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# SENATE CONCURRENT RESOLUTION

URGING THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO EXAMINE  
AND CONSIDER PURCHASING REEF INSURANCE TO SUPPORT NATURE-  
BASED SOLUTIONS TO PROTECT HAWAII'S COASTLINES AND COASTAL  
INFRASTRUCTURE FROM NATURAL DISASTERS.

1           WHEREAS, the State has environmental resources such as  
2 coral reefs, wetlands, forests, and other natural infrastructure  
3 that, when healthy, effectively managed, and functioning, can  
4 help mitigate the risks and related loss and damage from the  
5 effects of climate change and natural disasters; and

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7           WHEREAS, Hawaii's coastal areas and infrastructure are  
8 facing exposure to climate change-related risks and disaster  
9 events, including exposure to storms, high wave events, sea  
10 level rise, and flooding; and

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12           WHEREAS, climate scientists and other local and global  
13 experts predict an increase in severity and frequency in such  
14 events; and

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16           WHEREAS, a study by a team from the United States  
17 Geological Survey, The Nature Conservancy, and University of  
18 California at Santa Cruz estimates that Hawaii's coral reefs  
19 protect \$836,000,000 worth of coastal infrastructure from  
20 flooding annually; and

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22           WHEREAS, in addition to coastal protection, Hawaii's  
23 nearshore coral reefs provide residents with income from  
24 fishing, which is estimated at \$13,400,000 annually, of which  
25 \$10,000,000 is from non-commercial catch; and

26  
27           WHEREAS, Hawaii's coral reefs also provide reef-related  
28 tourism, which is estimated at \$1,230,000,000 annually; and  
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1           WHEREAS, Hawaii's coral reefs also provide food security,  
2 recreational opportunities, and a cultural connection to the  
3 State; and  
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5           WHEREAS, over ten million visitors traveled to Hawaii in  
6 2019 to experience the beauty of the State's beaches, reefs,  
7 oceans, and other natural resources and, in doing so,  
8 contributed nearly \$17,000,000,000 to the State's economy; and  
9

10           WHEREAS, the health and sustainability of the State's  
11 communities and economy are closely intertwined with the health  
12 of the State's coral reefs and coastal ecosystems; and  
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14           WHEREAS, the health and function of Hawaii's coral reefs  
15 are threatened by global stressors related to climate change,  
16 including sea level rise, coral bleaching, and acidification;  
17 and by local stressors from land-based sources of pollution,  
18 unsustainable fishing practices, and invasive species; and  
19

20           WHEREAS, in some areas of the State, live coral cover has  
21 declined by as much as forty percent, and reef fish abundance  
22 has declined by up to ninety percent; and  
23

24           WHEREAS, Hawaii has experienced three coral bleaching  
25 events in the past five years, including the first statewide  
26 mass bleaching event in 2015; and  
27

28           WHEREAS, coastal risks are expected to increase from the  
29 effects of climate change, which include an increase in the  
30 number and severity of hurricanes, higher levels of rainfall in  
31 fewer storm events, higher sea surface temperatures, and greater  
32 ocean acidification, which negatively impacts coral reefs,  
33 lobsters, oysters, and other calcifying organisms; and  
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35           WHEREAS, global losses due to natural catastrophes and  
36 tropical hurricanes have been increasing in recent decades,  
37 which impact national and local economic productivity, threaten  
38 water and food security, increase diseases, damage critical  
39 public infrastructure, and impede basic services; and  
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41           WHEREAS, the exposure of communities and coastal assets to  
42 flooding and erosion is also increasing because coastal



1 ecosystems that serve as the first line of defense, such as  
2 wetlands and coral reefs, are being lost at alarming rates; and  
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4 WHEREAS, in 2018, the Mexican state government of Quintana  
5 Roo partnered with the local hotel owners' association, The  
6 Nature Conservancy, and a local marine park to establish the  
7 Coastal Zone Management Trust Fund, which was funded in part  
8 through local tourism taxes, to manage and restore beaches and  
9 coral reefs; and  
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11 WHEREAS, in mid-2019, the Coastal Zone Management Trust  
12 Fund purchased the world's first reef insurance policy, which  
13 will provide funds to quickly restore the coral reef if it is  
14 damaged in a hurricane; and  
15

16 WHEREAS, a reef insurance policy covers damage to the reef  
17 rather than damage to the private property on the coastline,  
18 thus insuring nature itself; and  
19

20 WHEREAS, in 2020, Mexico's reef insurance policy paid out  
21 \$850,000 to repair a reef that was impacted by Hurricane Delta;  
22 and  
23

24 WHEREAS, The Nature Conservancy completed a feasibility  
25 assessment in 2020, finding that reef insurance is ecologically  
26 and economically feasible in the State and could help Hawaii  
27 repair its reefs after a natural disaster; and  
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29 WHEREAS, the feasibility assessment identified hurricanes,  
30 marine heatwaves, and excessive storm runoff as potentially  
31 insurable natural disasters; now, therefore,  
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33 BE IT RESOLVED by the Senate of the Thirty-first  
34 Legislature of the State of Hawaii, Regular Session of 2021, the  
35 House of Representatives concurring, that the Department of Land  
36 and Natural Resources is urged to examine and consider  
37 purchasing reef insurance to support nature-based solutions to  
38 protect Hawaii's coastlines and coastal infrastructure from  
39 natural disasters; and  
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41 BE IT FURTHER RESOLVED that in its examination, the  
42 Department of Land and Natural Resources is requested to work,



1 in collaboration with the State Insurance Commissioner and other  
2 appropriate state and county agencies, The Nature Conservancy,  
3 insurance experts, and other experts and partners, to develop a  
4 report that includes:

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- 6 (1) Term sheets for a prospective Hawaii reef insurance
- 7 policy for natural disasters;
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- 9 (2) Priority sites for insurance;
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- 11 (3) Possible buyers and sellers of reef insurance; and
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- 13 (4) Recommended funding mechanisms to cover insurance
- 14 premium costs; and
- 15

16 BE IT FURTHER RESOLVED that the Department of Land and  
17 Natural Resources is requested to identify and propose to the  
18 Legislature specific nature-based projects that help protect the  
19 State's coastal infrastructure from inundation, including  
20 insurance and other market mechanisms that incentivize public  
21 and private investment to protect and restore the health and  
22 function of reefs and other coastal systems from natural  
23 disasters; and

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25 BE IT FURTHER RESOLVED that the Department of Land and  
26 Natural Resources is requested to submit a report of its  
27 findings and recommendations, including any proposed  
28 legislation, to the Legislature no later than twenty days prior  
29 to the convening of the Regular Session of 2023; and

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31 BE IT FURTHER RESOLVED that certified copies of this  
32 Concurrent Resolution be transmitted to the Governor,  
33 Chairperson of the Board of Land and Natural Resources,  
34 Chairpersons of the Hawaii Climate Change Mitigation and  
35 Adaptation Commission, State Insurance Commissioner, Mayor of  
36 the City and County of Honolulu, Mayor of the County of Hawaii,  
37 Mayor of the County of Maui, Mayor of the County of Kauai, and  
38 Executive Director of The Nature Conservancy Hawaii.

