

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  
FINANCE

Wednesday, February 28, 2018  
12:00 PM  
State Capitol, Conference Room 308

In consideration of  
HOUSE BILL 1751, HOUSE DRAFT 2  
RELATING TO AQUATIC RESOURCES

House Bill 1751, House Draft 2 proposes to require the Department of Land and Natural Resources (Department), through its Division of Aquatic Resources, to establish a network of marine managed areas in areas identified to provide the most benefit to the State's nearshore marine resources. **The Department supports this measure and offers the following comments.**

The Department appreciates the spirit of this measure and recognizes the benefits of a well-planned 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. The Department expects that the Marine 30x30 Initiative plan will be finalized by 2019.

Thank you for the opportunity to comment on this measure.

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

ROBERT K. MASUDA  
FIRST DEPUTY

JEFFREY T. PEARSON P.E.  
DEPUTY DIRECTOR - WATER

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

Testimony of The Nature Conservancy of Hawai'i  
Supporting HB 1751 HD2 Relating to Aquatic Resources  
House Committee on Finance  
Wednesday, February 28, 2018, 12:00PM, Room 308

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*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.*

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The Nature Conservancy supports H.B. 1751 HD2.

We agree that a well-designed and well-managed network of marine managed areas is a 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 support this measure.

## HAWAI‘I REEF AND OCEAN COALITION

February 27, 2018

**To:** House Committee on Finance  
Sylvia Luke, Chair  
Ty J.K.Cullen, Vice Chair

**Re:** HB 1751, HD 2, to Establish Marine Management Areas

**Hearing:** Wednesday, February 28, 2018, 12:00 noon, Room 308

**Position:** STRONG SUPPORT

The HAWAI‘I REEF AND OCEAN COALITION – HIROC – was formed last year by coral reef scientists, educators, local Hawai‘i environmental organizations, elected officials, and others to address a crisis facing Hawaii’s coral reefs and ocean. We are currently asking the Legislature to pass a handful of very important bills to save our coral reefs – they are bills relating to sunscreens, plus bills on cesspools; Styrofoam; plastic straws, bottles and other marine debris; and sea level rise.

We support HB 1751, HD 2, which would direct the Department of Land and Natural Resources to create a network of Marine Management Areas in Hawai‘i to help protect our coral ecosystems and coastal communities.

Coral reefs - on which our shoreline, economy and way of life critically depend - desperately need protection! We can increase the strength and health of our coral reefs by actively managing and mitigating localized stressors, such as: storm- water runoff containing sediment and pollution, cesspools spewing harmful nutrients, chemical sunscreens containing toxic oxybenzone or octinoxate, and plastic and polystyrene marine debris. Healthy levels of fish, especially herbivores, are critical to preserving coral reefs. This bill appears to take important steps toward that goal.

Our shorelines, beaches, tourist-based economy, and pristine recreational waters are completely dependent on healthy coral reefs. It all comes down to that.

HIROC thanks the Committee for this opportunity to testify on this important bill.

Alan B. Burdick, for HIROC  
[Burdick808@gmail.com/486-1018](mailto:Burdick808@gmail.com)

**HB-1751-HD-2**

Submitted on: 2/26/2018 1:40:30 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Tina Owens	LOST FISH Coalition	Support	No

Comments:

The LOST FISH Coalition strongly supports HB1751 HD2 and feels that this may be one of the most important steps forward to protect Hawaii's natural marine resources.

For more than 20 years the LFC has worked tirelessly to strengthen and assist the state in making wise management decisions for the West Hawaii reefs. We were instrumental in getting support for Act 306 (1998) making the entire West Hawaii coastline a special Regional Fisheries Management Area which included a network of Fish Replenishment Areas where no aquarium collecting was allowed.

Since that time, the populations of reef fish have rebounded astonishingly. Now that climate change is adding one more giant challenge to our natural resources it is time for additional management to extend to other segments and populations of our reefs. We have left them essentially at the mercy of the masses.

The intent of this bill is not to prohibit the people of Hawaii from accessing our beautiful ocean. The intent is to assure that the ocean remains rich, and beautiful and abundant. It is to ensure that future generations have a vibrant reef to fish on.

Please pass this bill.

Mahalo,

Tina Owens LOST FISH Coalition



## Eyes of the Reef: Community Reporting Network

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From:  
K. Lindsey Kramer, M. S.  
Eyes of the Reef Network  
Hawai'i Island Coordinator  
PO Box 3112  
Kailua-Kona, HI 96740

TO: HOUSE OF REPRESENTATIVES, 29<sup>th</sup> LEGISLATURE  
COMMITTEE ON FINANCE  
Meeting Date: 2/28/2018, 12:00

Feb. 27, 2018

### RE: SUPPORT for HB1751, RELATING TO MARINE LIFE PROTECTION

Aloha,

Mahalo for the opportunity to testify in **support** of **HB 1751, RELATING TO AQUATIC RESOURCES**, which would require the Department of Land and Natural Resources (DLNR), through its Division of Aquatic Resources (DAR), to establish a network of marine managed areas in areas identified to provide the most benefit to the State's nearshore marine resources.

I currently serve as the Hawai'i Island Coordinator for the Eyes of the Reef Network, which offers free community outreach and trainings on the health of Hawaii's coral reef ecosystems. I've also worked in the field of coral reef research for over 15 years, and wrote my M.S. thesis on the benefits of establishing marine managed areas on coral reef fisheries and the surrounding ecosystem. Spatial management of marine resources, including clearly-marked "no-take" areas, offers a simple and highly effective tool to ensure ecosystem-wide protection of coral reef species. I've included numerous scientific references supporting this statement below. When coupled with improved watershed management in surrounding areas, marine protected areas are our best option for enhancing ecosystem resilience against the numerous other stressors will likely affect us in the coming decades, including climate-change driven thermal stress events.

Our community in West Hawai'i experienced a massive and devastating coral bleaching and subsequent mortality event that occurred in summer 2015, which resulted in the loss of 49.6% of our live coral population. Surviving coral reef species, including corals, invertebrates, and fish, are reliant on the structural habitat created by corals, and urgently require strengthened protection. This massive loss foundational habitat for all other coral reef species should be a cause for great concern from our state legislature, and a catalyst to support this and other urgent marine conservation efforts.

Importantly, this bill aligns with the strategies outlined in DLNR/DAR's Coral Bleaching Recovery Plan, and Governor Ige's 30 by 30 plan for marine managed area designation.

Mahalo for your consideration of this testimony in strong support of HB1751.

K. Lindsey Kramer  
Eyes of the Reef Network  
Hawaii Island Coordinator

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## Eyes of the Reef: Community Reporting Network

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### RELEVANT SCIENTIFIC REFERENCES

#### **Benefits of “No-take” areas/ Restoration of fisheries within protected zones:**

- Alder J (1996) Have tropical marine protected areas worked? An initial analysis of their success. *Coast Manage* 24:97-114
- Attwood CG, Bennett BA (1994) Variation in dispersal of Galjoen (*Coracinus capensis*) (Teleostei: Coracinidae) from a marine reserve. *Can J Fish Aquat Sci* 51:1247-1257
- Edgar GJ, Barrett NS (1999) Effects of the declaration of marine reserves on Tasmanian reef fishes, invertebrates and plants. *J Exp Mar Biol Ecol* 242:107-144
- Halpern BS, Warner RR (2002) Marine reserves have rapid and lasting effects. *Ecol Lett* 5:361-366
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- Friedlander, A., and E Demartini. 2002. Contrasts in density, size and biomass of reef fishes between Northwestern and the main Hawaiian Islands: the effects of fishing down apex predators. *Mar. Ecol. Prog. Ser.* 230: 253-264.
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- McClanahan TR, Mangi S (2000) Spillover of exploitable fishes from a marine park and its effects on the adjacent fishery. *Ecol Appl* 10(6):1792-1805
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- Roberts CM, Bohnsack JA, Gell F, Hawkins JP, Goodridge R (2001) Effects of marine reserves on adjacent fisheries. *Science* 294:1920-1923
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- Sobel J, Dalgren C (2004) *Marine reserves: A guide to science, design and use*. Island Press, Washington

#### **Other Ecological Benefits of “No-take” zones:**

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- Mumby P.J., A.R. Harborne, J. Williams, C.V. Cappel, D.R. Brumbaugh, F. Micheli, K.E. Holmes, C.P. Dahlgren, C.B. Paris, and P.G. Blackwell. 2007. Trophic cascade facilitates coral recruitment in a marine reserve. *PNAS*. 104: 8362-8367.
- Pinnegar, J.K., N.V.C. Polunin, P. Francour, F. Badalamenti, R. Chemello, M. L. Harmelin-Vivien, B. Hereu, M. Milazzo, M. Zabala, G. D'Anna, and C. Pipitone. 2000. Trophic cascades in benthic marine ecosystems: lessons for fisheries and protected-area management. *Environ. Conserv.* 27: 179–200
- Shears NT, Babcock RC (2002) Marine reserves demonstrate top-down control of community structure on temperate reefs. *Oecologia* 132:131-142

#### **Global decline of coral reefs:**

- Bellwood D.R., T. P. Hughes, C. Folke, and N. Nystrom. 2004. Confronting the coral reef crisis. *Nature* 429: 827-833.
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## Eyes of the Reef: Community Reporting Network

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- Kramer et al. (2016) Kramer K, Cotton S, Lamson M, Walsh W. Bleaching and catastrophic mortality of reef-building corals along west Hawai'i island: findings and future directions. *Proceedings of the 13th international coral reef symposium, Honolulu; 2016*. pp. 229–241.
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- Pandolfi, J.M., J. B. C. Jackson, N. Baron, R. H. Bradbury, H. M. Guzman, T. P. Hughes, C. V. Kappel, F. Micheli, J. C. Ogden, H. P. Possingham, and E. Sala. 2005. Are US coral reefs on the slippery slope to slime? *Science*. 307: 1725-1726.
- Souter, D.W. and O. Lindén. 2000. The health and future of coral reef systems. *Ocean & Coastal Management*. 43: 657-688.
-

I would like to submit my written testimony in opposition to HB1751.

The focus should always be on specific species in fisheries management and not geographic areas. Closing areas can be the wrong tool for the protection of many species due to their wide range of movement. The Division of Aquatic Resources conducted more than a decade of fish tagging studies and it was determined that fish such as papio, ulua and opakapaka will readily transit throughout our state's waters.

Marine protected areas will do nothing to protect those stocks.

If protection is deemed necessary, the species need to be specified. Each would require different levels of protection. Each has its own range of habitats. And each has their own sets of behavior that will determine how protections can best be applied. Migratory species, for example, aren't helped by closed areas as they'd continue to be taken once they leave those protected zones. An annual catch limit works for those fish, and the timing of that catch period might need to be adjusted based on spawning periods.

Good science needs to be acquired and applied for fishery management strategies. Not only to provide the desired protection, but to allow the reasonable use of these marine resources at a time when Gov. David Ige is trying to increase local food production.

It is the job of marine resource experts to determine what should be protected and what kind of protections are to be established. That should be left to the Division of Aquatic Resources and done through the Administrative Rulemaking process.

Fishery management strategies should always be adaptive to changing conditions and never be done through fixed laws enacted in the legislature.

Thank you for your consideration.

Aloha,  
Dean Sensui, executive producer  
Hawai'i Goes Fishing



**HB-1751-HD-2**

Submitted on: 2/25/2018 9:15:07 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

Submitted By	Organization	Testifier Position	Present at Hearing
Teresa L. Nakama	BIFA	Oppose	No

Comments:

Aloha mai e Honorable House Representatives ;

We hereby ask all of you to oppose HB 1751 HD 2 for it violates our Hawaiian Constitution of Article 12 Section 7 of our gathering rights.

DLNR-DAR division has enough funds in its budget to do the study with out this proposal of wasting taxpayers hard earned tax dollars. Why is it that every time they need to work they are asking for more funds, every department has a budget and they need to work within their allowable budget and not keep wasting our hard earned tax payers money.

Public hearings are necessary to inform the public sector first, not past bills that will negatively affect the finances of the entire general public without any say in this legislation process.

Respectfully Yours,

Teresa L. Nakama

West Hawaii Aha Moku

Big Island Fisheries Alliance

Bringing about the abundance of Resources

Phone: [808-325-7157](tel:808-325-7157) Res. Leave message

Cell: [808-554-1587](tel:808-554-1587)

**HB-1751-HD-2**

Submitted on: 2/25/2018 4:58:00 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jaunette Itsuno	Individual	Support	No

Comments:

Dear Chair Luke and Members of the House Finance Committee,

Thank you for having this hearing and allowing the public to submit testimony. I strongly support the passing of this bill which will help to reduce opportunities of the fishing industries from quickly driving Hawaii's fish into extinction. To my astonishment, I have actually heard local fishermen say: "The fish are going extinct so we better get as much as we can now." Instead of just benefitting the few who are making a financial profit off of this exploitation, we should consider a slightly less myopic perspective which will also benefit Hawaii's economy as well as its ocean ecosystems. As responsible citizens of Hawaii, we are obliged to allow the ocean's endangered sentient beings to have a greater chance of survival. I support the designation of the marine areas to be managed by the Department of Land and Natural Resources as determined by statistical data to protect the ocean communities and to benefit the future generations of Hawaii's people.

Mahalo,

Jaunette Itsuno, B.S. Biology

Fourth generation Hawaii resident

**HB-1751-HD-2**

Submitted on: 2/27/2018 4:41:32 AM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Sylvia Ching	Individual	Support	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/23/2018 8:41:15 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Kat Culina	Individual	Support	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/24/2018 8:09:24 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Natalie Parra	Individual	Support	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/24/2018 8:56:42 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Mary James	Individual	Support	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/27/2018 12:29:14 AM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Ted Bohlen	Individual	Support	No

Comments:

Coral reefs (on which our shoreline, economy and way of life depend) desperately need protection! The local threats to reefs include storm water runoff containing sediment and pollution, cesspools spewing harmful nutrients, chemical sunscreens containing toxic oxybenzone or octinoxate, and plastic and polystyrene marine debris. Healthy levels of fish, especially herbivores, are critical to preserving coral reefs. Please pass this bill, which appears to take important steps toward the goal of sustaining reef fish Mahalo!

**HB-1751-HD-2**

Submitted on: 2/26/2018 6:25:02 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
M. Markl	Individual	Support	No

Comments:

Hello Committee Members And Chair(s):

Please support and protect our marine life here and pass this bill in your committee and onward

into law this session.

Thank you.

M. Markl



**HB-1751-HD-2**

Submitted on: 2/27/2018 1:35:28 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Monte Petersen	Individual	Support	No

Comments:

The Kahala Reef on Oahu is dying fast because fresh water canals are rivering streams of fresh water along with earthen mud and various pollutants into the very shallow eco system, shocking and killing much that should thrive there. Green algae grows on the reef which is devoid of what was once the normal marine life. This area should be alive with fish similar to Hanamu Bay, but is not. A simple solution would be to pipe and tunnel the two water canals out to empty into deeper waters out beyond the reef. The canals with the huge volumes of water are what caused the catastrophic destruction of the Kahala beach to reef area marine life. There was no such direct water flow into the area, until after the natural ponds, swamps, etc were drained and farmed then latter built upon, and now with the man made canals directing all the water that used to be stored naturally on the island are now two direct man made rivers bringing all that water into the Kahala beach to reef marine area. A quoted fact: "Corals are intolerant both of temperature and salinity change and it just takes a rise of 1C for a few weeks or extreme rainfall for them to begin to die. In the past 20 years, extreme weather linked to El Niño events and climate change has hit the world's shallow reefs hard. "

Thank you.

**HB-1751-HD-2**

Submitted on: 2/25/2018 10:44:13 AM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Brian F. Funai	Individual	Oppose	No

Comments:

I am in opposition to HB1751 HD2 for several reasons. I do not believe that marine managed areas should be legislated as the Legislature created the Chapter 93 process for the Division of Aquatic Resources/DLNR to require inclusion of the public's input. This legislation circumvents significant steps that the legislature itself noted as important enough to put the process in place. Please let the Division and Department do its job.

What it comes down to is that the creation of marine managed areas is about exclusion of one activity (ie fishing) over many other activities that are proven to be just as, if not more, of an impact to the nearshore ecosystem. Yet you do not see any real attention or resources being directed at increasing tourism, protection from runoff, removal of freshwater from the ecosystem, etc.

We have reduced management of our resources down to politics, private agendas and emotion and not allowed or adequately funded the Department to do it's job.

Thank you,

Brian F. Funai

**HB-1751-HD-2**

Submitted on: 2/25/2018 5:19:45 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Lynn Makabe	Individual	Oppose	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/25/2018 5:56:12 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Isaac Moon	Individual	Oppose	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/25/2018 5:56:58 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Shyla Moon	Individual	Oppose	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/25/2018 6:07:47 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Paul Lee	Individual	Oppose	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/25/2018 6:08:34 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Darrell Tanaka	Individual	Oppose	No

Comments:

DLNR cannot even defend the reserves it already has in place and you expect them to create more successfully??? how's about you show the public the state can effectively manage what it has before creating more private fishing areas for poachers.

**HB-1751-HD-2**

Submitted on: 2/25/2018 6:10:10 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jeffrey Kagihara	Individual	Oppose	No

Comments:



**HB-1751-HD-2**

Submitted on: 2/25/2018 6:24:46 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Andrew Ban	Individual	Oppose	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/25/2018 7:28:20 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Erik Parubrur-Kahaulelio	Individual	Oppose	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/25/2018 8:50:55 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
dawn hinano	Individual	Oppose	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/25/2018 9:14:03 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Joni Kamiya	Individual	Oppose	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/25/2018 10:28:32 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jim Hori, DDS	Individual	Oppose	No

Comments:

Strong Opposition!

**HB-1751-HD-2**

Submitted on: 2/26/2018 4:17:48 AM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
C. Pang	Individual	Oppose	No

Comments:

I am opposed to HB 1751 because I do not believe the legislature should be enacting by law what the DLNR should be determining is necessary or not on a scientific basis with stakeholder input. Enacting a law does not allow the DLNR the flexibility to adapt and modify as needed on a timely basis but rather locks everyone into what is passed ad infinitum, given the exceeding difficulty of modifying something once it has passed.

Let's instead allow the DLNR to do its job.

Mahalo,  
Courtland Pang  
Citizen

**HB-1751-HD-2**

Submitted on: 2/26/2018 7:31:19 AM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Randy Cheung	Individual	Oppose	No

Comments:

I STRONGLY oppose no-take areas and any other alleged methods of "management" which outright denies access or taking of marine life. It is IRRESPONSIBLE and LAZY to think that just by closing fishing to a certain area, that the outcome will be a net positive impact on the "states nearshore marine resources". The fishing pressure will just move to another area, and that area will be "devastated" twice as fast as the protected area. Just look at Waikiki. Sure the fish come back when its closed to fishing, but it just gets wiped out on the opening day of the next year. Lets stop being lazy and really manage our resources the correct way.

**HB-1751-HD-2**

Submitted on: 2/26/2018 8:44:32 AM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Dusten Dudoit	Individual	Oppose	No

Comments:

I Strongly Oppose this bill. Enough Areas are shut down already, leaving less areas to practice our gathering rights. Me and my family gather frequently and to know any of our favorite areas could be shut down would be devastating.

Dusten Dudoit

Sustenance Fisherman



**HB-1751-HD-2**

Submitted on: 2/26/2018 12:25:31 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
NOAH DRAZKOWSKI	Individual	Oppose	No

Comments:

Department of Land and Natural Resources does not have enough man power to enforce the laws of existing Marine Preserves and Herbivor zones.

**HB-1751-HD-2**

Submitted on: 2/26/2018 12:25:35 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Chadwick Teanio	Individual	Oppose	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/26/2018 12:29:50 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Reynaldo Gameng	Individual	Oppose	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/26/2018 12:36:43 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Evan Pascual	Individual	Oppose	No

Comments:

**HB-1751-HD-2**

Submitted on: 2/26/2018 3:33:17 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
William K. Chang	Individual	Oppose	No

Comments:

I oppose this bill

**HB-1751-HD-2**

Submitted on: 2/26/2018 6:08:03 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Huang-Chi Kuo	Individual	Oppose	No

Comments:

1. A very large portion of the shoreline is already inaccessible to the public. Have DAR do an analysis on what is the exact percentage of shoreline that is inaccessible to the public either due to geographic constrain or private land ownership?
2. Fshing is already heavily regulated to protect marine resources. Studies show that the bigger problems for Hawaii's reef and fishery are on-land land use, pollution, and over-development, which MPA will not fix.
3. Fishing is already in decline; less and less peole are fishing and know how to fish because the reliance on fishing for providing food is diminishing. Some perople may see it a progress, some others like me think otherwise. Why put more pressure on the fishing culture that is essential to an island's subsistence, especially for the less previlaged?

**HB-1751-HD-2**

Submitted on: 2/26/2018 10:59:00 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Edwin Taniguchi	Individual	Oppose	No

Comments:

MPA's deny access and should not be legislated.

**HB-1751-HD-2**

Submitted on: 2/26/2018 10:16:39 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Michael Grace	Individual	Oppose	No

Comments:



**HB-1751-HD-2**

Submitted on: 2/27/2018 7:14:30 AM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
jordan kilkeny	Individual	Oppose	No

Comments:

Hawai'i doesn't need more areas set aside and regulated we simply need more enforcement officers. I've been fishing my whole life 29 years and in my time fishing I've only seen one dlNr officer. Not enough personnel to do anything.

**HB-1751-HD-2**

Submitted on: 2/27/2018 8:41:46 AM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Brian Kimata	Individual	Oppose	No

Comments:

Chair Luke and Distinguished legislators,

I am opposed to the development of any additional Marine Reserves. This measure perpetuates the misconception that our fish stocks suffer from overfishing and does little to address the greater factors involved. Pollution, Coastal Development, Tourism, Siltation, Light Pollution, Reef disease, Climate Change and so many other factors are being ignored while a single minded attempt that merely appears to the uninitiated to be for the good of the resource tries to resolve the problem. Fishermen already have nearly 30% of the coast unavailable to them and taking away more of it ignores the many factors that have gotten our resource to it's current state.

Brian Kimata

**HB-1751-HD-2**

Submitted on: 2/27/2018 8:58:21 AM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Tom Ogawa	Individual	Oppose	No

Comments:



**LATE**

**HB1751 HD2**  
**RELATING TO AQUATIC RESOURCES**  
House Committee on Finance

February 28, 2018

12:00 p.m.

Room 308

The Office of Hawaiian Affairs (OHA) offers the following **COMMENTS** on HB1751 HD2. This bill would require the Department of Land and Natural Resources (DLNR) to establish a network of marine managed areas, including no-take areas, herbivore replenishment areas, and other spatial management approaches, 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 no-take areas, herbivore replenishment areas, and other specially managed areas, including, presumably, community-based subsistence fishing areas (CBSFAs).

OHA notes that many rural, subsistence Native Hawaiian communities have a close and highly interdependent relationship with their nearshore fisheries. 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 a no-take model. **Accordingly, OHA respectfully urges the Committee to consider explicitly including robust community consultation requirements in the establishment of the contemplated network, prior to the initiation of rulemaking proceedings, and to list community-driven CBSFAs along with no-take and herbivore replenishment areas as explicit components of the contemplated marine management area network.**

Additionally, OHA notes that a separate bill, HB1723 HD1, 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 marine protected area. OHA believes that this working group could be restructured and extended to assist the DLNR in the designation of a network of no-take areas, herbivore replenishment areas, CBSFAs, and other marine managed areas, 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.

**LATE**

**HB-1751-HD-2**

Submitted on: 2/27/2018 2:46:40 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Thomas Iwanicki	Individual	Support	No

Comments:

The impact of climate change is visible throughout the Hawaiian archipelago. With the increased prevalence of coral bleaching, over-fishing, and habitat degradation by anthropogenic forces, the natural systems that make the Hawaiian archipelago unique are in grave danger. I strongly support bill HB1751 and any legislation that will protect Hawai'i's endemic marine biodiversity. We must show the bravery and tenacity to enact these changes now. The environment for which we are stewards of cannot wait for future generations to act. We must act.

February 27, 2018



House Committee on Finance

DATE: Wednesday, February 28, 2018

TIME: 2:00 PM

PLACE: Conference Room 308

HB1751HD2 – RELATING TO AQUATIC RESOURCES

Honorable Chair Luke, Vice Chair Cullen and Members of the House Committee Finance

**STRONG OPPOSITION**

While I support the ability of the Administration to have a large “tool bag” of management options to effectively manage our aquatic resources, I strongly oppose HB1751HD2 as it attempts to legislate the establishment of a network of marine managed areas over-stepping the separation of duties between the State Legislature and the Administration. To legislate marine managed areas as an essential tool in the State's commitment to “actively combat climate change and sea level rise, and to protect the State's economies and coastal communities” is a stretch as the prescribed management measure is not an effective tool for the purpose described.

HB1751HD2 also undermines the administration and management direction of the Department of Land and Natural Resources, Division of Aquatic Resources and its Chapter 91 Administrative Rulemaking authorities. It is the Department's and Division's responsibility and authority to initiate and analyze the necessary science monitor the status of aquatic resources and initiate actions to effectively address threats to them to ensure their sustainability, security and accessibility by the public with the vetting, transparency and discussion with the public provided by the Administrative Rule process.

Additionally, statutory mandates denies the Department and Division the flexibility necessary to “effectively manage” and limits their ability to employ alternative management measures and strategies to quickly and effectively respond to changing conditions and situations.

Thank you for this opportunity to provide testimony on this measure.

Respectfully,

Roy N. Morioka, Oahu Fisherman



UNIVERSITY  
of HAWAII°  
MĀNOA

**Dr. Mark Hixon**

*Sidney and Erica Hsiao Endowed Chair in Marine Biology*

Department of Biology

University of Hawai'i at Mānoa

2538 McCarthy Mall, Edmondson 216

Honolulu, HI 96822-2216

phone: 808-956-6427

e-mail: [hixonm@hawaii.edu](mailto:hixonm@hawaii.edu)

web: <http://manoa.hawaii.edu/biology/people/mark-hixon>

27 February 2018

Hawai'i State Legislature

**re: personal testimony in support of HB 1751**

**LATE**

Aloha Legislators:

I speak in strong favor of HB 1751 as a marine scientist with decades of experience studying and designing marine managed areas. I served for 6 years on the U.S. Marine Protected Areas Federal Advisory Committee, three of those years as chairman. I also co-chaired a stakeholder committee that designed the Cape Perpetua Marine Reserve in Oregon, and helped the Government of the Bahamas design their network of marine reserves. I received no compensation for these services.

Healthy coral reefs provide many benefits to Hawai'i, including natural breakwaters from ever rising sea levels and intensifying coastal erosion, potentially productive fisheries, sources of new medicines, tourism income, recreation, and spiritual connection.

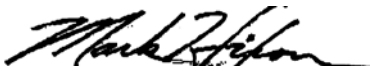
**I cannot overemphasize the importance of effective marine managed areas in replenishing populations of fishes and invertebrates that eat *limu* (seaweed or benthic algae), especially *uhu* (parrotfishes) and some sea urchins, thereby ensuring that our coral reefs survive ever worsening coral bleaching events.** Many of these herbivores are terribly overfished in the main Hawaiian Islands due to decades of overfishing. In their absence, once a coral colony dies due to coral bleaching or any other cause, *limu* tends to cover the dead coral skeleton, preventing new baby corals from settling and growing. The coral reef remains dead rather than recovering.

**Importantly, Hawai'i is rapidly running out of time to save our coral reefs.** As the oceans continue to warm, 2017 being the warmest ocean year on record globally so far (Cheng and Zhu 2018), coral bleaching is accelerating in frequency and intensity in Hawai'i and elsewhere. Bleaching, which occurs when warm water breaks-down the mutualism between corals and their single-celled symbionts, often kills coral colonies. Bleaching was first detected on the main Hawaiian Islands in 1996, was first reported in the Northwest Hawaiian Islands in 2002 (Jokiel and Brown 2004), and was followed by massive bleaching events in 2014 (high recovery in Kane'ohe Bay) and 2015 (low recovery on the Island of Hawai'i and Maui Nui). Globally, coral bleaching is now recurring on average every 6 years (Hughes et al. 2017), and it is predicted that **Hawai'i will suffer bleaching events every year by 2040** (van Hooidonk et al. 2016, with

Hawai'i appendix by Dr. Jamison Gove, NOAA), effectively preventing recovery of vulnerable corals. Combined with the fact that **recovery of coral-reef herbivore populations by means of fully-protected marine reserves requires on the order of a decade** (Babcock et al. 2010), we are nearly out of time to foster the ecological resilience of Hawaiian reefs before it's too late.

For our *keiki*, please pass and implement HB 1751 as soon as humanly possible. I also request that the bill include provisions for monitoring the effectiveness of the marine managed areas.

Mahalo,



Mark Hixon



*The Hsiao Chair*  
was generously funded by  
the stained glass art of  
Erica Karawina Hsiao  
Mālama honua!

## REFERENCES

Cheng, L. and J. Zhu. 2018. 2017 was the warmest year on record for the global ocean. *Advances in Atmospheric Sciences* 34:261-263.

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Jokiel, P. L. and E. K. Brown. 2004. Global warming, regional trends and inshore environmental conditions influence coral bleaching in Hawaii. *Global Change Biology* 10:1627-1641.

van Hooidonk, R., J. Maynard, J. Tamelander, J. Gove, G. Ahmadi, L. Raymundo, G. Williams, S. F. Heron, and S. Planes. 2016. Local-scale projections of coral reef futures and implications of the Paris Agreement. *Scientific Reports* 6:39666, DOI: 10.1038/srep39666.



**LATE**

**HB-1751-HD-2**

Submitted on: 2/27/2018 5:25:12 PM

Testimony for FIN on 2/28/2018 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Brian Bowen	Individual	Support	No

Comments:

This approach worked in West Hawaii and now should be implemented elsewhere in the state.

Mahalo

## FIN-Jo

---

**From:** Amy Harrison <afh@hawaii.edu>  
**Sent:** Tuesday, February 27, 2018 5:26 PM  
**To:** FINTestimony  
**Subject:** HB1751 HD2



Dear Legislators,

Please vote in favor of this bill to better protect our coral reefs and coastal communities! As a marine biologist, I understand the importance of these laws because I see how much people take nature for granted. Corals can grow slowly over hundreds of years, but it can take only seconds to destroy them. I want the beautiful coral ecosystems to thrive around Hawaii now, and forever! Please consider these measures to keep our reefs safe.

Thank you,

Amy Knowles