National Hurricane Center updates National Storm Surge Hazard Maps

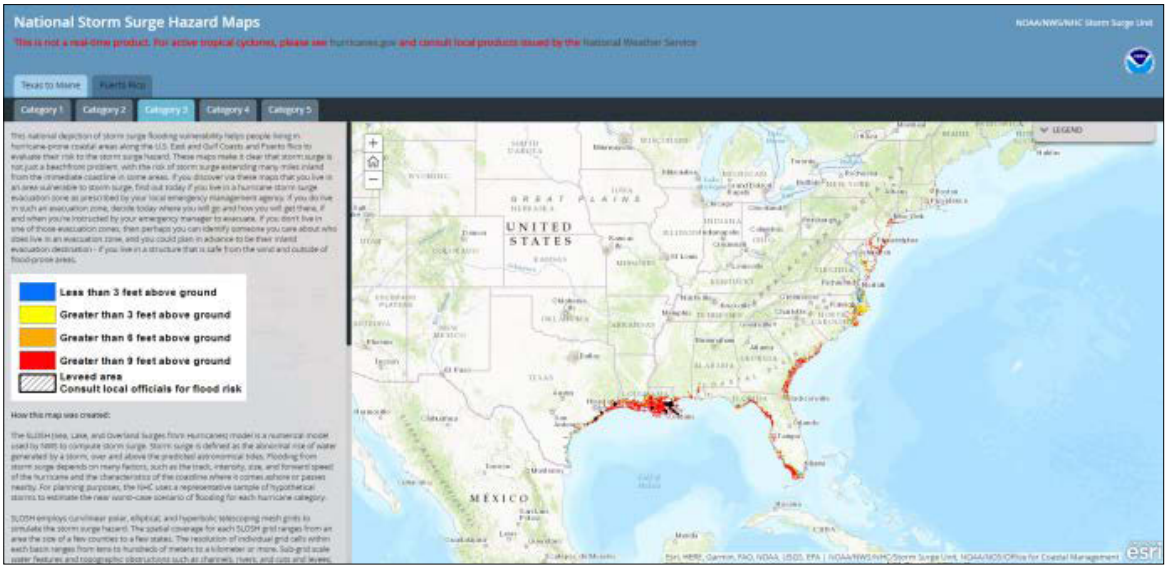
NOAA's National Hurricane Center (NHC) is issuing a new version of the National Storm Surge Hazard Maps. The improvements, based on user feedback, will include:

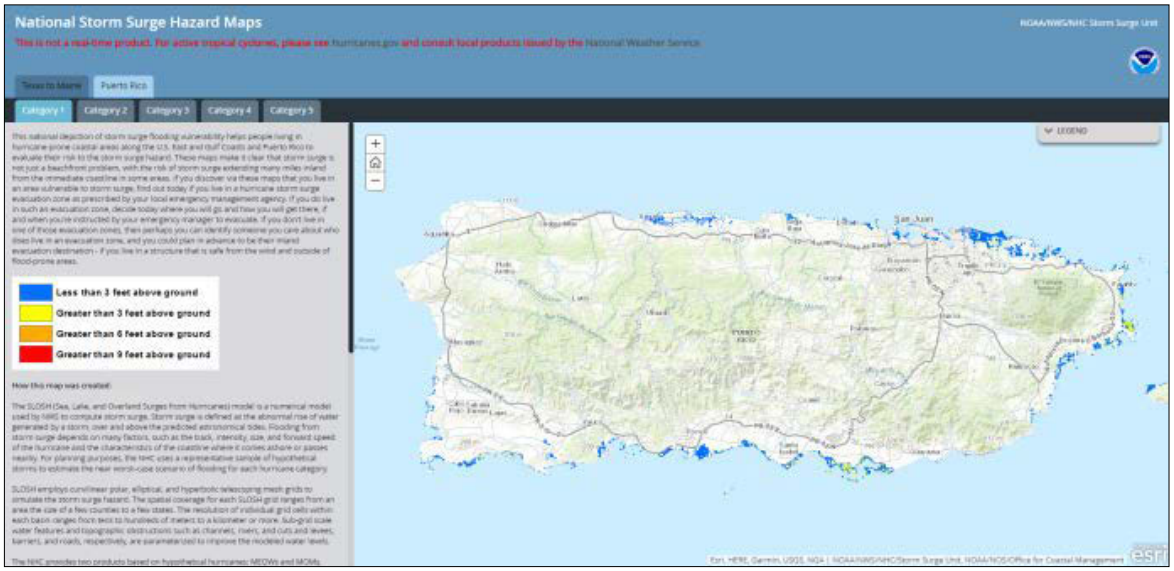
- GIS data files available for download
- The addition of Puerto Rico (inclusion of wave setup)
- Updated topography data (Digital Elevation Model)
- The inclusion of the new South Florida SLOSH grids

The updated maps, which cover the coast from Texas to Maine, and now Puerto Rico, will continue to be hosted by NOAA's GeoPlatform and be accessible via NHC's webpage at www.hurricanes.gov/nationalsurge. The first version of the National Storm Surge Hazard Maps was released in November of 2014. During the transition, the first version of the service may be temporarily unavailable.

Approximately 22 million people in the United States are vulnerable to storm surge, which is responsible for about half the deaths in the United States due to tropical cyclones. In addition to homes and businesses, many evacuation routes are also at risk of inundation from surge. The new maps allow anyone living in hurricane-prone coastal areas along the U.S. East and Gulf Coasts to visualize and evaluate their own risk to storm surge. And the addition of GIS data files in version 2 enables advanced mapping and geoprocessing functions.

The maps below illustrate that storm surge is not just a beachfront problem, with the risk of storm surge extending several miles from the immediate coastline in some areas. Florida has a particularly large vulnerable population, with about 40 percent of its residents at risk to worst-case storm surge flooding.





NHC uses the hydrodynamic Sea, Lake, and Overland Surges from Hurricanes (SLOSH) model to simulate storm surge in numerous basins along the U.S. East and Gulf Coasts. Based on climatology, hundreds of thousands of hypothetical hurricanes are simulated and the potential storm surges are calculated. Composites of the resulting storm surges are created to assess and visualize overall storm surge risk based on a wide range of scenarios.

Previous versions of this information were created for geographically disparate areas and could not provide a unified national perspective. The new national maps provide a better way to view and communicate national storm surge flooding risk, and enhance the analysis of regional and national vulnerabilities.

"To find out if you are in an area at risk for storm surge flooding from a hurricane, simply look at these interactive maps and zoom in to your area of interest", said Brian Zachry, Ph.D., NHC Storm Surge Specialist.

What should individuals do if they discover that they live in an area vulnerable to storm surge? "If you discover you are in a hurricane storm surge evacuation zone, then decide today where you will go and how you will get there, if and when you're instructed by emergency managers to evacuate", said Rick Knabb, Ph.D., Director of NOAA's National Hurricane Center.

The site is linked at:
www.hurricanes.gov/nationalsurge

NOAA's GeoPlatform site is linked at:
http://noaa.maps.arcgis.com/apps/StorytellingTextLegend/index.html?appid=b1a20ab5eec149058bafc059635a82ee

Additional information:
-Storm Surge Can Be Deadly - 10 Tips to Be Ready –
English: http://www.nhc.noaa.gov/surge/StormSurgeCanBeDeadly10tips-single.pdf
Spanish: http://www.nhc.noaa.gov/surge/StormSurgeCanBeDeadly10tips-single-spanish.pdf
-NHC Storm Surge website: http://www.nhc.noaa.gov/surge

Contact: NHC Public Affairs: nhc.public.affairs@noaa.gov

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