

ATLANTIC COUNTY, NJ

SEPTEMBER 2019



FEMA

274,550



POPULATION
BASED
ON 2010 CENSUS

47 % PENETRATION RATE
IN THE SFHA

9 PUBLIC ASSISTANCE
DECLARATIONS SINCE 2010



\$487,146,700
TOTAL CLAIMS PAID SINCE 1978



\$6,601,526,700
FLOOD INSURANCE COVERAGE



6

NUMBER OF APPEALS
RESOLVED

157



COASTAL
MILES
STUDIED *

20,740



NUMBER OF INSURANCE
CLAIMS RECORDED

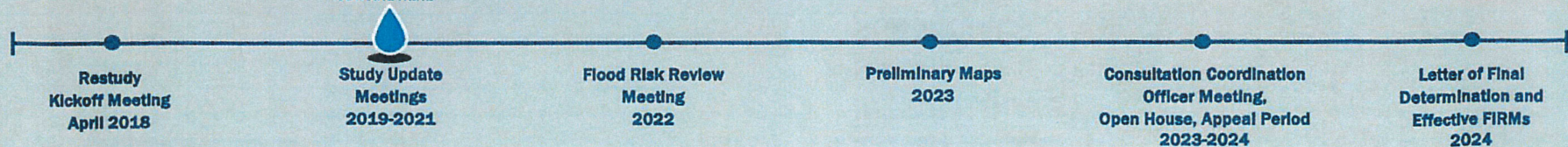
75 % HOMEOWNERSHIP
BASED ON ACS 5-YEAR
ESTIMATE

28,530

NUMBER OF FLOOD
INSURANCE POLICIES IN FORCE

KEEPING ATLANTIC SAFE: Your Risk MAP Timeline

YOU ARE HERE*



*Numbers and dates are subject to change

RESTUDY DETAILS

In 2010, FEMA Region II initiated a coastal study for New York and New Jersey to update flood risk information for communities.

Preliminary Flood Insurance Rate Maps (FIRMs) were issued for coastal communities from December 2013 through December 2014. In June 2015, New York City submitted an appeal of the maps, citing concerns with aspects of FEMA's storm surge analysis. To resolve the appeal, FEMA initiated a Coastal Restudy with new storm surge analysis and wave modeling to produce revised flood maps for coastal communities.

The restudy began in November 2017, and new maps will be available once the study is complete. A kickoff meeting was held with Atlantic County in April 2018, and outreach will continue with several technical study update meetings and a Flood Risk Review meeting in 2022.

INTERMEDIATE DATA SUBMITTALS

Five Intermediate Data Submittals (IDS), or reports, document the proposed technical approach that will inform the Coastal Restudy analyses. The IDS reports also formally document the local knowledge and field data collected so far. In these submittals, FEMA and its mapping partners record and document all technical processes and decisions. The reports provide detailed data that can later be used to reconstruct or support the study results.

The first report, "Data Acquisition and Technical Approach," was delivered to FEMA in summer 2019. In addition to providing a brief overview of the major technical components of the restudy, IDS 1 documents how the restudy addresses the three primary issues brought up by the appeal:

1. Extratropical storm validation
2. Representation of tidal effects
3. Inclusion of post-2009 storm events

Four additional IDS reports will be developed over the next two years: two will cover the storm surge and modeling approach (IDS 2 and 3), and two will detail the overland wave analyses and coastal mapping (IDS 4 and 5).

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The Coastal Flood Risk Analysis and Mapping Process

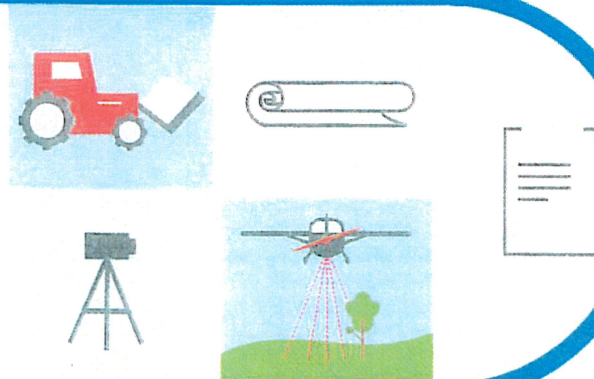
FEMA identifies coastal flood hazards, assesses flood risks, and provides accurate flood risk data to help drive communities toward mitigation actions and achieve greater resilience. As part of the coastal mapping process, FEMA conducts flood hazard analysis and mapping studies to produce FIRMs (Flood Insurance Rate Maps). These flood maps are used to administer the National Flood Insurance Program and they provide information to communities for the adoption and enforcement of floodplain management measures to help mitigate the effects of flooding.

While each coastal study and Region is unique, the coastal flood hazard analysis and mapping process generally includes the following steps:

1

DEFINE BASE TOPOGRAPHY

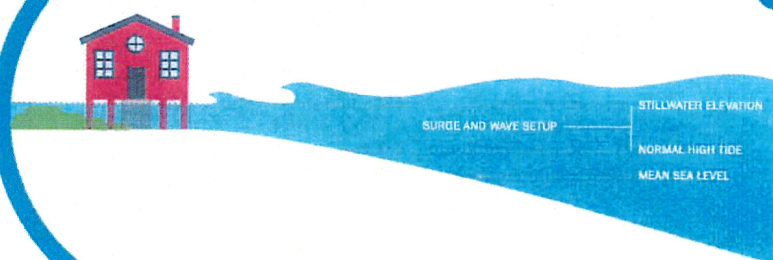
FEMA collaborates with local, State, and Federal governments to identify all available topographical data in the study area, and may also collect new data if no existing information is available. FEMA encourages communities to share new or updated topographic information as it becomes available to ensure maps have the most up-to-date data to support mitigation decisions.



2

EVALUATE WATER LEVELS AND STORM SURGE

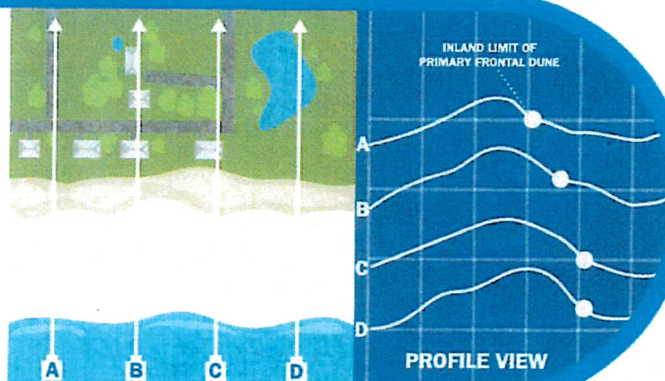
In order to identify coastal flood hazards, FEMA analyzes sea level, tides, wave setup, and storm surge. Storm surge is the water that is pushed toward the shore by strong winds during a storm. Wave setup is the increase in water level caused by the onshore movement of water due to waves breaking.

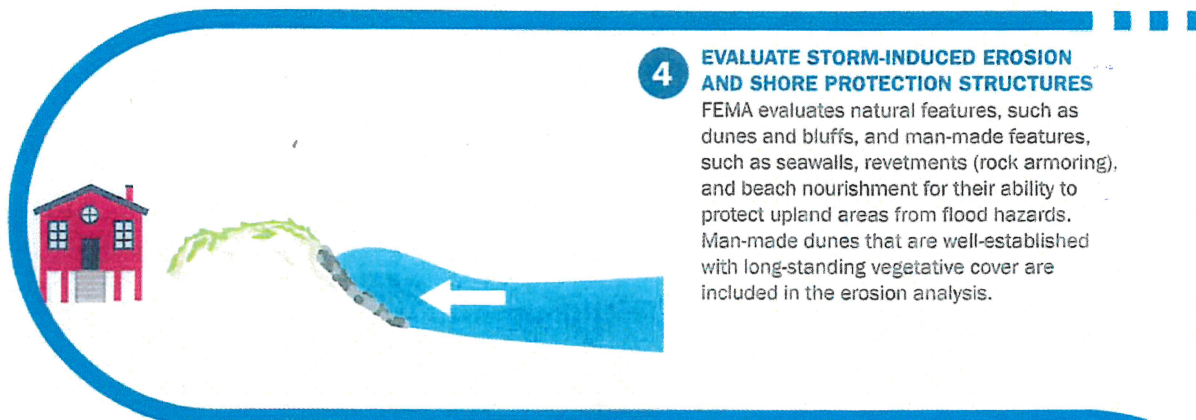


3

DEFINE CROSS-SHORE TRANSECTS AND IDENTIFY THE PRIMARY FRONTAL DUNE

Engineers and surveyors divide the shoreline into segments and represent each segment with a cross-shore transect to characterize the study area's topography, development, and land use. The Primary Frontal Dune (PFD), defined as a continuous or nearly continuous ridge of sand with relatively steep seaward and landward slopes immediately landward of and adjacent to the beach, is identified for each shoreline segment.



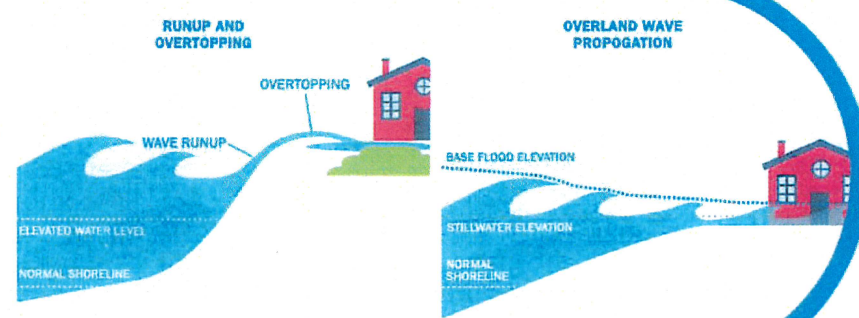


4 EVALUATE STORM-INDUCED EROSION AND SHORE PROTECTION STRUCTURES

FEMA evaluates natural features, such as dunes and bluffs, and man-made features, such as seawalls, revetments (rock armoring), and beach nourishment for their ability to protect upland areas from flood hazards. Man-made dunes that are well-established with long-standing vegetative cover are included in the erosion analysis.

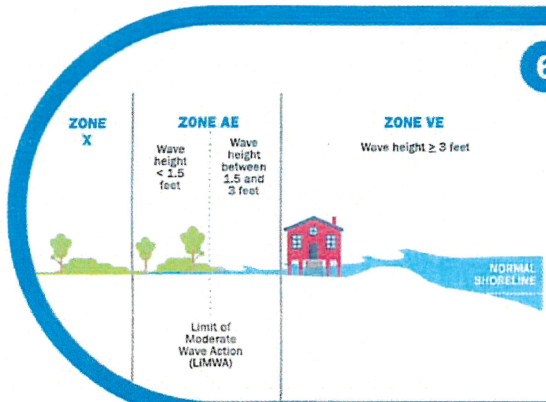
5 WAVE HAZARD MODELING

During a flood, waves ride on elevated water levels and can impact buildings located on land that is normally high and dry. FEMA conducts wave hazard modeling to evaluate the risks from overland wave propagation, runup, and overtopping and to determine base flood elevations (BFEs).



6 COASTAL FLOOD HAZARD MAPPING

Results of the coastal flood hazard assessment are used to create flood maps. The maps include flood zone designations that indicate areas at high-risk for flooding, e.g., Zone VE and Zone AE. Zone VE indicates a coastal high hazard area where wave action and/or high-velocity water can cause structural damage during severe storms. Zone AE is also assigned to areas identified as the Primary Frontal Dune. Zone AE is mapped for inundated areas with less hazardous wave action. Each zone has a base flood elevation (BFE), which is the elevation to which floodwater is anticipated to rise during the 1-percent-annual-chance flood. The Limit of Moderate Wave Action (LIMWA) may also be mapped to indicate the inland limit of waves 1.5 feet or greater for floodplain management purposes.



7 FIS AND FIRM PRODUCTION

Once the coastal flood hazard analysis and mapping process is completed, a flood map, or FIRM, is created by merging the coastal mapping with any inland riverine floodplain mapping and overlaying the flood zones on a base map that shows roads and other features to help with location identification. During this step, FEMA also prepares the Flood Insurance Study (FIS) report, which describes the study area, summarizes the engineering methods, and presents results from the study.

