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# HOUSE CONCURRENT RESOLUTION

REQUESTING THE DEPARTMENT OF LAND AND NATURAL RESOURCES AND THE OFFICE OF PLANNING, IN CONSULTATION WITH THE HAWAII CLIMATE CHANGE MITIGATION AND ADAPTATION COMMISSION, ACTING THROUGH ITS COORDINATOR, TO COLLABORATE TO CONVENE A TASK FORCE ON WAIKIKI'S ADAPTATION TO SEA LEVEL RISE.

1           WHEREAS, substantial flooding impacts from sea level rise  
2 are projected as a result of climate change for the island of  
3 Oahu, with lesser impacts for other parts of the State, as  
4 discussed in more detail below; and  
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6           WHEREAS, the iconic tourist destination of Waikiki, in  
7 particular, is projected to incur among the worst impacts in the  
8 State, including a much higher economic impact in lost property  
9 value than any other area due to the dense concentration of high  
10 level investment in hotels, condominiums, and retail  
11 establishments there; and  
12

13           WHEREAS, rising sea levels are among the significant  
14 adverse impacts of climate change, which result from the  
15 expanded volume of ocean waters due to increased water  
16 temperatures as the oceans absorb most of the increased heat  
17 from global warming and the addition of melt waters from melting  
18 glaciers and ice sheets in the polar regions; and  
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20           WHEREAS, another effect of the increasing temperature of  
21 ocean waters is to add energy to tropical storms such as  
22 hurricanes, such that such storms become more powerful and last  
23 longer with damaging force; and  
24

25           WHEREAS, these impacts have been recognized by the  
26 Legislature since at least 2007, when in enacting Act 234,  
27 Session Laws of Hawaii 2007, it observed that "climate change  
28 poses a serious threat to the economic well-being, public  
29 health, natural resources, and the environment of Hawaii" and  
30 that "the potential adverse effects of global warming include a



1 rise in sea levels resulting in the displacement of businesses  
2 and residences...and an increase in the severity of storms and  
3 extreme weather events"; and  
4

5 WHEREAS, Hawaii, as the only state in the country  
6 consisting solely of islands, is particularly vulnerable to  
7 rising sea levels and more powerful tropical storms; and  
8

9 WHEREAS, Hawaii's Sea Level Rise Vulnerability and  
10 Adaptation Report dated December 2017 (the "Sea Level Rise  
11 Report") is the first state-wide vulnerability assessment for  
12 coastal hazards associated with sea level rise in Hawaii; and  
13

14 WHEREAS, preparation of the Sea Level Rise Report was  
15 initially mandated by Act 83, Session Laws of Hawaii 2014, and  
16 expanded in scope pursuant to Act 32, Session Laws of Hawaii  
17 2017; and  
18

19 WHEREAS, the Sea Level Rise Report, including its  
20 projections of sea level exposure areas described below, has  
21 been officially approved by the Hawaii Climate Change Mitigation  
22 and Adaptation Commission; and  
23

24 WHEREAS, among the scientific information included in the  
25 Sea Level Rise Report are projections of future increases in  
26 global sea level of up to 3.2 feet by 2100 under the "business  
27 as usual" scenario developed by the United Nations  
28 Intergovernmental Panel on Climate Change in its Assessment  
29 Report 5 (IPCC 2014) in which greenhouse gas emissions continue  
30 to increase at current rates; and  
31

32 WHEREAS, however, the Sea Level Rise Report further notes  
33 that "[more] recent observations and projections suggest that  
34 this magnitude of seal level rise could occur as early as year  
35 2060", leading to the Sea Level Rise Report's conclusion that,  
36 "...it is vital that the magnitude and rate of sea level rise is  
37 tracked as new projections emerge, [to] plan for 3.2 feet of sea  
38 level rise now, and be ready to adjust that projection upward";  
39 and  
40

41 WHEREAS, the Sea Level Rise Report also cites emerging  
42 science, including a Climate Science Special Report (CSSR)



1 issued in 2017 by the U.S. Global Change Research Program and a  
2 report by the National Oceanic and Atmospheric Administration,  
3 indicating that the global mean sea level is very likely to rise  
4 by up to 4.3 feet by 2100 if greenhouse gas emissions continue  
5 to increase and suggesting that, for high emission scenarios, a  
6 global mean sea level rise in the range of 6.4 feet to 8.8 feet  
7 is "physically plausible" by 2100, based on observations and  
8 models of potential rapid ice melt in Greenland and Antarctica;  
9 and

10  
11 WHEREAS, the National Oceanic and Atmospheric  
12 Administration report further indicates that sea level rise in  
13 the area around Hawaii and other tropical areas will exceed  
14 projections of global mean sea level rise; and

15  
16 WHEREAS, the Sea Level Rise Report states that the  
17 potential future exposure of each of the Hawaiian islands to  
18 coastal hazards as a result of sea level rise were determined by  
19 computer modeling, "using the best available data and methods",  
20 to assess three separate chronic flooding hazards, including  
21 passive flooding, annual high wave flooding, and coastal  
22 erosion; and

23  
24 WHEREAS, the separate impacts of these three hazards were  
25 mathematically combined by the model to define the total  
26 projected extent of chronic flooding due to sea level rise under  
27 four scenarios, including a maximum rise of 3.2 feet; and

28  
29 WHEREAS, the total projected area of flooding impact is  
30 referred to as the "sea level rise exposure area"; and

31  
32 WHEREAS, the results of the modeling are available for  
33 online review through an interactive tool referred to as the  
34 Hawaii Sea Level Rise Viewer; and

35  
36 WHEREAS, in addition to sea level rise projections, the Sea  
37 Level Rise Report also provides vulnerability assessments of the  
38 estimated social, cultural, economic, and environmental impacts  
39 of the projected sea level rise; and

40  
41 WHEREAS, vulnerability, as used in the Sea Level Rise  
42 Report, refers to the "degree to which a system is susceptible



1 to, and unable to cope with, adverse effects of climate change,  
2 including climate variability and extremes"; and  
3

4 WHEREAS, for lands within the sea level rise exposure area,  
5 vulnerability was assessed as "the estimated potential permanent  
6 loss of land and structures and displaced people from the  
7 exposure to sea level rise"; and  
8

9 WHEREAS, potential economic loss, as determined in the Sea  
10 Level Rise Report, is "based on the value of the land and  
11 structures from the county tax parcel database permanently lost  
12 in the sea level rise exposure area for each projected height of  
13 sea level rise"; and  
14

15 WHEREAS, the Sea Level Rise Report's modeling projects much  
16 greater impact from chronic flooding to the island of Oahu (nine  
17 thousand four hundred acres) than the other islands of Hawaii  
18 (Kauai having the next largest flooding acreage of 5,760 acres);  
19 and  
20

21 WHEREAS, when these impacts are translated to vulnerability  
22 assessments, the Sea Level Rise Report shows the island of Oahu  
23 to have a markedly higher vulnerability to sea level rise  
24 impacts than other islands of the State; and  
25

26 WHEREAS, Oahu's projected thirteen thousand three hundred  
27 displaced persons is more than twice the total for all other  
28 islands of the State and its projected \$12,900,000,000 in  
29 economic loss from the chronic flooding of structures and land  
30 is nearly twice the total for all other islands of the State;  
31 and  
32

33 WHEREAS, the Waikiki area of Oahu is described by the Sea  
34 Level Rise Report as particularly vulnerable to sea level rise  
35 due to very low elevation of this area; and  
36

37 WHEREAS, also problematic is the presence of the Ala Wai  
38 Canal, which will act as a conduit for ocean waters into the  
39 interior of Waikiki as sea level rise worsens; and  
40

41 WHEREAS, this iconic tourist attraction has the highest  
42 concentration and largest total value of projected economic loss



1 (estimated at over \$5,000,000,000) of any area on Oahu or  
2 elsewhere in the State, including twelve major hotels as well as  
3 many condominiums and expensive retail shopping establishments;  
4 and  
5

6 WHEREAS, Waikiki is also projected to have the single  
7 largest concentration of displaced residents; and  
8

9 WHEREAS, the Sea Level Rise Report includes recommendations  
10 for the development of policies and programs to support,  
11 sustainable and resilient land use and community development,  
12 prioritization of smart urban redevelopment outside the  
13 projected sea level rise exposure area, development of  
14 innovative and sustainable financing approaches to support  
15 adaptation, and promotion of intergovernmental collaboration and  
16 accountability for adaptation measures; and  
17

18 WHEREAS, the Sea Level Rise Report warns that decisions  
19 about where to use coastal armoring and when to retreat will  
20 need to be made carefully; and  
21

22 WHEREAS, the Sea Level Rise Report carefully points out  
23 that it does not include a plan for implementation of its  
24 recommendations; now, therefore,  
25

26 BE IT RESOLVED by the House of Representatives of the  
27 Thirtieth Legislature of the State of Hawaii, Regular Session of  
28 2020, the Senate concurring, that the Department of Land and  
29 Natural Resources and the Office of Planning, in consultation  
30 with the Hawaii Climate Change Mitigation and Adaptation  
31 Commission, acting through its Coordinator, are requested to  
32 collaborate to convene a task force on Waikiki's adaptation to  
33 sea level rise to do the following:  
34

- 35 (1) After reviewing the recommendations from the Sea Level  
36 Rise Report, develop, consider, and offer  
37 recommendations on a broad range of alternative  
38 options for adaptive measures by which Waikiki might  
39 respond to projected increasing sea levels, including  
40 but not limited to the extent to whether Waikiki  
41 should retreat from the incursions of ocean waters or,  
42 conversely, protective measures should be considered,



- 1 if deemed technically feasible, to preserve Waikiki in  
2 its current state;
- 3
- 4 (2) Consider and offer recommendations on potential  
5 methods of funding of such adaptive measures for  
6 Waikiki from public and private stakeholders; and  
7
- 8 (3) To the extent that the Task Force concludes that a  
9 more detailed and in-depth engineering study  
10 concerning possible adaptation measures for Waikiki  
11 and a more in-depth financial analysis of funding  
12 options is needed for sound decision making on this  
13 monumental subject, the task force is requested to  
14 outline with as much specificity as reasonable the  
15 topics or issues to be addressed in such follow-up  
16 study or studies and an estimate of the costs thereof;  
17 and  
18

19 BE IT FURTHER RESOLVED that the Chairperson of the Board of  
20 Land and Natural Resources, or the Chairperson's designee, and  
21 the Director of the Office of Planning, or the Director's  
22 designee, are requested to serve as co-chairs of the task force  
23 and to invite one representative of each of the following  
24 entities to service as members of the task force:

- 25
- 26 (1) The Office of Conservation and Coastal Lands of the  
27 Department of Land and Natural Resources;
- 28
- 29 (2) The Department of Business, Economic Development and  
30 Tourism;
- 31
- 32 (3) The Office of the Mayor of the City and County of  
33 Honolulu;
- 34
- 35 (4) The Office of Climate Change, Sustainability, and  
36 Resilience of the City and County of Honolulu;
- 37
- 38 (5) The Department of Planning of the City and County of  
39 Honolulu;
- 40
- 41 (6) The Hawaii Tourism Authority;
- 42



- 1 (7) The Chamber of Commerce Hawaii;
- 2
- 3 (8) The Waikiki Beach Special Improvement District
- 4 Association;
- 5
- 6 (9) The Waikiki Improvement Association; and
- 7
- 8 (10) The Waikiki Neighborhood Board; and
- 9

10 BE IT FURTHER RESOLVED that the Chairperson of the Board of  
11 Land and Natural Resources, or the Chairperson's designee, and  
12 the Director of the Office of Planning, or the Director's  
13 designee, are requested to consider inviting representatives  
14 from the following entities to serve as additional non-voting  
15 participants in the task force:

- 16
- 17 (1) A civil engineering firm;
- 18
- 19 (2) A bank or financing firm; and
- 20
- 21 (3) Two representatives at large from the Waikiki
- 22 community; and
- 23

24 BE IT FURTHER RESOLVED that the task force is requested to  
25 submit a report with its findings and recommendations, including  
26 any proposed legislation, to the Legislature no later than  
27 twenty days prior to the convening of the Regular Session of  
28 2021; and

29

30 BE IT FURTHER RESOLVED that the members of the task force  
31 shall serve without compensation; and

32

33 BE IT FURTHER RESOLVED that certified copies of this  
34 Concurrent Resolution be transmitted to Chairperson of the Board  
35 of Land and Natural Resources; Director of Business, Economic  
36 Development, and Tourism; Director of the Office of Planning;  
37 Chairperson of the Hawaii Climate Change Mitigation and  
38 Adaptation Commission; Director of the Office of Climate Change,  
39 Sustainability, and Resilience; Director of the Department of  
40 Planning of the City and County of Honolulu; Mayor of the City  
41 and County of Honolulu; Chairperson of the Board of Directors of  
42 the Hawaii Tourism Authority; Chairperson of the Chamber of



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1 Commerce Hawaii; Chairperson of the Waikiki Beach Special  
 2 Improvement District Association; Chairperson of the Waikiki  
 3 Improvement Association; and Chairperson of the Waikiki  
 4 Neighborhood Board.

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 7

OFFERED BY:

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