

Sen. Hirono's Coral Reef Sustainability Through Innovation Act

Providing competitive prizes to spur innovative coral reef conservation research

The Problem: Healthy coral reef ecosystems provide the highest total economic value and greatest biological diversity of all ecosystem types in the world. However, as confirmed by NOAA earlier this fall, warmer-than-normal ocean temperatures are threatening their health and causing the world's third mass bleaching event on record. Bleaching events cause corals to be more susceptible to disease and increase their chances of dying. Given the multitude of ecosystem services that corals provide, their degradation and loss could have drastic unforeseen impacts that scientists have yet to unveil.

Coral reef ecosystems:

- Are a marine biodiversity hotspot
- Provide a source of food for millions of people
- Protect coastlines from storms and erosion
- Provide habitat, spawning and nursery grounds for economically important fish species
- Are a source of new medicines
- Are key pieces of coastal economies by providing areas for fishing, recreation, and tourism
- In Hawaii alone are worth \$385 million per year to the local economy and taking into account all of the services have a net present value of \$10 billion.

As coral reefs provide a rich habitat for a variety of marine life, the loss of coral reef ecosystems could have serious negative consequences for coastal communities and economies, the health of fish and other marine animals, biodiversity and the overall marine environment. Despite these growing concerns, there is limited understanding of the ecological and societal impacts of coral reef degradation, showing the need for additional coral reef research and preservation.

Proposed Solution: Although research is ongoing in coral reef ecosystems, there is opportunity for the federal government to help incentivize additional research. Prize competitions that encourage public-private partnerships, such as the one that this bill proposes, have an established record of spurring innovation that can be integrated into a Federal ocean management strategy.

The **Coral Reef Sustainability Through Innovation Act** is **a no-cost bill** that amends the Coral Reef Conservation Act of 2000 to include prize competitions. The legislation allows any agency on the US Coral Reef Task Force to:

- Award competitive prizes to advance the ability to preserve, sustain, and restore coral reef ecosystems.
- Use already appropriated money to fund prize purses.
- Work with private non-profits to contribute to prize purses and administer competitions.