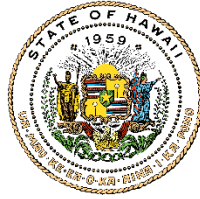


JOSH GREEN, M.D.  
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE  
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
KA 'OIHANA KUMUWAIWAI 'ĀINA

P.O. BOX 621  
HONOLULU, HAWAII 96809

Testimony of  
DAWN N. S. CHANG  
Chairperson

Before the House Committee on  
FINANCE

Friday, March 31, 2023

2:00 p.m.

State Capitol, Conference Room 308 & Videoconference

In consideration of  
SENATE BILL 1291, SENATE DRAFT 1, HOUSE DRAFT 1  
RELATING TO SEA LEVEL RISE ADAPTATION

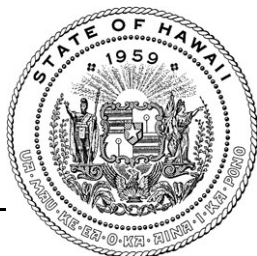
Senate Bill 1291, Senate Draft 1, House Draft 1 proposes that the Office of Planning and Sustainable Development (OPSD) develop a standardized process for state managed facilities to assess vulnerability to sea level rise and makes an appropriation for this endeavor. **The Department of Land and Natural Resources (Department) supports this bill.**

An assessment conducted by OPSD pursuant to Act 178, Session Laws of Hawai'i, 2021, determined that twenty of the twenty-five state agencies with facilities management responsibilities have facilities that fall within the 3.2 ft Sea Level Rise Exposure Area (SLR-XA). The proposed measure builds on the work already accomplished by OPSD and continues state agencies' work towards understanding vulnerability to sea level rise.

The 2017 Hawai'i Sea Level Rise Vulnerability and Adaptation Report (Report) and the 2022 five-year update include recommendations to conduct *an in-depth assessment of vulnerability and evaluation of adaptation strategies for critical infrastructure throughout the State* and to *promote collaboration and accountability for adapting to sea level rise*. The Report also recommends that the State *conduct long-term strategic planning for maintenance, repair and replacement of critical infrastructure within the SLR-XA in advance of emergent need*. Senate Bill 1291, Senate Draft 1, House Draft 1 provides the resources needed to meet the recommendations of the Report, and to develop a standardized vulnerability assessment tool to facilitate state agencies' implementation of appropriate sea level rise adaptation strategies.

Mahalo for the opportunity to testify in support of this measure.

DAWN N.S. CHANG  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE  
MANAGEMENT  
LAURA H.E. KAAKUA  
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



**DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT & TOURISM**  
KA 'OIHANA HO'OMOHALA PĀ'OIHANA, 'IMI WAIWAI  
A HO'OMĀKA'IKĀ'I

**JOSH GREEN, M.D.**  
GOVERNOR

**CHRIS J. SADAYASU**  
DIRECTOR

**DANE K. WICKER**  
DEPUTY DIRECTOR

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813  
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804  
Web site: [dbedt.hawaii.gov](http://dbedt.hawaii.gov)

Telephone: (808) 586-2355  
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Statement of  
**CHRIS J. SADAYASU**  
Director  
Department of Business, Economic Development, and Tourism  
before the  
**HOUSE COMMITTEE ON FINANCE**

Friday, March 31, 2023  
2:00 PM

State Capitol, Conference Room 308 & Videoconference

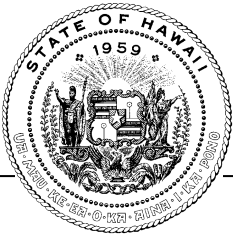
In consideration of  
**SB1291, SD1, HD1**  
**RELATING TO SEA LEVEL RISE ADAPTATION.**

Chair Yamashita, Vice Chair Kitagawa and Members of the Committee. The Department of Business, Economic Development and Tourism (DBEDT) supports SB1291, SD1, HD1, that requires the Office of Planning and Sustainable Development (OPSD) to coordinate with state agencies to develop a standardized process to assess the vulnerability of state managed facilities to sea level rise and makes an appropriation in support of this effort.

Act 178, SLH 2021 codified HRS § 225M-9 Coordination of sea level rise adaptation activities, which tasked OPSD in cooperation with state agencies to plan for and assess a range of options to mitigate the impacts of sea level rise to existing and planned facilities.

This measure provides resources to the OPSD to carry out its charge and is critical to planning for and supporting the state's resiliency to coastal hazards.

Thank you for the opportunity to testify.



# STATE OF HAWAII OFFICE OF PLANNING & SUSTAINABLE DEVELOPMENT

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

Telephone: (808) 587-2846  
Fax: (808) 587-2824  
Web: <https://planning.hawaii.gov/>

Statement of  
**SCOTT GLENN, Director**

before the  
**HOUSE COMMITTEE ON FINANCE**  
Friday, March 31, 2023, 2:00 PM  
State Capitol, Conference Room 308

in consideration of  
**SB 1291 SD1 HD1**  
**RELATING TO SEA LEVEL RISE ADAPTATION**

Chair Yamashita, Vice Chair Kitagawa, and Members of the House Committee on Finance:

The Office of Planning and Sustainable Development (OPSD) **strongly supports SB 1291 SD1 HD1**, which proposes that the OPSD develop a standardized process for state managed facilities to assess vulnerability to sea level rise and appropriate funds for this endeavor.

Pursuant to Act 178, Session Laws of Hawaii 2021, which codified Hawaii Revised Statutes (HRS) § 225M-9 Coordination of sea level rise adaptation activities, the OPSD conducted a sea level rise exposure assessment, which identified that out of 25 agencies with facilities management responsibilities, 20 agencies have facilities that fall within the 3.2 ft Sea Level Rise Exposure Area (SLR-XA). The development of a standardized procedure for assessing the vulnerability of state managed facilities to sea level rise will ensure a coordinated statewide effort to building climate resiliency and ensures that sea level rise planning and adaptation implementation is carried out in a consistent and comprehensive way across agencies and capital planning projects.

The use of a standardized approach to assessing vulnerability will facilitate improved planning to prepare and incorporate sea level rise adaptation into facilities planning and operations, and will support agencies' abilities to prioritize needs for current and future sea level rise adaptation into capital improvement requests. The OPSD is actively engaging and consulting with agencies with facilities management responsibilities and will continue to collaborate during the development of a standardized vulnerability assessment process.

**SB1291 SD1 HD1** will (i) ensure that the State's planning for sea level rise adaptation is moving forward in a coordinated and focused effort, (ii) allow the OPSD, in coordination with state agencies, to continue meeting the charges of Act 178, SLH 2021, and (iii) further progress in meeting HRS § 226-109 Climate change adaptation priority guidelines.

The work enabled by this measure will also contribute to a suite of approaches that the OPSD Coastal Zone Management Program is developing to address coastal hazards and shoreline management issues including (i) developing a resource with information on a range of coastline adaptation strategies; (ii) applying regional scale planning to shoreline management; and (iii) conducting a policy, law, and regulatory analysis to assess managed retreat as one option to mitigate risks from erosion and sea level rise.

Thank you for the opportunity to testify on this measure.



# ‘ŌNAEHANA KULANUI O HAWAI‘I

## Legislative Testimony

### Hō‘ike Mana‘o I Mua O Ka ‘Aha‘ōlelo

Testimony Presented Before the  
House Committee on Finance  
Friday, March 31, 2023 at 2:00 p.m.

By

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

And

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

And

Michael Bruno, Provost  
University of Hawai‘i at Mānoa

#### SB 1291 SD1 HD1 – RELATING TO SEA LEVEL RISE ADAPTATION

Chair Yamashita, Vice Chair Kitagawa, and members of the Committee:

The University of Hawai‘i Sea Grant College Program (Hawai‘i Sea Grant) and the Climate Resilience Collaborative (CRC) **support Senate Bill 1291 SD1 HD1.**

This measure requires the Office of Planning and Sustainable Development, in cooperation with each state agency having operational responsibilities over state facilities to: develop a standardized process to conduct vulnerability assessments for facilities at risk from sea level rise and guidance to agencies on how to conduct the vulnerability assessments for their facilities. Makes an appropriation.

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.

CRC is a multi-investigator research project at the University of Hawai‘i at Mānoa focused on sea level rise adaptation and climate resilience. CRC is updating coastal models that project the impacts of sea level rise.

Hawai‘i Sea Grant and CRC would be happy to provide updated sea level rise data and projections to the Committee or any lawmaker upon request.

**Hawai'i Sea Grant and the Climate Resilience Collaborative support SB 1291 SD1 HD1.**

Thank you for the opportunity to testify on this measure.



3/29/2023

Finance Committee  
Hawai'i State Capitol  
Honolulu, Hawai'i 96813

Dear Chair Yamashita, Vice Chair Kitagawa, and Members of the House Committee on Finance,

**Position: Support SB1291 - Relating to sea level rise adaptation**

The Surfrider Foundation, Hawai'i region, is testifying in **strong support of SB1291**, requiring the Office of Planning and Sustainable Development, in cooperation with each state agency having operational responsibilities over state facilities to develop a standardized process to conduct vulnerability assessments for facilities at risk from sea level rise and guidance to agencies on how to conduct the vulnerability assessments for their facilities.

As the bill indicates, a 2021 inventory showed that 275 state facilities operated by over 20 agencies are within the 3.2 ft Sea Level Rise Exposure Area.

Tasking OPSD to lead the development of a standardized process for assessing sea level rise vulnerability is a logical and critical next step to protecting these important state facilities.

Thank you for your consideration of this testimony in support of SB1291, submitted on the behalf of the Surfrider Foundation's 4 Chapters in Hawai'i and our 437 local community members.

The Surfrider Foundation is a national nonprofit organization dedicated to the protection and enjoyment of our ocean, waves, and beaches. Surfrider maintains a network of over 150 chapters and academic clubs nationwide, including 4 chapters in the Hawaiian Islands. The Surfrider Foundation focuses on many aspects of the environment such as coastal protection, plastic pollution, and water quality.

Sincerely,

Lauren Blickley  
Hawai'i Regional Manager  
Surfrider Foundation



Environmental Caucus of  
The Democratic Party of Hawai'i

To: The Honorable Kyle T. Yamashita, Chair  
The Honorable Lisa Kitagawa, Vice Chair  
Members of the Committee on Finance

Re: **SB 1291, SD1, HD1– RELATING TO SEA LEVEL RISE ADAPTATION**

Hearing: Friday, March 31, 2023, 2:00 p.m., Conference Room 308 & Videoconference

Position: **Strong support**

Aloha, Chair Yamashita, Vice Chair Kitagawa, and Members of the Committee on Finance:

The Environmental Caucus of the Democratic Party of Hawai'i with its 7,500 voting enrolled members stands in strong support of SB 1291, SD1, HD1. This measure would require the Office of Planning and Sustainable Development, in cooperation with each state agency having operational responsibilities over state facilities to develop a standardized process to conduct vulnerability assessments for facilities at risk from sea level rise and guidance to agencies on how to conduct the vulnerability assessments for their facilities.

The Democratic Party of Hawai'i environmental policies call for the protection and preservation of Hawai'i's environment and achieving energy sustainability, advancing measures to re-establish a healthy climate and environment for humans and fellow species, including actions to urgently address climate change, and work towards 100% renewable energy goals.

We believe that all people have the right to live in a clean, healthy and safe environment. We believe that the preservation of our natural environment and its ecological well-being is essential to ensuring a safe, healthy, bountiful life for future generations in Hawai'i. We support policies that create a more sustainable society. We support the restoration, preservation, and protection of native ecosystems.

We believe in the resource management principles outlined in the Public Trust doctrine of [Article XI, Section 1 of] the Hawai'i State Constitution. [OUR PLATFORM | DPH \(hawaiidemocrats.org\)](https://www.hawaiidemocrats.org)

Requiring the Office of Planning and Sustainable Development, in cooperation with each state agency having operational responsibilities over state facilities to develop a standardized process to conduct vulnerability assessments for facilities at risk from sea level rise and guidance to agencies on how to conduct the vulnerability assessments for their facilities is consistent with the state and counties' duties under the Public Trust Doctrine under Article XI, Section 1, of the Hawaii State Constitution, and the DPH Platform environmental plank to take actions to urgently address climate change. Please support and pass this bill.

Mahalo for the opportunity to testify on this measure.

/s/ Melodie Aduja and Alan Burdick  
Co-Chairs, Environmental Caucus of the Democratic Party of Hawai'i



**SB-1291-HD-1**

Submitted on: 3/29/2023 10:52:09 PM

Testimony for FIN on 3/31/2023 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Ted Bohlen	Hawaii Reef and Ocean Coalition and Climate Protectors Hawaii	Support	Written Testimony Only

Comments:

Hawaii Reef and Ocean Coalition and Climate Protectors Hawaii support this bill to ensure consistent planning through the Office of Planning and Sustainable Development for sea level rise across State agencies.



Aloha committee members,

My name is Arwen Revere and I am a high school student from Kailua and a member of the environmental organization Wild Kids, whom I am representing today. Wild Kids is in strong support of SB1291. We believe that climate change and sea level rise pose significant; dangerous, and imminent threats to the state's social and economic well-being, public safety, nature, cultural resources, property, infrastructure, and government functions. Chronic impacts of sea level rise, including coastal erosion, high tide flooding, and annual high wave flooding, are already impacting many low-lying coastal areas and are predicted to increase in extent and severity in the coming decades.

To successfully adapt to climate change and sea level rise, state agencies having operational responsibilities over facilities owned and managed by the state must plan, coordinate, and act to assure Hawai'i's sustainable and resilient future and mitigate against societal or economic disruptions caused by climate impacts. Please support this bill and protect our environment for future generations.

Thank you for the opportunity to testify,

Arwen Revere



## *Hawaii's Thousand Friends*

335 Hahani Street #342132 \* Kailua, HI 96734 \* Phone/Fax (808) 262-0682 E-Mail: [htf3000@gmail.com](mailto:htf3000@gmail.com)

March 31, 2023

### COMMITTEE ON FINANCE

Rep. Kyle T. Yamashita, Chair

Rep. Lisa Kitagawa, Vice Chair

### SB 1291 SD1 HD1

### RELATING TO SEA LEVEL RISE ADAPTATION

Hawaii's Thousand Friends, a statewide non-profit water and land use planning organization dedicated to protecting the environment, human health, and cultural and natural resources supports SB 1291 SD1 HD1, which requires the Office of Planning and Sustainable Development (OPSD) to take the lead in assessing facilities that are at risk from sea level rise and provide guidance to agencies on how to conduct vulnerable assessments for their facilities.

Local and national sea level rise data shows the vulnerability of Hawaii's coasts to sea level rise with significant impacts to natural and cultural resources and leaving public facilities within the 3.2 sea level rise exposure area exposed to imminent threats of erosion and flooding.

An inventory conducted in 2021 identified 275 state facilities under 20 agencies that are within the 3.2 ft Sea Level Rise Exposure Area yet there is no coordinated effort to deal with this pressing and predictable issue.

We urge you to pass SB 1291 SD1 HD1 so that planning for the inevitable sea level rise and impacts to public health, public safety and public facilities can begin.

**SB-1291-HD-1**

Submitted on: 3/29/2023 3:01:05 PM

Testimony for FIN on 3/31/2023 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Douglas Perrine	Individual	Support	Written Testimony Only

Comments:

Sea level rise is here, and some properties are already severely affected. Without a standardized method of assessing risk, the State and Counties will be floundering in their efforts to plan for mitigation. I strongly support passage of SB1291.

**SB-1291-HD-1**

Submitted on: 3/29/2023 5:17:36 PM

Testimony for FIN on 3/31/2023 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Denise E Antolini	Individual	Support	Written Testimony Only

Comments:

Aloha FIN Chair Yamashita, Vice Chair Kitagawa, and Members of the Committee,

Please support SB1292 SD1 HD1 with the requested appropriation of \$400,000 to OPSD.

As the bill indicates, a 2021 inventory showed that 275 state facilities operated by over 20 agencies are within the 3.2 ft Sea Level Rise Exposure Area.

Tasking OPSD to lead the development of a standardized process for assessing sea level rise vulnerability is a logical and critical next step to protecting these important state facilities.

Mahalo,

Denise Antolini

Law Professor, Pūpūkea resident

**SB-1291-HD-1**

Submitted on: 3/29/2023 6:34:12 PM

Testimony for FIN on 3/31/2023 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Will Caron	Individual	Support	Written Testimony Only

Comments:

Climate change and sea level rise pose significant, dangerous, imminent threats to the state's social and economic wellbeing, public safety, environment, cultural resources, property, infrastructure, and government functions. Chronic impacts of sea level rise, including coastal erosion, high tide flooding, and annual high wave flooding, are already impacting many low-lying coastal areas and are predicted to increase in extent and severity in the coming decades.

To successfully adapt to climate change and sea level rise, state agencies having operational responsibilities over facilities owned and managed by the state must plan, coordinate, and act to assure Hawai'i's sustainable and resilient future and mitigate against societal or economic disruptions caused by climate impacts. Please support this bill.

**SB-1291-HD-1**

Submitted on: 3/30/2023 9:38:45 AM

Testimony for FIN on 3/31/2023 2:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Ellie S. Jones	Individual	Support	Written Testimony Only

Comments:

Dear FIN Chair Yamashita, Vice Chair Kitagawa, and Members of the Committee,

My name is Ellie and I am a resident of O‘ahu in Mānoa Valley. I am writing to ask you to support SB1292 SD1 HD1 to appropriate \$400,000 to assess sea level rise impacts on state facilities.

As a marine scientist, one of the issues that concerns me most both for the health of the community, the ‘āina, and the ocean is sea level rise (SLR.) SB1292 discusses an inventory from 2021 that noted the state is in possession of 275 facilities that are within the predicted zone for expected sea level rise calculated by the 2017 *Hawaii Sea Level Rise Vulnerability and Adaptation Report*. It is imperative that we provide resources to proactively prepare for sea level rise. Providing this funding to the Office of Planning and Sustainable Development will give us a head start on addressing this issue before it endangers land, facilities, and people.

Mahalo for your time and consideration in hearing this bill,

Ellie S Jones