

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

SYLVIA LUKE
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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 House Committee on
FINANCE

Tuesday, February 28, 2023
10:00 a.m.

State Capitol, Conference Room 308 & Videoconference

In consideration of
HOUSE BILL 756, HOUSE DRAFT 2
RELATING TO LAND USE

House Bill 756, House Draft 2 proposes to expand the ability of the State to begin utilizing managed retreat as an option for moving residential development of associated infrastructure away from critically vulnerable areas to locations outside of sea level rise and coastal flooding exposure areas. **The Department of Land and Natural Resources (Department) strongly supports this bill.**

A 2012 study by University of Hawai'i researchers for the United States Geological Survey found that over 13 miles of Hawai'i's public beaches have already been lost to beach erosion and construction of coastal armoring including seawalls and revetments. Beach loss and threats to shorefront development will increase exponentially in coming decades with expected accelerating sea level rise if managed retreat is not implemented proactively, especially in high-value natural resource areas where beach protection is prioritized.

The State of Hawai'i, through the Office of Planning and Sustainable Development (OPSD), has studied the feasibility and implications of managed retreat and identified next steps and recommendations for the State to develop a managed retreat plan and program. In the face of sea level rise, relocation of development and associated public infrastructure away from the shoreline is an important element of preserving our beaches and nearshore ecosystem, which the State holds in public trust for current and all future generations.

Through Act 223, Session Laws of Hawai'i 2022 (Act 223), the State recognized the existential threat of sea level rise to real property and that the transfer of development rights, and land exchanges, are useful techniques to achieve community objectives of voluntarily shifting development away from areas that are critically threatened by sea level rise.

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

LAURA H.E. KAAKUA
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

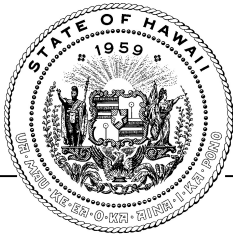
House Bill 756, House Draft 2 will further expand on Act 223, and act on recommendations from OPSD toward making managed retreat a viable option for improving community resilience and conserving beaches and coastal ecosystems.

The Department recognizes that OPSD is currently engaged in conducting a legal and policy analysis of the transfer of development rights and other mechanisms proposed for consideration in this bill. The Department is supportive of OPSD's efforts. The Department will continue to partner with OPSD concerning the comprehensive study of options and would expect to be the implementation agency for any resulting voluntary relocation plan.

The Department finds that House Bill 756, House Draft 2 will improve resilience of shorefront communities and conserve public trust beaches, coastal ecosystems, and public shoreline access.

As the bill will provide alternatives to temporary and permanent shoreline armoring, it will reduce the enforcement burden for unauthorized shoreline erosion control structures on both the Department's Office of Conservation and Coastal Lands, Division of Conservation and Resources Enforcement, and the Board of Land and Natural Resources.

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



**STATE OF HAWAII
OFFICE OF PLANNING
& SUSTAINABLE DEVELOPMENT**

JOSH GREEN, M.D.
GOVERNOR

SCOTT J. GLENN
DIRECTOR

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Statement of
SCOTT GLENN, Director

before the
HOUSE COMMITTEE ON FINANCE
Tuesday, February 28, 2023, 10:00 AM
State Capitol, Conference Room 308

in consideration of
HB 756 HD2
RELATING TO LAND USE

Chair Yamashita, Vice Chair Kitagawa, and Members of the House Committee on Finance:

The Office of Planning and Sustainable Development (OPSD) **supports HB 756 HD2**, which requires the Department of Land and Natural Resources (DLNR) to prepare plans and a program to facilitate voluntary relocation of residential development away from areas at risk of sea level rise; establishes the sea level rise relocation special fund; and allows the exchange of public land for private lands for the transfer of development rights or land exchanges to relocate private development away from high risk areas. OPSD would like to thank the prior committee for incorporating OPSD's recommendations.

In accordance with OPSD's responsibilities under Hawaii Revised Statutes (HRS) § 225M-2(b)(9) for climate adaptation and sustainability planning and coordination, the OPSD has been coordinating implementation of the 2020 Ocean Resources Management Plan (HRS § 205A-62) and regularly working with its interagency working groups to address balancing the importance of natural resources with existing and future shoreline development in consideration of coastal hazards such as erosion and sea level rise.

- In 2019, the OPSD published an initial discussion of managed retreat which described this approach's complexity, necessary coordination, and community outreach.
- In 2022, the OPSD applied for and was awarded federal funding to further advance the state's understanding of implementation of managed retreat by commissioning an analysis of ways to achieve managed retreat by analyzing relevant existing policies, laws, and regulations; an analysis of potential strategies to implement and finance managed retreat and the identification of challenges for its implementation. The project is in the early procurement phase.

OPSD looks forward to collaborating with DLNR to ensure the development of the activities described in this measure are closely coordinated and conducted with participation with existing initiatives with consideration of the outcomes of this forthcoming analysis.

Thank you for the opportunity to testify on this measure.



‘ŌNAEHANA KULANUI O HAWAI‘I

Legislative Testimony

Hō'ike Mana'o I Mua O Ka 'Aha'ōlelo

Testimony Presented Before the
House Committee on Finance
Tuesday, February 28, 2023 at 10:00 a.m.

By

Charles “Chip” Fletcher, PhD
Dean, School of Ocean and Earth Science and Technology

And

Darren T. Lerner, PhD
Director, Sea Grant College Program,
School of Ocean and Earth Science and Technology

And

Michael Bruno, Provost
University of Hawai'i at Mānoa

HB 756 HD2 – RELATING TO LAND USE

Chair Yamashita, Vice Chair Kitagawa, and Members of the Committee:

The University of Hawai'i Sea Grant College Program (Hawai'i Sea Grant) and the Climate Resilience Collaborative (CRC) support the intent of HB 756 HD2, provided that its passage does not impact priorities as indicated in the University's Board of Regents approved executive biennium budget.

This measure requires the department of land and natural resources to prepare plans and a program to facilitate voluntary relocation of residential development away from areas at risk of sea level rise. Establishes the sea level rise relocation special fund. Allows the exchange of public land for private lands for the transfer of development rights or land exchanges to relocate private development away from high-risk areas and appropriates funds.

Sea level rise is accelerating globally and increasing coastal erosion and flooding are inevitable, even in the most optimistic scientific projections. A 2022 multi-agency report led by the National Oceanic and Atmospheric Administration (NOAA) based on best-available science finds that sea level will rise as much in the next 30 years as it has in the last 100. These increasing coastal hazards are described and mapped in detail in the State of Hawai'i Sea Level Rise Vulnerability and Adaptation Report, Hawai'i Sea Level Rise Viewer, and related peer-reviewed research. The NOAA 2022 report projects about four feet of sea level rise by 2100 in an Intermediate scenario for Hawaii. The Intergovernmental Panel on Climate Change in its Fifth and Sixth Assessment Reports finds that Sea level rise will not stop at 2100 but will continue to rise for thousands of

years, even if future carbon dioxide emissions are reduced to zero and global warming halted.

Adapting to sea level rise will take a range of forms in Hawai'i. Managed retreat (e.g. voluntary relocation) is one essential tool in the state's "adaptation toolbox," particularly along beaches, other areas of high natural resource value, and in the most flood-prone backshore areas. Severe coastal erosion, as it is presently occurring along O'ahu's North Shore, in West Maui, and elsewhere, is best described as "unmanaged retreat" as shorelines roll back into properties and undermine structures; negatively impact coastal ecosystems and public shoreline access. This legislation is a critical step forward to establishing a framework and funding for the state to begin implementing managed retreat as one vital approach for sea level rise adaptation in close cooperation with the counties and federal entities.

The complex nature of managed retreat requires evolution beyond the narrow binary options of armor or retreat and instead requires evaluation of broader adaptation options in the context of hazard risk and vulnerability, socio-economic factors and place-based and community driven considerations for a variety of phased adaptation options that include managed retreat. Managed retreat has significant advantages over shorter-term mitigation responses, especially over longer time frames. While there may be significant opposition to this approach, especially in regard to the use of public funds to acquire coastal lands, the strategy may be best suited when protection of the natural beach resources are the highest priority and are economically justified for public investment into acquisition.

Historically, coastal retreat has taken the form of mandatory relocation of development or communities through government buyouts or incentives but future methods of retreat may include broader planning options such as down zoning and rebuilding restrictions, transferable development rights, increased coastal setbacks, and limitation of ownership transfers. Climate change-driven coastal adaptation will require some phased combination of retreat along with protection and adaptation. Disaster management literature reveals an unprecedented number of major natural disaster events around the world, this suggests a modern era of unmanaged or forced retreat is now affecting many of the low-elevation coastal communities around the world. Unmanaged retreat is often a default reactive response due to a lack of viable adaptation options, and is fundamentally different from strategic managed retreat as part of a holistic suite of adaptation policy tools. This measure will support developing comprehensive adaptation plans including managed retreat along with other adaptation approaches through a variety of mechanisms.

Hawai'i Sea Grant's mission is to provide integrated research, extension, and education activities that increase understanding and use of ocean and coastal resources of the Hawaiian and Pacific Islands and support the informed personal, policy, and management decisions that are integral to realizing this vision. Hawai'i Sea Grant is part of a national network of 34 university-based programs associated with NOAA that promote better understanding, conservation, and use of coastal resources.

CRC is a multi-investigator research project at the University of Hawai'i at Mānoa focused on sea level rise adaptation and climate resilience. CRC is updating coastal models that project the impacts of sea level rise.

Hawai'i Sea Grant and the Climate Resilience Collaborative support HB 756 HD2.

Thank you for the opportunity to testify on this measure.



2/27/2023

Finance Committee
Hawaii State Capitol
Honolulu, Hawaii 96813

Dear Chair Yamashita, Vice Chair Kitagawa, and Members of the House Committee on Finance,

Position: Support HB756 - Voluntary relocation of residential development away from areas at risk of sea level rise

The Surfrider Foundation, Hawaii region, is testifying in **strong support of HB756**, relating to the state establishing a program to facilitate voluntary relocation of residential development away from sea level rise risk areas and the establishment of a sea level rise relocation special fund.

The coastlines of Hawaii are facing severe chronic erosion that is being exacerbated by climate change and sea level rise. 70% of the sandy beaches on Maui, O'ahu, and Kaua'i are experiencing chronic erosion that is further being exacerbated by rising sea levels. Homes, businesses, and public infrastructure like roads are in highly vulnerable coastal areas.

Despite the clear and ongoing threats to certain coastal areas in Hawaii, we lack a proactive and holistic approach to relocating vulnerable properties away from the ocean. Over the past year, the Surfrider Foundation, O'ahu Chapter and SeaGrant convened the North Shore Coastal Resilience Working Group (NSCRWG),¹ a group of stakeholders on the North Shore, to discuss the imminent threats of sea level rise and proposed solutions. One of the key findings was the lack of a statewide managed retreat program that will provide a pathway for affected landowners to voluntarily vacate affected properties.

Currently our shorelines are experiencing unmanaged retreat which threatens public and private property, public safety, and the loss of public beaches. This bill is an important step towards developing a holistic and statewide approach to relocating vulnerable properties away from the ocean. Without this step forward, Hawaii will continue to lose valuable public beaches that have immeasurable cultural, environmental, and public health value. We need HB756 to help shift our shoreline management approach from reactionary and piecemeal to one that is proactive and holistic.

Thank you for your consideration of this testimony in support of HB756, submitted on the behalf of the Surfrider Foundation's 4 Chapters in Hawaii and our 437 local community members.

The Surfrider Foundation is a national nonprofit organization dedicated to the protection and enjoyment of our ocean, waves, and beaches. Surfrider maintains a network of over 150 chapters and academic clubs nationwide, including 4 chapters in the Hawaiian Islands. The Surfrider Foundation focuses on many aspects of the environment such as coastal protection, plastic pollution, and water quality.

Sincerely,

Lauren Blickley
Hawaii Regional Manager
Surfrider Foundation

¹ <https://hawaii.surfrider.org/northshoreworkinggroup/>

HB-756-HD-2

Submitted on: 2/27/2023 2:36:14 PM

Testimony for FIN on 2/28/2023 10:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Elizabeth Benyshek	Individual	Support	Written Testimony Only

Comments:

Aloha, I am writing to express my strong support for HB756 HD2, which would established a plan for managed retreat. Majority of our coastlines are currently undergoing erosion, and it is so extreme on our north shore that a house has fallen onto the beach. Our communtiy deserves a plan for protection and management of these eroding coastlines. Please support HB756! Thank you for your time and consideration.

Elizabeth Benyshek

Chair, Surfrider Foundation O‘ahu Chapter