



# Coastal Floodplain Mapping

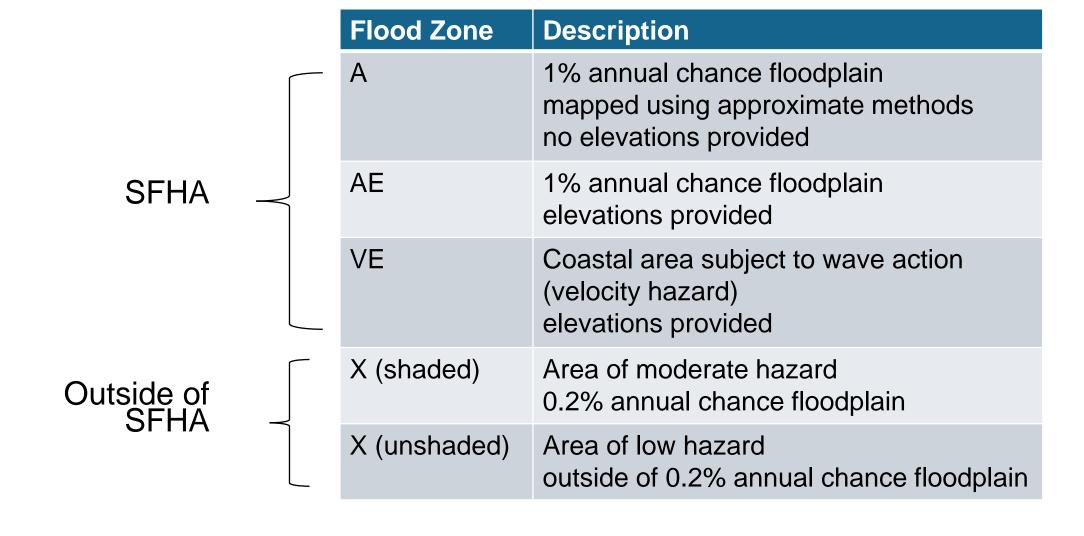
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Lewes Water Workshop December 1, 2020

## FEMA Floodplain Mapping

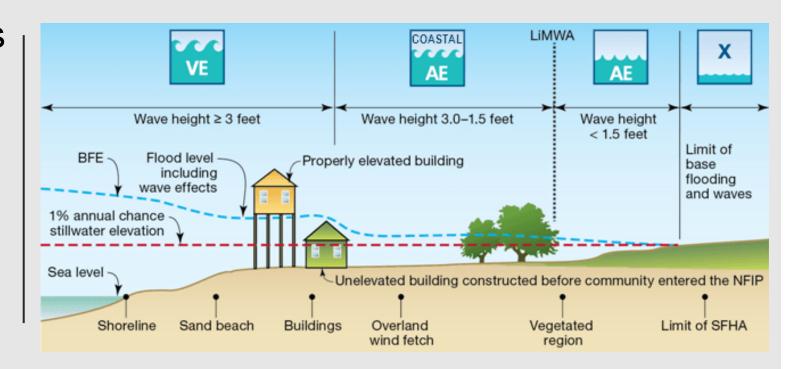
- National Flood Insurance Program (NFIP) was created in 1968 to provide flood insurance and reduce flood damages by restricting floodplain development
- Flood Insurance Rate Map (FIRM) shows mapping of flood zones for flood insurance rating purposes.
- Special Flood Hazard Area (SFHA) delineated; mandatory insurance purchase requirement
- Maps are updated periodically but not on a regular schedule
- Maps are typically used by communities in the regulation of land use

#### Flood Zones



#### Coastal Floodplain Modeling and Mapping

- Storm surge analysis
  - Set of storms modeled
  - Stillwater elevations
  - Regional scale
- Overland wave modeling
  - Predicts height of waves
  - 1% storm only

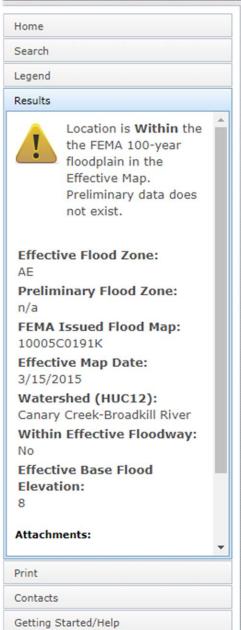


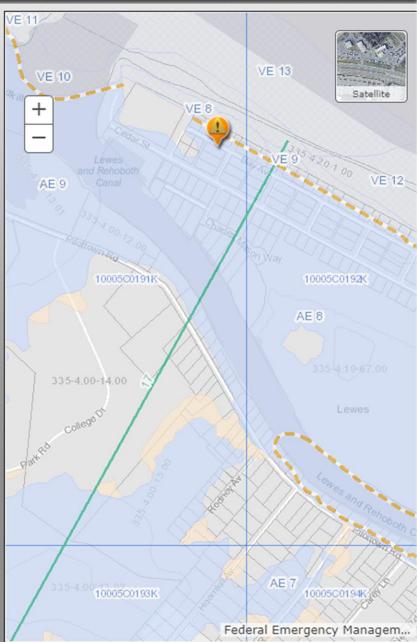


### Floodplain mapping limitations

- Based on conditions (topography, hydrology, etc.) at the time of the study
- Future conditions not considered sea level rise, changes in storm climatology, wetland loss, shoreline erosion
- No consideration of back-to-back storms
- 500-year coastal floodplain is based on stillwater elevation only (no 500year wave analysis for FIRM)







# Delaware Flood Planning Tool

- Interactive web map application
  - http://De.gov/floodplanning
- Displays effective FEMA mapping, plus other map features: elevation contours, clickable results, printable pdf map
- Upcoming updates: enhanced user interface, sea level rise mapping, users guide

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