

Tsunami and Extreme Tsunami Evacuation Zone Maps – Cautions and Additional Information

For most Tsunami Warnings, evacuate out of the tsunami evacuation zones; in the unlikely case of an “Extreme Tsunami” Warning, evacuation out of both the tsunami evacuation zones and the extreme tsunami evacuation zones.

Note 1:

Remain at least 100 feet away from inland waterways and marinas connected to the ocean due to wave surges and possible flooding.

Note 2:

Boaters should move vessels to at least 50 fathoms (300 feet) deep and 2 miles away from harbor entrances; follow all directions from the Captain of the Port.

Note 3:

Structural steel or reinforced concrete buildings of ten or more stories provide increased protection on or above the fourth floor; if you are caught near the shoreline, consider using vertical evacuation.

Note 4:

The evacuation zone is a guideline and should be considered the minimum safe evacuation distance.

Note 5:

These maps do not consider the destructive effects of a locally generated tsunami. If you feel shaking, move inland immediately, well away from the evacuation zone.

Layer Name: Tsunami Evacuation Zones
File Name: tsun_evac_zones
Layer Type: Polygon
Status: Complete
Geog. Extent: Islands of Niihau, Kauai, Oahu, Molokai, Lanai, Maui and Hawaii
Projection: Universal Trans Mercator, Zone 4 (Meters), NAD 83 HARN
Description: Tsunami Evacuation Zones for the islands of Niihau, Kauai, Oahu, Molokai, Lanai, Maui and Hawaii
Source: Island of Hawaii: Pacific Disaster Center (PDC), 1998.
Island of Oahu: City and County of Honolulu, 2010.
Islands of Molokai, Lanai, Maui: County of Maui, 2013.
Island of Kauai: County of Kauai, 2014

History: **Islands of Niihau and Kauai:**

2013 Kauai Tsunami Evacuation Zones - Kauai Civil Defense Agency - Tsunami evacuation zones have been updated for Kauai. These zones were developed using updated scientific techniques and technology, and were produced in conjunction with County Public Safety officials. Please contact civildefense@kauai.gov for additional information.

Please also see Kauai Tsunami Evacuation Zone metadata – KauTsunEvac.shp.xml.

State GIS Program received the shapefile for the island of Niihau from NOAA in October, 2016.

State GIS Program projected the data from Web Mercator into UTM Zone 4 HARN.

Island of Oahu:

City and County of Honolulu, Honolulu Land Information System (HoLIS).
These maps were developed using updated scientific techniques and technology, and were produced in conjunction with County Public Safety Officials. In many instances the new data identifies locations with an increased tsunami hazard risk; review these new maps NOW and be prepared for the next tsunami. If you have any questions or comments about the new maps, please e-mail: tsunamiready@honolulu.gov.

State GIS Program projected the data from State Plane Zone 3 into UTM Zone 4 HARN.

County of Maui:

Received update for Maui County from Pacific Disaster Center, August 2013.

Island of Hawaii:

(Text written by PDC Staff, 1998):

Tsunami evacuation layers for the [islands of Hawaii and Kauai] were digitized from Tsunami Evacuation Zone proof maps provided by the State of Hawaii Civil Defense, and published in County Telephone Directories by GTE in 1991. These maps were produced by the Joint Institute for Marine and Atmospheric Research, at the University of Hawaii, in cooperation with the State of Hawaii Civil Defense System. Data from these maps were digitized in the GIS program Arc View Version 3.0a using features from island coastlines, roads, and the USGS 7.5 minute digital raster graphics (DRGs). Specific distances given on the maps (for example: "1900 feet from Farrington Highway") were incorporated into the digitization. Where no distances were given, evacuation zone boundaries were estimated by topographical characteristics, or approximated using surrounding features such as roads. In cases where evacuation zone boundaries bordered roadways, selected roads from state DLG road layer were extracted into the tsunami evacuation shape file for accuracy. No details of scale accompanied the paper proofs. Coastline and evacuation zone shape files for each island were then made into coverages using ArcInfo Version 7.1.2, which were subsequently appended into a single coverage for editing. Arcedit was used to eliminate all dangling nodes, intersections, etc. Tolerances were set to minimize the alteration of zone boundaries. Topology was built for each island, polygons labeled, and polygon attribute tables created. Each polygon is associated with a particular evacuation map, with the exception of two polygons on Oahu which are areas of high ground (map #7), and water (maps # 18-19) within evacuation zones.

A coverage for the State was created from appended individual island coverages in ArcInfo.

Other:

Merged all islands into one layer by OP Staff, August 2013, February 2014, October 2016.

No information for fields MAPNUM and MAPNAME on Niihau, Kauai or Oahu.

Attributes:

Polygons:

ISLAND	Island Name
MAPNUM	Map # of evacuation zone as it appears in the county telephone directory.
MAPNAME	Geographic area covered by each numbered evacuation zone map, as it appears in the county telephone directory.
ZONE	"1" = tsunami evacuation zone

Also refer to the statewide "Extreme Tsunami Evacuation Zones" and "Tsunami Evacuation Safe Zones" layers.

Note:

May 2024 – Hawaii Statewide GIS Program staff removed extraneous fields that had been added as part of the 2016 GIS database conversion and were no longer needed.

Contact:

Hawaii Statewide GIS Program
Office of Planning and Sustainable Development, State of Hawaii
PO Box 2359, Honolulu, Hi. 96804
(808) 587-2846
email: gis@hawaii.gov