UNIVERSITY OF HAWAIʻI SYSTEM
Legislative Testimony

Testimony Presented Before the
Senate Committees on Higher Education, Agriculture & Environment,
and Water & Land
Tuesday, March 21, 2017 at 1:50 p.m.
By
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HB 450 HD1 – RELATING TO CORAL

Chairs Kahele, Gabbard and Rhoads, Vice Chairs Kidani and Riviere, and members of the committees:

In my role as Director of the Hawaiʻi Institute of Marine Biology, I am presenting testimony in strong support of HB 450 HD1 on behalf of the University of Hawaiʻi, provided that its passage does not replace or adversely impact priorities as indicated in our Board of Regents Approved Biennium Budget. This measure allocates resources for the University of Hawaiʻi to examine the impacts of sunscreen products on corals.

I am a marine scientist who has studied the health of coral reefs for the past 25 years and Hawaiian reefs for the past 13 year, and I am the current President of the International Society for Reef Studies. My graduate students, post-doctoral researchers and I have conducted numerous studies on the influence of water quality on coral health. There is no doubt that coral communities in Hawaiʻi have been and continue to be exposed to increasing impacts from human use and that in some places they are degrading as a result. Work from other parts of the world has highlighted the detrimental impact of chemicals in sunscreen products on coral health and reproduction. No studies to date have explored their impact on Hawaiian corals however some Hawaiian reefs see heavy tourist traffic (e.g. Hanauma Bay and Waikīkī), and measurable concentrations of sunscreen chemical, a scenario that creates context for a detailed examination of the impact of sunscreen chemicals on the health of Hawaiʻi corals.

The bill will allocate resources to the University of Hawaiʻi to conduct a study and report on the effects of sunscreen used by ocean users on the coral reefs located in Hawaiʻi waters and, if any are found, make recommendations for mitigating these impacts. The University of Hawaiʻi has experts who are appropriately trained in coral reef biology and analytical chemistry to conduct such a study. The compartmentalization of tourist traffic on Oahu makes the comparison of concentrations of sunscreen chemicals like oxybenzones in heavily trafficked versus rarely visited coral reef areas tractable and measurable. Facilities in the School of Earth, Ocean and Earth Science (SOEST), University of Hawaiʻi at Mānoa, possess world class capacity to expose corals to these measured concentrations of sunscreen chemicals in the laboratory and the experts to assess their impact on coral health, growth, reproductive output and on their offspring. The results from such studies will create information that can guide management actions to mitigate or minimize impacts of sunscreen products on corals and develop best practices for products and ocean use in Hawaiʻi waters.

Thank you for the opportunity to present testimony in support of the important HB 450 HD1.