Testimony Presented Before the
House Committee on Higher Education
Wednesday, March 19, 2025 at 2:00 p.m.
By
Charles "Chip" Fletcher, PhD
Interim Dean
School of Ocean and Earth Science and Technology
And
Michael Bruno, PhD
Provost
University of Hawaii at Mānoa

SB 657 SD1 HD1 - RELATING TO THE CENTER FOR CLIMATE RESILIENT DEVELOPMENT

Chair Garrett, Vice Chair Amato, and Members of the Committee:

The University of Hawai'i School of Ocean and Earth Science and Technology (SOEST) strongly supports Senate Bill 657 SD1 HD1, which appropriates funds for SOEST to establish and operate a Center for Climate Resilient Development.

The proposal set forth in SB 657 SD1 HD1 to create a Center for Climate Resilient Development at the University of Hawai'i at Mānoa represents a crucial step in safeguarding the future of Hawai'i.

Building on the SOEST's proven expertise in climate modeling, the Center will provide actionable data on sea level rise, coastal erosion, wave flooding, groundwater inundation, storm water drainage, and more—already indispensable to Hawai'i's real estate, environmental review, and county resilience laws. Further, laws that refer to the Sea Level Rise Exposure Area include the clause "or its successor," contemplating updates to SOEST's modeling products that cannot be completed without adequate resources.<sup>1</sup>

The following is a list of laws and policies that depend on SOEST data.

- Mandatory disclosure of sea level rise in real estate transactions
  - Hawai'i Revised Statutes § 508D-15(5)
- Required analysis of sea level rise in the Hawai'i Environmental Policy Act
  - Hawai'i Revised Statutes Chapter 343
  - o Hawai'i Administrative Rules §§ 11-200.1-13, -18, -21, -24
- Shoreline Setback Ordinances in Kaua'i County, Maui County, and the City & County of Honolulu
  - Hawai'i Revised Statutes § 205A-45
  - Maui County Administrative Rules, Title 12 Chapter 203
  - o Revised Ordinances of Honolulu, Chapter 26
  - Kaua'i County Code, Title IV, Chapter 8, Article 27

\_

<sup>&</sup>lt;sup>1</sup> See e.g. Haw. Rev. Stat. § 508D-15(a)(5).

- Special Management Area in Maui County and the City & County of Honolulu
  - o Hawai'i Revised Statutes §§ 205A-21 et seq.
  - Maui County Administrative Rules, Title 12 Chapter 202
  - o Revised Ordinances of Honolulu, Chapter 25
- Kaua'i County Sea Level Rise Constraint District
  - o Kaua'i County Code, Title IV, Chapter 8, Article 12.5

In 2017, the Hawai'i Climate Change Mitigation and Adaptation Commission formally adopted the Hawai'i Sea Level Rise Vulnerability and Adaptation report based on SOEST research.<sup>2</sup> Since then, SOEST data and modeling have been utilized in many state and local reports and plans. City and County of Honolulu and Maui County Mayors have also issued proclamations requiring their respective departments to incorporate sea level rise considerations into their planning and decision making.<sup>3</sup>

Currently, research at SOEST relies heavily on unstable federal grants, putting this vital work at risk without consistent funding. Recently, the Trump Administration implemented a pause on all federal grants, indicating a concerning trend for an administration that has shown limited interest in funding climate change-related research.

While SB 657 SD1 HD1 requests a one-time appropriation for this legislative session, SOEST advocates for an ongoing funding mechanism.

With \$3 million annually, the Center will solidify Hawai'i's capacity to address evolving climate hazards, collaborate with communities statewide, and champion equitable, sustainable development to protect the islands' people, ecosystems, and future.

The utilization of general fund dollars for climate and sea level rise research offers significant long-term cost savings. While the initial investment may seem substantial, it pales in comparison to the future expenses that the state will inevitably face if it fails to adequately prepare for the impacts of climate change.

Investing in research now allows for the development of data-driven strategies to mitigate these impacts, protecting critical infrastructure and minimizing damage from severe weather events. Every dollar spent proactively on research can save the state significantly more in the form of avoided future infrastructure repairs, emergency services costs, and the immeasurable cost of human suffering during climate-related disasters. This proactive approach is not only fiscally responsible but also demonstrates a commitment to the safety and well-being of Hawai'i's residents.

In conclusion, passing SB 657 SD1 HD1 and funding climate and sea level rise research at SOEST, whether through general fund, or through some other means, is a strategic investment in the state's future. This vital research will help to protect the natural beauty that attracts tourists and generates significant revenue, while also mitigating future costs associated with

<sup>&</sup>lt;sup>2</sup> Hawai'i Climate Change Mitigation and Adaptation Commission. 2017. Hawai'i Sea Level Rise Vulnerability and Adaptation Report. Prepared by Tetra Tech, Inc. and the State of Hawai'i Department of Land and Natural Resources, Office of Conservation and Coastal Lands, under the State of Hawai'i Department of Land and Natural Resources Contract No: 64064.

<sup>&</sup>lt;sup>3</sup> Off. of the Mayor, City and Cty. of Honolulu, Exec. Directive No. 18-2 (Jul. 16, 2018); Off. of the Mayor, Cty. of Mau Honolulu, Exec. Proclamation (Feb. 22, 2018).

climate change impacts. This investment is not merely an expenditure, but a crucial step towards ensuring Hawai'i's environmental, economic, and social resilience in the face of an increasingly uncertain future.

We urge your passage of SB 657 SD1 HD1, provided its adoption does not impact priorities as indicated in our Board of Regents Approved Budget. Thank you for the opportunity to testify on this measure.