



UNIVERSITY OF HAWAII SYSTEM

Legislative Testimony

House Committee on Water & Land
House Committee on Energy & Environmental Protection
House Committee on Ocean, Marine Resources, & Hawaiian Affairs
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By

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HB 1512 – RELATING TO POWERS OF THE LIEUTENANT GOVERNOR

Chairs Evans, Lee, and Hanohano, Vice Chairs Lowen, Thielen, and Cullen, and Members of the House Committees assembled:

The University of Hawai'i is in favor of HB 1512, which proposes for the Office of Lt. Governor to develop a strategic plan for directing statewide growth and development that takes into account a predicted sea level rise in 2050 to 1 foot above the current sea level and any resultant climate change.

In 2012 the National Academy of Sciences projected that global sea level will rise 3 to 9 inches by 2030, relative to the 2000 level, 7 to 19 inches by 2050, and 20 to 55 inches by 2100. In 2013 they published a report indicating that greenhouse gases emitted today will cause sea level to rise for centuries to come. Each degree of global warming is likely to raise sea level by more than 6 feet in the future. Note, that global temperatures have already risen 0.9 degrees. By developing a strategic plan for guiding statewide growth in the context of rising sea levels, you will be taking a strong step in protecting the public from one of the most dangerous aspects of climate change as manifested in the Hawaiian Islands.

This bill will also result in improved collaboration between county, state, and federal agencies, non-governmental organizations, the business community and other decision-makers for the purpose of defining steps that would achieve maximum protection of public health and safety as well as protection of natural resources for future generations.

I suggest that the language in the bill be modified to reflect a scenario-based approach rather than a single benchmark of "1 ft," per the National Oceanographic and Atmospheric Administration as shown below.

NOAA- Global Sea Level Rise Scenarios for the United States National Climate Assessment

Conclusion

"Based on a large body of science, we identify four scenarios of global mean SLR ranging from 0.2 meters (8 inches) to 2.0 meters (6.6 feet) by 2100. These scenarios provide a set of plausible trajectories of global mean SLR for use in assessing vulnerability, impacts, and adaptation strategies. None of these scenarios should be used in isolation, and experts and coastal managers should factor in locally and regionally specific information on climatic, physical, ecological, and biological processes and on the culture and economy of coastal communities. Scientific observations at the local and regional scale are essential to action, and long-term coastal management actions (e.g. coastal habitat restoration) are sensitive to near-term rates and amounts of SLR. "

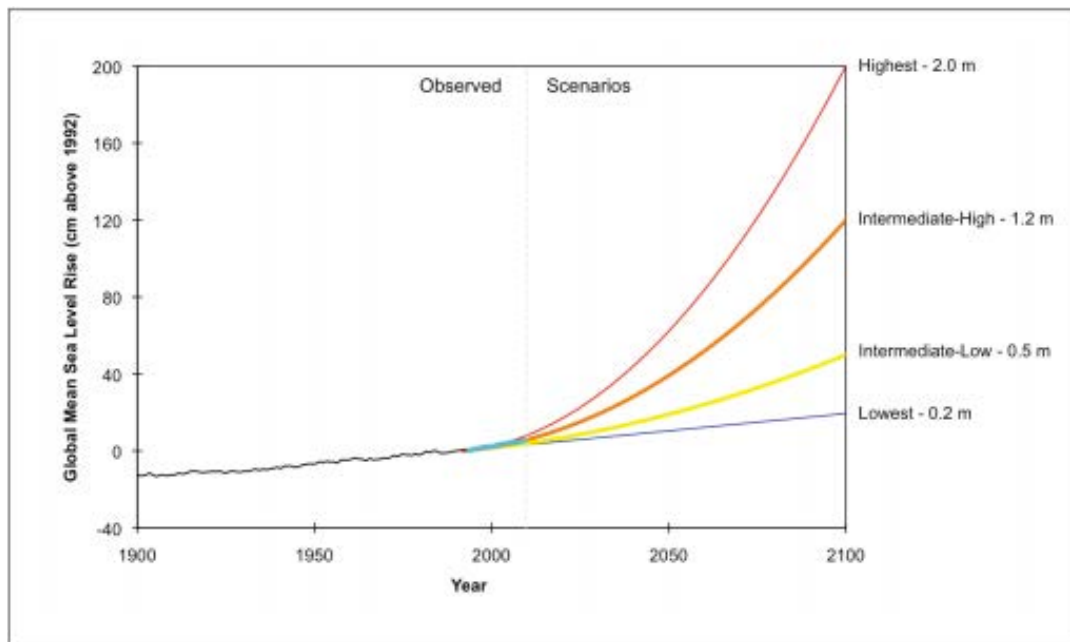


Figure ES 1. Global mean sea level rise scenarios. Present Mean Sea Level (MSL) for the US coasts is determined from the National Tidal Datum Epoch (NTDE) provided by NOAA. The NTDE is calculated using tide gauge observations from 1983 – 2001. Therefore, we use 1992, the mid-point of