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# HOUSE RESOLUTION

DESIGNATING HAWAII'S CORAL REEFS AS CRITICAL NATURAL  
INFRASTRUCTURE AND STRONGLY SUPPORTING NATURE-BASED  
SOLUTIONS SUCH AS CORAL REEF RESTORATION FOR RISK  
REDUCTION.

1           WHEREAS, the islands of the State include environmental  
2 resources such as coral reefs that, if healthy, effectively  
3 managed, and functioning, can help mitigate the risks and  
4 related loss and damage from floods and the effects of climate  
5 change and natural disasters; and

6  
7           WHEREAS, studies have shown that healthy coral reefs can  
8 absorb up to ninety-seven percent of wave energy, protecting  
9 coastal properties from the power of the sea by reducing wave  
10 energy, trapping sediments, and attenuating storm surge, and one  
11 study has estimated that Hawaii's coral reefs protect  
12 \$836,000,000 worth of coastal infrastructure from flooding  
13 annually; and

14  
15           WHEREAS, in addition to coastal protection, Hawaii's coral  
16 reefs provide residents with income from fishing and tourism,  
17 food security, recreational opportunities, and a cultural  
18 connection to their island home; and

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20           WHEREAS, ten million visitors travel to the State annually  
21 to experience the beauty of its beaches, reefs, oceans, and  
22 other natural resources, and in doing so contribute nearly  
23 \$17,000,000,000 to our state economy annually; and

24  
25           WHEREAS, the State's coastal areas and infrastructure face  
26 climate change-related risks and disaster events, including  
27 exposure to storms, high wave events, sea level rise, and  
28 flooding, and climate scientists and other experts predict an  
29 increase in the number and severity of hurricanes, higher levels  
30 of rainfall in fewer storm events, increasing sea surface



1 temperatures, and increased ocean acidification, which will  
2 negatively impact coral reefs; and

3  
4 WHEREAS, the health and sustainability of the State's  
5 communities and economy are closely intertwined with the health  
6 of our coral reefs but are being threatened by global stressors  
7 related to climate change, such as sea level rise, as well as  
8 coral bleaching and ocean acidification; and by local stressors  
9 from land-based sources of pollution, unsustainable fishing  
10 practices, and invasive species; and

11  
12 WHEREAS, coastal ecosystems, such as coral reefs, that  
13 serve as a first line of defense are being lost at alarming  
14 rates; and

15  
16 WHEREAS, live coral cover has declined by as much as forty  
17 percent in some areas, and Hawaii has experienced three coral  
18 bleaching events in the past ten years, including the first  
19 statewide mass bleaching event in 2015; and

20  
21 WHEREAS, storms impact national and local economic  
22 productivity, threaten water and food security, increase  
23 diseases, damage critical public infrastructure, and impede  
24 basic services; and

25  
26 WHEREAS, the Federal Emergency Management Agency is  
27 responsible for responding to natural disasters and providing  
28 technical and financial hazard mitigation support, and this  
29 support is primarily distributed as grant funding through the  
30 Federal Emergency Management Agency's Hazard Mitigation  
31 Assistance programs; and

32  
33 WHEREAS, there is growing interest in the use of coral  
34 restoration for hazard mitigation action to reduce risks to  
35 people and property; and

36  
37 WHEREAS, coral reef restoration for risk reduction is an  
38 active restoration strategy with the aim of increasing the  
39 structural integrity and complexity of coral reef ecosystems to  
40 attenuate wave energy and reduce coastal flooding; and  
41



1 WHEREAS, a recent report by The Nature Conservancy  
 2 concluded that coral reef restoration for risk reduction is a  
 3 cost-effective hazard mitigation strategy in Hawaii; and

4  
 5 WHEREAS, the Federal Emergency Management Agency provides  
 6 financial assistance to all states, territories, and federally  
 7 recognized tribal governments of the United States through its  
 8 Hazard Mitigation Assistance programs, including its Building  
 9 Resilient Infrastructure and Communities program; and

10  
 11 WHEREAS, legislative recognition of coral reefs as critical  
 12 natural infrastructure demonstrates political support for  
 13 nature-based solutions, and the level of a State's political  
 14 support is an important metric when the Federal Emergency  
 15 Management Agency directs activities and funding toward coral  
 16 reef restoration for risk reduction projects; now, therefore,

17  
 18 BE IT RESOLVED by the House of Representatives of the  
 19 Thirty-second Legislature of the State of Hawaii, Regular  
 20 Session of 2023, that this body designates Hawaii's coral reefs  
 21 as critical natural infrastructure and strongly supports nature-  
 22 based solutions such as coral reef restoration for risk  
 23 reduction; and

24  
 25 BE IT FURTHER RESOLVED that certified copies of this  
 26 Resolution be transmitted to the Governor, Chairperson of the  
 27 Board of Land and Natural Resources, and Administrator of the  
 28 Hawaii Emergency Management Authority.

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 31 OFFERED BY: *Linda L. Chingma*  
 MAR 09 2023

