



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

Testimony Presented Before the
Senate Committee on Water and Land
Friday, February 11, 2022 at 1:10 p.m.

By

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And

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SB 2519 – RELATING TO COASTAL ZONE MANAGEMENT

Chair Inouye, Vice Chair Keith-Agaran, and members of the committee:

The University of Hawai'i Climate Resiliency Initiative (CRI; formerly Coastal Geology Group) **strongly supports SB 2519**. This legislation proposes to require an emergency shoreline hardening permit for the construction, maintenance, or improvement of a temporary erosion control structure. Provides that each permit is valid for a maximum of one year; provided that the lifetime of the structure may be extended no more than an additional two and a half years upon an applicant demonstrating a concerted effort, as deemed acceptable by the Board of Land and Natural Resources, to develop and implement a long-term solution which will enable the removal of the temporary erosion control structure. Establishes penalties for persons who build, improve, or maintain a temporary erosion control structure without a valid permit. Requires the Board to administer and enforce this Act.

Studies show that emergency shoreline hardening has negative and detrimental effects on natural coastal processes and exacerbates beach erosion on shorelines across the state (Summer et al., 2018, below). Hawai'i's natural sandy beaches face imminent extinction due to artificial shoreline hardening combined with sea level rise and the increasing intensity of waves reaching the state's coastlines. Regulation of emergency shoreline hardening statewide has thus far fallen short of providing a sustainable future for the state's beaches. The Legislature bears an affirmative duty under the public trust doctrine and Article XI, section 1 of the Constitution of Hawai'i to protect the state's beaches.

CRI believes that this measure would strengthen the state's regulatory framework and procedures when it permits emergency shoreline hardening structures to protect property and infrastructure by ensuring that any hardening beyond a year will have a clear plan in place to eventually remove the structure and to establish clear penalties for persons who would choose to contravene the law.

The Climate Resiliency Initiative (CRI) is a newly-established 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.

The CRI strongly supports SB 2519 to strengthen the regulation of emergency shoreline hardening throughout the state.

Thank you for the opportunity to testify on this measure.

Summers, A., Fletcher, C.H., Spirandelli, D. et al. Failure to protect beaches under slowly rising sea level. *Climatic Change* 151, 427–443 (2018).
<https://doi.org/10.1007/s10584-018-2327-7>

<https://link.springer.com/article/10.1007/s10584-018-2327-7>