



PROPOSED AMENDMENTS TO THE MAUI PLANNING COMMISSION'S SPECIAL MANAGEMENT AREA & SHORELINE RULES

Kihei Community
Informational Meeting
November 14, 2019



MEETING AGENDA

5:00 pm: Introductions and proposed meeting process

- Introductions
- Purpose of informational meeting
- Planning process timeline to date
- Update on outreach & feedback to date
- Resource Materials available

5:15 pm: Planning department presentation

- SMA Rule changes
- What is happening on the shoreline & why rule updates are needed
- Shoreline Rule changes

5:45 pm: Community Q & A

6:30 pm: Meeting summary, next steps, & adjournment

PLANNING PROCESS TIMELINE TO DATE

- **2014 – 2017:** Internal rules revisions to include impacts of sea level rise & to exclude minor projects as “no needs”
- **2017:** comments sought from state agencies (OP & DLNR)
- **December 2017:** Hawaii Sea level rise assessment & vulnerability Report released
- **2018:** revision of shoreline rules to incorporate sea level rise report erosion hazards line for 3.2 feet of sea level rise
- **July 2018:** proposed new sma & shoreline rules posted for comment
- **October 2018:** Initial introduction of rules changes to Maui Planning Commission
- **August 2018 – october 2019 (14 months):** gathered comments from professional presentations (7) & small interest group meetings (3)
- **September & October 2019:** input from two Maui Planning Commission Workshops (details of future sea level rise due to climate change. Dr. fletcher)
- **November 2019 – January 2020:** postcard announcing community meetings (4+1)

OUTREACH & FEEDBACK TO DATE

1. August 2018: American Institute of Architects (AIA)
2. October 2018: Construction Industry of Maui
3. October 2018: Public workshop
4. November 2018: Neighborhood groups (i.e. Spreckelsville)
5. November 2018: Large Landowners Group
6. November 2018: Resort leadership (i.e. Host Hotels, Kyo-ya Hotels)
7. April 2019: Realtors Association of Maui (RAM)
8. June & October 2019 (2): Maui Facilities and Engineering Leadership Council (MFELC)

OUTCOMES OF OUTREACH & FEEDBACK

1. Revisions to Proposed Rules
2. Frequent Comments and Questions (handout)
3. Planning Commission request for community meetings
4. Shoreline property owners notified

RESOURCE MATERIALS AVAILABLE

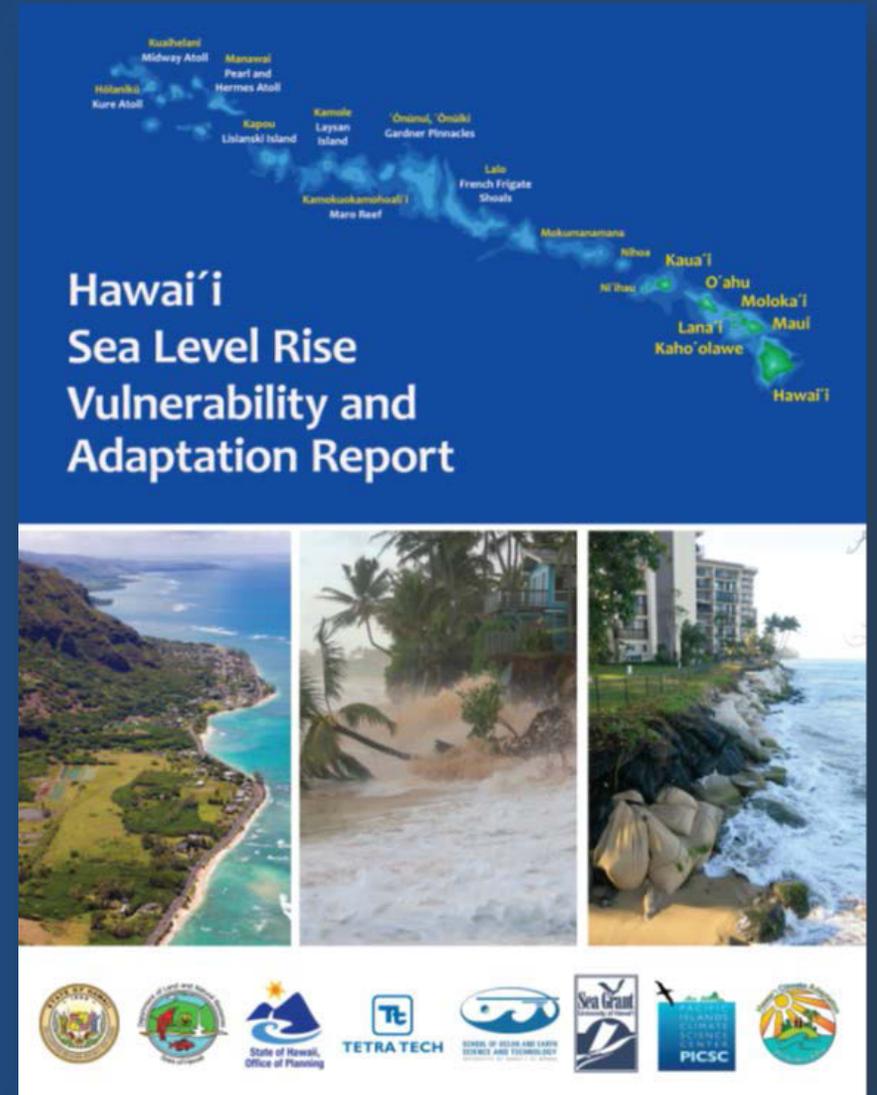
1. *Special management area Rules for the Maui planning Commission (HANdouts)*
2. *Shoreline rules for the maui planning commission (handouts)*
3. *Frequent comments and questions (handouts)*
4. *Hawaii sea level rise viewer screen captures for south maui (table copies)*
5. *Scenarios (9) for most common shoreline development (table copies)*
6. *Postcard for upcoming community informational meetings*

SPECIAL MANAGEMENT AREA (SMA) & SHORELINE RULES

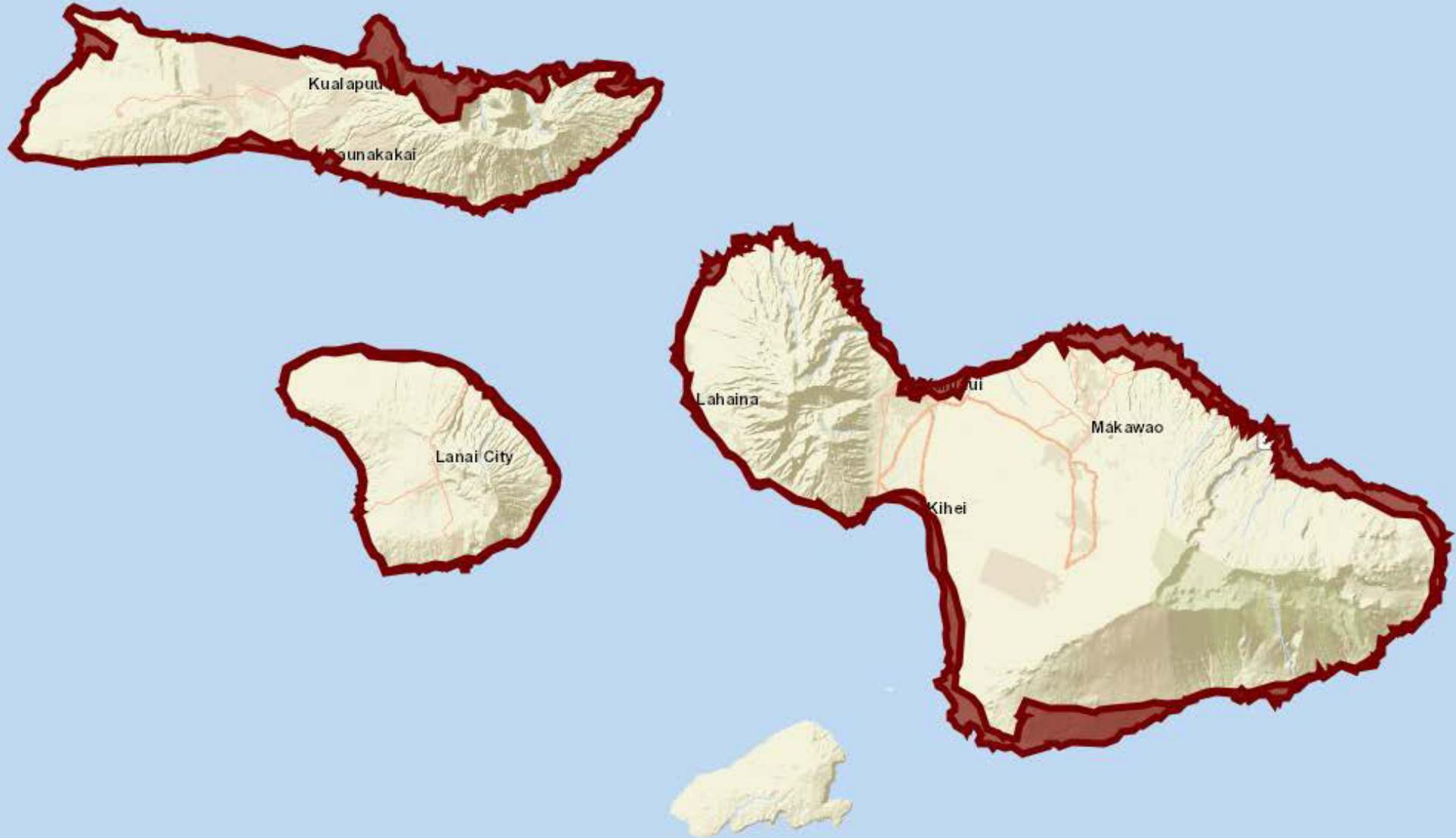
- The Federal Coastal Zone Management Act was passed in 1972. The Hawaii CZM program was codified by HRS Chapter 205A in 1977.
- HRS 205A calls for “Special Management Area” boundaries and permitting requirements. It also provides special protections specifically for the shoreline area.
- The “purposes” section of HRS 205A states these are intended “to avoid permanent losses of valuable resources and the foreclosure of management options, and to ensure that adequate access... to public owned or used beaches, recreation areas, and natural reserves is provided.”
- Planning commissions have exclusive authority over coastal-zone regulation (Maui County Charter Section 8-8.4: Each planning commission shall ...“Act as the authority in all matters relating to the Coastal Zone Management law”).

SMA & SHORELINE RULES

- Each of our planning commissions has its own SMA and shoreline Rules.
- Proposed modifications (and solutions) to the **Maui Rules** are based on Hawaii Sea Level Rise Vulnerability and Adaptation Report (2017).
- Public meetings and workshops conducted with the Maui Planning Commission and Maui County Council's Planning Committee; other public outreach and consultation ongoing.



SPECIAL MANAGEMENT AREA FOR MAUI COUNTY



SMA RULES – WHY CHANGING?

- Streamline and update permit process
- Improve response to emergency situations
- Update and improve enforcement process
- Include established sea level rise exposure area and impacts in project assessments
- Other small technical cleanups and improvements for clarity

SMA RULES – BACKGROUND

- HRS Chapter 205A says any “development” within the SMA needs a permit, and defines what is, and what is not, a development
- An action that is not a development is exempt from getting a permit. However, we first have to determine whether the action “may have a cumulate impact, or a significant environmental or ecological effect” ...which means that, even though it’s exempt, we still have to assess!

SMA RULES – PROPOSED CHANGES

Streamlining:

- Proposed changes would create “category exemptions” (aka “no needs”) for actions that are exempt and that we do not need to assess
- Many “no needs” are also being added to the Shoreline Rules
- State certified shoreline survey no longer needed for shoreline properties



Example “category exemptions”:

- nonstructural repairs and renovations with no ground disturbance
- minor exterior changes (doors, windows)
- limited residential lanai enclosures
- surface area site improvements up to 300 square feet, such as driveway, patio or turf
- improvements needing holes under 16 square feet, such as for trees or shrubs, mailboxes, short utility lines, or ground signs
- adding rooftop PV

SMA RULES – BACKGROUND

Emergency Permits:

- Danger or substantial harm is imminent, often from storms
- “The purpose of an emergency permit is to allow an urgently needed protective measure, principally of a temporary nature.”
- Examples: beach erosion or sinkholes threatening structures, wind damage to structures threatening habitability

EMERGENCY PERMITS: TEMPORARY PROTECTION



Kaanapali Beach Hotel, January 2018

photo credit: Chris Conger

SMA RULES – PROPOSED CHANGES

Improve and clarify the emergency permit procedure:

- Broaden the use of verbal approvals
- Allow more time to submit a written application
- Require timeline for removal of temporary measures and/or require plans for a long-term remedy (adaptation, beach nourishment, dune restoration)
- Expanded beyond “habitable” structures only (e.g. infrastructure)
- Continue practice of notifying MPC at next meeting after permit approval

SMA RULES – PROPOSED CHANGES

Enforcement:

- Proposed changes would clarify how violations are resolved:
 - payment of fines
 - illegal use has stopped or construction has been removed or proper permits have been obtained
- Proposed changes would allow Notices of Warning or Notices of Violation to be posted on the property or published in the newspaper and be considered served
- Proposed changes would allow the director to negotiate a settlement for violations when the fines do not exceed \$50,000 without requiring commission approval
 - Currently all settlements have to be approved by the MPC



Baldwin Beach Park, September 2016

photo credit: Heidi Sherman



South Kihei Road, January 2017



Honoapiilani Highway, Olowalu, July 2019



Kaanapali Beach Hotel, January 2018

photo credit: Chris Conger



Kaanapali Beach Club, June 2018



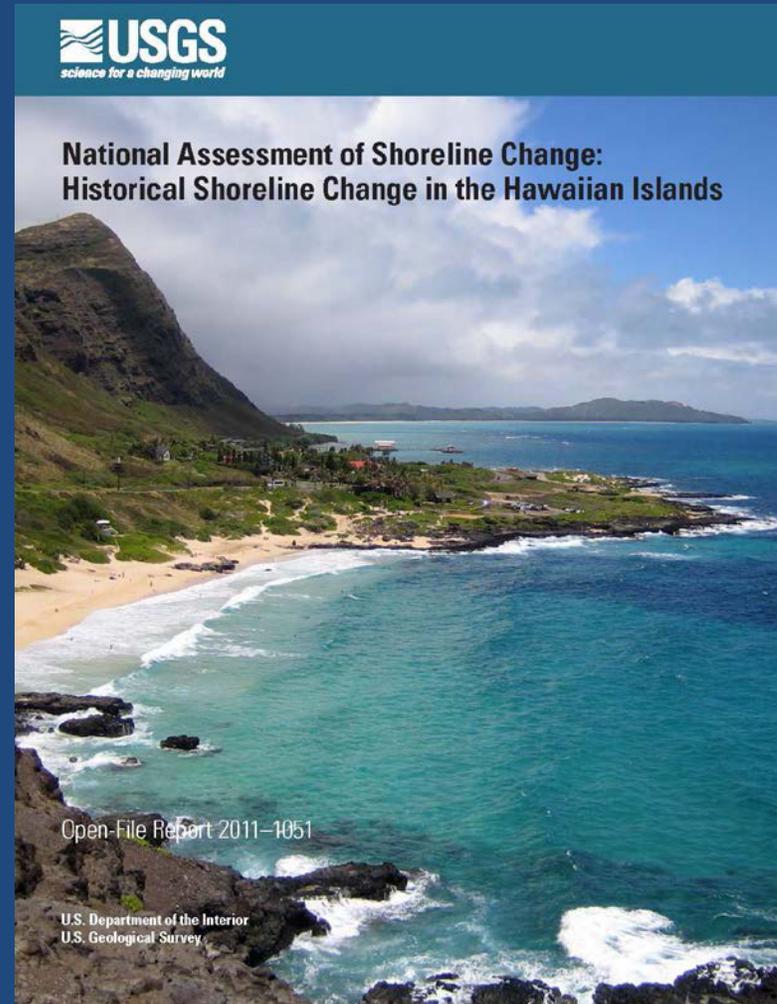
Kahana Beach (Valley Isle Resort), April & June 2016



Kahana Reef, October 2019

EROSION IS WIDESPREAD ON MAUI

- 85% of Maui shorelines are eroding over the long-term.
- Maui's beaches are experiencing the highest rates of erosion for the Hawaiian islands.
- Maui has the highest percentage of beach loss (11% or ~4 miles).



CONTRIBUTIONS TO EROSION

Combination of:

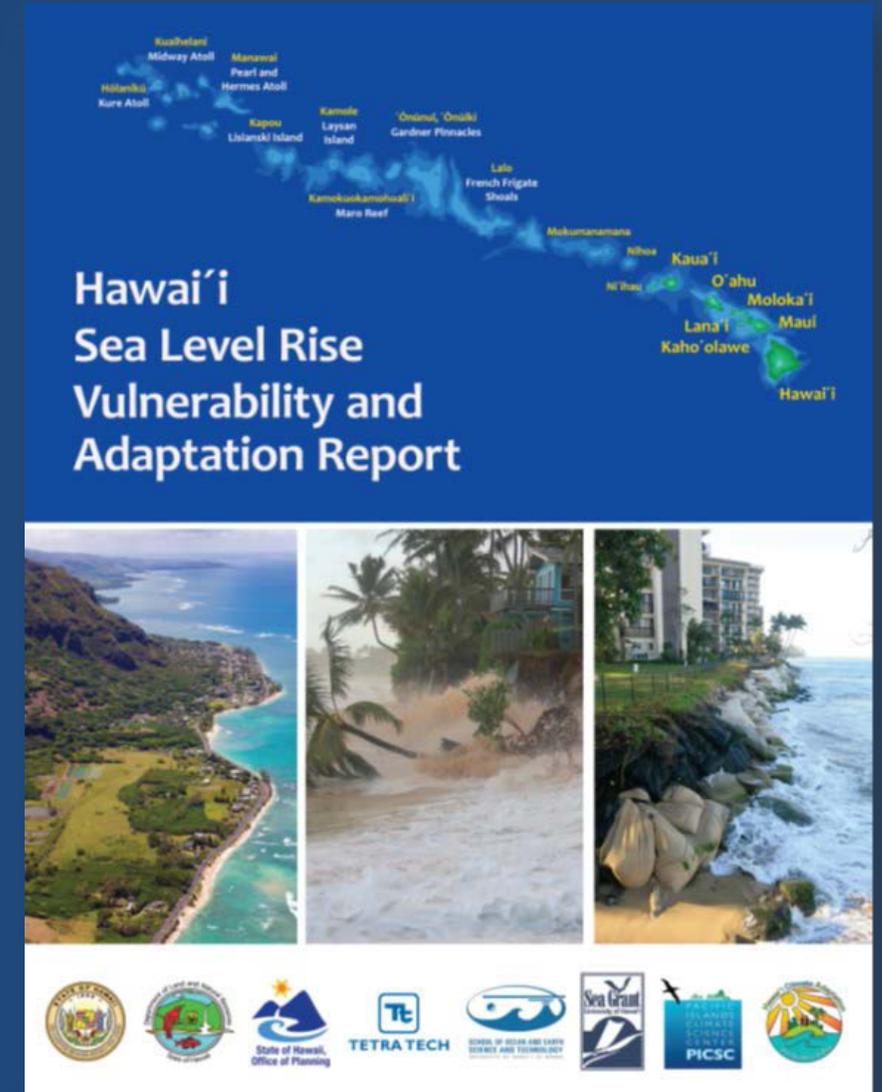
1. Sea-Level Rise
(*chronic erosion*)
2. Seasonal Wave Conditions
& Storms that Move Sand
(*episodic erosion*)
3. Human Interventions –
seawalls, revetments, and
sand mining



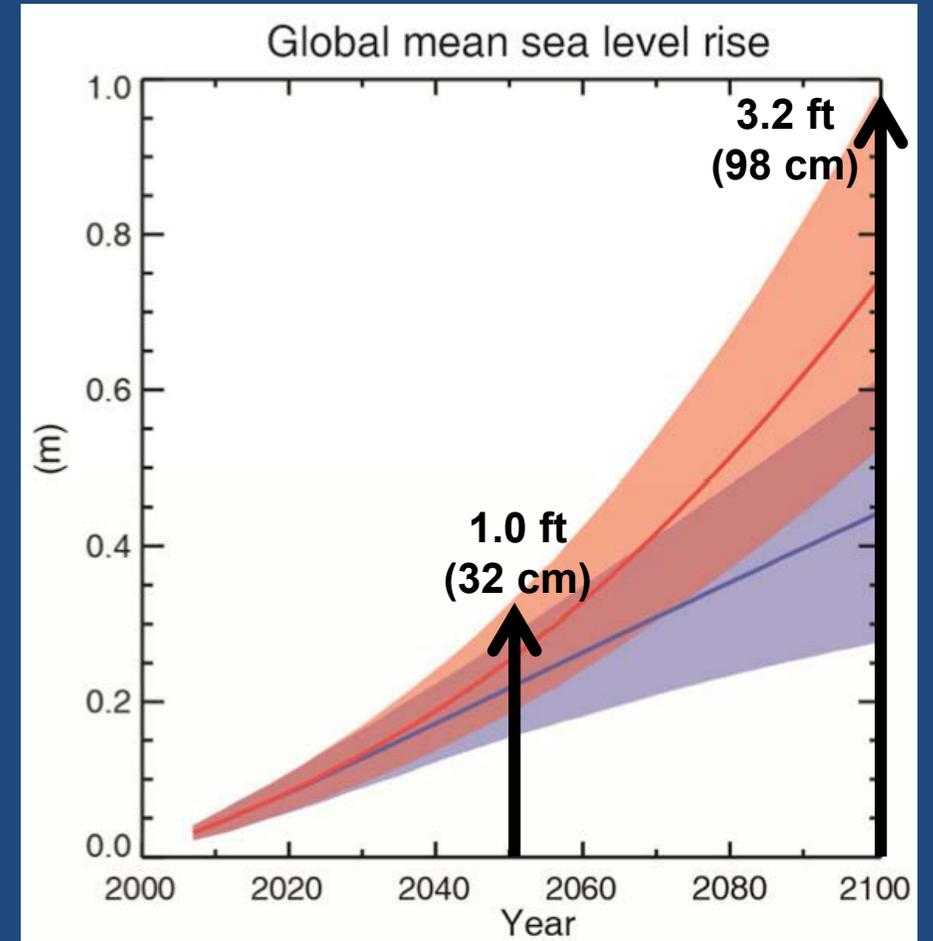
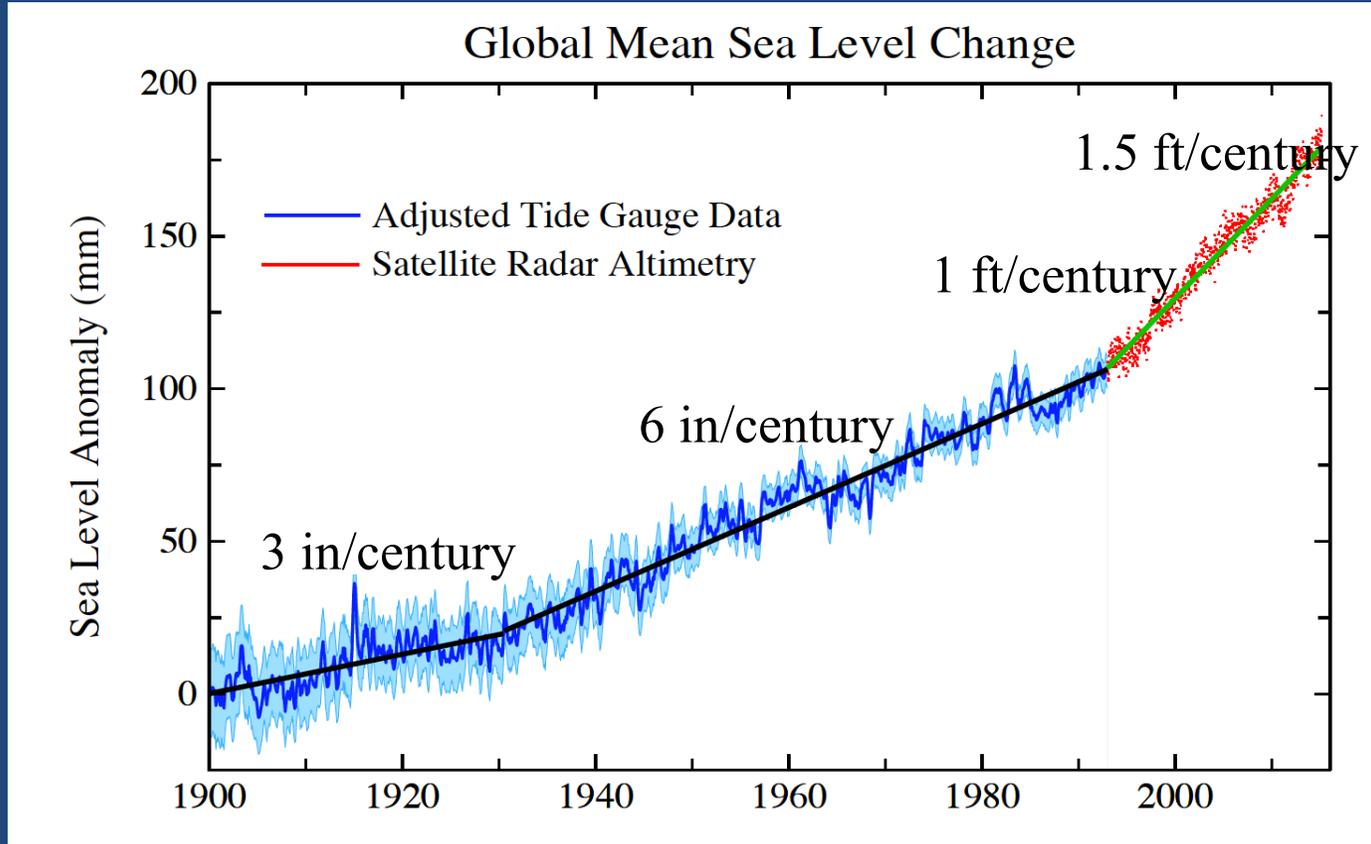
West Maui, Pohailani Condominiums

HAWAII SLR REPORT & VIEWER

- Adopted by the State Climate Commission in December 2017.
- Assesses vulnerabilities to coastal hazards with sea level rise.
- Provides recommendations for improving resilience to coastal hazards.
- Recommendation: Plan for 3.2 ft of sea level rise now!



PROJECTIONS FOR HAWAII SLR MODELING

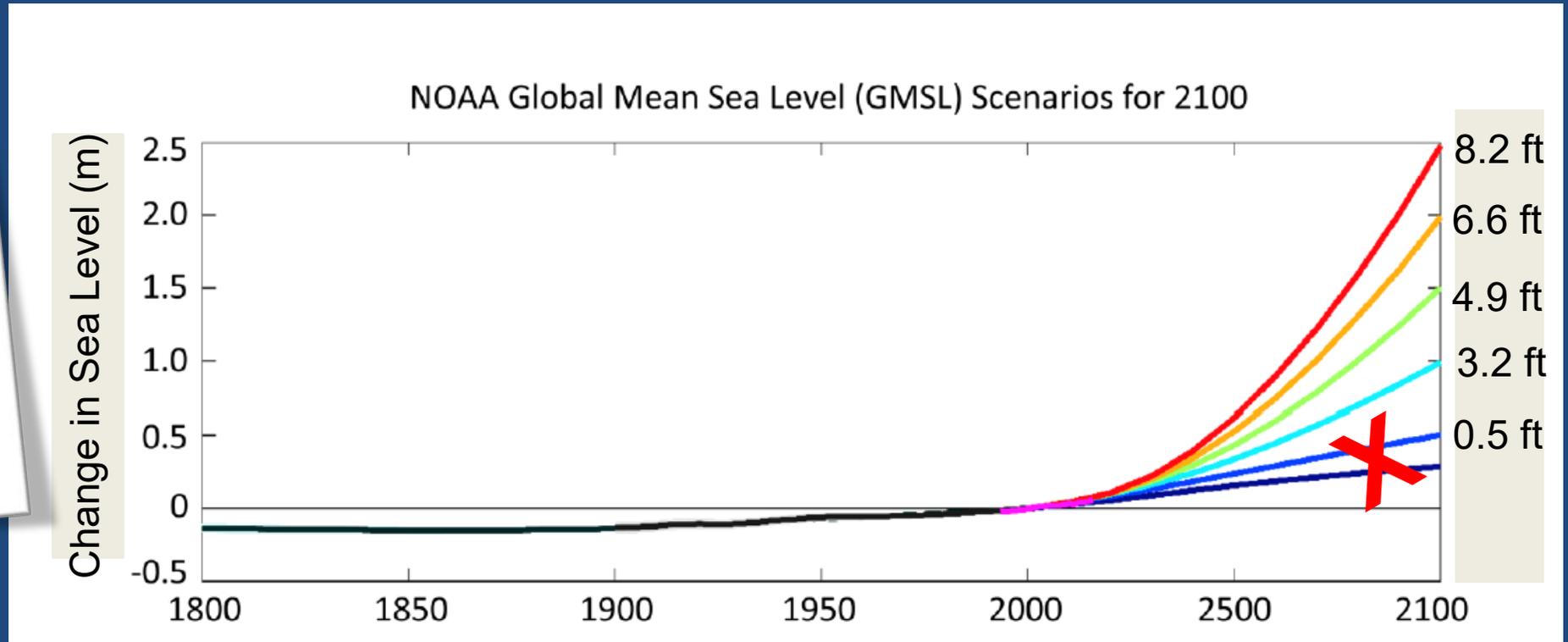
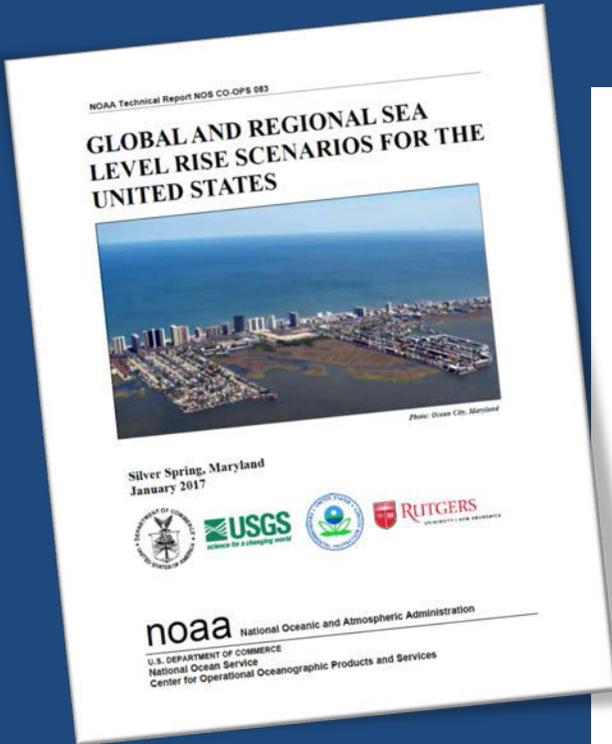


IPCC AR5

Intergovernmental Panel on Climate Change (IPCC), 2013: Fifth Assessment Report (AR5):

*Representative Concentration Pathways (RCP) characterize a range of global Greenhouse Gas (GHG) emissions scenarios through the 21st century from RCP2.6 (dramatic GHG emission reductions after 2020) to RCP8.5 (increasing GHG emissions through 21st century).

NOAA & NCA SEA LEVEL RISE SCENARIOS



The current rate of sea level rise >2 feet by 2100, so the lowest scenarios are obsolete.

www.hawaiisealevelriseviewer.org

Hawai'i Sea Level Rise Viewer | PacIOOS

Not secure | pacioos.hawaii.edu/shoreline/slr-hawaii/

Data Services | Education Resources | **Regions**

PacIOOS
PACIFIC ISLANDS OCEAN OBSERVING SYSTEM

▶ Waves ▶ Currents ▶ Shoreline Impacts ▶ Water Characteristics ▶ Weather ▶ Projects

Home / Shoreline Impacts / Sea Level Rise / Hawai'i Sea Level Rise Viewer

SHARE

Sea Level Rise : Hawai'i Sea Level Rise Viewer

[view full-screen map](#)

Zoom to...
or use <Shift>-drag to zoom

HAWAIIAN ISLANDS

BASEMAPS

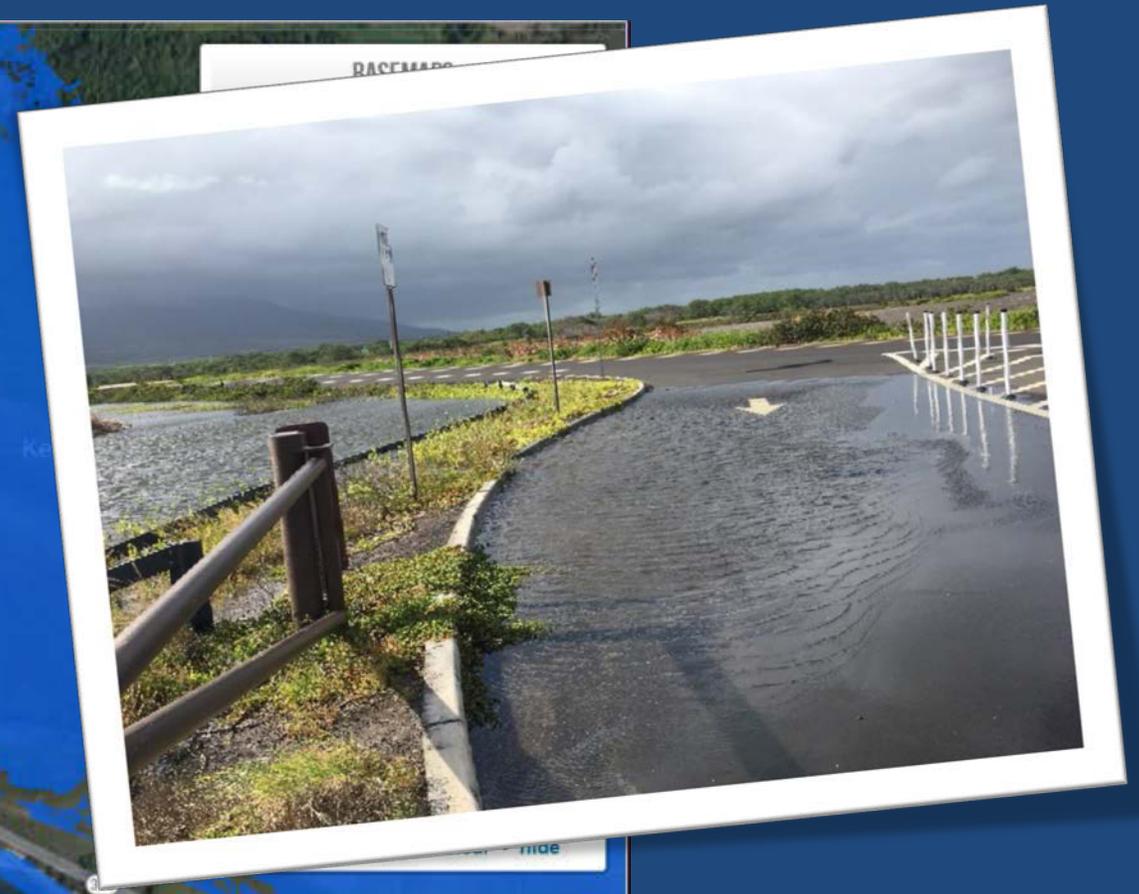
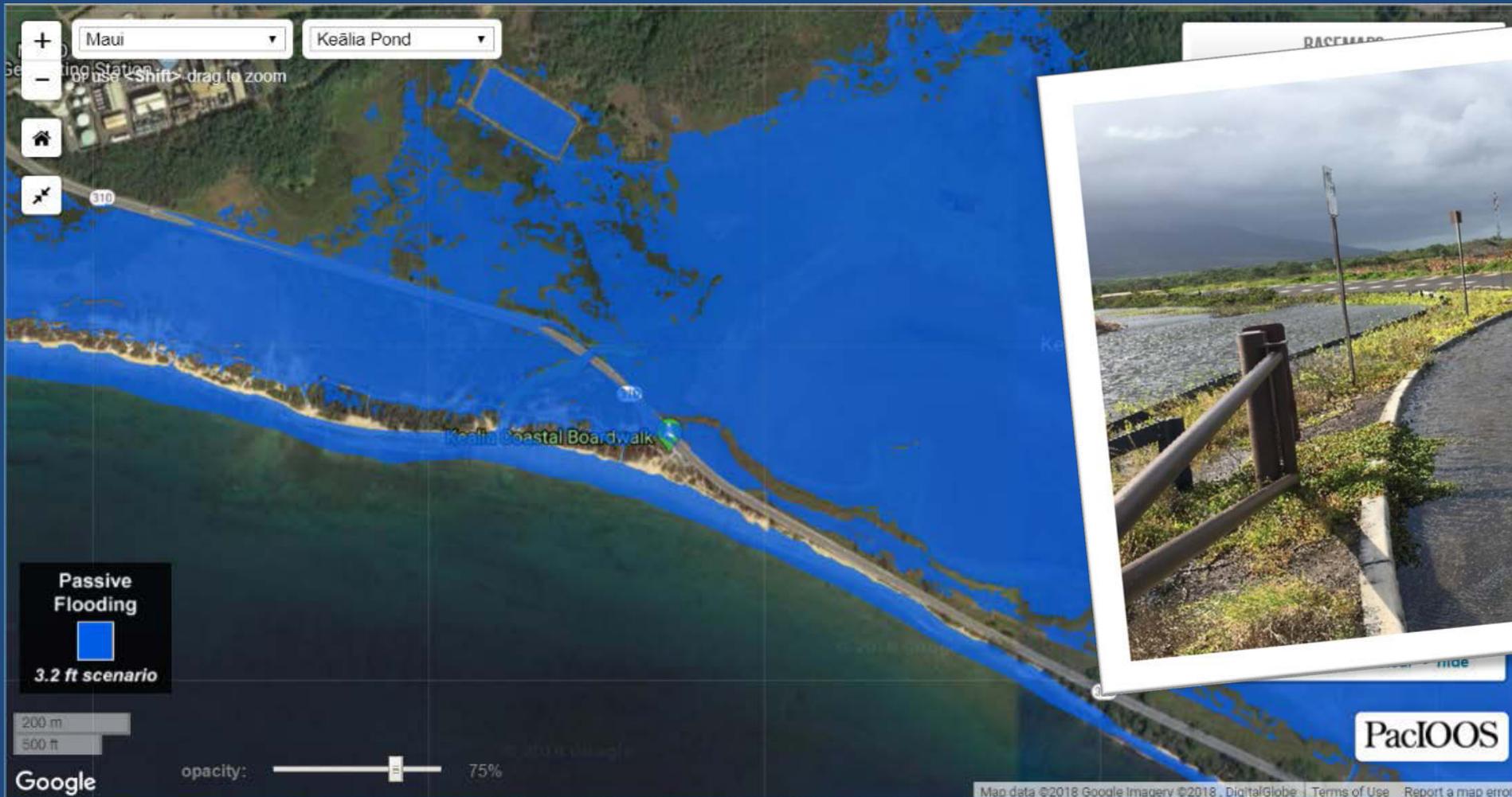
EXPOSURE

- Sea Level Rise Exposure Area (SLR>CA) (a, b, and c combined area)
- 0.5 Ft
- 1.1 Ft
- 2.0 Ft
- 3.2 Ft
- a. Passive Flooding (all major islands)
- b. Annual High Wave Flooding (Kaua'i, Maui, and O'ahu only)
- c. Coastal Erosion (Kaua'i, Maui, and O'ahu only)

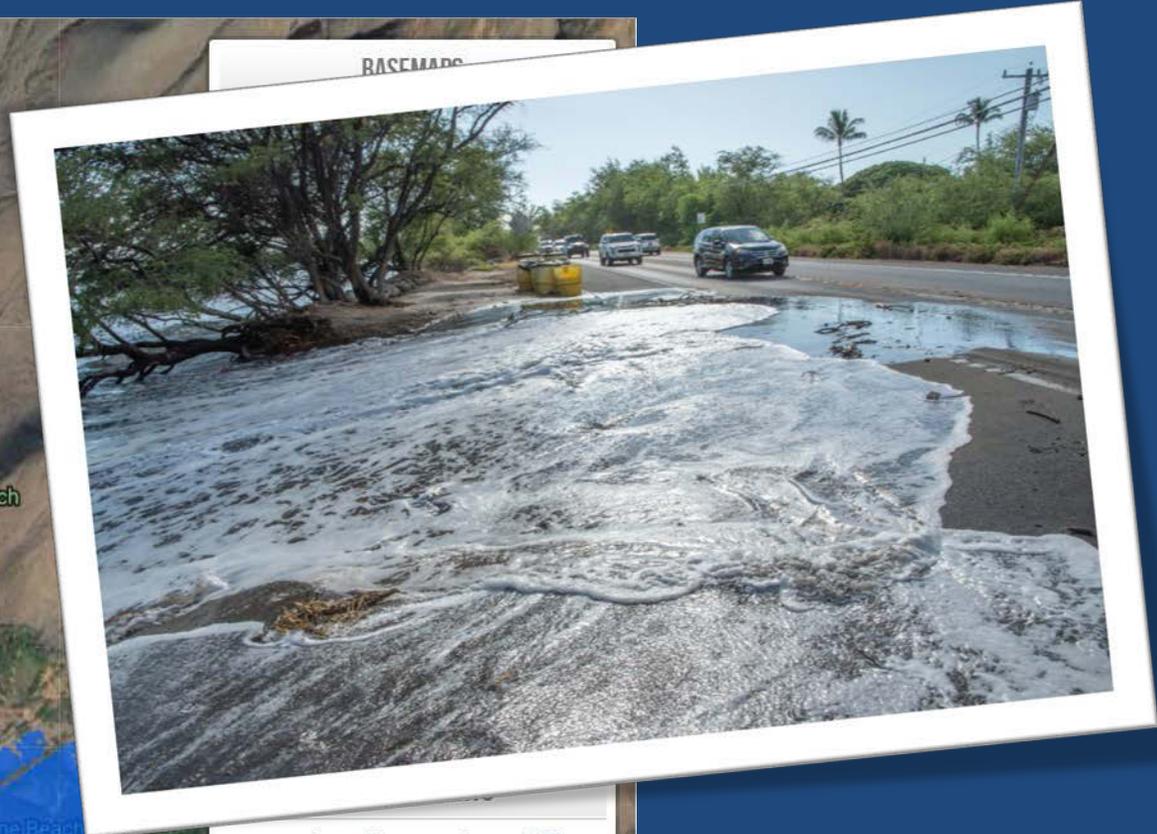
VULNERABILITY

- Potential Economic Loss

PASSIVE (STILL-WATER) FLOODING



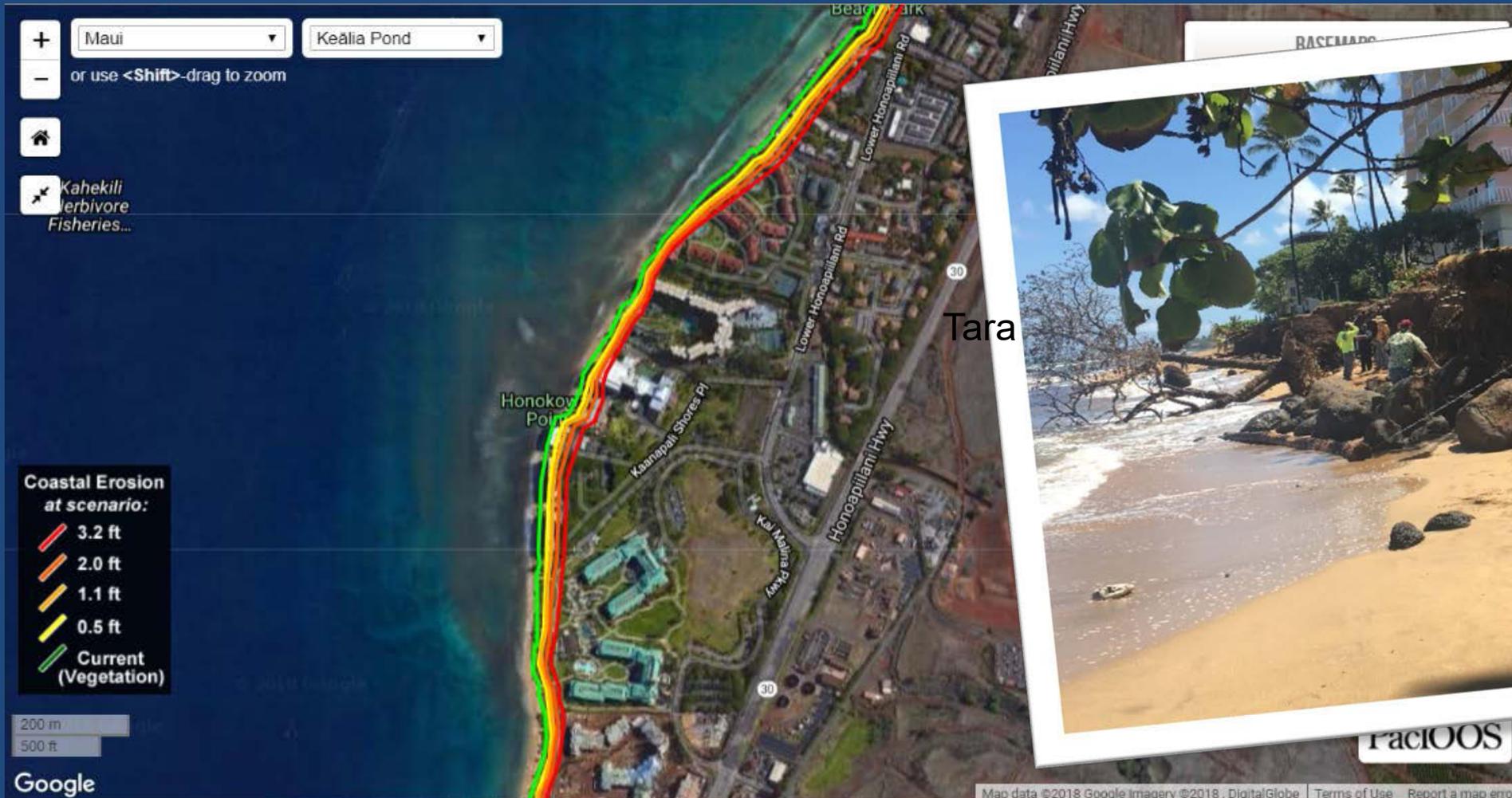
ANNUAL HIGH WAVE FLOODING



expand • collapse • clear • hide

PacIOOS

COASTAL EROSION*



*Only the erosion model (aka “the red line”) is used in the proposed setback rules

Maui Honokōwai
or use <Shift>-drag to zoom

80% confidence that you will be safe from erosion landward of this line



Coastal Erosion at scenario:

- 3.2 ft
- 2.0 ft
- 1.1 ft
- 0.5 ft
- Current (Vegetation)

BASEMAPS

EXPOSURE

- Sea Level Rise Exposure Area (SLR-XA) (a, b, and c combined area)
- a. Passive Flooding (all major islands)
- b. Annual High Wave Flooding (Kaua'i, Maui, and O'ahu only)
- c. Coastal Erosion (Kaua'i, Maui, and O'ahu only)

select all • clear all

- Vegetation Line (Current)
- 0.5 ft
- 1.1 ft
- 2.0 ft
- 3.2 ft

VULNERABILITY

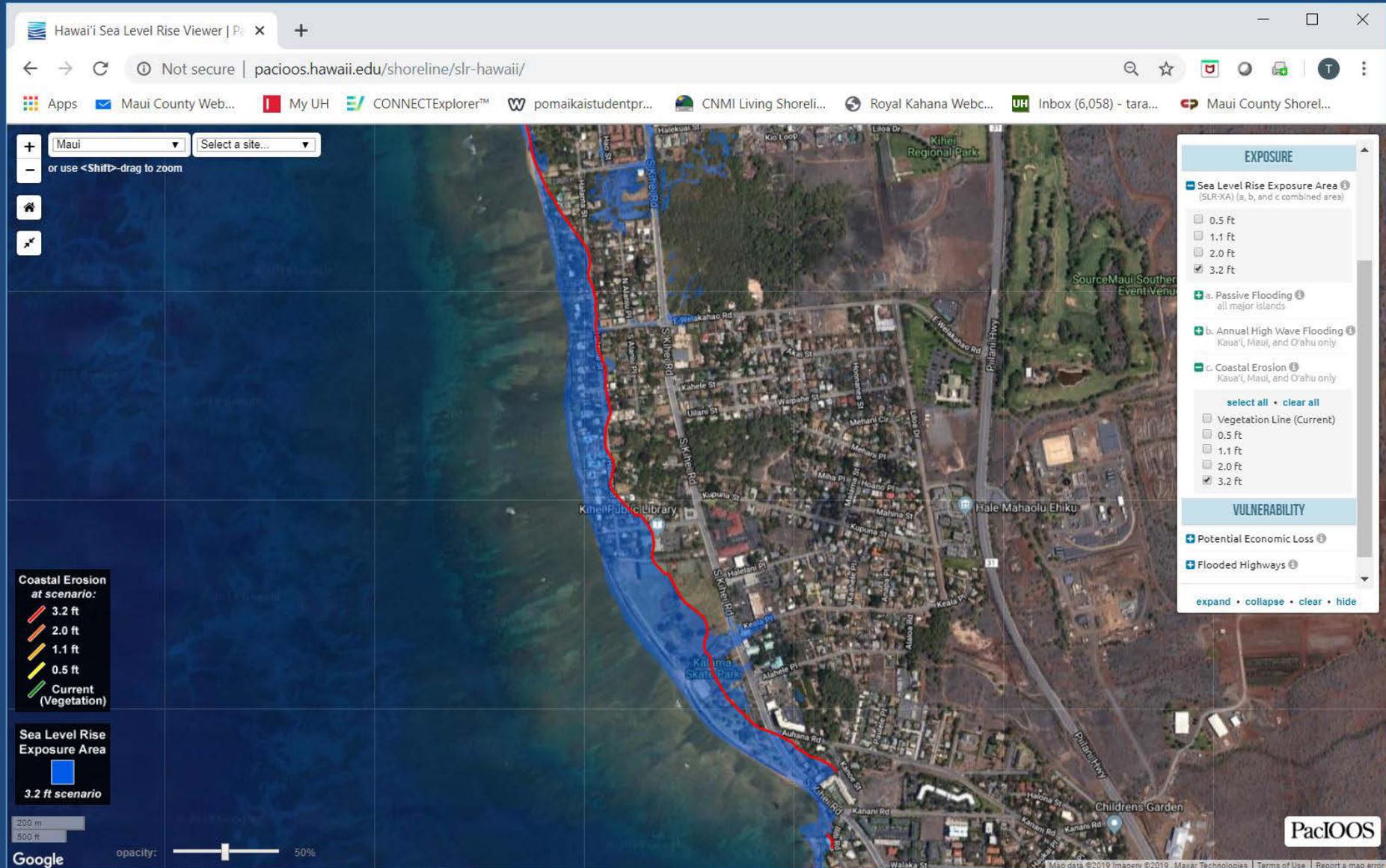
- Potential Economic Loss
- Flooded Highways

OTHER OVERLAYS

expand • collapse • clear • hide

50 m 100 ft

HAWAII SLR VIEWER SCREEN GRABS FOR KIHEI



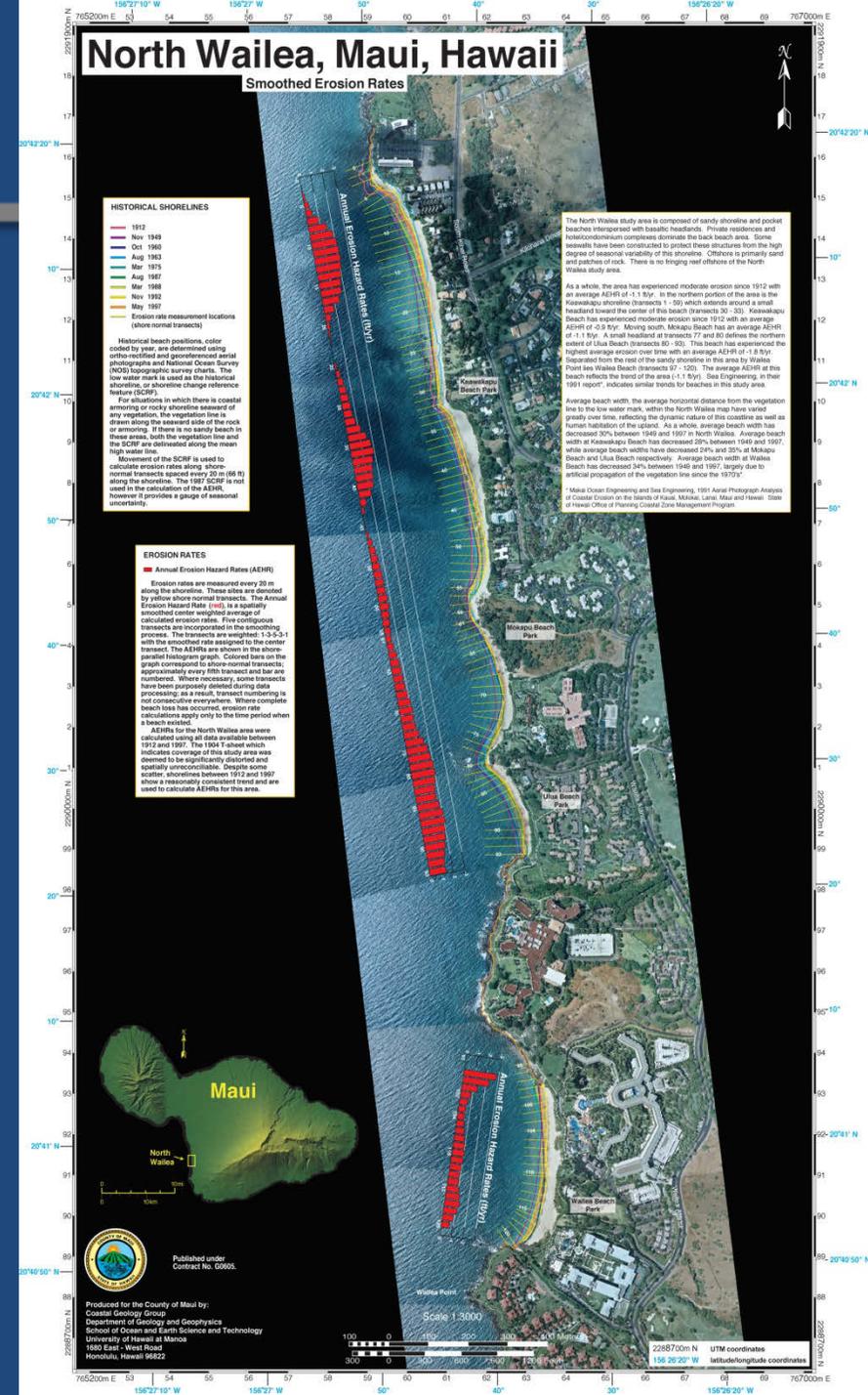
COASTAL MANAGEMENT TOOLBOX

- **Retreat (Planned Relocation)**
 - Discourage development in hazard-prone areas
 - Plan for relocation of existing development inland
 - *Example: Shoreline setbacks*
- **Accommodate**
 - Construct or retrofit for improved resilience
 - Limit shoreline armoring
 - *Example: Elevate, Reconfigure*
- **Preserve & Restore**
 - Preserve and restore coastal environments as a natural buffer
 - *Example: Sand management, Vegetative buffers, Dune and/or Beach restoration*
- **Protect (Harden)**
 - Prioritize protecting people and property
 - *Example: Seawalls and revetments*



EROSION BASED SETBACKS

- Maui County §12-203: “Shoreline Rules for the Maui Planning Commission” (adopted November 27, 2003)
- §12-203-4 Definitions. "Annual erosion hazard rate" [AEHR] means the annual rate of coastal erosion calculated according to the methodology developed by the university of Hawaii...Said rates shall be updated on a regular basis at least once every ten years...



MAUI'S EXISTING SETBACK CALCULATIONS

- Setback is the greater of A or B:

A. Erosion-based Setback

Current Calculation:

$$50 \text{ yrs} \times \text{AEHR} + 25 \text{ feet}$$

life expectancy of structure

historical erosion

minimum setback

Example:

If AEHR = 1.4 ft/yr,

(50 yrs x 1.4 ft/yr) + 25 ft = 95 ft setback

B. Lot Depth-based Setback

Current Calculation:

If lot depth is: Setback is:

100 ft or less 25 feet

100 to 160 ft 40 feet

160 ft or more 25% of avg.

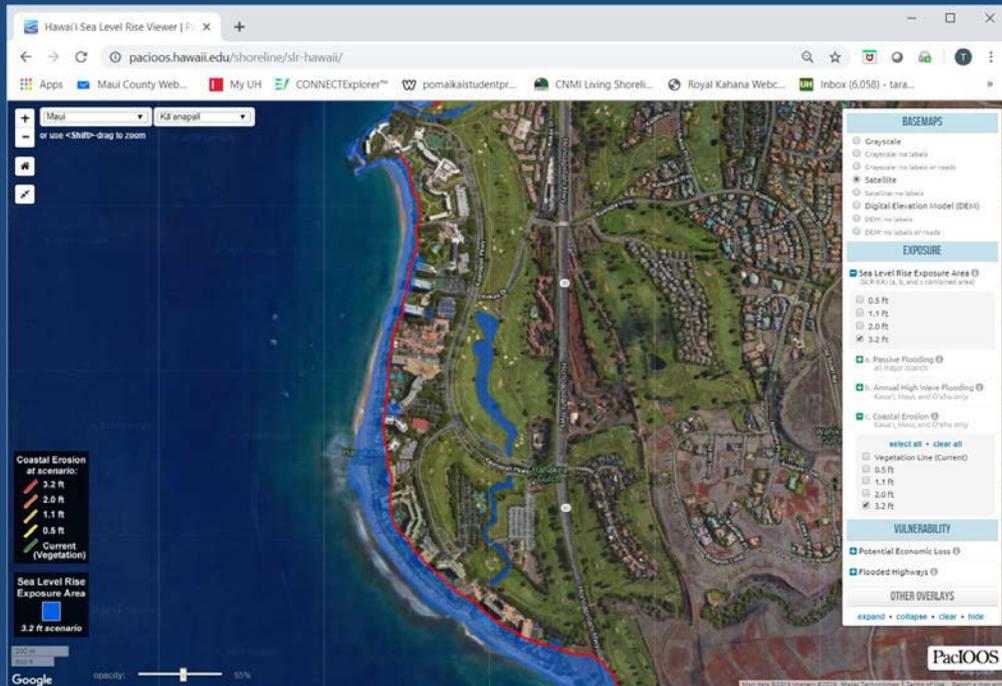
*lot depth
(150 ft max.)*

NOTE: Minimum of 25 ft setback for all shoreline lots.

MAUI'S PROPOSED SETBACK CALCULATIONS

- Setback is either A or B:

A. Erosion Hazard Line + 40 ft



B. 200 ft from “shoreline”
(mapped by Planning Department)

OR

Lot depth setback, IF certified shoreline exists

If lot depth is: Setback is:

100 ft or less	25 feet
100 to 160 ft	40 feet
160 ft or more	25% of avg. lot depth (150 ft max.)

SHORELINE RULES – PROPOSED UPDATES

- Purposes are: to preserve and protect the shoreline area and open space resources; to ensure the public can access, use, and enjoy the shoreline area; and for constructed features to be compatible with the shoreline area.
- This is primarily accomplished by shoreline setbacks (part of a managed retreat strategy); however, updates are needed.
 - Current rules create the setback by a formula using the annual erosion hazard rate or by using the average lot depth; **both of these require a certified shoreline survey.**
 - Proposed rules use the erosion hazard line adopted by the state climate commission as the method to establish the setback, and do not require a certified shoreline survey. **The setback would be much larger in many areas, and smaller in some areas.**

ECOSYSTEM SERVICES OF THE SHORELINE AREA



coastal dunes with native plants provide hazard mitigation



beaches and dunes provide habitat for turtles, seals, shorebirds, plants and more

Coastal Sand Dunes

A Natural Protection

Shifting Sands
Sand dunes play an important role in protecting shorelines and providing habitat for many of the unique plants and animals found in Hawai'i. Coastal erosion is a natural process and the dynamic nature of shorelines can be observed in the seasonal retreat and recovery of many beaches. Rising sea levels, inappropriate land use practices, and shoreline development can accelerate erosion. Therefore healthy coastal dunes are important during high waves and seasonal fluctuations for protection of coastal development from flooding and for releasing sand to maintain beaches.

Please Kōkua
Beach users can help restoration by staying off the dunes and keeping on designated beach paths to avoid trampling the sensitive vegetation. Mahalo!



Nānaka, Naupaka, and other plants



Pūhāhā, Pūhāhā, and other plants



Kūpāhā, Kūpāhā, and other plants

Photography by Kim Starr

Restoration
Reducing human foot traffic and replanting native plants contribute to the healthy restoration of sand dunes. Removal of non-native plants can also contribute to the restoration process.

Why the Boardwalks?
Raised boardwalks, also called dune walkovers, are used to keep foot traffic off of the dunes and to protect vegetation that keeps sand in place. Sand fencing is also used to help retain windblown sand to allow the dune to grow.

The above information is a voluntary project for the public. See in collaboration with the County of Maui, Hawaii Tourism Authority, and other organizations. All rights reserved. © 2015. All rights reserved.

WHAT IF THIS BUILDING HAD BEEN SETBACK?



Kahana Beach, 1979 & 2016

INCORPORATE SLR TO AVOID REPEATING THE PAST

3.2 ft EHL:

80% confidence that property will be safe from erosion landward of this line

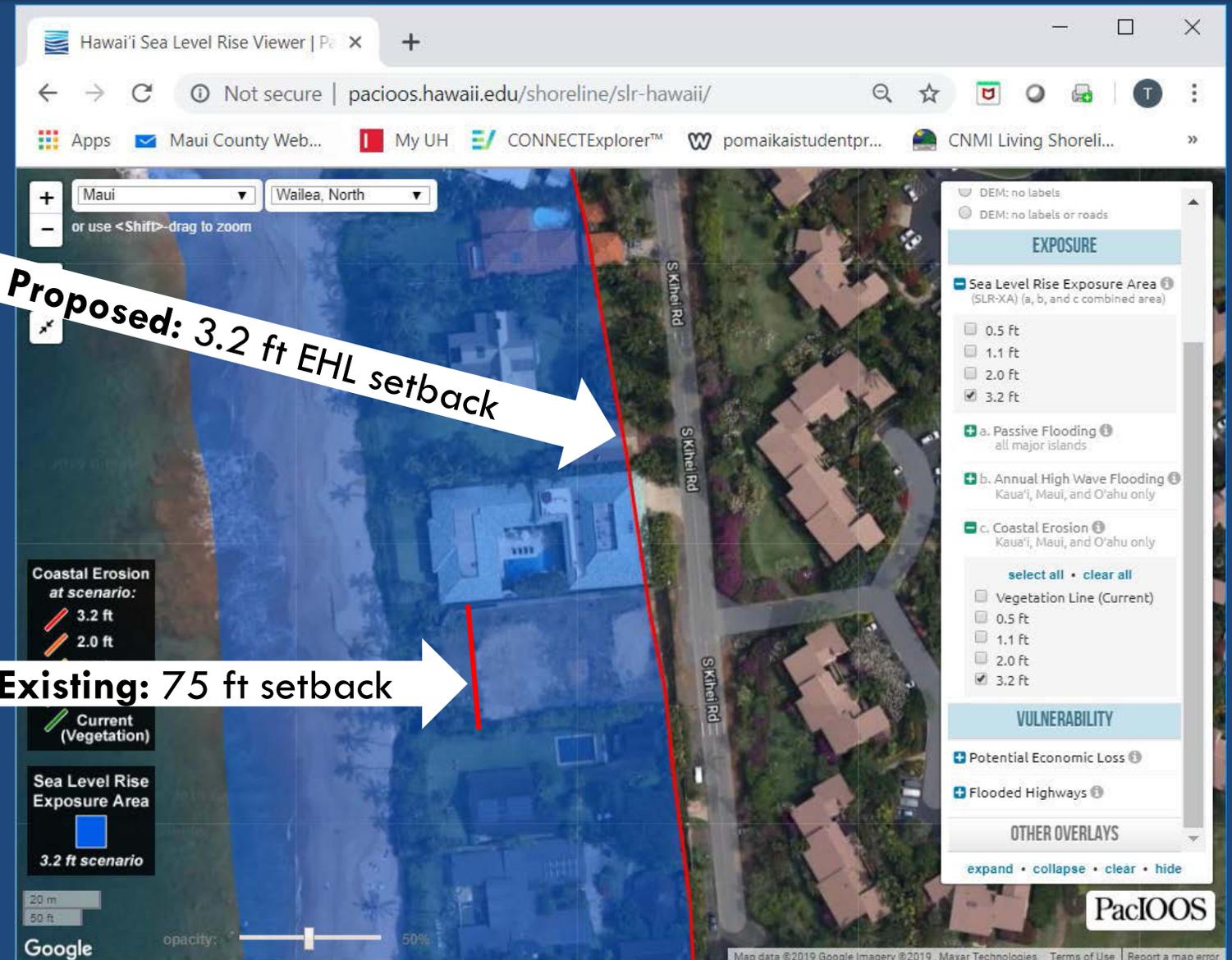
Existing Shoreline Setback Calculation:

1) Erosion Rate (without Sea Level Rise)=
 $(50 \text{ yr} \times 0.5 \text{ ft/yr}) + 25$
=50 ft setback

2) Lot Depth=
~300 ft lot/4
=75 ft setback

Proposed: 3.2 ft EHL setback

Existing: 75 ft setback



SHORELINE RULES – EXISTING

- Structures and activities currently allowed in the shoreline setback, with a permit:
 - Repairs up to 50% of replacement value of structures built pursuant to the shoreline rules.
 - For structures legally built before the shoreline rules became applicable to them, repairs or complete reconstruction proportional to damage from a calamity, except that repairs are limited to 50% of replacement value if damage was by coastal hazards
 - Demolition of structures in ways that protect coastal resources
 - Beach nourishment and dune restoration
 - Minor structures

SHORELINE RULES – PROPOSED CHANGES

- Proposed rules clarify and expand upon structures and activities that are allowed in the shoreline setback, with a permit:
 - Limited residential lanai enclosures
 - When associated with an existing legal structure, site improvements such as driveway, patio, turf, trees or shrubs, utility lines, mailbox, ground signs, and PV
 - Repair to Hawaiian fishponds and permitted seawalls
 - Actions that received a SMA emergency permit
 - Temporary events
 - Alterations and intensified use of structures protected by shoreline hardened public facilities, or natural features such as basalt headlands

SHORELINE RULES – PROPOSED CHANGES

- Includes some “no needs” like the SMA Rules
 - nonstructural repairs and renovations with no ground disturbance
 - minor exterior changes (doors, windows)

SHORELINE RULES – SETBACK DETERMINATION

- The process to request an amendment to the setback is an administrative approval.
- There is still a minimum buildable area, proposed to increase from 35 to 40 feet deep from the property's front yard setback (40 feet x width allowed by side yard setbacks). This addresses the concern that the setbacks create lots that are unbuildable
- There are more lenient provisions for repairs and reconstruction of lawful nonconforming (“grandfathered”) structures; some may require a recorded agreement to not seek future shoreline armoring.

SHORELINE RULES – CONCLUSION

- Short-term and long-term responses are site-specific; either way, we need to recognize the long-term reality.
 - Options for site, capacity and resources of owner (i.e. managed retreat, adaptation, beach nourishment, dune restoration, vegetative buffers, sand pushing, etc.)
 - Episodic (storms, seasonal waves) VS. chronic (sea level rise)
 - Temporary measures require a long-term plan...not permanent armoring or backstops (note: repairs to existing hardening can be approved in some cases)

Questions? Mahalo!

Email: planning@mauicounty.gov

Visit: Planning Department website
www.mauicounty.gov/121/planning-department

Go to “hot topics” and scroll to:

- “Proposed amendments to Maui SMA Rules”, and
- “Proposed amendments to Maui Shoreline Rules”