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Service Change Notice 16-18
National Weather Service Headquarters Washington DC
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From: Eli Jacks
 Chief, Forecast Services Division

Subject: Experimental Potential Storm Surge Flooding Map Transitioning to
Operational Status June 1, 2016

Effective June 1, 2016, the Potential Storm Surge Flooding Map issued by the National Hurricane Center (NHC) will transition from experimental to operational status. If necessary before June 1, the map can be released as an operational product.

The map will show geographical areas where inundation from storm surge could occur and how high above ground the water could reach in those areas.

Areas of possible storm surge flooding for a given storm will be represented in different colors on the map based on water level:

Blue: greater than 1 foot above ground
Yellow: greater than 3 feet above ground
Orange: greater than 6 feet above ground
Red: greater than 9 feet above ground

The Potential Storm Surge Flooding map takes into account:

- Flooding due to storm surge from the ocean, including adjoining tidal rivers, sounds and bays
- Normal astronomical tides
- Land elevation
- Uncertainties in the track, landfall location, intensity, forward speed, and size of the cyclone.

The map does not take into account wave action, freshwater flooding from rainfall, riverine discharge, and flooding inside and overtopping of certain levees.

The intertidal zone, the area that is above water at low tide and under water at high tide, will be displayed with a user-selectable mask layer on the Potential Storm Surge Flooding Map. This mask layer will allow users to differentiate between areas that could experience consequential

flooding of normally dry ground and areas that routinely flood during typical high tides. The intertidal mask will be depicted as gray on the Potential Storm Surge Flooding Map.

The potential storm surge hazard is not depicted within certain levee areas, such as the Hurricane and Storm Damage Risk Reduction System in Louisiana. These areas are highly complex and water levels resulting from overtopping are difficult to predict. Users are asked to consult local officials for flood risk inside these leveed areas.

NHC will release the initial map for any storm that is expected to affect the Gulf or East Coast when it issues a hurricane (or optionally with a tropical storm) watch or warning.

The map is subject to change every six hours with each new NHC full advisory package. Due to the processing time required to generate the storm surge guidance and produce the map, it will be available about 60 to 90 minutes after the NHC advisory.

The map provides a reasonable worst-case scenario for flooding at particular locations due to storm surge, and therefore conveys the flooding that a person should be prepared for. Specifically, the map depicts the amount of flooding over normally dry land that has a 1-in-10 (10 percent) chance of being exceeded. The map is created from multiple runs of the Sea, Lake and Overland Surges from Hurricanes (SLOSH) model. Additional information and map examples are online at:

<http://www.nhc.noaa.gov/surge/inundation>

The map will be available on the NHC website at:

<http://www.nhc.noaa.gov>

Geographic Information System (GIS) data will be available for each advisory this graphic is active and can be found via the NHC GIS webpage:

<http://www.nhc.noaa.gov/gis>

For technical questions regarding this notice, please contact:

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National Service Change Notices are online at:

<https://www.weather.gov/notification/archive>

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