Interpreting New Jersey Preliminary Work Maps

Overview

FEMA is committed to continuing the recovery process in New Jersey by providing the best available flood risk assessments. This will help guide communities in their efforts to reduce the impact of flood events and protect lives and property from future damages. To accomplish this, FEMA is implementing a comprehensive outreach initiative to share data and to ensure that affected communities are fully engaged and informed throughout the Flood Insurance Rate Map (FIRM) development process.

FEMA has prepared this fact sheet to provide important information regarding the specific types of data that communities will receive. In addition to describing the data, it provides guidance on how communities can use the data to better understand their own flood risk, use as a tool in the decision making process, and to plan for mitigation activities.

Release of Preliminary Work Maps

The FEMA preliminary work maps are an interim product created during the process of developing preliminary FIRMs. This information will replace the Advisory Base Flood Elevation (ABFE) maps that were made available to impacted communities as the best available flood hazard data for rebuilding and recovery efforts in the aftermath of Hurricane Sandy. FEMA strongly encourages communities to reasonably use this information in instances where Base Flood Elevations (BFEs) increase, floodways are revised, and/or new Special Flood Hazard Areas (SFHAs) are shown on the on the preliminary work maps. This will help community members make decisions to reduce their flood risk until the preliminary FIRMs become effective.

Preliminary Work Map Data

The coastal hazard analysis and mapping process involves a series of steps to produce preliminary work maps and ultimately the effective FIRMs, which become the regulatory basis of flood insurance ratings and floodplain management requirements. These steps include:

- Defining a base topographic data set to be used for analysis and mapping
- Defining shoreline transects to represent terrain and variability of shoreline features
- Conducting analyses to characterize 1% storm-induced erosion
- Conducting overland wave modeling to define coastal hazard areas and establish BFEs
- Creating preliminary work maps of coastal hazard areas utilizing the results of modeling and analysis
- Producing FIRMs and Flood Insurance Study (FIS) reports

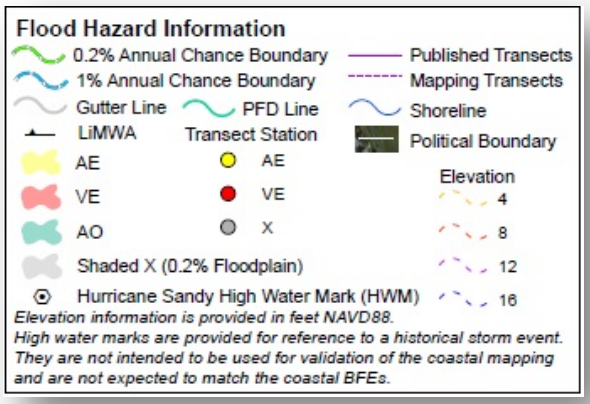
The preliminary work maps have been refined from the information shown on the ABFE maps. Community officials should review them to identify any areas of concern with the mapping of the proposed SFHAs (the area inundated by a flooding event having a 1% chance of occurring in any given year). The flood hazard information contained on the preliminary work maps is shown in the legend and the most pertinent items are described in more detail below.

Interpreting the Preliminary Work Map Data

To appropriately interpret the preliminary work map data there must be an understanding of the information shown on the preliminary work maps. The most pertinent flood hazard features are defined below along with an image showing how the preliminary work maps will look.

Zone AE - A yellow shaded area of high flood risk subject to inundation by the 1% annual-chance flood event determined by detailed methods. Base Flood Elevations are shown and mandatory flood insurance purchase requirements and floodplain management standards apply within AE zones included on effective FIRMs.

Zone AO - A blue shaded area of high flood risk subject to inundation by 1% annual-chance shallow flooding where average depths are between one and three feet. Average flood depths derived from detailed hydraulic analyses are shown in this zone. Mandatory flood insurance purchase requirements and floodplain management standards apply within AO zones included on effective FIRMs.



Zone VE - A light-red shaded area of high flood risk subject to inundation by the 1% annual-chance flood event with additional hazards due to storm-induced velocity wave action (a 3-foot or higher breaking wave). BFEs derived from detailed hydraulic analyses are shown. Mandatory flood insurance purchase requirements, specific construction requirements, and floodplain management standards apply within VE zones included on effective FIRMs.

Shaded Zone X - A gray shaded area of moderate flood risk subject to inundation by the 0.2% annual-chance flood event. Although mandatory purchase of flood insurance doesn't apply in Shaded Zone X, property owners are encouraged to do so to reduce their flood risk.

LiMWA - The black line denoting the Limit of Moderate Wave Action (LiMWA) is the landward limit of the area where base flood wave heights are between 1.5 and 3 feet and where wave characteristics are deemed sufficient to damage many structures on shallow or solid wall foundations. Triangular marks point toward the deeper flooding section of the area.

AE 10 (example) - Zone AE having a Base Flood Elevation of 10 feet as referenced to North American Vertical Datum of 1988 (NAVD 88).

VE 11 (example) - Zone VE having a Base Flood Elevation of 11 feet as referenced to NAVD 88.

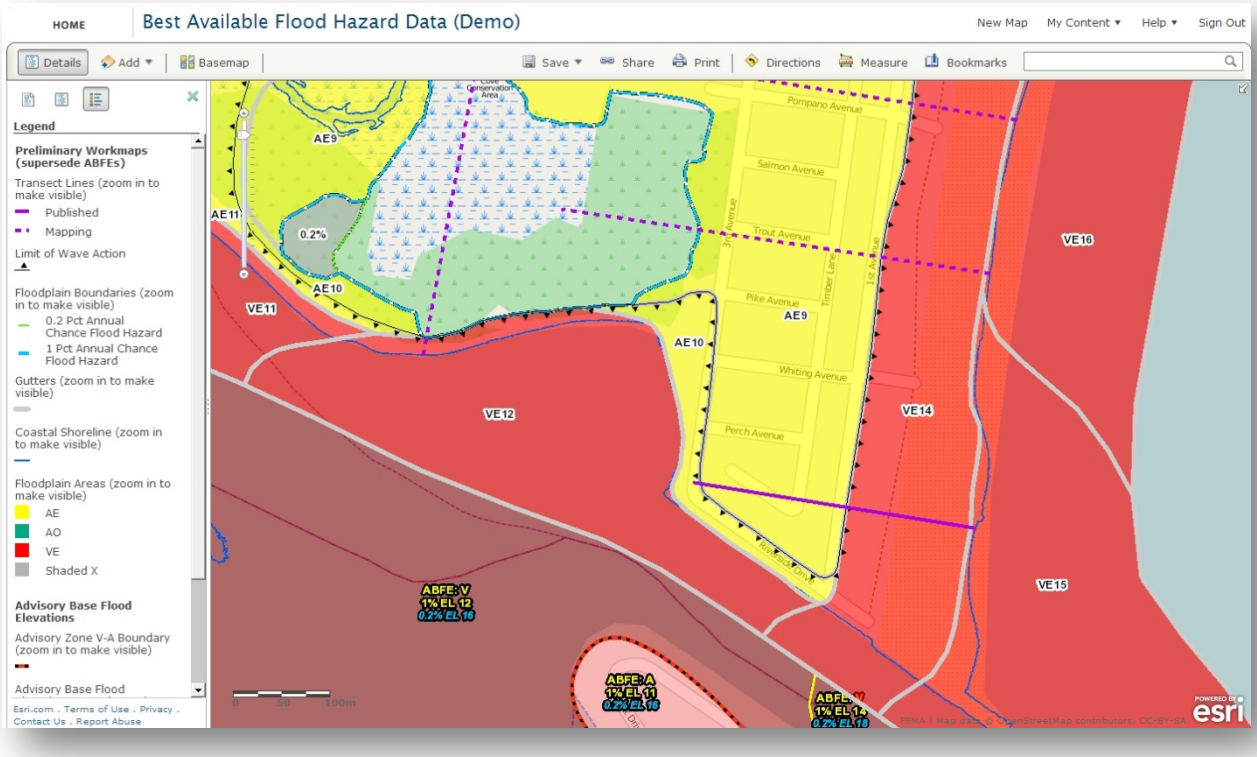
Gutter Line - A gray colored line dividing two different flood zones (AE, AO, or VE) or dividing the same zone when there is more than one BFE. In the example image there is a gutter line dividing VE15 and VE16.

PFD Line - A teal colored line denoting the location of the Primary Frontal Dune. The PFD is used to delineate the limit of the coastal high hazard area.

Transect - A purple line depicting a surveyed cross section taken perpendicular to the shoreline to represent the coastal and overland characteristics present in the area. Transect data is used when performing overland wave modeling and mapping for a coastal flood study.

Transect Station - The distance along a profile (transect) in reference to a common starting point. Transect stations define the points where information is being provided for the modeling and define the location of the BFE and zone changes along a transect.

Hurricane Sandy High Water Mark (HWM) data - The Hurricane Sandy HWM is based on data collected by the U.S. Geologic Survey (USGS). These data are shown for informational purposes and are not intended to be used to validate the coastal mapping or the coastal BFEs.



Where the Preliminary Work Maps Can Be Viewed

The preliminary work maps, including tutorials, user guides, and other learning resources, are available through the FEMA Region II Coastal Analysis and Mapping website at www.region2coastal.com.

How the Data can be Used

Community officials will have the opportunity to comment on the preliminary work maps at any point in time once they are issued and during meetings that are planned to review the maps. It is important for community officials to identify areas in their community where they believe the risk is inappropriately mapped (understated or overstated) and to be prepared to discuss those concerns at the meeting. Hard data is encouraged, if available. Additionally, if more detailed local information is available such as terrain data, corrected street names, building features, and land features, this information is requested to be provided to FEMA for review.

Following this review, FEMA may incorporate this information into the regulatory products. By actively engaging in the mapping process, officials can help to ensure more precise effective FIRMs. Community officials are also encouraged to proactively communicate this information to ensure residents and property owners fully understand the changes in the maps and have an opportunity to discuss potential mitigation options.

Next Steps

Preliminary FIRMs will be released mid-to-late summer 2013. After their release, there will be a statutory 90-day appeal period during which FEMA will accept technical information submitted by the community that better characterizes local conditions and flood risk. Data submitted for potential refinement of the preliminary FIRMs must be comprehensive and detailed enough to be consistent with the process for developing the preliminary FIRMs.

Following the end of the appeal period and the resolution of any submitted concerns, FEMA will finalize the maps and initiate a six-month compliance period for formal map adoption. It will be after that six-month period when the revised FIRMs will become effective and once this occurs, they will become the basis for flood insurance requirements and insurance premiums. It typically takes 18 to 24 months from release of the preliminary FIRMs for the maps to complete the regulatory process and become effective.

Where to Go for More Information

The New Jersey Department of Environmental Protection (NJDEP), in coordination with FEMA, will be hosting webinars and community meetings to further explain the data that is received and answer questions about next steps. Please visit www.Region2Coastal.com for more information on FEMA's data sharing initiative with New Jersey.