and biological change over time
- 3. **Create replenishment areas for fish** The process must be based on the best available science and credible local knowledge, involving fishers, local communities, scientists, and government
- 4. **Strengthen enforcement capacity** Everyone agrees that enforcement needs to be improved. Hawai'i's enforcement capacity is underfunded and understaffed.
- 5. **Manage statewide threats** Invasive species and land-based sources of pollution (*e.g.*, sewage injection wells, cesspools, illegal grading, stream channelization) are killing our reefs and must be reduced through statewide action and policy.

Taken together, the actions outlined above form a comprehensive program that will enable the State to turn the tide on reef degradation and begin to preserve the biological, cultural, and economic values of Hawai'i's reefs. The Nature Conservancy's marine work in Hawai'i is focused on working with the Department of Land and Natural Resources, local communities, and other government and private partners in support of these goals.

By whatever name, marine reserves, management areas, replenishment areas, or protected areas have been demonstrated across the Pacific and the world as an effective tool for replenishing fish stocks both within and—maybe of greater interest—outside their boundaries. The proven result is that providing a network for refuge areas where fish can grow well beyond their first time of sexual maturity, those fish will produce exponentially more offspring which will then spill over into surrounding areas.

Thank you for the opportunity to provide comments on this measure.





# HB 1751 HD1 RELATING TO AQUATIC RESOURCES

Committee on Energy & Environmental Protection

February 15, 2018

8:35 a.m.

Room 325

The Office of Hawaiian Affairs (OHA) offers the following **COMMENTS** on HB1751 HD1. This bill would require the Department of Land and Natural Resources (DLNR) to establish a network of marine protected areas (MPAs) and herbivore replenishment areas (HRAs) to protect Hawai'i's marine resources, and meet the state's goal to "effectively manage" 30 percent of the State's nearshore resources by 2030.

OHA has long-advocated for more responsible management and proactive protection of Hawai'i's marine resources, particularly in light of these resources' importance to our beneficiaries' culture, health, and economic self-sufficiency. Thus, we appreciate the general intent of this bill and acknowledge the potential benefits of establishing a network of MPAs and HRAs.

However, OHA does have concerns about the broad impacts a categorical and non-time-limited "no-take" MPA model may have on the resources and communities in and around the areas in which such MPAs may be designated. In particular, OHA notes that many rural, subsistence Native Hawaiian communities have a close and highly interdependent relationship with their nearshore fisheries, which may be inadvertently impacted or even severed by less-than-fully-informed MPA designation decisions. Notably, such communities' intimate familiarity with and connection to their respective places may also hold the key to managing and perpetuating their nearshore resources, in a manner just as if not more effective than an MPA no-take model. Accordingly, OHA respectfully urges the Committee to consider including robust community consultation requirements as a condition of MPA and HRA designation, prior to the initiation of rulemaking proceedings, and further allowing for community-based subsistence fishing areas or similar community-driven management proposals to also be considered an eligible component of the contemplated marine management "network."

In addition, while OHA appreciates subsection (c)'s direction to the DLNR to consider and provide for the preservation of traditional and customary Native Hawaiian practices, the proposed language is unclear as to the whether Native Hawaiian cultural practitioners may be subject to liability for engaging in certain practices within a designated MPA. Accordingly, to clarify and strengthen this measure's protection of Native Hawaiian traditional and customary practices and practitioners, OHA recommends amending the language on page 3, lines 5-8, to read as follows:

"(c) Marine protected areas designated under this section and marine management strategies for such areas shall provide for and not restrict the exercise of Native Hawaiian traditional and customary practices protected pursuant to Article XII, section 7 of the Hawai'i State Constitution."

Finally, OHA notes that a separate bill, HB1723, would convene a working group to identify high-priority areas that are in need of protective management and that may be eligible for designation as MPAs. OHA believes that this working group could be restructured and extended to assist the DLNR in the designation of a network of MPAs, HRAs, and CBSFAs, provided that this does not delay formal DLNR action in support of communities currently seeking CBSFA designation for their nearshore waters.

Thank you for the opportunity to testify on this measure.





## PET INDUSTRY JOINT ADVISORY COUNCIL

1615 Duke Street, Suite 100 Alexandria, VA 22314 Tel: 202-452-1525

# TESTIMONY OF THE PET INDUSTRY JOINT ADVISORY COUNCIL FOR CONSIDERATION OF THE HAWAII HOUSE ENERGY & ENVIRONMENTAL PROTECTION COMMITTEE IN SUPPORT OF HB 1751

To be considered February 15<sup>th</sup>, 2018

January 25, 2018

Position: SUPPORT

HB 1751 will further ensure the sustainability of what is already one of the best managed near shore fisheries in the world. Sound science, sound safety practices, and common sense all dictate that Hawaii already maintains a highly responsible and sustainable aquarium fishery. HB 1751 is supported by the Pet Industry Joint Advisory Council (PIJAC) and our Hawaii members as a measure to further ensure that sustainability into the future.

The Pet Industry Joint Advisory Council (PIJAC) appreciates the opportunity to offer our views regarding HB 1751. As the country's largest pet trade association, representing the interests of all segments of the pet industry throughout the United States, PIJAC counts among its members national associations, organizations, corporations and individuals involved in the commercial pet trade. More specifically, PIJAC represents the interests of pet stores, suppliers, distributors, pet supply manufacturers, fish collectors, retailers and pet owners throughout the state of Hawaii and across the country.

Let me start by saying that nobody cares more about healthy and safe pets than do PIJAC and our members. We have for many years provided a well-respected animal care certification program that is widely utilized by not only persons in the commercial pet trade but shelters, humane societies and institutes of higher education as well. Our association has long been recognized as the voice for a responsible pet trade, and we routinely advocate legislative and regulatory proposals establishing governmental mandates where appropriate to advance the public interest and welfare of pets and the environment. PIJAC works closely with US Department of Agriculture and Department of the Interior to ensure effective enforcement of the federal Animal Welfare Act, management of threatened or endangered species and control of invasive species, and have since its inception. We regularly work with federal and state agencies as well as local governments to advance animal welfare and environmental interests.

The science surrounding Hawaii's near-shore fishery is clear; it is sustainable, and arguably the best managed in the world. Our members are reliant on the sustainability of Hawaii's fisheries. They have supported and, in the case of the aquarium fishers, have actually proposed many of these restrictions in order to protect the trade and the reefs into the future. We strongly urge the legislature to embrace the responsible cautionary measures proposed in HB 1751 over the environmental extremism proposed in SB 2003 which simply declares that aquarium ownership is just somehow wrong despite all scientific evidence.

It is important to note that these restrictions are being supported as a precautionary measure to ensure the continuance of a sustainable fishery. In fact, the Hawaii Department of Land and Natural Resources (DLNR) found that the West Hawaii "no-aquarium collecting" Fish Replenishment Areas (FRAs), implemented in 1999, have been very successful in increasing populations of Yellow Tang (Zebrasoma flavescens) — the most heavily targeted aquarium fish accounting for 84% of the total catch. Fifteen years after closure, the population of Yellow Tang has increased 64.5% in the FRAs while their abundance in the Open Areas has not declined significantly." Overall Yellow Tangs have increased substantially with a current population in excess of 3.6 million fish. Further, aquarium fisheries harvest the plentiful juvenile fish

rather than mature adults, further protecting the ability of the different species to reproduce. In fact, the DLNR, based upon the effectiveness of the West Hawai'i FRAs for aquarium fish, recommends that it establish MPAs for non-aquarium fish species. The data clearly show that Hawaii's current management practices are resulting in increased, not decreased, fish populations.

Hawaii's aquarium industry is considered one of the best regulated near-shore fisheries in the world. The DLNR, pursuant to State law, submits a report to the legislature every five years entitled "Relating to the West Hawaii Regional Fishery Management Area." The 2015 Report found that the "The Hawaii marine aquarium fishery is currently the most economically valuable commercial inshore fishery in the State with FY 2014 reported landings greater than \$2.3 million." The regulatory mechanisms covering the Hawaiian aquarium fishery supports the tenets of the sustainable use of renewable natural resources supported in the IUCN's Policy Statement on sustainable use. PIJAC supports HB 1751 and asks the Hawaii Legislature to similarly support the measure. We ask that you vote YES on HB 1751.

Thank you for considering our concerns.

Robert Likins
Vice President of Government Affairs
Pet Industry Joint Advisory Council (PIJAC)
bob@pijac.org

<u>HB-1751-HD-1</u> Submitted on: 2/12/2018 8:41:49 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Erica Scott	Individual	Support	No	

Comments:

Submitted on: 2/13/2018 10:15:28 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Shyla Moon	Individual	Oppose	No

#### Comments:

We don't need preservation we need conservation. Know the difference.

<u>HB-1751-HD-1</u> Submitted on: 2/13/2018 2:06:23 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Randy Cheung	Individual	Oppose	No

Comments:

Submitted on: 2/13/2018 2:37:16 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Laura Russell	Individual	Support	No

#### Comments:

Please support HB 1751

Growing up in Hawaii I witnessed the ups and downs of Hanauma Bay. Designating the area as a Marine Protected Area with a mandatory educational component for all visitors play a vital role in the bay's comeback

Submitted on: 2/13/2018 3:12:33 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Lauren	Individual	Support	No

#### Comments:

Coastal ecosystems are vital to the sustainability of all marine life. Marine sanctuaries should continue to protect the indigenous flora and fauna of Hawaii. I have never personally seen Hawaii, but I have also never seen The Great Barrier Reef in Australia, and I never will, as the reef died within my lifetime. It is in the state's best interest to protect Hawaii's coastal ecosystems and local species, which is why I support HB1751.

Submitted on: 2/13/2018 5:14:41 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Nina Lambert	Individual	Support	No

#### Comments:

Protection of marine areas has proven to be an effective means of preserving nearshore marine resources which are critical to maintaining a healthy ocean food chain. This legislation would help to increase the biomass, density, size and diversity of marine organisms in protected areas to support the health of our coral reefs, spinner dolphins, whales and other cetaceans in Hawaii. With our oceans being under increasing pressure from human activity, Hawaii should be a leader in preserving vital nearshore marine resources which supports the state's economic future and quality of life for future generations.

Submitted on: 2/13/2018 5:23:14 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Jeanne Shearer	Individual	Support	No

#### Comments:

I am in writing in support of HB1751. As a marine mammal biologist and PhD student, I am well aware of the value of marine protected areas (MPAs). MPAs provide a wealth of both ecological and economic benefits. By serving as important nursery grounds for fish, MPAs can increase fish stocks, leading to more productive and sustainable fisheries. A healthy fish stock leads to healthy ecosystems, including Hawaii's iconic coral reefs that serve as a prime tourist attraction, one of Hawaii's most important economies. Well-functioning reefs and ecosystems in turn contribute to healthy populations of marine mammals, including Hawaii's well-known spinner dolphins. Protecting habitat and foraging resources for spinner dolphins has beneficial impacts for the tourism industry as well as Hawaii's image as a natural resource wonderland. When looking at conservation tools, no-take marine protected areas are one of the best way to rebuild degraded ecosystems and restore biodiversity and productivity. I encourage you to pass HB1751 and let Hawaii be a leader on the world stage as we recognize the value of protecting our natural ecosystems.

Submitted on: 2/13/2018 5:24:55 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Austin Allen	Individual	Support	No

#### Comments:

As a marine science PhD student with a Masters in Coastal Environmental Management, I respect conservation tools that are effective. While the debate surrounding the efficacy of marine protected areas (MPAs) continues, the consensus is that certain factors lead to MPAs that support biodiversity, ecosystem services, human livelihoods, and spillover effects that support fisheries resources, among other benefits. In a Nature paper from 2014, Edgar and colleagues reviewed 87 MPAs around the globe and identified five key features that lead to successful MPAs: 1) no-take status, 2) well-enforced, 3) older (>10 years), 4) large, and 5) isolated by deep-water and sand. Social scientists have determined a number of ways to set up MPAs to make them work long-term, including a mosaic of management regimes, including no-take areas, and I urge the DLNR managers and scientists to consult that literature.

The coral bleaching in Hawaii several years ago was dramatic. Coral reefs are under assault from many serious cumulative stressors. Setting aside areas as MPAs, even as multi-use (not no-take), can help make reefs more resilient and prevent an ecosystem phase shift toward non-coral dominated habitat. I've conducted research showing corals mistake microplastics for prey, which is likely low on the list of stressors reefs face, yet it proves how diverse the threats are to reefs. Focusing on preventing herbivore over-fishing, as Caribbean coral reef managers are doing, is a wise move. Overall, MPAs are a vital tool in marine conservation and I commend the effort to manage part of Hawaii's resources as MPAs. I support HB1751.

<u>HB-1751-HD-1</u> Submitted on: 2/13/2018 5:29:02 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Jennifer Milholen	Individual	Support	No

Comments:

Submitted on: 2/13/2018 7:15:14 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Michelle Campbell	Individual	Support	No	

#### Comments:

I support HB1751.

As someone who actively works in the profession of marine conservation, I feel MPAs are beneficial to the conservation of biodiversity and ecosystems, fishery support, cultural appreciation, marine tourism and opportunities for education on all of these fronts.

Well-managed MPAs with 'no-take' reserves can be tourist attractions. These marine areas build abundant opportunities to connect visitors to the cultural significance of Hawaii and the preservation of the ecosystem. The establishment of a MPA is a wonderful way to raise the profile of an area. Coastal and marine ecosystems contribute to beach and shoreline stability and to the quality of life of the people living alongside them. MPAs play a large role in educating local communities and visitors about the culture and history of the areas they protect. Educating visitors about sites of historic significance helps illustrate the relationship between people and marine environments. Connection and appreciation is one of the best ways to further marine conservation in Hawaii.

Thank you.

Michelle Campbell

<u>HB-1751-HD-1</u> Submitted on: 2/13/2018 8:40:08 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Joni Kamiya	Individual	Oppose	No

Comments:

Submitted on: 2/14/2018 12:43:06 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Krysta Walker	Individual	Support	No

#### Comments:

I am writing to support HB1751 that will ensure the health of Hawaii's marine ecosystems. This is critically important to the animals than inhabit these waters, such as fish, wild spinner dolphins, whales, and other marine life. With ever growing pressures on the ocean, it's important to protect Hawaii's nearshore marine resources and do what we can now, before it's too late.

Krysta Walker

Submitted on: 2/14/2018 5:46:21 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Shelby Dailey	Individual	Support	No	

#### Comments:

I strongly support HB1751.

The health of marine life is vital to all living beings and is directly impactful in geographical areas with close proximity to large bodies of water like Hawaii. It is our responsibility to ensure that the marine life that inhabit the ocean have a clean, safe habitat. Since mosts threats to wild marine life are the direct result of human pollution, it would be irresponsible to disregard our accountability in the declining health of our ocean.

Instead, we should be leaders of ocean stewardship. By protecting these areas, we are protecting the entire ecosystem and preserving the critical ecological chain. While the current protected areas are a great step in the right direction, we must do more.

Currently, the ocean is being polluted at an alarmingly rapid rate and, in an effort to reverse this damage, more needs to be done. Protecting these areas will be a necessary catalyst in counteracting the daily effects that plastic waste, water pollution, and other human influences are making on our marine life and their ocean home.

Submitted on: 2/14/2018 6:11:18 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Tamra Erickson	Individual	Support	No

#### Comments:

I support this bill. I feel it is an important step in protecting our oceans, wildlife, ecosystems and increasing biodiversity.

Submitted on: 2/14/2018 6:48:23 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Vivian Plowman	Individual	Support	No

Comments:

Testimony in Support of HB 1751

Submitted by: Vivian Strolis Plowman

Financial Controller

Dolphin Quest, LLC

I support the legislative findings that marine protected areas are effective tools for preserving Hawaii's nearshore resources. Additionally, I believe it is imperative to require the department of land and natural resources to establish a network of marine protected areas to protect Hawaii's marine resources and effectively manage at a minimum thirty per cent of the State's nearshore resources by 2030, or preferably sooner.

The harmful effects of humans on our wonderful marine ohana must be limited and we need to protect the oceans for the benefit of all future generations and for the existence of all the corals, fish, marine mammals and other flora and fauna of our marine biomes. Supported by multiple research projects, there is overwhelming evidence that such nearshore areas must be protected for fish stocks, coral reefs and even eco-tourism.

Submitted on: 2/14/2018 6:35:50 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kevin Furman	Individual	Support	No

#### Comments:

#### Aloha:

I support the efforts to create and maintain marine protected areas (MPA) in Hawaii for a number of reasons. These areas are vital to replenishing and restoring the health of coral reefs, fish stocks, and food sources for other marine life such as marine mammals. These ecosystems are constantly harmed by human activity and to the extent that we can preserve areas to be free from human impacts, or at least be managed in a way that would permit restoration to health, all the better for generations to come. DNLR and other Hawaii state agencies can do more and perhaps HB 1751 will assist the agency in that work. But ultimately the health of these fragile areas is up to those of us who seek to take responsibility for the condition of these areas. Ho'okuleana means that we take responsibility for protecting these areas and so I support HB 1751 if it leads to doing so.

-Kevin Furman

Submitted on: 2/14/2018 6:50:48 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
William Wolden	Dolphin Quest	Support	No	

#### Comments:

Please support HB1751.

I'm a frequent visitor to Hawaii and believe this Bill is very important to help protect the health of Hawaii's marine habitats and coral reefs which are critically important to our wild spinner dolphins, whales, and other cetacean populations that depend on stable and bio-diverse fish stocks which this Bill will help protect.

Thank you.

Submitted on: 2/14/2018 7:52:12 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Jason Price	Individual	Support	No

#### Comments:

I support HB1751. It is vitally important to protect Hawaii's coastal marine resources. The health of these areas has a direct impact on the long-term health of spinner dolphins, coral reefs, whales and other cetaceans. The enhanced protection of these marine areas provided by this bill is critical for these animals and will help ensure their survival into the future.

Submitted on: 2/14/2018 8:06:31 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Jade Haughian	Individual	Support	No

#### Comments:

Please support HB1751. It is critical that we take steps now to establish a well planned network of marine protected areas to support ecosystem health and biodiversity in our oceans. The health of Hawaii's marine habitats and coral reefs are critically important to our marine life populations (such as spinner dolphins) that depend on stable and biodiverse fish stocks which this bill will help protect. Our ocean is under ever-increasing pressures and Hawaii should be a leader in preserving vital nearshore marine resources which supports the state's economic future and quality of life for our future generations.

Mahalo,

Jade Haughian

Oahu Resident

Submitted on: 2/14/2018 8:06:41 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Jillian Costello Chavers	Individual	Support	No	

#### Comments:

Dear Representatives,

Protection of marine habitats is vital to conserve our marine species and fisheries for future generations. As a veterinary professional, I am in strong support for passage of this legislation.

Sincerely, Jill Costello Chavers, DVM

P.S. - Is page 4 a typo? Bill to take affect in 2088?

Submitted on: 2/14/2018 8:13:09 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	
Zehra Gundogan	Individual	Support	No	

#### Comments:

Dear members,

I am in support of bill HB1751. As a veterinarian, I strongly value the importance of protecting Hawaii's marine resources. The health of marine habitats and coral reefs are extremely important to cetacean populations, which depend on a complex network of biodiverse organisms and fish stocks that will be protected under this bill. Marine protected areas are critical to maintaining the marine health of sustainable fisheries, stimulating the economy through ecotourism and encouraging the importance of marine education. Hawaii should be a leader in the fight to protect our oceans and marine wildlife.

Thank you for this opportunity to provide a testimony and support bill HB1751. Thank you,

Zehra Gundogan, VMD

Submitted on: 2/14/2018 8:14:37 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Timothy Murphy	Individual	Support	No

#### Comments:

As a Hawaii Resident I urge you to support HB 1751. Our oceans are under increasing pressure and we as a State should be a leader in preserving marine resources. Enhancing Marine Protected Areas in Hawaii will help preserve nearshore resources which are critically important to the health whales, spinner dolphins and other cetaceans.

Submitted on: 2/14/2018 8:19:17 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kianna Scott	Individual	Support	No

#### Comments:

As a veterinary professional I understand the importance of marine protected areas and strongly support bill HB1751. In an increasingly hazardous and damaged ecosystem it is vital that we perform all feasible tasks to conserve coral reefs and marine habitats. In doing so we will support the vast verity fish, marine mammals, and all forms of sea life for generations to come.

Submitted on: 2/14/2018 8:20:17 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Kent Allen	Individual	Support	No

#### Comments:

To whom it may concern.

My name is Kent Allen, I am a veterinary professional who visits the Hawaiian Islands frequently. I am strongly in favor of HB 1751. The MPA needs to be enacted while there are still coastal areas to be protected.

Kent Allen DVM

Submitted on: 2/14/2018 9:17:20 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Cameron Dabney	Individual	Support	No

#### Comments:

#### I support HB1751.

As an avid ocean user and marine biologist I want to see MPA's continue to thrive. Historical evidence shows that these areas are crucial to the health of our reefs, fish populations, and ultimately all of us who rely on our ocean ecosystem. I have seen visible, positive results within MPA's and with adjacent reefs on the North Shore and in Puako – increased fish size, more biodiversity, large populations sizes, and decreases reef degredation. This is a great summary of MPA's success in Hawaii: <a href="https://dlnr.hawaii.gov/dar/files/2014/04/MPApub.pdf">https://dlnr.hawaii.gov/dar/files/2014/04/MPApub.pdf</a>

I urge you to also support HB1751 for the health of our ocean and our families!

Thank you,

~Cameron Dabney

Submitted on: 2/14/2018 9:19:08 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Tulia Ferguson	Individual	Support	No

Comments:

Aloha,

Please support HB1751. The health of Hawaii's marine habitats and coral reefs are critically important to our wild spinner dolphins, whales and other cetacean populations that depend on stable and bio-diverse fish stocks which this bill will help protect. Enhancing Marine Protected Areas in Hawaii will help preserve Hawaii's nearshore marine resources. Marine protected areas around the world have contributed to large increases in biomass, density, size and diversity of marine organisms in those areas. Our ocean is under ever-increasing pressures. Hawaii should be a leader in preserving vital nearshore marine resources which supports the state's economic future and quality of life for future generations. Marine protected areas have also been shown to result in sustainable fisheries, to promote marine education and recreation, and to stimulate the economy through ecotourism and education.

Mahalo,

Tulia Ferguson

Submitted on: 2/14/2018 3:32:06 PM

Testimony for EEP on 2/15/2018 8:35:00 AM



Submitted By	Organization	Testifier Position	Present at Hearing
Eric Dilley	Individual	Support	No

#### Comments:

My name is Eric Dilley and I am a Marine Biology graduate student at UH Manoa. As an aspiring marine biologist, I am very concerned about climate change and how it will impact coral reef ecosystems in Hawai'i. With further warming and acidification of our oceans, corals will be subjected to more frequent and intense disturbances such as storms and bleaching events which will inhibit the ability of corals to recover and grow. It is crucial that the state of Hawai'i fosters resilience of coral reef ecosystems by managing local impacts effectively. Impacts such as overfishing, poor coastal management, and pollution are further inhibiting the ability of coral reefs to adapt to changes over time. It is therefore vital that thoughtful and timely action is taken by the DLNR to create a management system through marine protected areas and other actions to ensure that coral reefs as we know them persist into the future. I therefore strongly endorse HB1751 and urge the state legislature to support and pass this bill in a timely manner.



<u>HB-1751-HD-1</u> Submitted on: 2/14/2018 5:02:03 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Margaret Maupin	Individual	Support	No

Comments:



Submitted on: 2/14/2018 8:41:13 PM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Linda Darlington	Individual	Support	No

#### Comments:

Any measure like this is of DIRE necessity! The islands are struggling to maintain the numbers and diversity of marine species that generations here have known. Whether it be due to ocean warming, pollution, plastic, overfishing, etc, is only part of the solution. ACTING to preserve these important spaces for the future of Hawaii is URGENT! I support enforcing this and similar legislations.



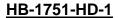
Submitted on: 2/15/2018 6:35:27 AM

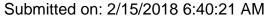
Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing	_
noenoe barney- campbell	Individual	Support	No	

#### Comments:

I support this measure because our ocean and its respurces are in danger from global warming and the acidification of our ocean. We must do all we can to protect our ocean resources for without our ocean and it's without our oceans and the life ithey sustain we will not survive on our planet All life on earth is dependent on a healthy ocean.





Testimony for EEP on 2/15/2018 8:35:00 AM



Submitted By	Organization	Position	Present at Hearing
Lynn Lauterbach	Individual	Support	No

#### Comments:

I am writing to encourage support of HB 1751. As a tourist to your beautiful state, greatly appreciate the wisdom in conserving and protecting this irreplaceable ecosystem and all of the incredible life it supports. It is vital to keep these areas under the guidance of those who have studied and understand the systems. Educating the human population is a key component also. I hope to visit your beautiful state often and know that the marine ecosystems will be there for my grandchildren and beyond. Protect it!! Please support HB 1751 to ensure this happens. Lynn Lauterbach, Colorado



Submitted on: 2/15/2018 8:23:43 AM

Testimony for EEP on 2/15/2018 8:35:00 AM

Submitted By	Organization	Testitier Position	Present at Hearing
Amy Nihan	Individual	Support	No

#### Comments:

As a tourist to your spectacular islands, I fully support HB1751, and hope that protecting and conserving Hawaii's coastal marine resoures will always be a high priority for both residents of Hawaii and all of our world community. This ensures both the future of marine life, and the beautiful coastal regions for all currrent and future generations to enjoy and savor.

Thank you,

Amy Nihan

Lafayette, Colorado