

### Guidance for Addressing Sea Level Rise in Community Planning in Hawai'i

Hawai'i Sea Grant: Brad Romine, Tara Owens, Katy Hintzen, Melanie Lander, Ruby Pap, Darren Lerner

**DLNR-OCCL: Sam Lemmo** 

**OP-CZM:** Justine Nihipali

Tetra Tech, Inc.: Kitty Courtney





















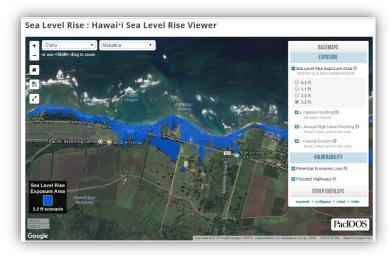






# BUILDING RESILIENCE TO COASTAL HAZARDS AND CLIMATE CHANGE IN HAWAI'I

Three complementary projects building on the *Hawai'i Sea Level Rise Vulnerability and Adaptation Report* and other recent projects and initiatives:



Hawaii Sea Level Rise Viewer hawaiisealevelriseviewer.org





seagrant.soest.hawaii.edu









"It will be critically important for localities to institutionalize flexible decision-making frameworks that extend long into the future, possibly for 50 or more years." 1

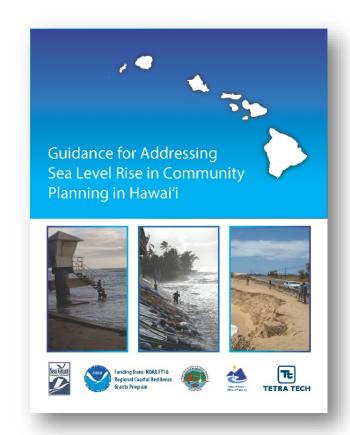
- Adapting to sea level rise requires communities to make difficult decisions, weighing priorities and consequences
- Community planning provides a critical entry point and existing framework for locally-appropriate combination of:
  - Decision analysis
  - Land use planning
  - Public participation



1.Quay, R. (2010). Anticipatory Governance. *Journal of the American Planning Association,* 76(4), 496-511.

## Purpose and Approach

- Purpose: Assist county planners to build upon and improve ongoing efforts to address sea level rise
- Focus: County general and community plans as a critical entry point, guidance may also be applied in other related planning efforts
- Developed through research and extensive input and technical review from planners in each of the counties:
  - 15 outreach events with over 100 county staff and other stakeholders (workshops, webinars, smaller consultations)
  - Written comments on drafts were essential to refining the guidance



#### Results and Recommendations

- Guidance under four key topics:
  - A. Vulnerability assessment
  - B. Land use and development alternatives
  - C. Plan and policy alignment
  - D. Adaptive management
- With Recommended Practices under each Guidance
- Examples and Resources for each of the Recommended Practices (Appendix 1)
- Summary of recommended practices with relevance to State Priority Guidelines (Appendix 2)

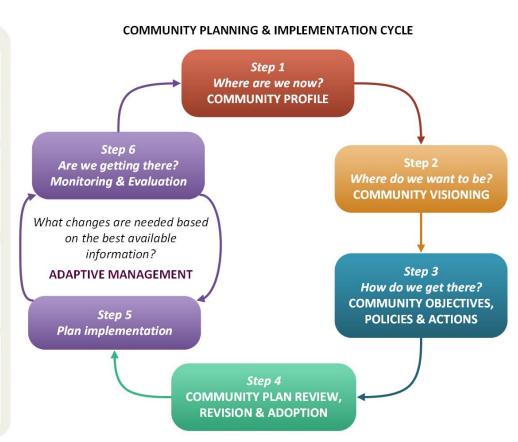
#### GUIDANCE

A. Assess vulnerability to sea level rise and identify potential adaptation strategies to support planning and policy development

> B. Create sea level riseinformed land use and development alternatives identifying benefits and drawbacks

C. Align plans, policies, and actions to reduce vulnerability to coastal hazards and support sea level rise adaptation

D. Approach planning and implementation as cycle with monitoring and evaluation to support adaptive management



## **Concluding Thoughts**

- Adapting to sea level rise will be challenging and disruptive. However, disruption brings opportunity for innovation and creativity to re-envision our communities as more equitable, sustainable, and resilient.
- Inaction will be the costliest and most complicated path in the long-run.
- Developing this Guidance has emphasized the importance of continuing to share evolving knowledge and practices

