

MAR 12 2021

SENATE CONCURRENT RESOLUTION

URGING THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO EXAMINE
AND CONSIDER 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, if healthy, effectively managed, and functioning, can help
4 mitigate the risks and related loss and damage from the effects
5 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
11

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
21

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



1 WHEREAS, Hawaii's coral reefs also provide reef-related
2 tourism estimated at \$1,230,000,000 annually; and

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4 WHEREAS, Hawaii's coral reefs also provide food security,
5 recreational opportunities, and a cultural connection to the
6 State; and

7
8 WHEREAS, over ten million visitors traveled to Hawaii in
9 2019 to experience the beauty of the State's beaches, reefs,
10 oceans, and other natural resources, and in doing so,
11 contributed nearly \$17,000,000,000 to the State's economy; and

12
13 WHEREAS, the health and sustainability of the State's
14 communities and economy are closely intertwined with the health
15 of the State's coral reefs and coastal ecosystems; and

16
17 WHEREAS, the health and function of Hawaii's coral reefs
18 are threatened by global stressors related to climate change,
19 including sea level rise, coral bleaching, and acidification;
20 and by local stressors from land-based sources of pollution,
21 unsustainable fishing practices, and invasive species; and

22
23 WHEREAS, live coral cover has declined by as much as forty
24 percent, and reef fish abundance has declined by up to ninety
25 percent in some areas; and

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

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31 WHEREAS, coastal risks are expected to increase in the
32 future from the effects of climate change, including an increase
33 in the number and severity of hurricanes, higher levels of
34 rainfall in fewer storm events, increasing sea surface
35 temperatures, and increased ocean acidification that negatively
36 impacts coral reefs, lobsters, oysters, and other calcifying
37 organisms; and

38
39 WHEREAS, global losses due to natural catastrophes and
40 tropical hurricanes have been increasing in recent decades, and
41 these storms impact national and local economic productivity,



1 threaten water and food security, increase diseases, damage
2 critical public infrastructure, and impede basic services; and
3

4 WHEREAS, the exposure of communities and coastal assets to
5 flooding and erosion is also increasing because coastal
6 ecosystems that serve as the first line of defense, such as
7 wetlands and coral reefs, are being lost at alarming rates; and
8

9 WHEREAS, in 2018, the Mexican state government of Quintana
10 Roo partnered with the local hotel owners' association, The
11 Nature Conservancy, and a local marine park to establish a
12 Coastal Zone Management Trust Fund to manage and restore beaches
13 and coral reefs, which was funded in part through local tourism
14 taxes; and
15

16 WHEREAS, in mid-2019, the Coastal Zone Management Trust
17 Fund purchased the world's first reef insurance policy, which
18 will provide funds to quickly restore the coral reef if damaged
19 in a hurricane; and
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21 WHEREAS, the insurance covers damage to the reef rather
22 than damage to the private property on the coastline, thus
23 insuring nature itself; and
24

25 WHEREAS, in 2020, Mexico's reef insurance policy paid out
26 \$850,000 to repair the reef that was impacted by Hurricane
27 Delta; and
28

29 WHEREAS, The Nature Conservancy completed a feasibility
30 assessment in 2020, finding that reef insurance is ecologically
31 and economically feasible in the State and could help Hawaii
32 repair its reefs after a natural disaster; and
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34 WHEREAS, the feasibility assessment identified hurricanes,
35 marine heatwaves, and excessive storm runoff as potentially
36 insurable natural disasters; now, therefore,
37

38 BE IT RESOLVED by the Senate of the Thirty-first
39 Legislature of the State of Hawaii, Regular Session of 2021, the
40 House of Representatives concurring, that the Department of Land
41 and Natural Resources is urged to examine and consider reef
42 insurance to support nature-based solutions to protect Hawaii's



1 coastlines and coastal infrastructure from natural disasters;
2 and

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4 BE IT FURTHER RESOLVED that in its examination, the
5 Department of Land and Natural Resources is requested to work in
6 collaboration with the State Insurance Commissioner and other
7 appropriate state and county agencies, The Nature Conservancy,
8 insurance experts, and other experts and partners to develop a
9 report that includes:

10

11 (1) Term sheets for a new Hawaii reef insurance policy for
12 natural disasters;

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14 (2) Priority sites for insurance;

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16 (3) Possible buyers and sellers of reef insurance; and

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18 (4) Recommended funding mechanisms to cover insurance
19 premium costs; and

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21 BE IT FURTHER RESOLVED that the Department of Land and
22 Natural Resources is requested to identify and propose to the
23 Legislature specific nature-based projects that can help protect
24 the State's coastal infrastructure from inundation, including
25 the use of insurance and other market mechanisms that
26 incentivize public and private investment to protect the health
27 and function of reefs and other coastal systems and to restore
28 them after a natural disaster; and

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30 BE IT FURTHER RESOLVED that the Department of Land and
31 Natural Resources is requested to submit a report of its
32 findings and recommendations, including any proposed
33 legislation, to the Legislature no later than twenty days prior
34 to the convening of the Regular Session of 2022; and

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36 BE IT FURTHER RESOLVED that certified copies of this
37 Concurrent Resolution be transmitted to the Governor,
38 Chairperson of the Board of Land and Natural Resources, Chairs
39 of the Hawaii Climate Change Mitigation and Adaptation
40 Commission, State Insurance Commissioner, Mayor of the City and
41 County of Honolulu, Mayor of the County of Hawaii, Mayor of the



S.C.R. NO. 159

1 County of Maui, Mayor of the County of Kauai, and Executive
2 Director of The Nature Conservancy Hawaii.

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OFFERED BY: 

