

**Product Description Document**  
**Storm Surge Watch/Warning Graphic**  
Updated in February 2019 for expansion to WFO SJU

**Part I - Mission Connection**

- a. Product Description – The storm surge watch/warning (SSWW) graphic highlights areas along the Gulf and Atlantic coasts, including Puerto Rico and the U.S. Virgin Islands, that have a significant risk of life-threatening storm surge inundation from a tropical cyclone, subtropical cyclone, post-tropical cyclone, or a potential tropical cyclone. The area under a SSWW is designated by highlighting 2.5 km by 2.5 km geographical areas where there is a possibility (watch) or danger (warning) of life-threatening storm surge.

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:

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11691 SW 17th St.  
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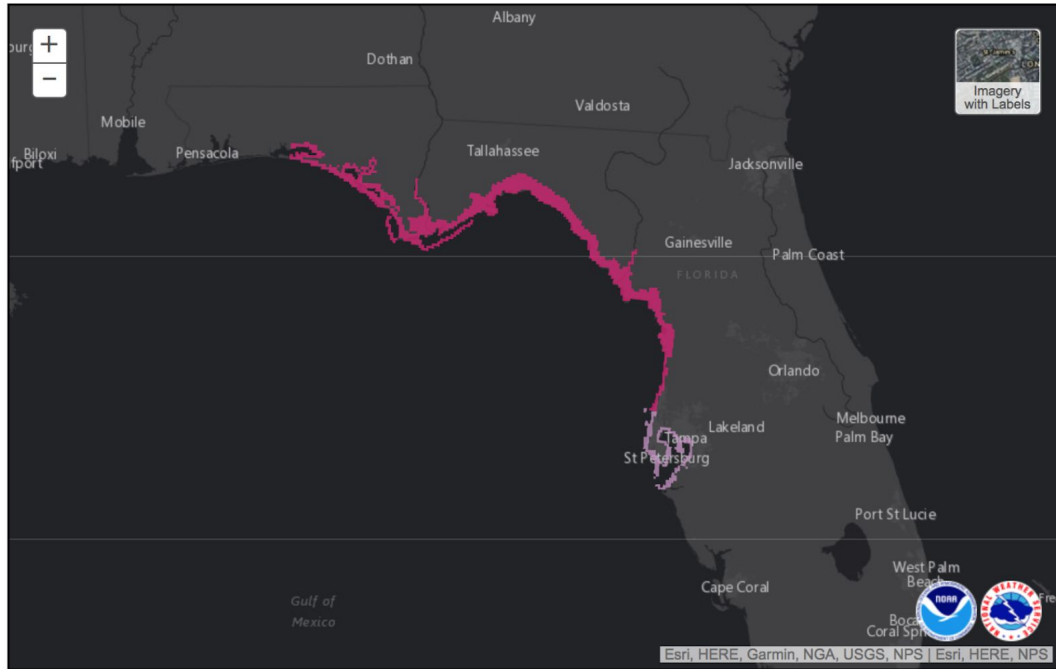
or e-mail questions and comments to: [jessica.schauer@noaa.gov](mailto:jessica.schauer@noaa.gov)

## **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) in the Atlantic basin. 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 in the United States within the Atlantic basin. 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\*

Hurricane Michael  
Advisory 015 Issued: 4:00 AM CDT Wed Oct 10



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