

## UNIVERSITY OF HAWAI'I SYSTEM

Legislative Testimony

Testimony Presented Before the Senate Committee on Water and Land Monday, January 31, 2022 at 1:00 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 – RELATING TO BEACHES

Chair Inouye, Vice Chair Keith-Agaran, 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. 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 beaches environments.
- 6. An area of demonstrated need for such an 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.

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, 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 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.