

DAVID Y. IGE  
GOVERNOR OF HAWAII



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**

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**Testimony of**  
**SUZANNE D. CASE**  
**Chairperson**

**Before the House Committee on**  
**FINANCE**

**Friday, February 21, 2020**  
**12:00 PM**  
**State Capitol, Conference Room 308**

**In consideration of**  
**HOUSE BILL 2036, HOUSE DRAFT 1**  
**RELATING TO CORAL RESTORATION**

House Bill 2036, House Draft 1 proposes to establish a pilot project to plan and design an expansion of the Hawaii Coral Restoration Nursery, including improvements to the sea urchin hatchery; requires a report to the Legislature; and appropriates funds. **The Department of Land and Natural Resources (Department) supports this measure provided that its passage does not replace or adversely impact priorities indicated in the Executive Supplemental Budget Request.**

Hawaii's coral reefs provide habitat for nearshore marine life, protect our coastal areas from waves and storms, and support tourism and fishing industries—ecosystem services worth billions of dollars. Coral reefs are also fundamental to the fabric of our local communities, providing a source of food, materials, and traditional activities.

Hawaii's coral reefs are under great threat from repeated coral bleaching events over the past six years, which have resulted in significant coral loss. In addition, invasive seaweed smothers and kills corals, adding further stressors to the reef. As a result, we are losing corals faster than they are naturally being replaced. The Department has created a unique land-based coral restoration nursery to fast-grow Hawaiian corals and a sea urchin hatchery to raise sea urchins to control invasive algae and restore coral reefs.

The coral nursery provides large, healthy native corals for transplantation onto impacted coral reefs in Hawaii to help recover the ecosystem services and functions lost to vessel groundings, anchor damage, coral bleaching mortality, and other impacts. The coral nursery is currently limited in its ability to produce enough large corals for out-planting due to facility size and

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

**ROBERT K. MASUDA**  
FIRST DEPUTY

**M. KALEO MANUEL**  
DEPUTY DIRECTOR - WATER

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

staffing. With expansion, the nursery could go from producing a couple hundred large coral colonies a year to out-planting over a thousand a year, a level where reef restoration is realistic and which could begin to keep up with expected levels of climate change affecting our reefs. Large colonies have greater levels of survival against environmental change, produce greater reproductive output, protect our shorelines, and provide shelter and habitat for a wide variety of fish and invertebrates important to both our residents and visitors alike. In addition, facility improvements are needed for the sea urchin hatchery to continue raising sea urchins to control invasive seaweed.

Thank you for the opportunity to comment on this measure.



# UNIVERSITY OF HAWAII SYSTEM

## Legislative Testimony

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Testimony Presented Before the  
House Committee on Finance  
Friday, February 21, 2020 at 12:00 p.m.

By

Judith Lemus, Director  
Hawai'i Institute of Marine Biology

And

Michael Bruno

Provost

University of Hawai'i at Mānoa

HB 2036 HD1– RELATING TO CORAL RESTORATION

Chair Luke, Vice Chair Cullen, and members of the committee:

Thank for the opportunity to provide testimony on HB 2036 HD1, which would establish a pilot project to plan and design an expansion of the Hawai'i Coral Restoration Nursery, including improvements to the sea urchin hatchery.

As a research institute heavily involved in coral cultivation and restoration, and a collaborative partner with the state coral nursery facilities, the Hawai'i Institute of Marine Biology wishes to express its support of efforts aimed at increasing the state's capacity to cultivate corals and other invertebrates in nurseries that will help recover our reef ecosystems.



February 19, 2020

To: The Honorable Sylvia Luke, Chair,  
The Honorable Ty J.K. Cullen, Vice Chair, and Members  
House Committee on Finance

Re: HB 2036, H.D.1– relating to coral reef restoration

Hearing: Friday, February 21, 2020, 12:00 noon. Room 308

Position: **Strong Support**

The HAWAII REEF AND OCEAN COALITION – HIROC – was formed in 2017 by coral reef scientists, educators, local Hawaii environmental organizations, elected officials, and others to address a crisis facing Hawaii’s coral reefs and ocean that is literally killing our marine life and jeopardizing our reef shoreline protection. We are currently asking the Legislature to pass a handful of very important bills to save our coral reefs from this crisis.

This bill would fund a pilot program at the coral restoration nursery, including improvements for the sea urchin hatchery. It is essential to protect the State’s reef ecosystems and help them recover. Urchins contribute to reef resilience by grazing algae and providing settlement space for corals, thereby helping to maintain conditions necessary for coral communities to recover after acute disturbances such as storms or bleaching events.

HIROC asks you to pass this bill with an adequate specific dollar appropriation, to provide additional funding for the coral reef restoration nursery, and to give the bill an early effective date. Thank you for the opportunity to testify on this important bill for the restoration of our coral reefs.

Alan B. Burdick, on behalf of HIROC, 486-1018

Burdick808@gmail.com

**HB-2036-HD-1**

Submitted on: 2/20/2020 7:39:32 AM

Testimony for FIN on 2/21/2020 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Lisa Bishop	Friends of Hanauma Bay	Support	No

Comments:

To: Committee on Finance

Rep Sylvia Luke, Chair

Rep Ty Cullen, Vice Chair

Hearing: Friday, February 21, 2020 12 p.m. Conference Room 308

Re: HB2036 Relating to Coral Restoration

Position: STRONG SUPPORT

Aloha Chair Luke, Vice Chair Cullen, and Committee members,

Thank you for the opportunity to testify in STRONG SUPPORT of HB2036 to expand the Hawai'i Coral Restoration Program and improve the sea urchin hatchery.

DLNR's highly successful Hawai'i Coral Restoration Program and sea urchin hatchery are essential to help protect Hawaii's reef ecosystems and help them recover. They require additional funding to expand and improve the facilities to better serve the critical needs of these fragile natural resources.

Please support and pass HB2036!

Respectfully,

Lisa Bishop

President

Friends of Hanauma Bay

Date: February 21, 2020

To: House Committee on Finance

From: Benton Kealii Pang, Ph.D.

Re: HB 2036 HD1

Aloha Chair Sylvia Luke, Vice-Chair Ty Cullen, and members of the House Committee on Finance,

As a native Hawaiian conservationist for the past 30 years, I **SUPPORT HB 2036 HD1**. This bill establishes a pilot project to plan and design an expansion of the Hawai'i Coral Restoration Nursery and sea urchin hatchery in Kāne'ōhe Bay.

The State of Hawai'i has been doing a good job raising coral for restoration efforts. The sea urchin hatchery is achieving it's goal to remove invasive algae from Kāne'ōhe Bay. Turtles are returning and the fisheries are recovering. Please PASS HB 2036 HD1.

**HB-2036-HD-1**

Submitted on: 2/19/2020 1:47:35 PM

Testimony for FIN on 2/21/2020 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Ron Tubbs	Individual	Support	No

Comments:

Please support important coal research and preservation. it is very import to fisheries and tourism.

Thanks Ron Tubbs fisherman

**HB-2036-HD-1**

Submitted on: 2/19/2020 8:25:20 PM

Testimony for FIN on 2/21/2020 12:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Andrea Quinn	Individual	Support	No

Comments:

Dear Honorable Committee Members:

Please support HB2036. Coral reefs are dying due to climate change, sunscreens, fertilizer runoff, sewage and other pollutants and many of our reefs already virtual deserts. A recent study also showed Coral reefs are now spawning out of sync and might fail to reproduce thanks to climate change

<https://www.newscientist.com/article/2215524-coral-reefs-are-now-spawning-out-of-sync-and-might-fail-to-reproduce/#ixzz6CTe4yUEI>

To restore our coral reefs is to protect our tourism dollars.

Thank you for the opportunity to present my testimony.

Andrea Quinn

Kihei, Maui