Layer Name:	Coastal Flood Zones <mark>with 3.2 feet of Sea Level Rise</mark>
File Name:	coastal_floodzones_w_SLR3
Layer Type:	Polygon
Status:	Complete
Geog. Extent:	Islands of Kauai, Oahu, Molokai, Lanai, Maui, Hawaii
Projection:	Universal Trans Mercator, Zone 4 (Meters)
Datum:	NAD 83 HARN

Description: 1% annual chance coastal flood zone modeled with 3.2 feet of sea level rise.

The State of Hawai'i 2018 Hazard Mitigation Plan incorporated the results of modeling and an assessment of vulnerability to coastal flooding from storm-induced wave events with sea level rise (Tetra Tech Inc., 2018). The 1% annual-chance-coastal flood zone with sea level rise (1%CFZ) was modeled to estimate coastal flood extents and wave heights for wave-generating events with sea level rise. Modeling was conducted by Sobis Inc. under State of Hawai'i Department of Land and Natural Resources Contract No: 64064. The 1%CFZ with 3.2 feet of sea level rise was utilized to assess vulnerability to coastal event- based flooding in mid to - late century.

The 1%CFZ with sea level rise would greatly expand the impacts from a 100-year flood event meaning that more coastal land area will be exposed to damaging waves. For example, over 120 critical infrastructure facilities in the City and County of Honolulu, including water, waste, and wastewater systems and communication and energy facilities would be impacted in the 1%CFZ with 3.2 feet of sea level rise (Tetra Tech Inc., 2018). This is double the number of facilities in the SFHA which includes the impacts of riverine flooding.

Source: Tetra Tech, Inc. for the State of Hawaii 2018 Hazard Mitigation Plan, Hawaii Emergency Management Agency. Received by Hawaii Statewide GIS Program from PaclOOS, December 2020.

<Attributes on following page>

## Attributes: Polygons:

Coastal Flood Zone with 3.2 feet of SLR added

- A Zone A
- CA Coastal Zone A
- V Zone V

"A, CA, and V attributes relate to coastal flood zones in the FEMA flood maps, but with sea level rise."

Bradley M. Romine, PhD Coastal Management and Resilience Specialist -University of Hawaii Sea Grant College Program



Note: Image courtesy PacIOOS/TetraTech/HI-EMA from report "1-Percent-Annual-Chance Coastal Flood Zone-SLR\_Methodology\_13Jan2020"

Please see the following for full metadata:

https://files.hawaii.gov/dbedt/op/gis/data/coastal\_flood\_zones\_w\_SLR3.html

Please also refer to the following report for additional information: 1-Percent-Annual-Chance Coastal Flood Zone-SLR Methodology 13Jan2020.pdf

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