

MAR - 6 2020

SENATE CONCURRENT RESOLUTION

SUPPORTING A FEASIBILITY ASSESSMENT FOR REEF INSURANCE AND
RECOMMENDATIONS FOR NATURE-BASED SOLUTIONS TO PROTECT
HAWAII'S COASTLINES AND COASTAL INFRASTRUCTURE FROM NATURAL
DISASTERS.

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

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

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

16
17 WHEREAS, a study by a team from the United States
18 Geological Survey, The Nature Conservancy, and University of
19 California at Santa Cruz has developed models showing that
20 healthy coral reefs can absorb up to ninety-seven percent of
21 wave energy, protecting coastal properties from the power of the
22 sea; and

23
24 WHEREAS, that study estimated that Hawaii's coral reefs
25 protect \$836,000,000 worth of coastal infrastructure from
26 flooding annually; and

27
28 WHEREAS, in addition to coastal protection, Hawaii's coral
29 reefs provide residents with income from fishing and tourism,



1 food security, recreational opportunities, and a cultural
2 connection to our island home; and

3
4 WHEREAS, the health and function of Hawaii's coral reefs are
5 threatened by global stressors related to climate change,
6 including sea level rise, coral bleaching, and acidification;
7 and by local stressors from land-based sources of pollution,
8 unsustainable fishing practices, and invasive species; and

9
10 WHEREAS, live coral cover has declined by as much as forty
11 percent and reef fish abundance has declined by up to ninety
12 percent in some areas; and

13
14 WHEREAS, Hawaii has experienced three coral bleaching
15 events in the past five years, including the first statewide
16 mass bleaching event in 2015; and

17
18 WHEREAS, coastal risks are expected to increase in the
19 future from the effects of climate change, including an increase
20 in the number and severity of hurricanes, higher levels of
21 rainfall in fewer storm events, increasing sea surface
22 temperatures, and increased ocean acidification, which will
23 negatively impact coral reefs, lobsters, oysters, and other
24 calcifying organisms; and

25
26 WHEREAS, global losses due to natural catastrophes and
27 tropical hurricanes have increased in recent decades; and

28
29 WHEREAS, these storms impact national and local economic
30 productivity, threaten water and food security, increase
31 diseases, damage critical public infrastructure, and impede
32 basic services; and

33
34 WHEREAS, the exposure of communities and coastal assets to
35 flooding and erosion is also increasing because coastal
36 ecosystems that serve as a first line of defense, such as
37 wetlands and coral reefs, are being lost at alarming rates; and

38
39 WHEREAS, these coastal ecosystems protect people and assets
40 on the coast by reducing wave energy, trapping sediments, and
41 attenuating storm surge; and



1 WHEREAS, ten million visitors travel to the State annually
2 to experience the beauty of its beaches, reefs, oceans, and
3 other natural resources, and in doing so contribute nearly
4 \$17,000,000,000 to our state economy annually; and
5

6 WHEREAS, the health and sustainability of our communities
7 and economy are closely intertwined with the health of our coral
8 reefs and coastal ecosystems; and
9

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

16 WHEREAS, in mid-2019, the Trust purchased the world's first
17 Reef Insurance policy that will provide funds to quickly restore
18 the coral reef if damaged in a hurricane; and
19

20 WHEREAS, the reef insurance policy covers damage to the
21 reef rather than damage to the private property on the
22 coastline, thus insuring nature itself; and
23

24 WHEREAS, The Nature Conservancy is conducting a feasibility
25 assessment to determine whether reef insurance may help protect
26 and restore Hawaii's reefs after a natural disaster; and
27

28 WHEREAS, this feasibility assessment is scheduled to be
29 completed by October 2020, and will assess the biological,
30 political, economic, cultural, and social feasibility of reef
31 insurance in the islands; now, therefore,
32

33 BE IT RESOLVED by the Senate of the Thirtieth Legislature
34 of the State of Hawaii, Regular Session of 2020, the House of
35 Representatives concurring, that the Legislature encourages the
36 completion of The Nature Conservancy's feasibility assessment;
37 and
38

39 BE IT FURTHER RESOLVED that the Department of Land and
40 Natural Resources, Department of Transportation, appropriate
41 state and county agencies, The Nature Conservancy, and other
42 experts and partners are urged to cooperate to develop an



1 implementation plan identifying and proposing to the 2021
 2 Legislature specific, nature-based projects that can help
 3 protect the State's coastal infrastructure from inundation,
 4 including the use of insurance and other market mechanisms that
 5 incentivize public and private investment to protect the health
 6 and function of reefs and other coastal systems and restore
 7 these reefs and other coastal systems after a natural disaster;
 8 and
 9

10 BE IT FURTHER RESOLVED that The Nature Conservancy is
 11 requested to share the results of its feasibility assessment
 12 with the 2021 Legislature along with any recommendations for
 13 nature-based solutions to help protect Hawaii's coasts from
 14 flooding and inundation; and
 15

16 BE IT FURTHER RESOLVED that certified copies of this
 17 Concurrent Resolution be transmitted to the Governor,
 18 Chairperson of the Board of Land and Natural Resources, Director
 19 of Transportation, Co-Chairpersons of the Hawaii Climate Change
 20 Mitigation and Adaptation Commission, each member of the Hawaii
 21 Climate Change Mitigation and Adaptation Commission, and
 22 Executive Director of The Nature Conservancy of Hawaii.
 23
 24
 25

OFFERED BY: Kal Nishida
[Signature]
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~~NSC. Fish Dept~~
Mike Helber