# Very Dangerous Hurricane Sandy October 28<sup>th</sup> – 31<sup>st</sup> 2012

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#### **Purpose of Briefing**



- Briefing #9 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.

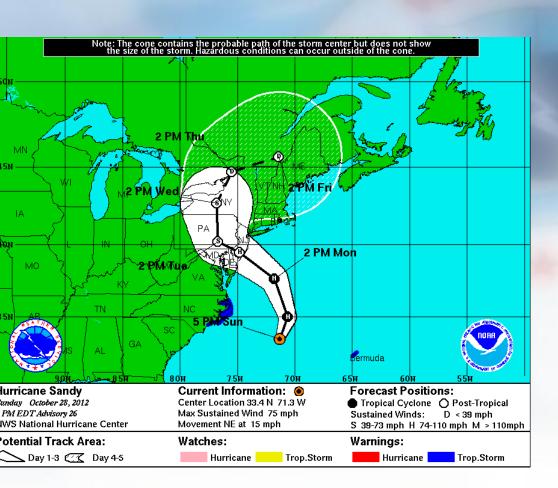


#### **Executive Summary**

- Hurricane Sandy will have a severe 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 75 mph. 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 Monday, October 29th.
- Monitor our website at 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 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 wind gusts exceeding 75 mph 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 slightly, we will still feel severe effects from this storm.

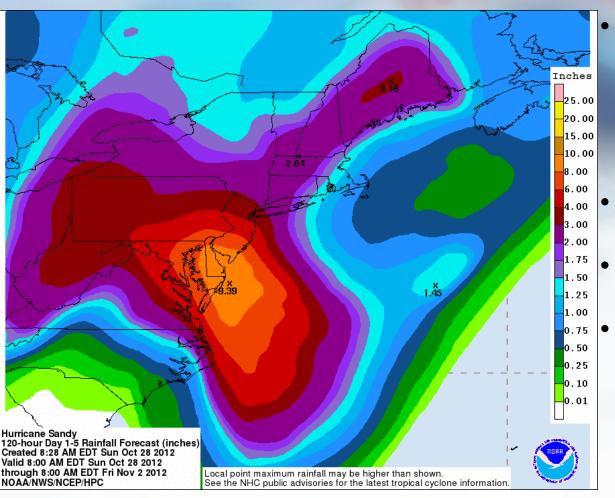


### Terminology

- Hurricane Sandy has 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

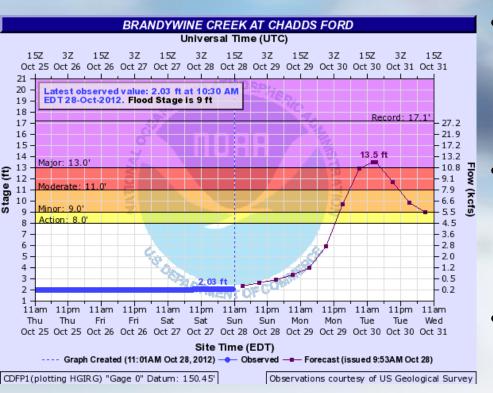


- Map on the left is forecast total rainfall over next 5 days. Rain is expected to move from south to north starting Sun night, with the heaviest rain Monday.
- Flash flooding is extremely likely.
- Major river flooding is likely.
- Record river flooding is possible in the areas of heaviest rain.





### Inland flooding tools

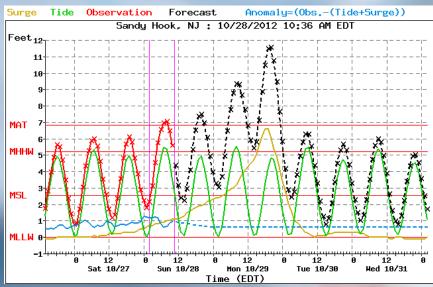


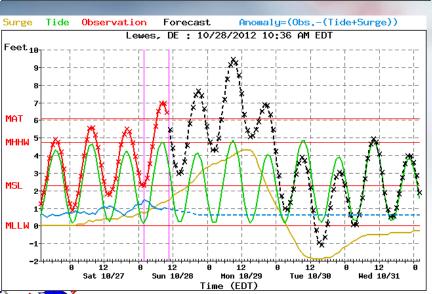
- Our inland river flooding forecast tools are now starting to contain valuable information for this event, as they have forecast information going out 72 hours.
- Remember, these are based on forecast rainfall, and will be updated as the rainfall forecast is updated, and as actual rainfall is observed.
- Tropical systems have brought some of the worst flooding events to our region. Please plan for the worst and hope for the best.





#### Coastal flooding tools





- Major coastal flooding is expected based on the current track forecast. Record coastal flooding is likely.
- A 12 to 15 foot storm tide (surge + astronomical tide) is possible in the Raritan Bay. This would produce record coastal flooding.
- A 10 to 12 foot storm tide is possible along the Atlantic Coast & the Delaware Bay. This would result in record coastal flooding in many locations.
- A 3 to 5 foot storm tide (surge + astronomical tide) is expected in the Chesapeake Bay. This would produce moderate coastal flooding.

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

- The first high tide cycle today (Sunday) produced minor to moderate coastal flooding. Subsequent high tides will be worse.
- The second high tide cycle this evening will produce moderate to major coastal flooding.
- The two high tides on Monday will produce major to record coastal flooding.
- Seas will continue to build and there will be 10-12 foot breakers in the surf on Monday.
- 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 will likely 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.





#### Personal plea

- If you are being asked to evacuate a coastal location by state and local officials, please do so.
- If you are reluctant to evacuate, and you know someone who rode out the '62 storm on the barrier islands, ask them if they would do it again.
- If you are still reluctant, think about your loved ones, think about the emergency responders who will be unable to reach you when you make the panicked phone call to be rescued, think about the rescue/recovery teams who will rescue you if you are injured or recover your remains if you do not survive.
- Sandy is an extremely dangerous storm. There will be major property damage, injuries are probably unavoidable, but the goal is zero fatalities.
- If you think the storm is over-hyped and exaggerated, please err on the side of caution. You can call me up on Friday (contact information is at the end of this briefing) and yell at me all you want.
- I will listen to your concerns and comments, but I will tell you in advance, I will be very happy that you are alive & well, no matter how much you yell at me.
- Thanks for listening.
- Gary Szatkowski National Weather Service Mount Holly



# Peekskill Bridgeport Scrantor Hilkes Fre L'ancaster Saligue City WindSpd(kts) & WindDir For Mon Oct 29 2012 (Mon Oct 29 2012 21Z) NWS Mount Hollu, NJ Graphic Created Oct 27 4:38PM EDT

#### Winds

- Strong winds will develop along coastal sections today and spread inland.
   Strong damaging winds will continue from late
   Sunday night through Monday into Tuesday morning.
- Winds gusts over 75 mph are possible over coastal sections. Inland locations will see peak wind gusts of 60 to 75 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://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



#### Questions?

- For the latest information, visit our website at weather.gov/phi
- If you have any questions, please contact us.
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- Office 609-261-6602 x222

