The Storm Surge Impacts of the 2017 Hurricane Season

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Introduction

• How many worked Disaster Response last year?
• How many Still Working on it?
• How many communities impacted?
• How many were tracking the storms as developing and approaching?
• How many feel safe? Dodged the bullet?
• What if?
Tracking the Storm

• Where is the storm going to go?
• What are the impacts on the current track and intensity?
• What would be the storm surge impacts?
• What if the track shifted?
• What if the storm intensifies?
NOAA National Hurricane Center

- [https://www.nhc.noaa.gov/](https://www.nhc.noaa.gov/)
- [http://slosh.nws.noaa.gov/psurge2.0/](http://slosh.nws.noaa.gov/psurge2.0/)
NOAA P-SURGE

P-Surge 2.6: Probabilistic Hurricane Storm Surge (with tide)

Hurricane Harvey (2017) Advisory 22: Storm surge (with tide) heights in feet above ground level with a 1 in 10 chance of being exceeded. Data valid from Aug 25, 01 PM EST to Aug 29, 07 PM EST.
NOAA P-SURGE

Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.

NATIONAL WEATHER SERVICE
P-Surge 2.6: Probabilistic Hurricane Storm Surge (with tide)

Click Map to Zoom
Archive data HERE

Storm and Year
Harvey2017

Advisory
21

Type
Prob of Surge > 8 ft

Datum
Above Ground

Time Grouping
Cumulative

Download Data

P-Surge 1.0

Hurricane Harvey(2017) Advisory 21: Probability of storm surge (with tide) >= 8 feet above ground level.
Data valid from Aug 25, 07 AM EST to Aug 29, 01 PM EST
CERA – Coastal Emergency Risk Assessment

- https://cera.coastalrisk.live/
CERA – Coastal Emergency Risk Assessment
NOAA – Tides and Currents

• https://tidesandcurrents.noaa.gov/
NOAA – Tides and Currents
USGS – Rapid Gage Deployment

- https://stn.wim.usgs.gov/FEV/
FEMA Coastal Flood Studies
Hurricane Harvey

Forecast 23

Forecast 20
Hurricane Irma

Hindcast

Forecast 30 – Left 50%
Hurricane Irma

Hindcast

Forecast 45
Hurricane Irma

Forecast 36
Hurricane Irma

Forecast 36 – Right 50%
Hurricane Maria

Forecast 17

[Map of Hurricane Maria's forecast path with current location and time]
Hurricane Maria

Forecast 30 – Left 100%
Hurricane Nate

Hindcast

Forecast 15
Summary

• Be Prepared for the worst

• Use the available tools
  • Before Hurricane Season
  • As Storm approaches
  • After the storm for Recovery and Mitigation

• What If?