

# Guidance for Using the Sea Level Rise Exposure Area in Local Planning and Permitting Decisions



Guidance for Using the Sea Level Rise Exposure Area in Local Planning and Permitting Decisions



A supplement to the Hawai'i Sea Level Rise Vulnerability and Adaptation Report

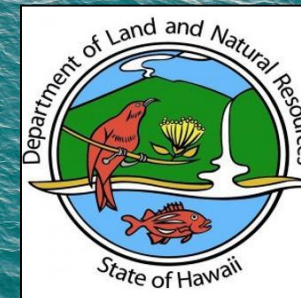
Pre-Final Draft 10/14/2020



University of Hawai'i Sea Grant College Program  
and  
The Department of Land and Natural Resources -  
Office of Conservation and Coastal Lands  
for the

Hawai'i Climate Change Mitigation and Adaptation  
Commission - Climate Ready Hawai'i Initiative

Dr. Brad Romine and Dr. Shellie Habel



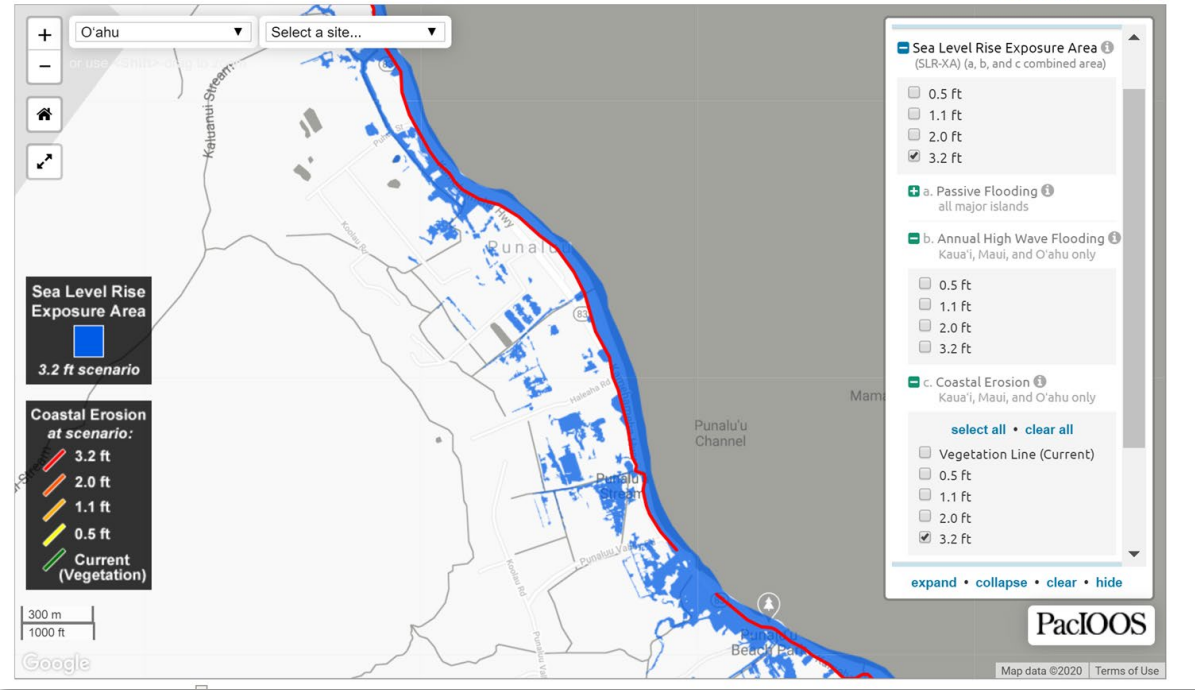


# Hawai'i Sea Level Rise Vulnerability and Adaptation Report

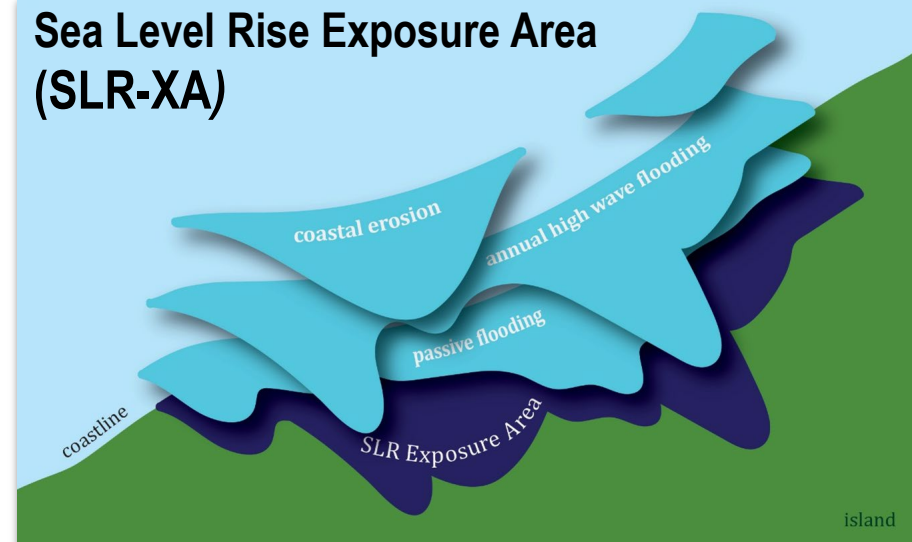


## Sea Level Rise : Hawai'i Sea Level Rise Viewer

[view full-screen map](#)



## Sea Level Rise Exposure Area (SLR-XA)



## **In their November 27, 2018 meeting the State Climate Commission determined that:**

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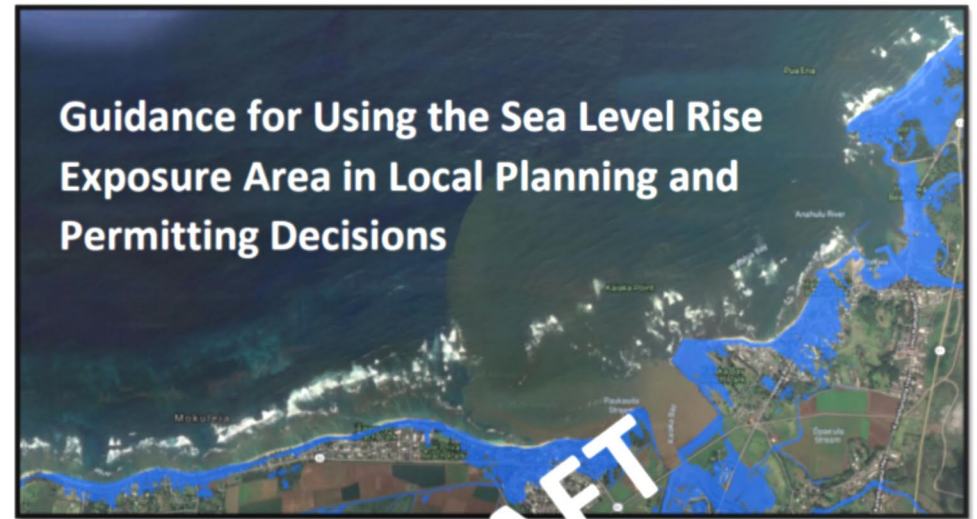
*Based on the methodology of sea level rise modeling used in the Hawai'i Sea Level Rise Vulnerability and Adaptation Report (Report) and the Hawai'i Sea Level Rise Viewer (Viewer), having gone through peer review and publication in the Nature Journal Scientific Reports (Anderson et al., 2018), **the results of this study are sufficiently validated to be appropriately used in land management decisions as the best available information as of the date of publication of the Report, December 2017, consistent with the intent of Act 83 SLH 2014 as amended.** This Report is intended to provide a state-wide assessment of Hawai'i's vulnerability to sea level rise. The location of projected impacts and economic costs from damages are estimates based on a particular sea level rise scenario. The hazard and vulnerability data and maps provided herein are based on observational data and computer-based models as described in the Report and in published research (Anderson et al., 2018). As with all models, it is important to understand the methods, assumptions, limitations, and uncertainties of the methods used.*



# Process of Developing SLR-XA Guidance:

A working group of county and state agency representatives and subject matter experts met in 2019 and 2020:

- Kauai County Planning Department
- Honolulu City & County (DPP and OCCSR)
- Maui County Planning Department
- Hawaii County Planning Department
- OP-CZM
- OCCL
- University of Hawaii Sea Grant
- University of Hawaii Coastal Geology Group



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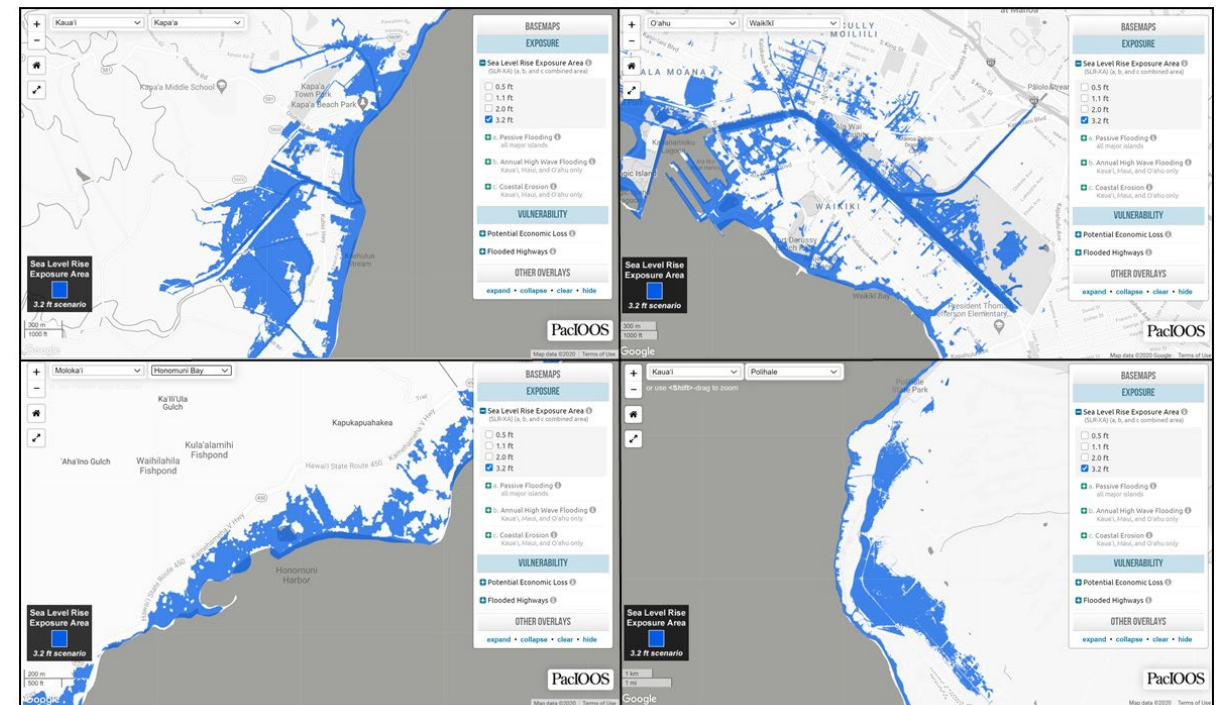
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This guidance is intended to address the following needs and challenges posed by the working group and others:

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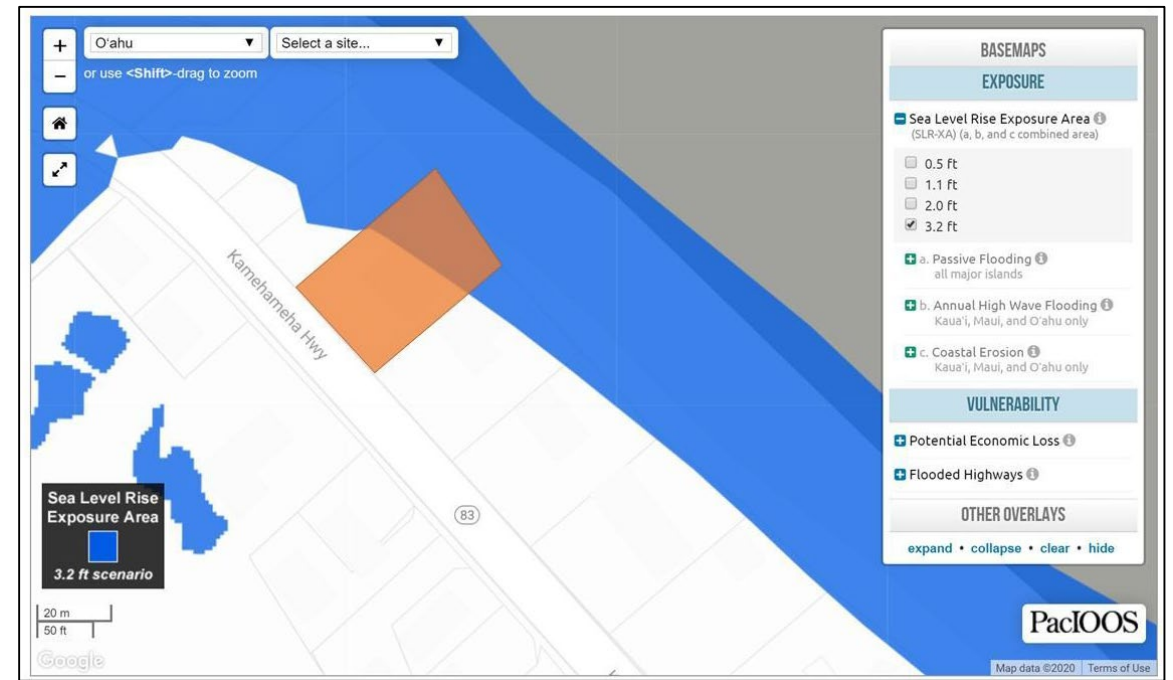
- Incorporating the SLR-XA in land use plans and policies;



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This guidance is intended to address the following needs and challenges posed by the working group and others:

- Incorporating the SLR-XA in land use plans and policies;
- Interpreting and applying the spatially-variable SLR-XA data;

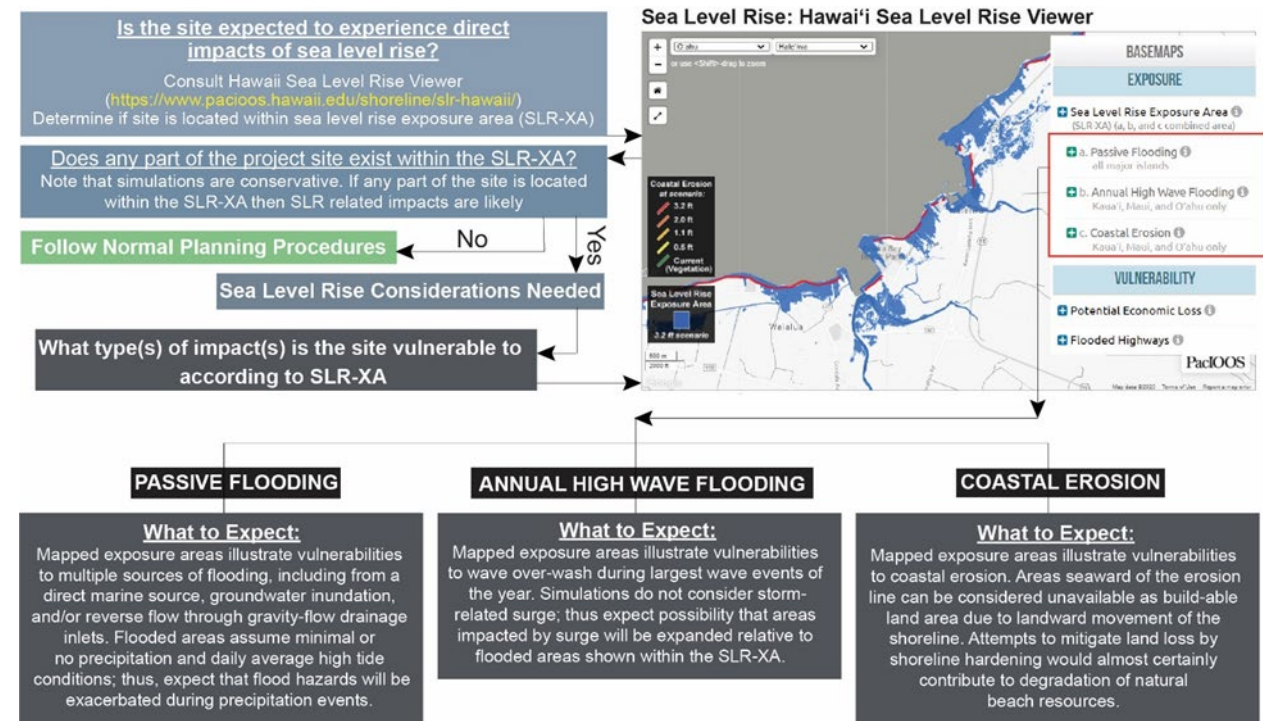




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This guidance is intended to address the following needs and challenges posed by the working group and others:

- Incorporating the SLR-XA in land use plans and policies;
- Interpreting and applying the spatially-variable SLR-XA data;
- Applying the SLR-XA in permit review at the property scale;





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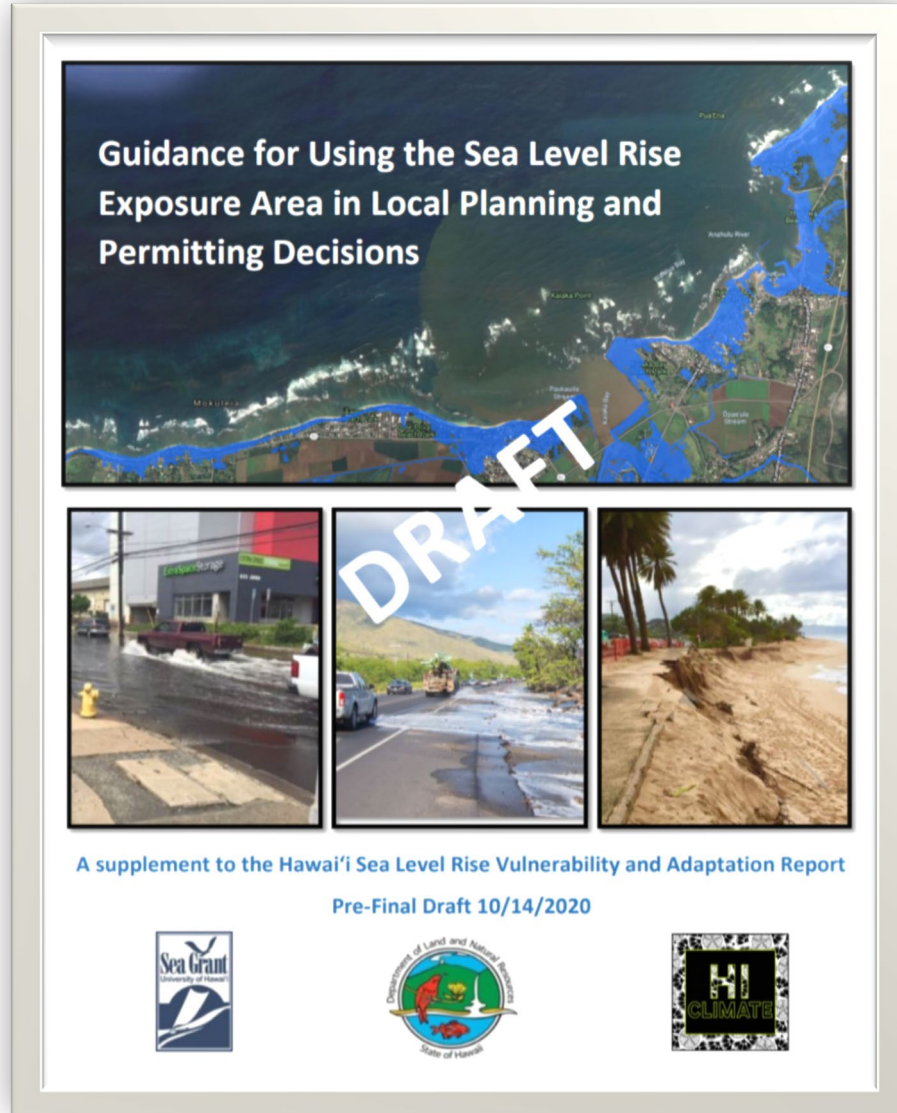
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This guidance is intended to address the following needs and challenges posed by the working group and others:

- Incorporating the SLR-XA in land use plans and policies;
- Interpreting and applying the spatially-variable SLR-XA data;
- Applying the SLR-XA in permit review at the property scale;
- Relating the SLR-XA model projections to existing shoreline hardening and backshore geology.



# Next Steps



- Finalize guidance with a statement from the Commission if provided;
- Update SLR Viewer;
- Welcome requests for more detailed briefings to planning departments.



## Possible Action: Acceptance of Draft Statement by the Commission

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*This document has been [endorsed/adopted] by the Hawai'i Climate Change Mitigation and Adaptation Commission to support implementation of recommendations in the Hawai'i Sea Level Rise Vulnerability and Adaptation Report adopted by the Hawai'i Climate Change Mitigation and Adaptation Commission in October of 2017, and as a resource of the Climate Ready Hawai'i Initiative.*