

# Hurricane Sandy

## October 28<sup>th</sup> – 31<sup>st</sup> 2012

Prepared 530 PM EDT – Saturday October 27, 2012

Gary Szatkowski

NOAA's National Weather Service

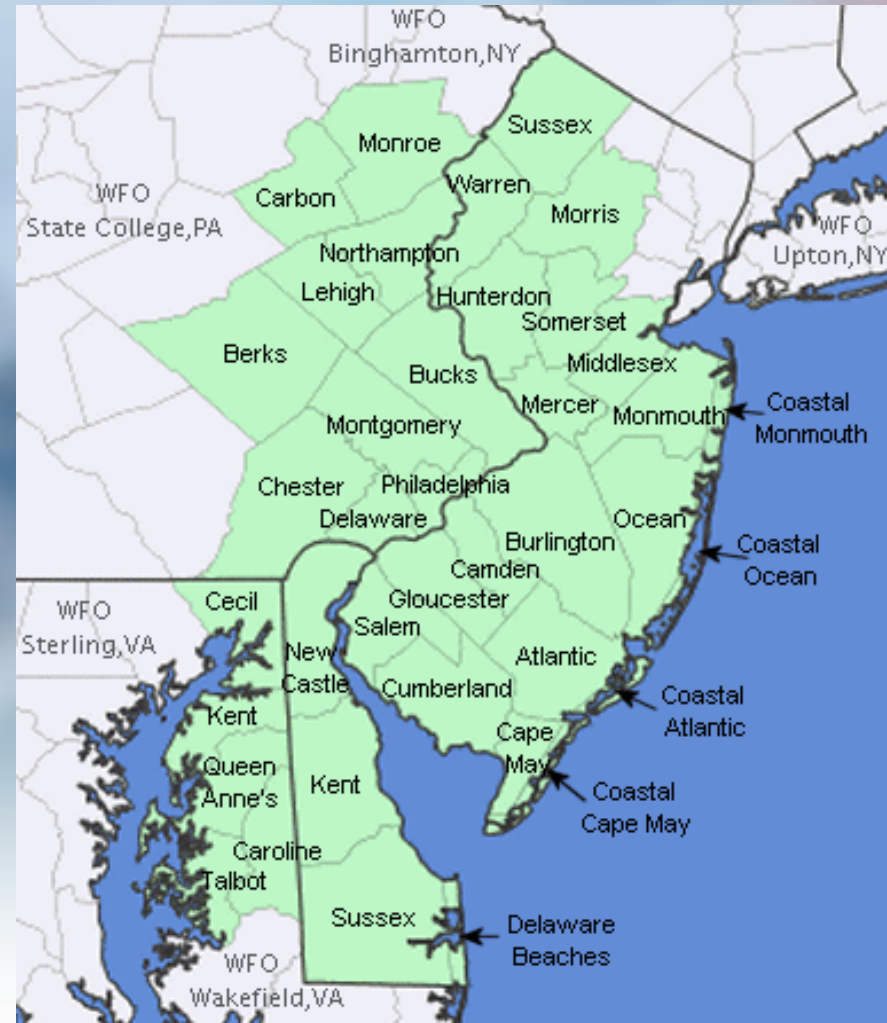
Philadelphia/Mt. Holly NJ Forecast Office

[Weather.gov/phi](http://Weather.gov/phi)



# Purpose of Briefing

- Briefing #7 for event
- Promote situational awareness for emergency management community & partners
- Provide guidance for planning efforts
- Briefing applies to Mount Holly service area – shaded in green on map



# Changes from previous briefing

- **Confidence continues to increase that our region will see very severe impacts from this storm.**
- **Information regarding various forecast tools has been added to this briefing package.**

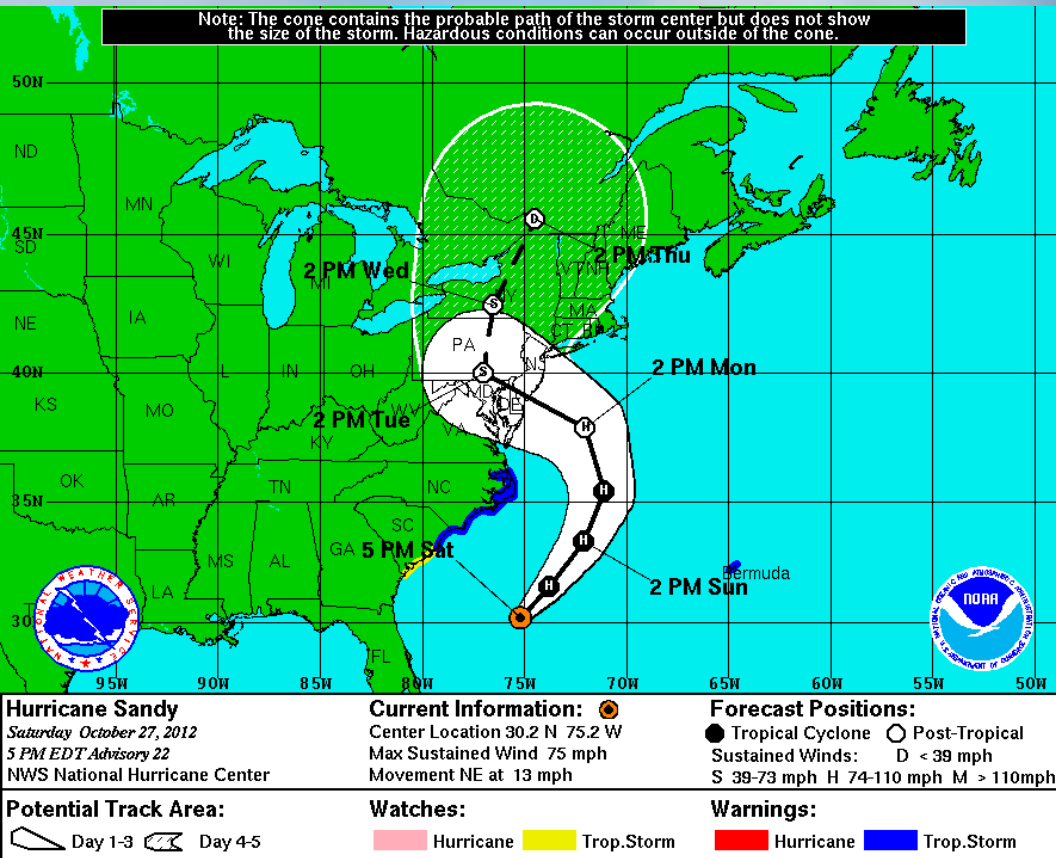


# Executive Summary

- Hurricane Sandy will have a major impact on our region over the next several days:
  - Strong damaging sustained winds 35 to 50 mph over a prolonged period of time (24 to 48 hours), with gusts up to near hurricane strength. Strongest winds are expected south and east of the I-95 corridor.
  - Extremely heavy rainfall.
  - Major to record inland flooding along streams and rivers.
  - Major to record coastal flooding. The full moon on October 29 just makes things worse.
- Options for the storm to miss our area are rapidly dwindling. Confidence on the storm having a major impact on our region continues to increase. The focus of efforts should be on when Sandy hits our region, not if Sandy hits our region.
- Next briefing package will be issued by Noon on Sunday, October 28<sup>th</sup>.
- Monitor our website at [weather.gov/phi](http://weather.gov/phi).



# Current status of Hurricane Sandy



- Sandy is currently a Category I hurricane. Sandy is expected to remain at or near hurricane strength for the next two days as it transitions into an extremely intense nor'easter.
- Its forecast track poses a direct threat to our region.
- It is forecast to still have sustained winds of 70 mph with higher gusts as it approaches our region.
- This is a very dangerous scenario.

# Note about the preceding maps

- Remember that the forecast maps are guidance, not gospel.
- The storm center forecast track is still subject to minor changes, which would change these forecast scenarios, some for the better, some for the worse.
- The takeaway message is that our region is currently in the path of a very dangerous storm. Even if the eventual path changes, we will still feel dire effects from this storm.

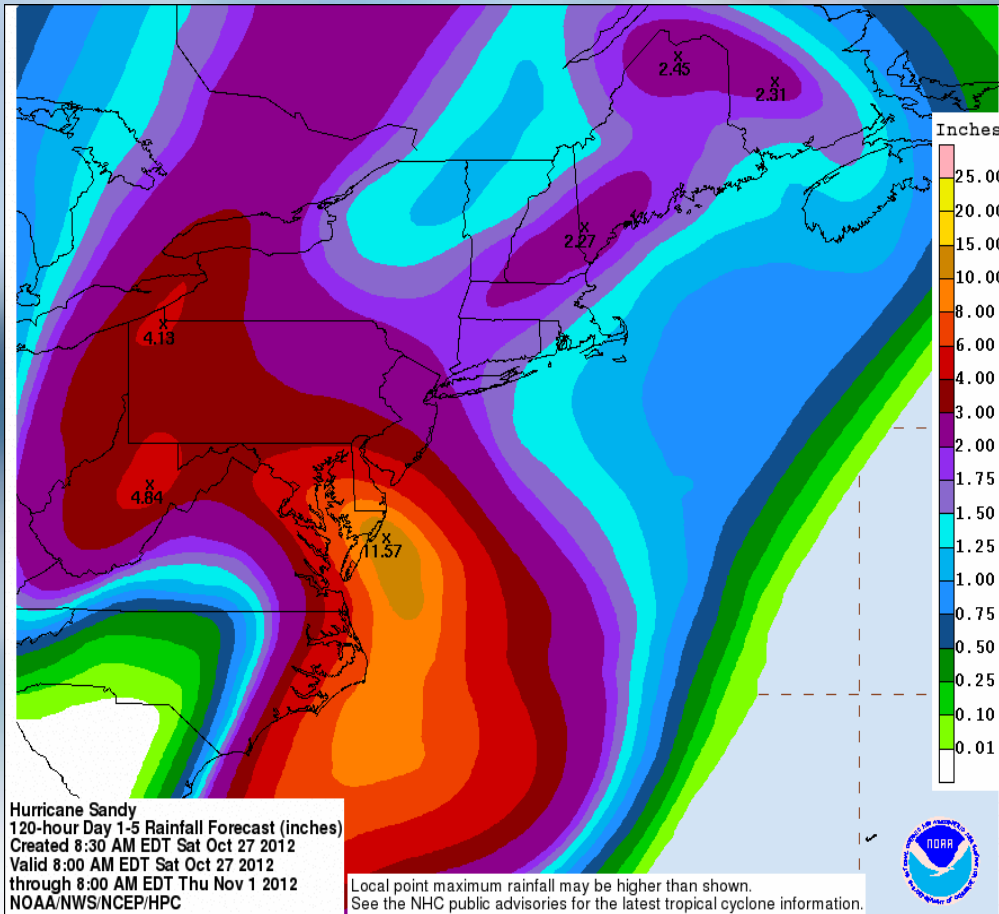


# Terminology

- Hurricane Sandy has already started the transition process toward becoming a very intense nor'easter.
- Since it is not expected to be a Hurricane when it comes ashore in our region, that is why no 'tropical' warnings have been issued for our region.
- We expect to continue with our nor'easter suite of watch/warning products (e.g., High Wind, Coastal Flood, Flash Flood, etc.) throughout the event.
- We have done this consciously so you would not be switching from a tropical to non-tropical set of warning products in the middle of the event. This event will be difficult enough without that unnecessary complication.



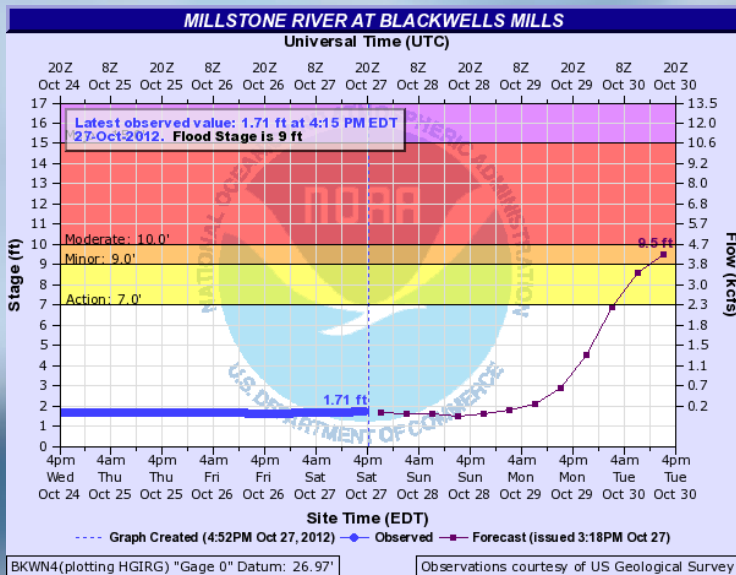
# Inland flooding threat



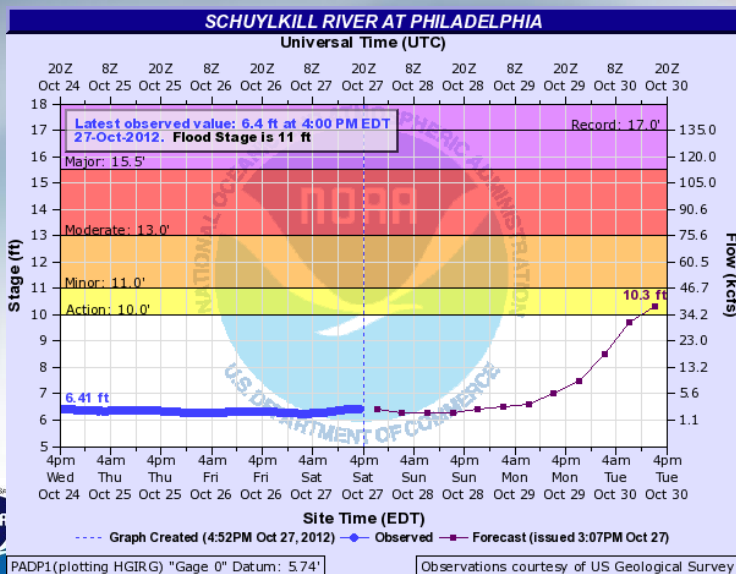
- Map on the left is forecast total rainfall over next 5 days. Rain is expected to move from south to north starting Sun night, with the heaviest rain Monday.
- Flash flooding is extremely likely.
- Major river flooding is likely.
- **Record river flooding is possible in the areas of heaviest rain.**



# Inland flooding tools

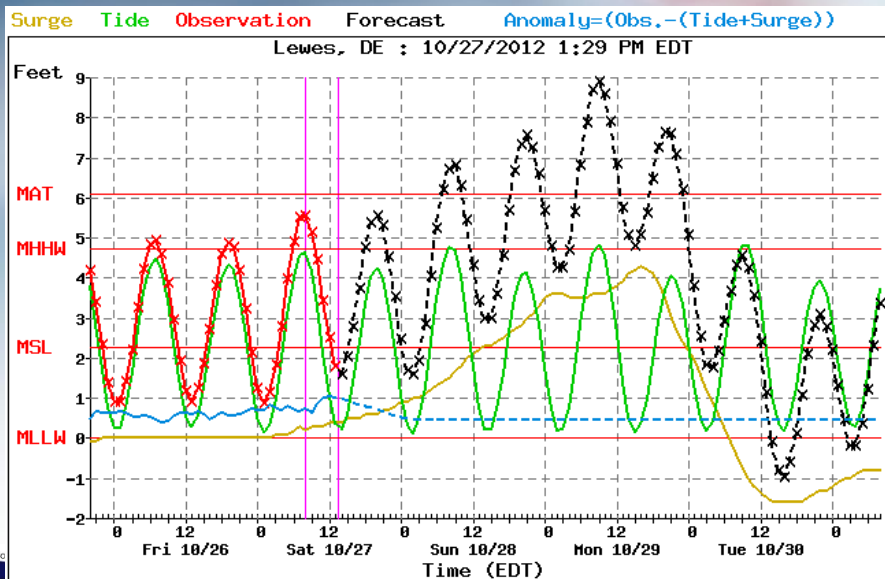
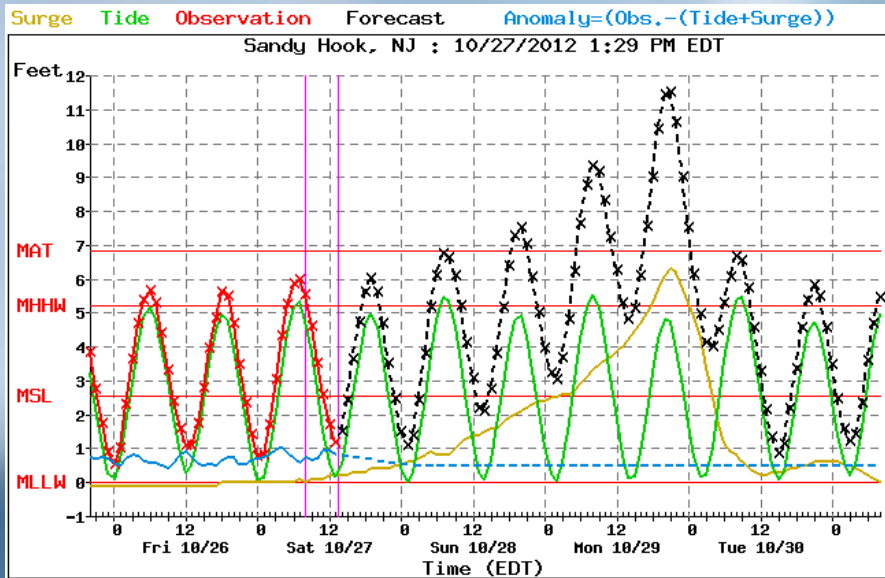


- Our inland river flooding forecast tools are now starting to contain valuable information for this event, as they have forecast information going out 72 hours.



- Additional rain will fall more than 72 hours out, so they are not yet capturing the full event.
- As we get closer to the event, you will get more complete river flood crest information

# Coastal flooding tools



- Major coastal flooding is expected based on the current track forecast. **Record coastal flooding is possible.**
- A ten to twelve foot storm tide (surge + astronomical tide) is possible along the Atlantic Coast, the Delaware Bay & the Raritan Bay, based on where the storm center comes ashore. This would result in record coastal flooding in many locations.
- A 3 to 5 foot storm tide (surge + astronomical tide) is possible in the Chesapeake Bay based on where the storm center comes ashore. Major flooding is not expected in the Chesapeake Bay based on current predicted storm path.

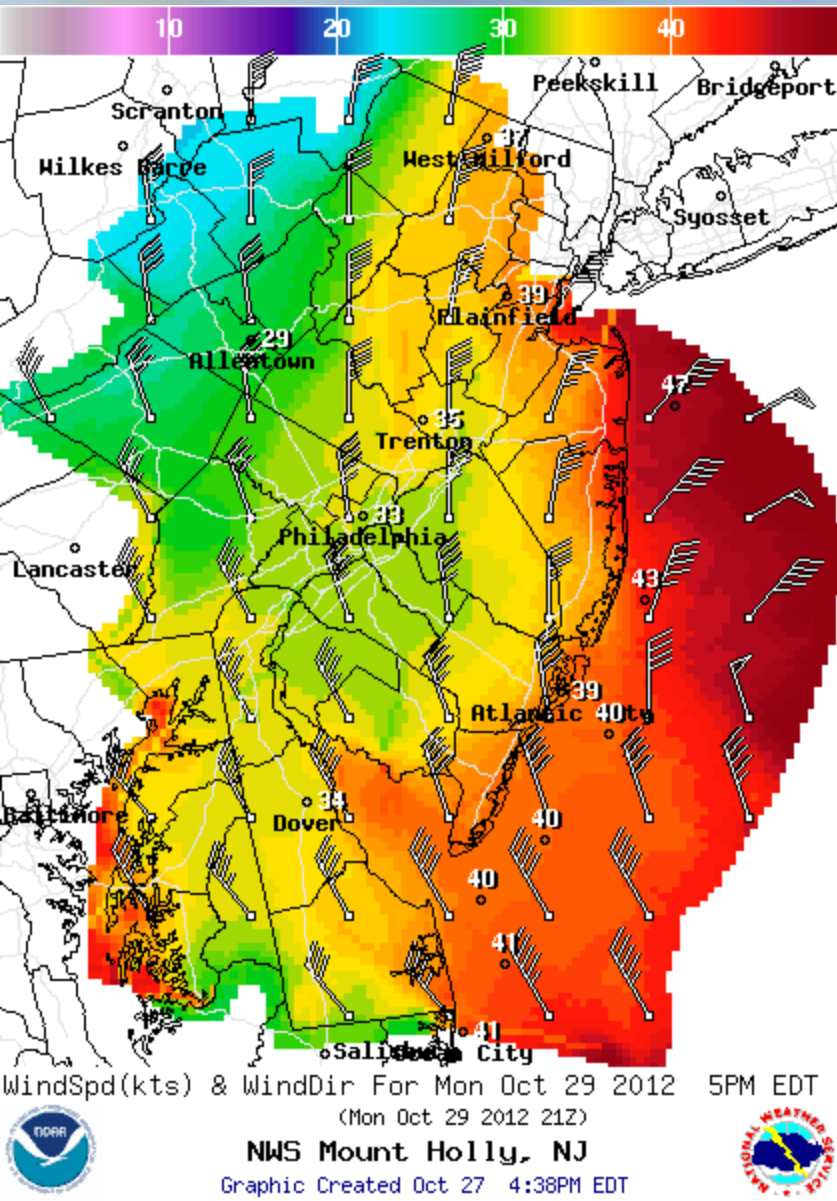
# Things to focus on regarding coastal flooding for the Atlantic Coast, Delaware Bay & Raritan Bay

- The high tides to focus on are the two high tides on Sunday and the two high tides on Monday
  - The center of the storm will have moved inland by Tuesday morning and the Tuesday morning high tide is expected to be considerably lower than the preceding high tides
- The two high tides on Monday will be the most dangerous high tides, with major to record coastal flooding expected. Between the coastal flooding and expected high winds, the barrier islands may be cut off from the mainland during both high tides.
- **Water is the most life threatening aspect of this storm. Hurricane Sandy is already the deadliest hurricane of the 2012 season. Please respect its power and heed the advice of local and state officials regarding any evacuations.**



# Winds

- Strong winds will develop along coastal sections Sunday and spread inland. Strong damaging winds will continue from late Sunday night through Monday into Tuesday afternoon.
- Winds gusts over 75 mph are possible over coastal sections. Inland locations will see peak wind gusts of 55 to 65 mph at the height of the storm.



# Forecast tool information

- Information on coastal flooding forecast tools can be found at:
  - <http://www.nws.noaa.gov/mdl/etsurge/index.php?page=map&region=ne>
  - [http://www.opc.ncep.noaa.gov/estofs/estofs\\_surge\\_info.shtml](http://www.opc.ncep.noaa.gov/estofs/estofs_surge_info.shtml)
  - <http://tidesandcurrents.noaa.gov/ofs/dbofs/dbofs.html>
- Information on inland flooding forecast tools can be found at:
  - <http://water.weather.gov/ahps2/index.php?wfo=phi>
- Our complete set of forecast information can be found at:
  - <http://Weather.gov/phi>



# Housekeeping

- Thank you for the very positive feedback on these briefing packages.
- However, we are simply unable to accommodate the magnitude of requests to be added to an email distribution list. Our list is frozen during this event as it is essentially maxed out.
- We are transitioning to using social media for this event and future events where we issue briefing packages.
- We are on Facebook at US National Weather Service Philadelphia/Mount Holly
- We are on Twitter at @NWS\_MountHolly
- We will post notification of briefing package issuance on both Facebook & Twitter.
- Please 'like' us on Facebook or 'follow' us on Twitter to receive the notification when we issue a briefing package.
- You can always download the latest briefing package at:  
[http://www.erh.noaa.gov/phi/briefing/packages/current\\_briefing.pdf](http://www.erh.noaa.gov/phi/briefing/packages/current_briefing.pdf)



# Questions?

- For the latest information, visit our website at [weather.gov/phi](http://weather.gov/phi)
- If you have any questions, please contact us.
- [Gary.Szatkowski@noaa.gov](mailto:Gary.Szatkowski@noaa.gov)
- [Joseph.Miketta@noaa.gov](mailto:Joseph.Miketta@noaa.gov)
- Office 609-261-6602 x222, 223

