

## **Product Description Document**

### **Storm Surge Watch/Warning Graphic**

#### **Part I - Mission Connection**

- a. Product Description – The storm surge watch/warning (SSWW) graphic highlights areas along the Gulf and Atlantic coasts that have a significant risk of life-threatening storm surge inundation from a tropical cyclone, subtropical cyclone, post-tropical cyclone, or, pending approval, a potential tropical cyclone. A potential tropical cyclone is a disturbance that is not yet a tropical cyclone, but one for which the NWS has begun issuing tropical cyclone watches or warnings because it poses the threat of bringing tropical storm or hurricane conditions to land areas within 48 hours. The highlighted area designated the geographical areas at 2.5 km resolution under a gridded storm surge watch or warning.

SSWW definitions:

Storm Surge Watch: The possibility of life-threatening inundation from rising water moving inland from the shoreline somewhere within the specified area, generally within 48 hours, in association with an ongoing or potential (pending approval) tropical cyclone, a subtropical cyclone, or a post-tropical cyclone. The watch may be issued earlier when other conditions, such as the onset of tropical-storm-force winds, are expected to limit the time available to take protective actions for surge (e.g., evacuations). The watch may also be issued for locations not expected to receive life-threatening inundation, but which could potentially be isolated by inundation in adjacent areas.

Storm Surge Warning: The danger of life-threatening inundation from rising water moving inland from the shoreline somewhere within the specified area, generally within 36 hours, in association with an ongoing or potential (pending approval) tropical cyclone, a subtropical cyclone, or a post-tropical cyclone. The warning may be issued earlier when other conditions, such as the onset of tropical-storm-force winds, are expected to limit the time available to take protective actions for surge (e.g., evacuations). The warning may also be issued for locations not expected to receive life-threatening isolated by inundation in adjacent areas.

- b. Purpose – The graphic is intended to help users visualize areas most at risk from life-threatening surge, and serve as a call to action. All persons, regardless of whether or not they are in the highlighted areas shown by the graphic, should promptly follow evacuation orders and other instructions from local emergency management officials.
- c. Audience – Federal, state, and local government agencies, media and the general public.

- d. Presentation Format - Interactive Google map.
- e. Feedback Method - Questions and comments may be addressed to:

Jessica Schauer  
NWS Tropical Program Leader  
NOAA/NWS/AFSO/Marine, Tropical and Tsunami Branch  
11691 SW 17th St.  
Miami, FL 33165

or e-mail questions and comments to: [jessica.schauer@noaa.gov](mailto:jessica.schauer@noaa.gov)

## **Part II - Technical Description**

- a. Format & Science Basis - The graphic is the results of a collaborative process between the National Hurricane Center (NHC) and Weather Forecast Offices (WFOs). The primary objective guidance for the graphic will be P-Surge, an ensemble-based probabilistic system driven by the Sea, Lake, and Overland Surges from Hurricanes (SLOSH) model, the latest NHC official tropical cyclone forecast, and the typical errors of the NHC forecasts. Forecaster confidence, continuity from advisory to advisory, and other subjective factors will also help determine the areas to be depicted in the graphic. For purposes of the storm surge watch/warning graphic, life-threatening inundation is currently defined to be three feet of water above ground level, but is subject to change as the NWS gathers more validation information and integrates improved science.
- b. Product Availability – The graphic will be issued 48 hours before the possibility of life- threatening storm surge from a tropical cyclone for areas along the Gulf and Atlantic coasts of the United States. The graphic will be available from the NHC website at <http://www.hurricanes.gov>
- c. Additional Information – An example of the storm surge watch/warning graphic is provided below.

# Storm Surge Watch/Warning Graphic

Tropical Depression NINE  
Advisory 12 Issued: 10:00 AM CDT Wed Aug 31



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Prototype Storm Surge Warning  
Prototype Storm Surge Watch