THE HAWAIʻI CLIMATE CHANGE MITIGATION & ADAPTATION INITIATIVE

Pili Na Mea A Pau
“All Things Are Related”

Sea Level Rise Vulnerability & Adaptation Report

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HAWAII CLIMATE CHANGE MITIGATION AND ADAPTATION INITIATIVE
(Act 32, 2017; replaces Act 83, 2014)

• Hawai‘i becomes the first state to enact legislation that implements portions of the Paris climate agreement
• Establishes a Hawaii Climate Change Mitigation and Adaptation Commission continuing the work of Interagency Climate Adaptation Committee
• Provide policy direction, coordination, and planning among agencies
• Establish climate change mitigation and adaptation strategies
• Develop a Sea Level Rise Vulnerability and Adaptation Report for Hawai‘i
THE HAWAI`I SEA LEVEL RISE VULNERABILITY & ADAPTATION REPORT

Due to the State Legislature by December 2017

- Compiling the best science on climate change and SLR.
- Projecting and modeling hazards exposure related to SLR.
- Assessing vulnerabilities to hazards related to SLR.
- Making recommendations for improving resilience to hazards.
- Providing a framework for assessing other climate change impacts.

This a report on sea level rise vulnerability and adaptation, not an adaptation plan.
SLR Hazard Modeling and Mapping

Passive Flooding

Coastal Erosion

High Wave Flooding

(Sorry, draft materials. Not ready to share.)

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(Sorry, draft materials. Not ready to share.)
SEA LEVEL RISE EXPOSURE AREA (SLR-XA)

• Estimated area of exposure to sea level rise based on modeling future passive flooding, annual high wave flooding, and coastal erosion
Sea Level Rise Exposure Area (Kihei, Maui)

(Sorry, draft materials. Not ready to share.)

The information being presented is preliminary and for demonstration only. It should not be used for planning or any other purposes at this time.
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Potential Economic Loss (Kihei, Maui)

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REPORT RECOMMENDATIONS

Broadscale recommendations based on stakeholder input, vulnerability, literature review and more:

• Planning
• Policy
• Governance
• Design and Construction
• Financing and Incentives
• Natural and Cultural Resources
• Emergency Management

Stakeholder workshops were held in 2016 and 2017
Building Resilience to Coastal Hazards and Climate Change in Hawai‘i

- Hawai‘i Sea Grant program in partnership with the Department of Land and Natural Resources (DLNR) and Office of Planning (OP)
- Funding: NOAA Regional Coastal Resilience Grants Program and DLNR
- Three complementary projects building on the Hawai‘i Climate Mitigation and Adaptation Initiative and other projects and initiatives
- Overall project time period: May 2016 - April 2019
Hawai‘i Sea Level Rise Map Viewer

- Online atlas for the Hawai‘i Sea Level Rise Report
- Local hazard exposure and vulnerability data and maps
- Empower decision makers and communities to understand and plan for increased coastal flooding and erosion

(Sorry, draft materials. Not ready to share.)
Integrating Resilience in Community Planning

**Goal:** Improve assessment of and planning for coastal hazards, climate change, and sea level rise in community and general plans

**Objectives:**
- Identify gaps and opportunities for integrating coastal resilience into community plans
- Guidelines for implementing *Hawai‘i Sea Level Rise Report* data and recommendations at the “ground level”
- Improve implementation of *Hawai‘i Climate Adaptation Priority Guidelines* (Act 286, 2012)

Working within existing planning and policy frameworks (community and general plans)
Resilience-Focused Disaster Reconstruction Planning

- Guidelines for increasing resilience to future hazards and protecting environmental resources through the post-disaster rebuilding process
- Build back safer, stronger, smarter, and faster after a damaging disaster
- Expands on Maui’s *Post-Disaster Reconstruction Guidelines and Protocols*
Mahalo!

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