

Layer Name: Flood Hazard Areas – State of Hawaii  
File Name: s\_fld\_haz\_ar\_state  
Layer Type: Polygon  
Status: Complete  
Geog. Extent: Counties of Kauai, Honolulu and Maui and Hawaii  
Projection: UTM Zone 4, NAD 83, HARN, Meters  
Description: FEMA Special Flood Hazard Areas for the State of Hawaii.

Additional Information:

Special Flood Hazard Areas Subject to inundation by the 1% annual chance flood:  
The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, D, V, VE, and X. The Base Flood Elevation (BFE) is the water-surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones.

Publication Dates:

County of Kauai:	September 8, 2016
County of Maui:	November 4, 2015 (Latest LOMR* Eff Date 7/10/18)
C&C of Honolulu:	November 5, 2014 (Latest LOMR* Eff Date 10/30/18)
County of Hawaii:	September 29, 2017 (Latest LOMR* Eff Date 7/12/18)

\* [LOMR = Letter of Map Revision](#)

History: Downloaded from [FEMA's National Flood Map Service Center](#), 2/4/19.  
Projected to UTM Zone 4, NAD 83 HARN, Meters

Source: Federal Emergency Management Agency (FEMA);  
Please refer to [online documentation](#) for more information:

**NOTE: Refer to the following resources for more information:**

<https://www.fema.gov/national-flood-insurance-program-flood-hazard-mapping>

Hawaii State Flood Hazard Assessment Tool: <http://gis.hawaiiinfip.org/fhat/>

**Attributes:**     **Polygons** (attribute definitions summarized from [online documentation](#)):

DFIRM_ID	Study Identifier. For a single jurisdiction flood risk project, the value is composed of the two-digit State FIPS code and the four-digit FEMA CID code. For a countywide flood risk project, the value is composed of the two-digit State FIPS code, the three-digit county FIPS code, and the letter "C."
VERSION_ID	Version Identifier. Identifies the product version and relates the feature to standards according to how it was created.
FLD_AR_ID	Primary key for table lookup. Assigned by table creator.
STUDY_TYP	Study Type. This describes the type of flood risk project performed for flood hazard identification.
FLD_ZONE	Flood Zone. This is a flood zone designation. These zones are used by FEMA to designate the SFHAs and for insurance rating purposes. See attribute definitions below.
ZONE_SUBTY	Flood Zone Subtype. This field captures additional information about the flood zones not related to insurance rating purposes. Types of floodways are also stored in this field. Floodways are designated by FEMA and adopted by communities to provide an area that will remain free of development to moderate increases in flood heights due to encroachment on the floodplain. Normal floodways are specified as 'FLOODWAY.'
SFHA_TF	Special Flood Hazard Area. T=True, F=False. True for any area coded as an A or V flood zone area. False for any X or D flood areas.
STATIC_BFE	Static Base Flood Elevation. This field will be populated for areas that have been determined to have a constant Base Flood Elevation (BFE) over a flood zone.
V_DATUM	Vertical Datum. The vertical datum indicates the reference surface from which the flood elevations are measured.
DEPTH	Depth. This is the depth for Zone AO areas. This field is only populated if a depth is shown on the FIRM.
LEN_UNIT	Length Units. This unit indicates the measurement system used for the BFEs and/or depths. Normally this would be feet. This field is only populated if the STATIC_BFE or DEPTH field is populated.
VELOCITY	Velocity. This is the velocity measurement of the flood flow in the area.

VEL_UNIT	Velocity Unit. This field is only populated when the VELOCITY field is populated.
AR_REVERT	Flood Control Restoration Zones – Zone AR Classification. If this area is Zone AR in FLD_Zone field, this field would hold the zone that the area would revert to if the AR zone were removed. This field is only populated if the corresponding area is Zone AR.
AR_SUBTRV	Flood Control Restoration Zones – Zone AR Classification Zone Subtype. If this area is Zone AR in FLD_Zone field, this field would hold the zone subtype that the area would revert to if the AR zone were removed. This field is only populated if the corresponding area is Zone AR.
BFE_REVERT	Flood Control Restoration Zones – BFE Revert. If zone is Zone AR in FLD_Zone field, this field would hold the static base flood elevation for the reverted zone. This field is populated when Zone equals AR and the reverted zone has a static BFE.
DEP_REVERT	Flood Control Restoration Zones – Depth Revert. If zone is Zone AR in FLD_Zone field, this field would hold the flood depth for the reverted zone. This field is populated when Zone equals AR and the reverted zone has a depth assigned.
DUAL_ZONE	Flood Control Restoration Zones – Dual Zone Classification. If the flood hazard areas shown on the effective FIRM shall be designated as “dual” flood insurance rate zones, (i.e. Zone AR/AE, Zone AR/AH, Zone AR/AO, Zone AR/A), this field will be coded as true. If should be false for any AR Zones that revert to Shaded X.
SOURCE_CIT	Source Citation. Abbreviation used in the metadata file when describing the source information for the feature.

## **Attribute Definitions:**

### **FLD\_Zone:**

**A** - Zone A is the flood insurance rate zone that corresponds to the 1-percent annual chance floodplains that are determined in the Flood Insurance Study by approximate methods of analysis. Because detailed hydraulic analyses are not performed for such areas, no Base Flood Elevations or depths are shown within this zone. Mandatory flood insurance purchase requirements apply.

**AE and A1-A30** - Zones AE and A1-A30 are the flood insurance rate zones that correspond to the 1-percent annual chance floodplains that are determined in the Flood Insurance Study by detailed methods of analysis. In most instances, Base Flood Elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.

**AH** - Zone AH is the flood insurance rate zone that corresponds to the areas of 1-percent annual chance shallow flooding with a constant water-surface elevation (usually areas of ponding) where average depths are between 1 and 3 feet. The Base Flood Elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.

**AO** - Zone AO is the flood insurance rate zone that corresponds to the areas of 1-percent shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average flood depths derived from the detailed hydraulic analyses are shown within this zone. In addition, alluvial fan flood hazards are shown as Zone AO on the Flood Insurance Rate Map. Mandatory flood insurance purchase requirements apply.

**AR** - Zone AR is the flood insurance rate zone used to depict areas protected from flood hazards by flood control structures, such as a levee, that are being restored. FEMA will consider using the Zone AR designation for a community if the flood protection system has been deemed restorable by a Federal agency in consultation with a local project sponsor; a minimum level of flood protection is still provided to the community by the system; and restoration of the flood protection system is scheduled to begin within a designated time period and in accordance with a progress plan negotiated between the community and FEMA. Mandatory purchase requirements for flood insurance will apply in Zone AR, but the rate will not exceed the rate for an unnumbered Zone A if the structure is built in compliance with Zone AR floodplain management regulations.

**A99** - Zone A99 is the flood insurance rate zone that corresponds to areas within the 1-percent annual chance floodplain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No Base Flood Elevations or depths are shown within this zone. Mandatory flood insurance purchase requirements apply.

**D** - Zone D designation is used for areas where there are possible but undetermined flood hazards. In areas designated as Zone D, no analysis of flood hazards has been conducted. Mandatory flood insurance purchase requirements do not apply, but coverage is available. The flood insurance rates for properties in Zone D are commensurate with the uncertainty of the flood risk.

### **Attribute Definitions (continued):**

**V** - Zone V is the flood insurance rate zone that corresponds to areas within the 1-percent annual chance coastal floodplains that have additional hazards associated with storm waves. Because approximate hydraulic analyses are performed for such areas, no Base Flood Elevations are shown within this zone. Mandatory flood insurance purchase requirements apply.

**VE** - Zone VE is the flood insurance rate zone that corresponds to areas within the 1-percent annual chance coastal floodplain that have additional hazards associated with storm waves. Base Flood Elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory flood insurance purchase requirements apply.

**X** - Zone X is the flood insurance rate zones that correspond to areas outside the 1-percent annual chance floodplain and areas protected from the 1-percent annual chance flood by levees. No Base Flood Elevations or depths are shown within this zone. Insurance purchase is not required in these zones.

**OW** – Zone X is an area of open water (e.g., Ocean)

### **SubTypes:**

- 0.2% Annual Chance Flood Hazard
- 0.2% Annual Chance Flood Hazard Contained in Channel
- 0.2% Annual Chance Flood Hazard Contained in Structure
- 1% Annual Chance Flood Hazard Contained in Channel
- 1% Annual Chance Flood Hazard Contained in Structure
- 1% Depth Less Than 1 Foot
- 1% Drainage Area Less Than 1 Square Mile
- 1% Future Conditions
- 1% Future Conditions Contained in Structure
- Administrative Floodway
- Area of Special Consideration
- Area With Reduced Flood Risk Due to Levee
- Area of Minimal Flood Hazard
- Colorado River Floodway
- Community Encroachment Area
- Density Fringe Area
- Floodway

**Attribute Definitions (continued):**

- Floodway Contained in Structure
- Floodway Contained in Channel
- Flowage Easement Area
- Narrow Floodway
- Riverine Floodway Shown in Coastal Zone
- State Encroachment Area
- Coastal Floodplain
- Combined Riverine and Coastal Floodplain
- Riverine Floodplain in Coastal Area
- Riverine Floodway in Combined Riverine and Coastal Zone
- 0.2% Annual Chance Flood Hazard in Coastal Zone
- 0.2% Annual Chance Flood Hazard in Combined Riverine and Coastal Zone
- Area with Flood Risk Due to Levee
- Other
- NP: NP – Not Populated

Contact: Carol Tyau-Beam, PE, DFM NFIP State Coordinator  
Department of Land and Natural Resources, Engineering Division  
1151 Punchbowl St., #221  
Honolulu, HI 96813; (808) 587-0267  
Email: carol.l.tyau@hawaii.gov

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