

DAVID Y. IGE  
GOVERNOR



CRAIG K. HIRAI  
DIRECTOR

GLORIA CHANG  
DEPUTY DIRECTOR

**STATE OF HAWAII**  
**DEPARTMENT OF BUDGET AND FINANCE**  
P.O. BOX 150  
HONOLULU, HAWAII 96810-0150

EMPLOYEES' RETIREMENT SYSTEM  
HAWAII EMPLOYER-UNION HEALTH BENEFITS TRUST FUND  
OFFICE OF THE PUBLIC DEFENDER

ADMINISTRATIVE AND RESEARCH OFFICE  
BUDGET, PROGRAM PLANNING AND  
MANAGEMENT DIVISION  
FINANCIAL ADMINISTRATION DIVISION  
OFFICE OF FEDERAL AWARDS MANAGEMENT (OFAM)

**WRITTEN ONLY**  
TESTIMONY BY CRAIG K. HIRAI  
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE  
TO THE SENATE COMMITTEE ON WATER AND LAND  
ON  
SENATE BILL NO. 2724

**February 4, 2022**  
**1:15 p.m.**  
**Room 229 and Videoconference**

RELATING TO SEA LEVEL RISE ADAPTATION

The Department of Budget and Finance (B&F) offers comments on this bill.

Senate Bill No. 2724 requires the Office of Planning and Sustainable Development to establish a pilot program to convene a working group to develop a Waikīkī adaptation and resilience plan (WARP) to address climate change and sea level impacts in the Waikīkī special district and appropriates \$400,000 in general funds for FY 23 for the development of the WARP.

B&F notes that, with respect to the general fund appropriation in this bill, the federal Coronavirus Response and Relief Supplemental Appropriations Act requires that states receiving Elementary and Secondary School Emergency Relief (ESSER) II funds and Governor's Emergency Education Relief II funds must maintain state support for:

- Elementary and secondary education in FY 22 at least at the proportional level of the state's support for elementary and secondary education relative to the state's overall spending, averaged over FYs 17, 18 and 19; and

- Higher education in FY 22 at least at the proportional level of the state's support for higher education relative to the state's overall spending, averaged over FYs 17, 18 and 19.

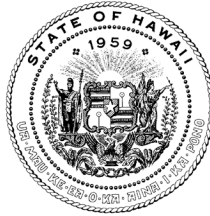
Further, the federal American Rescue Plan (ARP) Act requires that states receiving ARP ESSER funds must maintain state support for:

- Elementary and secondary education in FY 22 and FY 23 at least at the proportional level of the state's support for elementary and secondary education relative to the state's overall spending, averaged over FYs 17, 18 and 19; and
- Higher education in FY 22 and FY 23 at least at the proportional level of the state's support for higher education relative to the state's overall spending, averaged over FYs 17, 18 and 19.

The U.S. Department of Education has issued rules governing how these maintenance of effort (MOE) requirements are to be administered. B&F will be working with the money committees of the Legislature to ensure that the State of Hawai'i complies with these ESSER MOE requirements.

Thank you for your consideration of our comments.

DAVID Y. IGE  
GOVERNOR OF HAWAII



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
OFFICE OF CONSERVATION AND COASTAL LANDS  
POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

**SUZANNE D. CASE**  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

**ROBERT K. MASUDA**  
FIRST DEPUTY

**M. KALEO MANUEL**  
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

**Testimony of**  
**SUZANNE D. CASE**  
**Chairperson**

**Before the Senate Committee on**  
**WATER AND LAND**

**Friday, February 4, 2022**  
**1:15 p.m.**  
**State Capitol, Conference Room 229 & Videoconference**

**In consideration of**  
**SENATE BILL 2724**  
**RELATING TO SEA LEVEL RISE ADAPTION**

Senate Bill 2724 proposes to require the Office of Planning and Sustainable Development to establish a pilot program to convene a working group to develop a Waikiki adaptation and resilience plan to address climate change and sea level impacts in the Waikiki Special District. **The Department of Land and Natural Resources (Department) supports the bill.**

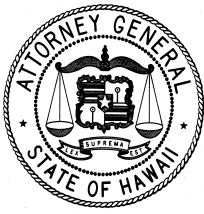
The proposed project would build off the Hawaii Climate Change Mitigation and Adaptation Commission's 2017 report, *Hawaii Sea Level Rise Vulnerability and Adaptation Report*. This report has been extremely valuable in the Department's mission to protect the State's natural and cultural resources and has guided many of our decisions over the past five years.

This bill will take the macro-level recommendations contained in the Commission's report, along with other studies, to create a community-level adaptation and resilience plan for Waikiki under the leadership of the Office of Planning and Sustainable Development. The Department believes that a successful pilot project will provide a useful model for other coastal communities in the State that are facing serious threats from sea level rise.

In order to ensure the success of the project, the Department would request that the Committee consider including an implementation strategy as a component of the plan.

Thank you for the opportunity to comment on this measure.





**TESTIMONY OF  
THE DEPARTMENT OF THE ATTORNEY GENERAL  
THIRTY-FIRST LEGISLATURE, 2022**

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**ON THE FOLLOWING MEASURE:**

S.B. NO. 2724, RELATING TO SEA LEVEL RISE ADAPTATION.

**BEFORE THE:**

SENATE COMMITTEE ON WATER AND LAND

**DATE:** Friday, February 4, 2022 **TIME:** 1:15 p.m.

**LOCATION:** State Capitol, Room 229, Via Videoconference

**TESTIFIER(S):** Holly T. Shikada, Attorney General, or  
Bryan C. Yee, Deputy Attorney General

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Chair Inouye and Members of the Committee:

The Department of the Attorney General provides the following technical comments:

Senate Bill No. 2724, among other things, proposes to establish a working group to work with the Office of Planning and Sustainability to develop a Waikiki adaptation and resilience plan to address climate change and sea level impacts in the Waikiki special district.

The bill creates a working group that will be subject to chapter 92, Hawai'i Revised Statutes, but does not specify the number of members, how the members are selected, or to which department the working group is administratively attached.

Although there are different ways in which this issue could be addressed, we offer the following wording as one alternative. On page 4, lines 13 through 20, replace subsection (c) with the following:

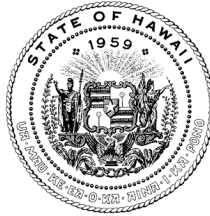
- (c) There is established within the department of \_\_\_\_\_ for administrative purposes the Waikiki adaptation and resilience working group.
- (d) The working group shall include:
  - (1) The University of Hawaii president, or designee;
  - (2) The \_\_\_\_\_ for the City and County of Honolulu, or designee;
  - (3) The director of the department of land and natural resources, or designee;
  - (4) The president of the Waikiki beach special improvement district association, or designee;

- (5) The chair of the Waikiki neighborhood board, or designee; and
- (6) Such other private and public stakeholders, including residents and owners of properties in Waikiki, that are critical to developing a sea level rise community adaptation and resilience plan for Waikiki, as the working group chooses to allow, all of whom shall not be subject to section 26-34.

If the Committee decides to make the amendment suggested above, the changes in the designations from subsection (d) to subsection (e) (page 5, line 1) and from subsection (e) to subsection (f) (page 5, line 15) should be also made.

Thank you for this opportunity to provide comments.

DAVID Y. IGE  
GOVERNOR OF HAWAII



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
OFFICE OF CONSERVATION AND COASTAL LANDS  
POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

**SUZANNE D. CASE**  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

**ROBERT K. MASUDA**  
FIRST DEPUTY

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DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES  
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**Testimony of**  
**SUZANNE D. CASE**  
**Chairperson**

**Before the Senate Committee on**  
**WATER AND LAND**

**Friday, February 4, 2022**  
**1:15 p.m.**  
**State Capitol, Conference Room 229 & Videoconference**

**In consideration of**  
**SENATE BILL 2724**  
**RELATING TO SEA LEVEL RISE ADAPTION**

Senate Bill 2724 proposes to require the Office of Planning and Sustainable Development to establish a pilot program to convene a working group to develop a Waikiki adaptation and resilience plan to address climate change and sea level impacts in the Waikiki Special District. **The Department of Land and Natural Resources (Department) supports the bill.**

The proposed project would build off the Hawaii Climate Change Mitigation and Adaptation Commission's 2017 report, *Hawaii Sea Level Rise Vulnerability and Adaptation Report*. This report has been extremely valuable in the Department's mission to protect the State's natural and cultural resources and has guided many of our decisions over the past five years.

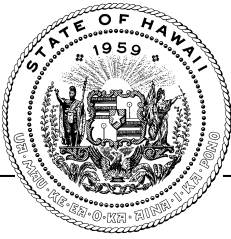
This bill will take the macro-level recommendations contained in the Commission's report, along with other studies, to create a community-level adaptation and resilience plan for Waikiki under the leadership of the Office of Planning and Sustainable Development. The Department believes that a successful pilot project will provide a useful model for other coastal communities in the State that are facing serious threats from sea level rise.

In order to ensure the success of the project, the Department would request that the Committee consider including an implementation strategy as a component of the plan.

Thank you for the opportunity to comment on this measure.







**STATE OF HAWAII  
OFFICE OF PLANNING  
& SUSTAINABLE DEVELOPMENT**

**DAVID Y. IGE**  
GOVERNOR

**MARY ALICE EVANS**  
DIRECTOR

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

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Coastal Zone  
Management  
Program

Environmental Review  
Program

Land Use Commission

Land Use Division

Special Plans Branch

State Transit-Oriented  
Development

Statewide Geographic  
Information System

Statewide  
Sustainability Branch

Statement of  
**MARY ALICE EVANS**  
Director, Office of Planning and Sustainable Development  
before the  
**SENATE COMMITTEE ON WATER AND LAND**  
Friday, February 4, 2022  
1:15 PM  
State Capitol, Conference Room 229 & Videoconference

in consideration of  
**SB 2724**  
**RELATING TO SEA LEVEL RISE ADAPTATION.**

Chair Inouye, Vice Chair Keith-Agaran, and Members of the Senate  
Committee on Water and Land.

The Office of Planning and Sustainable Development (OPSD) commends the legislature for its continued recognition of sea level rise as part of the climate crisis. Waikiki is a significant asset to the State and has unique challenges and opportunities relating to coastal erosion and sea level rise. The OPSD supports the intent of **SB 2724** and provides the following comments:

To provide flexibility to address needs and concerns during the coordination process that may not already be stated in this measure, the OPSD offers the following proposed amendments for the purposes of flexibility in defining the scope of work:

Page 4, Lines 1-5 “SECTION 2. (a) The office of planning and sustainable development shall [~~convene a Waikiki adaptation and resilience plan working group as~~] establish a pilot project to develop an adaptation and resilience plan that addresses the climate change and sea level rise impacts in the Waikiki special district.

Page 4, Lines 6-7 (b) The Waikiki adaptation and resilience plan shall [~~include~~] assess nature-based, as appropriate and urban designs for sea-level rise...

Page 4, Lines 13-17 (c) The [~~working group~~] office of planning and sustainable development shall [~~comprise~~] coordinate with representatives

from the University of Hawaii, city and county of Honolulu, department of land and natural resources, Waikiki beach special improvement district association, and Waikiki neighborhood board.

Page 5, Lines 1-2 (d) [~~In developing the~~] The Waikiki adaptation and resilience plan [~~the working group~~] shall [~~obtain and~~] use the best data ...

Page 5, Line 5-6 The [~~working group~~] Waikiki adaptation and resilience plan may consider the coastal flood adaptation architectural design...

Page 5, Line 15 [~~(e) The working group shall dissolve on January 1, 2024.~~]

The OPSD recognizes that this scale of planning is typically county-led and therefore would rely heavily on the City and County of Honolulu to ensure that the outcomes funded by this proposed measure are complementary to and consistent with county planning efforts without being duplicative of any activities currently being undertaken at the county level.

The OPSD additionally recognizes that establishing and developing sustained state capacity for sea level rise adaptation efforts is necessary to support and coordinate the implementation of activities consistent with the final Waikiki Adaptation and Resilience Plan. Staffing capacity for the OPSD Coastal Zone Management Program is funded through a federal award. Staff workplans are submitted prior to the fiscal year and must be consistent with addressing federal mandates and the CZM federally approved strategy. Current strategic priorities serve to implement the Hawaii Ocean Resources Management Plan which focuses on addressing management gaps and collaboration with CZM network agencies to improve upon **statewide policy**.

Current CZM workplans do not include allocations for the management of this regional-scale project. Given the significance of the value of Waikiki at both the state and county level, a project of this significance requires staff time with a dedicated role to support the initiative. OPSD would require additional staff capacity in order to adequately lead, manage, and procure consultant services to carry out the activities in this mandate as well to staff future coordination efforts to ensure activities in the area are consistent with the Waikiki Adaptation and Resilience Plan.

Thank you for the opportunity to testify on this matter.



# UNIVERSITY OF HAWAII SYSTEM

## Legislative Testimony

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Testimony Presented Before the  
Senate Committee on Water and Land  
Friday, February 4, 2022 at 1:15 p.m.

By

Darren T. Lerner, PhD  
Director, Sea Grant College Program,  
School of Ocean and Earth Science and Technology

And

Charles “Chip” Fletcher, PhD  
Dean, School of Ocean and Earth Science and Technology

And

Michael Bruno, PhD  
Provost  
University of Hawai'i at Mānoa

### SB 2724 – RELATING TO SEA LEVEL RISE ADAPTATION

Chair Inouye, Vice Chair Keith-Agaran, and members of the committee:

The University of Hawai'i Sea Grant College Program (Hawai'i Sea Grant) and the Climate Resiliency Initiative (CRI; formerly Coastal Geology Group) support SB 2724. This legislation requires the Office of Planning and Sustainable Development to establish a pilot program to convene a working group to develop a Waikīkī adaptation and resilience plan to address climate change and sea level impacts in the Waikīkī special district. Hawai'i Sea Grant offers the following comments and suggestions to strengthen this bill.

1. The bill correctly acknowledges the need to develop community-supported adaptation and mitigation plans that help address the impacts of sea level rise and guide policies at the macro-level. The value and importance of community engagement cannot be overstated.
2. The connection to other municipalities that have developed similar resilience strategies is an important aspect of developing a comprehensive plan and the University of Hawai'i has experience with reviewing many of the resilience plans identified in the bill.
3. This bill identifies the State Office of Planning and Sustainable Development (OPSD) to convene a Waikiki adaptation and resilience plan working group as a pilot project to develop an adaptation and resilience plan. It is not clear who will lead the development and composition of the plan and it is recommended an independent consultant assist the working group to develop the plan in collaboration with the OPSD and the working group.
4. Coastal hazard research has shown that inundation and flooding of Waikīkī related to climate change will occur from multiple sources: storm drain backflow,

groundwater inundation, wave run-up and marine hydrostatic (passive) flooding, heavy precipitation and the associated watershed flooding associated with extreme weather events.

5. Waikīkī, like so many of the other resort communities in the state, is in a sea level rise vulnerable area and requires a comprehensive adaptation and resilience plan to deal with projected climate change and sea-level rise.
6. Recent University of Hawai'i scientific research supporting the Hawai'i Sea Level Rise Vulnerability and Adaptation Report<sup>1</sup> found that 3.2 feet of sea level rise will have profound impacts on O'ahu. \$12.9 billion in structures and land could be lost; 3,800 structures could be flooded, including hotels and resorts in Waikīkī; over 13,000 residents could be displaced; and nearly 18 miles of major roads could be flooded. The report estimates that O'ahu will account for an estimated 66% of the total statewide economic losses due to sea level rise. The report recommends private and public entities such as Waikīkī should begin planning for sea level rise adaptation to prepare for higher sea levels in the future.
7. A recent University of Hawai'i Sea Grant College Program study on coastal flood adaption for Waikīkī has developed architectural rendering through a series of design charrettes to envision future sea-level adaption urban designs. This may be complimentary to the effort to develop a community- based resilience plan.

Hawai'i Sea Grant's mission is to provide integrated research, extension, and education activities that increase understanding and use of ocean and coastal resources of the Hawaiian and Pacific Islands and support the informed personal, policy, and management decisions that are integral to realizing this vision. Hawai'i Sea Grant is part of a national network of 34 university-based programs associated with the National Oceanic and Atmospheric Administration (NOAA) that promote better understanding, conservation, and use of coastal resources.

The Climate Resiliency Initiative (CRI) is a newly-established applied research program at the University of Hawai'i at Mānoa. CRI is an affiliation of researchers, technicians, undergraduate, and graduate students spread across campus working on challenges related to climate change. CRI researchers conduct investigations of sea level rise and community design, increasing resiliency to extreme weather events, projecting future climate stresses and shocks, marine and reef impacts, and better understanding community exposure to rising heat, storms, and drought. This requires cross-disciplinary and integrated research investigation on a range of spatial and temporal scales.

Hawai'i Sea Grant and the CRI support SB 2724 and recommends consideration of the above mentioned amendments. Thank you for the opportunity to testify on this measure.

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<sup>1</sup> Hawai'i Climate Change Mitigation and Adaptation Commission. 2017. *Hawai'i Sea Level Rise Vulnerability and Adaptation Report*. Prepared by Tetra Tech, Inc. and the State of Hawai'i Department of Land and Natural Resources, Office of Conservation and Coastal Lands. Page 152-162

## BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HI 96843  
www.boardofwatersupply.com



February 4, 2022

RICK BLANGIARDI, MAYOR

BRYAN P. ANDAYA, Chair  
KAPUA SPROAT, Vice Chair  
RAY C. SOON  
MAX J. SWORD  
NA'ALEHU ANTHONY

JADE T. BUTAY, Ex-Officio  
DAWN B. SZEWCZYK, Designate Ex-Officio

ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer

ELLEN E. KITAMURA, P.E.  
Deputy Manager and Chief Engineer

The Honorable Lorraine R. Inouye, Chair  
and Members  
Senate Committee on Water and Land  
Hawaii State Capitol, Room 229  
Honolulu, Hawaii 96813

Dear Chair Inouye and Members:

Subject: Senate Bill 2724: Relating to Sea Level Rise Adaptation

The Honolulu Board of Water Supply (BWS) supports Senate Bill (SB) 2724 relating to sea level rise adaptation, which establishes a pilot program working group for the Waikiki Special District. The BWS is actively working with the City's Climate Change, Sustainability and Resiliency Office and the City's One Water Panel to address sea level rise adaptation from climate change. We express our interest in participating in the working group.

The BWS recognizes that sea level rise and coastal erosion will impact the water distribution system in low lying and coastal areas and adaptation measures need to be prioritized and implemented. BWS has already experienced difficulty in repairing main breaks along Ala Wai Boulevard, Ala Moana Boulevard and Nimitz Highway having to wait for low tide to complete pipe repairs. We anticipate sea level rise exacerbating water system maintenance and repair in the decades to come.

Thank you for your consideration of our testimony in support of SB 2724.

Very truly yours,

ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer



Testimony Presented Before the  
**SENATE COMMITTEE ON  
WATER AND LAND**

**February 4, 2022 at 1:15pm**  
Senate Capitol (Via Video conference)

**Waikiki Beach Special Improvement District Association**

By  
Rick Egged, President

**SB 2724– RELATING TO SEA-LEVEL RISE ADAPTATION**

Chair Inouye, Vice Chair Keith-Agaran and members of the committees:

The Waikiki Beach Special Improvement District Association (WBSIDA) **strongly supports Senate Bill (SB 2724)**. SB 2724 requires the State Office of Planning and Sustainable Development (OPSD) to convene a working group to develop a Waikiki resilience plan to address climate change and sea level impacts in the Waikiki special district. This effort is an important step towards the development of an adaptation and resilience strategy for Waikiki and will serve as framework and demonstration for other communities in Hawai'i.

The Hawaii State Legislature has correctly recognized that Hawai'i is experiencing the impacts of climate change and coastal hazards including the effects of sea level rise and coastal erosion. These threats include; coastal hazards and climate change impacts including the effects of increased frequency and severity of storms and drought, sea level rise, groundwater inundation and coastal erosion. Sea-level rise induced ground water inundation is of particular concern to low elevation regions like Waikiki given the contribution to our economy, dense urban development and substantial coastal exposure to hazards. The intent of this bill is to develop a proactive resilience plan to prioritize actions that protect, preserve, and where desirable, create, restore or improve the quality of the environment and the associated community benefits.

As described by the City and State Climate Change Commission, it is increasingly likely that we will experience 3 feet or more of sea level rise by the middle to end of this century, depending on the greenhouse gas emission scenario. Six feet or more of sea level rise by 2100 is plausible under some scenarios. High tide flooding will affect low-lying coastal areas like Waikiki decades before global mean sea level reaches these benchmarks. The Honolulu Climate Commission recommends using the 3.2 ft Sea Level Rise Exposure Area as a hazard overlay to prepare for and adapt to sea level rise impacts. This is the

type of actionable information that can be used by such a task force to anticipate and plan for predicted impacts to Waikīkī.

Waikīkī is a globally recognized icon of Hawai'i and is the state's largest tourist destination. Waikīkī generates approximately 42% of the state's visitor industry revenue and is responsible for 8% (\$5 billion) of the Gross State Product<sup>1</sup>. Beaches are a primary attraction for visitors to Waikīkī and perhaps the first line of defense against sea-level rise. It has been estimated that Waikīkī Beach accounts for over \$2 billion in annual income for the local economy<sup>2</sup>. The beaches and myriad of world-renown surf breaks and reef ecosystem located offshore are valuable natural resources that support the environment, culture and lifestyle of Hawai'i, and the idyllic image of Waikīkī. It is critically important to facilitate the ability to maintain these important natural resources along with maintaining the associated resilient development for the inherent economic, social, cultural and environmental value they provide to residents and visitors alike.

Policies related to coastal resilience in Hawai'i have centered on the possible impact of sea-level rise on the active beach system and the built environment. As part of the development of new resilience policies, it is important to recognize and evaluate possible adaptation strategies with a strong understanding of the challenges, limitations and opportunities associated with some adaptive planning and design approaches for Waikīkī. The role and influence of the impacts of groundwater inundation is one example of the type of predicted impact that significantly affects land use and urban design. Similarly, due to the unique history and economy of Waikīkī there may be solutions and design approaches that are particularly well-suited for a high-density urban environment like Waikīkī that should be assessed and evaluated by the task force.

The effort to develop a resilience plan and specific resilient design guidelines for Waikīkī is consistent and supportive of the City and County of Honolulu's (CCH) O'ahu Resilience Strategy. The O'ahu Resilience Strategy (ORS) is part of the CCH's effort to develop strategies for resilience as part of the international 100 Resilient Cities network organized and hosted by the Rockefeller Foundation. One of the 44 Resilience Actions identified in the ORS is Action 14: *Establish Future Conditions Climate Resilience Design Guidelines*. This action is among many in the ORS that a task force can and should evaluate and serve as a proactive advisory guideline for climate resilience. The purpose of the Action 14 guideline is to provide step-by-step instructions on how to incorporate climate and hazard considerations into the design of City and private facilities and infrastructure but can also serve a pilot for adaptation for private development.

Waikiki Special District Guidelines (WSD)<sup>3</sup>.

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<sup>1</sup> <http://www.waikikibid.org/>

<sup>2</sup> Waikīkī Improvement Association (2018) *Economic Impact Analysis of the Potential Erosion of Waikīkī Beach, Final Report*.

<sup>3</sup> (Revised Ordinance of Honolulu Chapter 21 Section 9. Special District Regulations)

Waikīkī is subject to a Special District that controls certain land uses and zoning restrictions. The purpose of a special district is to provide a means by which certain areas in the community in need of restoration, preservation, redevelopment or rejuvenation may be designated as special districts to guide development to protect and/or enhance the physical and visual aspects of an area for the benefit of the community as a whole. The Waikīkī Special District Objectives contain a total of fourteen district objectives listed including promoting the Hawaiian sense of place, guiding development with optimum benefits to the community and retaining residential sector among the objectives. There is currently no specific mention of climate change, hazards, sustainability or resilience anywhere in the Waikīkī Special District Guidelines. With recent interest in revising and updating the WSD guidelines there is an opportunity for the Waikīkī Resilience Task Force to assist in the development of the revised guidelines utilizing new urban planning and architectural design concepts such as those presented here including the Waikīkī Design Flood Elevation guidelines as one example.

The University of Hawai'i, through a collaborative research project with the School of Architecture, SOEST and Sea Grant have initiated a study on long-term visioning and climate adaptation of the buildings and landscapes in Waikīkī through a series of architectural design charrettes. The research addresses the design problem of "in-place" adaptation of a coastal urban area to flooding as sea level rises in Waikīkī and is largely based on research of other U.S. municipalities efforts to adapt to sea-level rise. This research is an essential component to implementing these land use changes over time and the type of information the Resilience Task Force could evaluate.

Thank you for the opportunity to testify.

*The Waikiki Beach Special Improvement District Association (WBSIDA) is dedicated to enhancing the resilience of Waikīkī by ensuring the coordinated management and long-term sustainability of Waikiki Beach and nearshore waters.*

<https://www.wbsida.org/>



Feb 4, 2022

Testimony by Dennis Furukawa  
435 Seaside Ave, 1608  
Honolulu HI 96815

Before the  
SENATE COMMITTEE ON WATER AND LAND  
Senator Lorraine R. Inouye, Chair  
Senator Gilbert S.C. Keith-Agaran, Vice Chair

Friday, February 4, 2022  
1:15 p.m.  
Conference Room 229 & Videoconference

Testimony in support of

SENATE BILL 2724  
RELATING TO SEA LEVEL RISE ADAPTATION

Chairperson Inouye and members of the Committee,

The development of a coordinated strategic plan to address the tremendous challenges of adapting to sea level rise is a top priority for the State of Hawai'i. As a resident of Waikiki I have witnessed rapid changes to the shoreline, and damage caused by exceptionally high 'king' tides. Saltwater from high waves and tides has washed away beach sand, damaged buildings and storm drains, trees washed away, deposited sand on park lawns, sidewalks, and streets.

*Accordingly, the purpose of this Act is to establish a pilot project where a working group convened by the office of planning and sustainable development will develop the framework for a Waikiki adaptation and resilience plan that addresses the impacts of the projected climate change and sea level rise in the State.*

...

*Residents, property owners, businesses, and others directly affected must be involved in the adaptation and mitigation planning process*

While various agencies have made efforts to respond to the damages rising seas have caused, it has been evident that coordination between various State and County agencies has been absent, prior to the development of project proposals. The currently proposed Beach improvement plan for the

Halekulani/Sheraton portions of Waikiki Beach by DLNR is a case in point. Public responses to the EIS for the planned beach improvement plan identified the need for a variety of services and rights-of-way that only the C&C of Honolulu and adjoining property owners can provide, however the providers of those services (C&C) and points of public access (hotel owners) were not parties in the development of the plan. A key goal of the proposed improvement plans – public access and restoration of the oceanfront walkways - relies upon cooperation between the hotel owners to maintain public access routes and make repairs to the beachfront structures like walls, walks, and railings. Evidence that hotel owners committed to provide and maintain those essential elements was absent in the proposal and in their responses to the EIS.

Solutions to rising seas will require cooperation between all stakeholders. Time is too short and money is too valuable to waste on projects that do not involve the participation of all parties in the crafting of solutions. A working group would identify these co-dependencies and hopefully create cooperation between the various public agencies, private businesses, and the public in the formation of strategies to adapt to sea level rise.

End of testimony

By

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