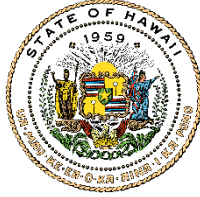


JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA

P.O. BOX 621  
HONOLULU, HAWAII 96809

Testimony of  
**DAWN N. S. CHANG**  
Chairperson

Before the Senate Committee on  
**WAYS AND MEANS**

Wednesday, April 2, 2025  
10:01 PM

State Capitol, Conference Room 211 & Videoconference

In consideration of  
**HOUSE BILL 1220, HOUSE DRAFT 1**  
**RELATING TO INVASIVE SPECIES**

House Bill 1220, House Draft 1 proposes to appropriate funds to support the efforts of the Division of Aquatic Resources of the Department of Land and Natural Resources in the removal of the invasive majano anemone from Kāne'ōhe Bay. **The Department of Land and Natural Resources (Department) strongly supports this bill, provided that its passage does not replace or adversely impact priorities indicated in the Executive Budget Request.**

### **Background**

Kāne'ōhe Bay is a unique and ecologically important marine environment that hosts a diverse range of marine species, including endemic coral species such as the finger coral (*Porites compressa*). These coral reefs not only support marine biodiversity but also provide essential services, including fish habitats, coastal protection, and recreational opportunities for our residents and visitors.

Unfortunately, the majano anemone (*Anemonia majano*), an invasive species, has recently been detected in Kāne'ōhe Bay, specifically in areas that were previously impacted by non-native coral introductions. First introduced as a hitchhiker on these non-native corals, the majano anemone has spread aggressively, blanketing an area of approximately 950 square yards. This invasive species poses a severe threat to the delicate coral reef ecosystem of Kāne'ōhe Bay.

The majano anemone is known for its rapid growth and ability to outcompete native coral species for space and resources. If left unchecked, the majano anemone could decimate coral

**DAWN N.S. CHANG**  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT

**RYAN K.P. KANAKA'OLE**  
FIRST DEPUTY

**CIARA W.K. KAHAHANE**  
DEPUTY DIRECTOR - WATER

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

populations in Kāneʻohe Bay, destabilize the ecosystem, and negatively impact marine life, including the fish populations that depend on healthy reefs.

### **Proposed Multi-Phase Removal Strategy**

The Division of Aquatic Resources (DAR) has developed a scientifically informed, multi-phase strategy for the removal of the majano anemone. This plan includes chemical control methods, as well as physical removal and smothering techniques that are tailored to the biology of the species. By using a combination of methods, we aim to effectively remove the majano anemone, reduce its spread, and restore the health of Kāneʻohe Bay's coral reef ecosystem.

In addition to the technical aspects of removal, DAR will prioritize ongoing monitoring and data analysis to track the progress of our efforts and adjust strategies as needed. It is also essential that we engage the community and stakeholders in this process, and we will dedicate resources to outreach and education efforts to raise awareness about the invasive species and the importance of reef conservation.

### **Funding Support for Continued Efforts**

The appropriation of \$200,000 for fiscal years 2025-2026 and 2026-2027 will provide the necessary funding to carry out this important work. These funds will support personnel costs, materials, equipment, data management, analysis, and outreach efforts. Continued support for these activities will help ensure that we can address the majano anemone infestation in a comprehensive and sustained manner, preventing further damage to Kāneʻohe Bay's coral reefs.

### **Conclusion**

The removal of the majano anemone from Kāneʻohe Bay is a crucial step in protecting the health of Hawai'i's coral reefs and the biodiversity they support. The Division of Aquatic Resources is committed to ensuring the success of this initiative and appreciates the legislature's consideration of this bill to fund these efforts. We urge you to support this measure, as it will play an integral role in preserving the marine ecosystems that are essential to Hawai'i's environment, economy, and communities.

Mahalo for the opportunity to provide testimony in strong support of this measure.

**JOSH GREEN, M.D.**  
Governor

**SYLVIA LUKE**  
Lt. Governor



**SHARON HURD**  
Chairperson, Board of Agriculture

**DEAN M. MATSUKAWA**  
Deputy to the Chairperson

State of Hawai'i  
**DEPARTMENT OF AGRICULTURE**  
KA 'OIHANA MAHI'AI  
1428 South King Street  
Honolulu, Hawai'i 96814-2512  
Phone: (808) 973-9600 FAX: (808) 973-9613

**TESTIMONY OF SHARON HURD  
CHAIRPERSON, BOARD OF AGRICULTURE**

**BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS**

**WEDNESDAY, APRIL 02, 2025  
10:01 AM  
CONFERENCE ROOM 211**

**HOUSE BILL NO. 1220 HD1  
RELATING TO INVASIVE SPECIES**

Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee:

Thank you for the opportunity to provide testimony on House Bill 1220 HD1 that appropriates funds to support the efforts of the Division of Aquatic Resources of the Department of Land and Natural Resources in the removal of the majano anemone from Kaneohe Bay. The Department of Agriculture (Department) supports this bill.

Biosecurity programs to prevent invasive species from entering the state and programs to control and mitigate the pests that are in-state is an interagency effort. The Department appreciates and supports the work of the Department of Land and Natural Resources to improve the quality of life and for the people of Hawaii.

Thank you for the opportunity to testify on this bill.



JOSH GREEN  
GOVERNOR OF HAWAII

SYLVIA LUKE  
LIEUTENANT GOVERNOR



## HAWAII INVASIVE SPECIES COUNCIL

1151 PUNCHBOWL ST, #325  
HONOLULU, HAWAII 96813

### VOTING MEMBERS

DAWN CHANG  
DEPARTMENT OF LAND & NATURAL  
RESOURCES

SHARON HURD  
HAWAII DEPARTMENT OF AGRICULTURE

KATHLEEN HO, D.Env  
DEPARTMENT OF HEALTH

PARWINDER GREWAL, Ph.D.  
UNIVERSITY OF HAWAII

MARY ALICE EVANS  
BUSINESS, ECONOMIC DEVELOPMENT &  
TOURISM

DEXTER KISHIDA  
DEPARTMENT OF TRANSPORTATION

**Chelsea Arnott, HISC Coordinator on behalf of  
HISC Co-Chair Sharon Hurd and Co-Chair Dawn N.S. Chang**

**Senate Committee on  
WAYS AND MEANS**

**Tuesday, April 1, 2025  
10:01 PM**

**State Capitol, Conference Room 211, and Via Videoconference**

**In consideration of  
HOUSE BILL 1220, HOUSE DRAFT 1  
RELATING TO INVASIVE SPECIES**

House Bill 1220 House Draft 1 appropriates funds for equipment for the Division of Aquatic Resources in the removal of the majano anemone from Kaneohe Bay. **The Hawai'i Invasive Species Council (Council) supports this measure.**

In early 2023, a biologist performing survey work at Ford Island, Joint Base Pearl Harbor-Hickam discovered several sea anemones that were later identified as *Anemonia majano* or majano anemone. It is likely the anemone was an aquarium release and subsequently the same species was confirmed in Kāne'ohe Bay by biologists with the Division of Aquatic Resources (DAR).

This anemone species is not native to Hawai'i and can quickly reproduce and spread, smothering reefs and displacing native species. This anemone can also readily detach and reattach to new reef structures. Right now, the infestation of majano anemone is relatively contained and could be eradicated with increased resources and effort. Currently, DAR has no dedicated resources for this work because it is a newly detected species.

The Council recognizes the importance of protecting Hawai'i's marine ecosystems and the importance biosecurity plays for preventing new marine invasive species incursions. The Council provides funding to support research into detection and management of marine invasive species and supports the planner position under the Ballast Water and Hull Fouling coordinator.

Mahalo for the opportunity to provide testimony in support of this measure.



# UNIVERSITY OF HAWAII SYSTEM

## ‘ŌNAEHANA KULANUI O HAWAII

### Legislative Testimony

#### Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

Testimony Presented Before the  
Senate Committee on Ways and Means  
Wednesday, April 2, 2025, at 10:01 a.m.

By

Dr. Megan Donahue, Interim Director  
Hawai'i Institute of Marine Biology

And

Michael Bruno, Provost  
University of Hawai'i at Mānoa

### HB 1220 HD1 – RELATING TO INVASIVE SPECIES

Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee:

The Hawai'i Institute of Marine Biology (HIMB) **supports HB 1220 HD1** for appropriation to the Division of Aquatic Resources (DAR) of the Department of Land and Natural Resources to eradicate the invasive majano anemone from Kāne'ōhe Bay.

The majano anemone can outcompete native coral species, as it has in the Philippines and Vietnam. Spread of this alien invasive species can precipitate a significant decline in reef ecosystems and threaten a resource of great cultural, ecological, and economic value.

Hawai'i's coral reefs are central to Native Hawaiian culture and support high levels of endemic biodiversity, with 25% of reef life found only here in Hawai'i<sup>1</sup>. Reefs protect our coastlines, generate nearly \$850 million annually via tourism and recreation, and act as an essential seafood source<sup>2,3</sup>. The reefs of Kāne'ōhe Bay are particularly valuable, as they have persisted despite extreme natural and anthropogenic stressors, providing information on how to enhance the resilience of reefs globally<sup>4</sup>.

The removal of majano anemone from Kāne'ōhe Bay will ensure that coral reefs can continue to provide essential services at local and state levels, and advance coral preservation internationally. For these reasons, HIMB supports this important bill, and looks forward to working with DAR, in consultation with the Kāne'ōhe Bay community, to safely eradicate this alien invasive.

#### References:

1. NOAA Coral Reef Conservation Program – **National Oceanic and Atmospheric Administration**
2. DLNR DAR – **Department of Land and Natural Resources, Division of Aquatic Resources**
3. NCRMP Socioeconomic Monitoring Component – **National Coral Reef Monitoring Program**
4. Bahr, K.D., Jokiel, P.L., & Rodgers, K.S. (2015) – "The resilience of Hawai'i's coral reefs under climate change"



The Senate  
Committee on Ways and Means  
Wednesday, April 2, 2025  
10:01 AM Conference Room 211 & Videoconference  
State Capitol

### Testimony in Support of HB 1220 HD1

Aloha Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee,

The Coordinating Group on Alien Pest Species (CGAPS) is **in support of HB 1220 HD1**, which appropriates funds to support the removal of the majano anemone from Kaneohe Bay.

Appropriating funds for fiscal year 2025-2026 and for fiscal year 2026-2027 to support the removal of majano anemone from Kaneohe Bay is an essential investment of State funds. The majano anemone is an invasive species with the potential to significantly impact coral reefs in Kaneohe Bay and beyond if it is not controlled. This species can live in sand, rubble, within coral branches, and it can also overgrow, smother, and kill coral. It easily fragments, with each fragment able to grow into a new anemone. This anemone can also move locations by detaching its “foot,” moving to a new open space, and reattaching. Many marine aquarium hobbyists refer to this as an invasive species and recommend against keeping it due to its invasive habit.

The multi-phase removal strategy proposed by the Department of Land and Natural Resources, Division of Aquatic Resources, could control this invasive species in Kaneohe Bay. Without this targeted control, the anemone will spread to other coral reef areas in the State and control actions will become more expensive and less effective.

Mahalo for the opportunity to support HB1220 HD1.

Aloha,

Christy Martin  
CGAPS Program Manager

Stephanie Easley  
CGAPS Legal Fellow

**HB-1220-HD-1**

Submitted on: 3/30/2025 12:41:58 PM

Testimony for WAM on 4/2/2025 10:01:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Ted Bohlen	Testifying for Hawai'i Reef and Ocean Coalition	Support	Written Testimony Only

Comments:

SUPPORT!

**Testimony of The Nature Conservancy  
Supporting HB1220 HD1, Relating to Invasive Species.  
Committee on Ways and Means  
April 2, 2025 at 10:01 am  
Conference Room 211 and via Videoconference**

Dear Chair Dela Cruz, Vice Chair Moriwaki, and Members of the Committee:

Mahalo for the opportunity to testify today. The Nature Conservancy (TNC) Hawai'i and Palmyra strongly supports HB1220 HD1, which appropriates funds towards the efforts of the Division of Aquatic Resources (DAR) of the Department of Land and Natural Resources (DLNR) in the removal of the majano anemone from Kāne'ōhe Bay.

TNC has been working with community partners at He'eia and Kāne'ōhe Bay since 2008 to remove invasive algae from the reef, restore wetlands, improve nearshore ecosystems and build community resilience. The recent detection of the invasive majano anemone is cause for critical concern. The majano anemone is known for its rapid growth rate and ability to displace native coral species, and is reported by DAR to already cover area of approximately 950 square yards of reef in Kāne'ōhe Bay. The majano anemone can smother the delicate coral reef system of the bay, and if not controlled promptly, will continue to pose a threat to the entire coral reef ecosystem of Kāne'ōhe and beyond.

Early and immediate action is essential to control this invasive species. At this time, the of majano anemone infestation is relatively contained and likely could still be eradicated with an appropriate investment in DAR's multi-phase removal strategy. Without action, the majano anemone could decimate coral populations in Kāne'ōhe Bay and negatively impact marine life, including fish populations, as the anemone smothers their habitat. Supporting the ongoing management of invasive species is essential to ensuring that the long-term health of O'ahu's nearshore ecosystems.

Mahalo for the opportunity to testify in support of HB1220 HD1.

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*Guided by science, TNC is a non-profit organization dedicated to the preservation of the lands and waters upon which all life depends. The Conservancy has helped protect more than 200,000 acres of natural lands in Hawai'i and Palmyra Atoll. We manage 40,000 acres in 13 nature preserves and have supported over 50 coastal communities to help protect and restore the nearshore reefs and fisheries of the main Hawaiian Islands.*

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*Founders:* Samuel A. Cooke Herbert C. Cornuelle



**HB-1220-HD-1**

Submitted on: 3/28/2025 11:04:43 AM

Testimony for WAM on 4/2/2025 10:01:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Douglas Perrine	Individual	Support	Written Testimony Only

Comments:

If the majano anemone is not controlled in Kaneohe Bay, it will likely spread to other areas, devastating coral reefs. I support HB1220 to eradicate this threat.

**HB-1220-HD-1**

Submitted on: 3/28/2025 5:04:04 PM

Testimony for WAM on 4/2/2025 10:01:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Eileen Hilton	Individual	Support	Written Testimony Only

Comments:

MARCH 28, 2025

RE: House Bill 1220

Aloha Chairman Dela Cruz, Fuji and committee members,

The Windward Coalition supports funding HB 1220 an attempt to eradicate invasive Majano Anemones in Kaneohe Bay as this could:

- Stop/slow rapidly the spread that overwhelms and smothers native coral.
- Prevent spreading to other reefs and areas outside Kaneohe Bay.
- help maintain the bay's native species.
- Preserve biodiversity.

Our concerns include:

- The proposed eradication method involving tarps and chlorine could kill native species along with the Majano Anemone.
- The process would require:
  - Significant time, effort, and financial resources due to the rugged and layered nature of the affected area would require large expenditures.
  - Have uncertain long-term effectiveness.
  - Have unintended consequences such as:
    - the proliferation of other invasive species
    - negative effects on native species that may have adapted to the presence of the Majano Anemone.
  - The DNLR with all its other responsibilities and limited personnel does not have the manpower or expertise to effectively and timely complete the project.

The Windward Coalition supports passage of this measure with careful consideration of the complexity of the situation and the cost of eradication efforts.

Mahalo for considering our comments,  
Eileen Hilton MD

President, Windward Coalition