



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
House Committee on Finance
Thursday, March 31, 2022 at 1:30 p.m.

By

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

And

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

And

Michael Bruno, PhD
Provost
University of Hawai'i at Mānoa

SB 3027 SD2 – RELATING TO BEACHES

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

The University of Hawai'i Sea Grant College Program (Hawai'i Sea Grant) and the Climate Resiliency Initiative (CRI; formerly Coastal Geology Group) supports the intent of SB 3027 SD2. This legislation proposes to amend the Hawai'i State Planning Act, Section 226-11 Hawai'i Revised Statutes to include the development of a statewide beach assessment study and a restoration and conservation plan. Hawai'i Sea Grant offers the following comments and suggestions to strengthen this Bill.

1. It is not clear that inclusion of this amendment in the Hawai'i State Planning Act, Section 226-11, Hawai'i Revised Statutes, is the most appropriate place for the proposed amendment. It is also not clear that an amendment to an existing statute is necessary in order to achieve the development of such a plan.
2. The requirement to conduct the beach assessment and development of restoration and conservation plan appears to be unfunded with no lead agency identified in the Bill.
3. Data on historical shoreline change exists for most of the state and is regularly updated by the University of Hawai'i CRI researchers, this data compliments the intent to develop a statewide beach assessment.
4. The statewide reach for such an assessment and plan may be too large and not appropriate considering the scale and detail necessary for such an effort. Instead Hawai'i Sea Grant suggests a smaller, regional pilot study and plan in order to demonstrate the model and achieve outcomes in a shorter and more appropriate timeframe.
5. Long term beach conservation planning, maintenance and management should be part of larger comprehensive and cooperative planning efforts among a range

of state and county agencies and communities. Coastal community adaptation measures including strategic or phased relocation of coastal development and infrastructure should be included in coastal management plans and will improve community resilience to coastal hazards and sea level rise while conserving and restoring beach environments.

6. The amendments included in this bill focus attention to the need for assessment of beach and shoreline restoration but fail to recognize the importance of maintenance and restoration of the coastal dunes as a primary buffer to coastal hazards. Inclusion of the terms “coastal dune systems” would broaden the scope of the implied restoration efforts (see suggested amendments below).
7. The Hawai'i Department of Land and Natural Resources developed and the Land Board adopted the Coastal Erosion Management Plan (COEMAP) in the year 2000¹. This statewide resource on managing coastal erosion is in need of an update and might be a good policy tool to utilize in order to implement the goals of this measure.
8. An area of demonstrated need for a regional beach assessment and plan is at Sunset Beach on the North Shore of O'ahu, where recent beach erosion is currently immanently threatening dwellings as it has repeatedly in the last several years and has triggered emergency erosion control by private landowners.

In addition, Hawai'i Sea Grant offers suggestive language to the new statutory material described under Section 1(b)(10):

“(10) Develop a statewide ~~beach and~~ [coastal] assessment ~~study and~~ [for] beach and shoreline [coastal dune system] restoration and conservation ~~plan to~~ [that] regularly assess[es] beach and shoreline [dune] erosion and develop ~~feasible~~ beach and shoreline [coastal dune system] restoration or conservation ~~options~~[plans].”

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 the National Oceanic and Atmospheric Administration (NOAA) that promote better understanding, conservation, and use of coastal resources.

The Climate Resiliency Initiative (CRI) is a newly-established Congressionally-funded applied research program at the University of Hawai'i at Mānoa. CRI is an affiliation of researchers, technicians, undergraduate, and graduate students spread across campus working on challenges related to climate change. CRI researchers conduct investigations of sea level rise and community design, increasing resiliency to extreme weather events, projecting future climate stresses and shocks, marine and reef impacts,

¹ <https://climateadaptation.hawaii.gov/wp-content/uploads/2015/07/COEMAP1.pdf>

and better understanding community exposure to rising heat, storms, and drought. This requires cross-disciplinary and integrated research investigation on a range of spatial and temporal scales

Hawai'i Sea Grant and the CRI supports the intent of SB 3027 SD2 to develop a beach assessment study and restoration and conservation plan and recommend consideration of the above mentioned amendments.

Thank you for the opportunity to testify on this measure.