FREQUENT QUESTIONS

Coastal Flood Exposure Mapper

NOAA Office for Coastal Management
www.coast.noaa.gov/digitalcoast/tools/flood-exposure

At what scale is the tool meant to be used?
The mapper is a screening-level tool with existing national data that are locally relevant. The mapper was developed to get the conversation started around coastal flood hazard risks and associated vulnerabilities, but we encourage users to obtain local data to conduct more detailed analyses, if necessary.

At what scale is the data being displayed?
Map data are displayed from roughly the extent of the continental United States down to the neighborhood level (1:18,000).

What is the boundary for coastal counties shown in the mapper?
The county data set used in the mapper is a generalized county boundary data set that includes a three-kilometer buffer along the shoreline of shore-adjacent counties.

Which coastal counties are included?
Coastal counties within the generalized county boundary data set that have data for one or more coastal flood hazards included. If data are not available for a location, it is not included in the mapper.

Why is my county missing data for one or more of the coastal flood hazards?
Sea Level Rise and Shallow Coastal Flooding – a) Your county may not have suitable lidar-based elevation data and hydro-enforced digital elevation models required for accurate coastal inundation mapping.

b) Sea level rise and shallow coastal flooding data do not exist for Louisiana and Alaska. Currently, there are no plans to map Alaska because of a lack of adequate statewide coastal elevation data. Louisiana will be included when improved coastal elevation data become available.

FEMA Flood Zones – a) Digital flood data may not exist for your county or may not have existed when the mapper was completed. Check the availability of data for your county on FEMA's Flood Map Viewer. The flood data used in the mapper are a combination of Digital Flood Insurance Rate Maps and Q3 flood data available as of June 2014.

b) Your county may only have paper Flood Insurance Rate Maps (FIRMs). Check to see the availability of FIRMs for your community.

c) Your county may not participate in the National Flood Insurance Program (NFIP), which means that flood maps have not been created. Check your state to determine if your county or community participates. You may also contact your state or local floodplain manager as listed on the Association of State Floodplain Managers' website.

Coastal Flood Hazard Composite – The flood hazard composite includes multiple flood hazard data sets combined (best available as of 2014, including shallow coastal flooding, FEMA flood data including V zones, A zones, and 500-year zones treated as individual layers, storm surge for category 3 hurricane, and sea level rise of 3 feet above mean high tide. If your county is missing any of these data, a flood hazard composite was not created for that county.

What is the purpose of the Coastal Flood Hazard Composite map?
The concept for a coastal flooding composite hazard layer was initially developed for coastal areas of New York after Hurricane Sandy to depict geographically dependent susceptibility to coastal flooding, storm surge, and long-range inundation impacts. The mapping method was modified and expanded to the rest of the East Coast and Gulf for the Coastal Flood Exposure Mapper. This map layer aggregates risk information for multiple coastal flood hazards. This map shows the gradient of coastal flood risk that ranges from areas outside the FEMA 1% annual chance floodplain that are still at risk from high magnitude, low frequency events like major landfalling hurricanes, to areas nearer the coast that are also at risk from lower frequency flood events, wave impacts, and long-term sea level change. At any given location the user can query which coastal flood hazards may impact that spot. This layer should not be confused with, and may not be substituted for, any existing regulatory risk maps or associated boundaries. These maps are for planning purposes only.

Does the sea level rise map show scenarios added to FEMA flood zones (base flood elevation)?
No. The sea level rise layer shows scenarios of 0 to 6 feet based on the current average highest high tide (called mean higher high water, or MHHW).

Are the data available for download?
The exact data sets used are available as map services to pull into ArcGIS online and for mashup with additional data sets. However, the specific data as you see it now are not available directly for download. You can download the data from the authoritative sources, including some from NOAA's Office for Coastal Management and available on our website. See the data document linked from each map page for details on where to access the various data.

Are you expanding the mapper nationally?
We have not yet scoped expansion to the West Coast, Pacific Islands, territories, or Great Lakes.

Do you have examples of how communities have used the mapper?
We are starting to gather and write examples now, which will be located in the mapper under the Case Studies section.

How does this tool differ from NOAA's Sea Level Rise Viewer?
The mapper was designed with a specific audience in mind and was developed based on needs heard during NOAA's risk and vulnerability trainings for maps that show coastal flood hazards in addition to sea level rise, along with community assets. Sea level rise and shallow coastal flooding data from the Sea Level Rise Viewer are included in the mapper. The Sea Level Rise Viewer is focused specifically on sea level rise, shallow coastal flooding, and marsh impacts.

Can we add our own local data to the mapper?
No, but the data used in the mapper are available as map services (links to services are at the bottom of each map page), and you can create maps using your local data (as map services) in ArcGIS online. In the Data Sources link at the bottom of each map page, step-by-step instructions are provided on how to do this in ArcGIS online.