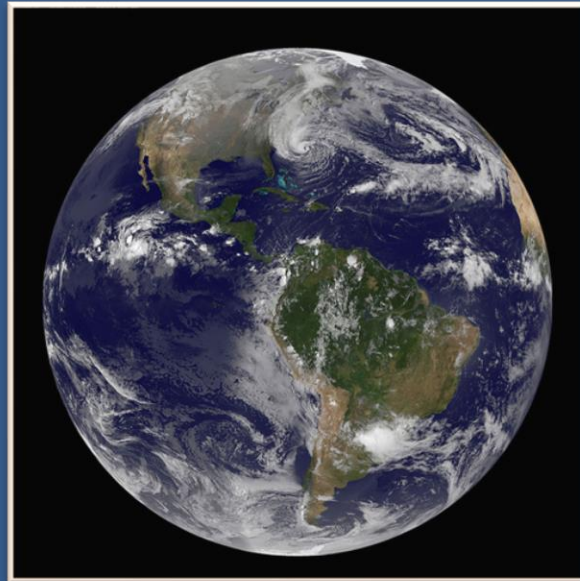


Sandy Claims – Emergent Themes & Issues



London Power Forum
13 November 2013

Topics

- **Superstorm Sandy Facts**
- **Expectations vs. Reality**
- **FEMA**
- **Repair Issues**
- **Coverage Issues**
- **Adjustment Issues**
- **Working with the Insured**
- **Inefficiencies and a Compromised Settlement***
- **Impact on the Industry**

Statistics

- **Winds reached 69 mph in RI**
- **Wind gusts reached 90 mph in NY and NJ**
- **Max U.S. storm surge: 9.45' in NJ**
- **Max U.S. storm tide: 14.60' in NJ**
- **Max U.S. wave height: 33.1' in NC and 32.5' in NY**
- **Max U.S. rainfall: 12.55" in MD**
- **Max snowfall: 36" in WV**

Statistics

- **The destructive potential of the storm surge registered at 5.8 on a scale of 0 to 6. It was the highest of any hurricane observed since 1969. The previous record was 5.6 set by Hurricane Isabel.**
- **The storm was the largest Atlantic hurricane on record measuring 1,100 miles (1,800 km) while classified as a Category 2 off the Northeastern coast of the U.S.**

Statistics

- **Approximately 286 people were killed**
- **The storm was the second-costliest “hurricane” in U.S. history surpassed only by Hurricane Katrina.**
- **Estimates as of June 2013 assess damage to have been over \$68 billion (USD)**

Statistics

Largest U.S. Power Outages from a Weather Disaster (from unofficial Wikipedia and media sources)



1.	<u>“Superstorm”</u> Blizzard	1993	10,000,000 customers
2.	<u>“Superstorm”</u> Sandy	2012	8,500,000
3.	Hurricane Ike	2008	7,500,000
4.	Hurricane Isabel	2003	6,000,000
5.	Hurricane Frances	2004	6,000,000

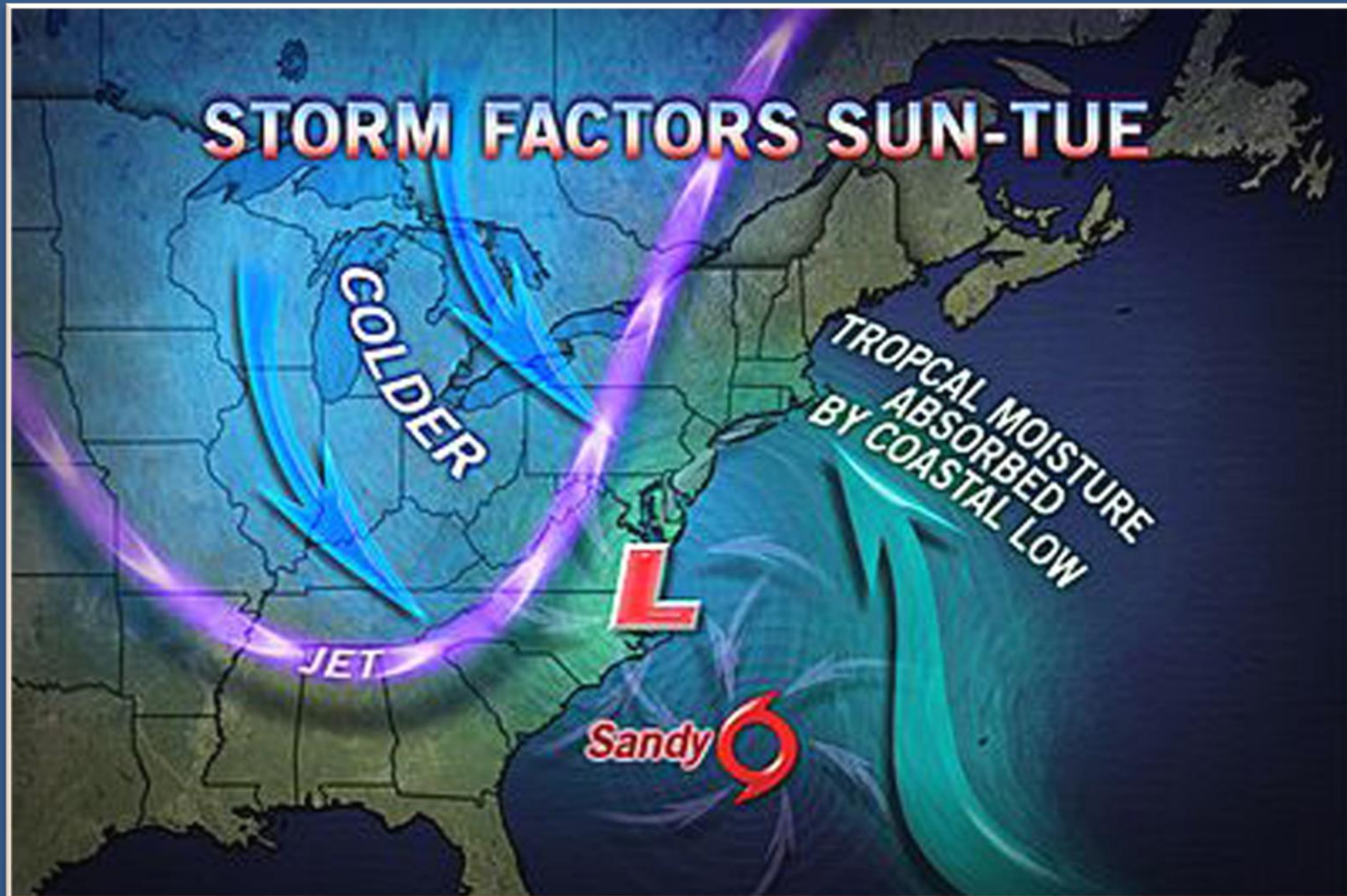
Original Forecasted Trajectory



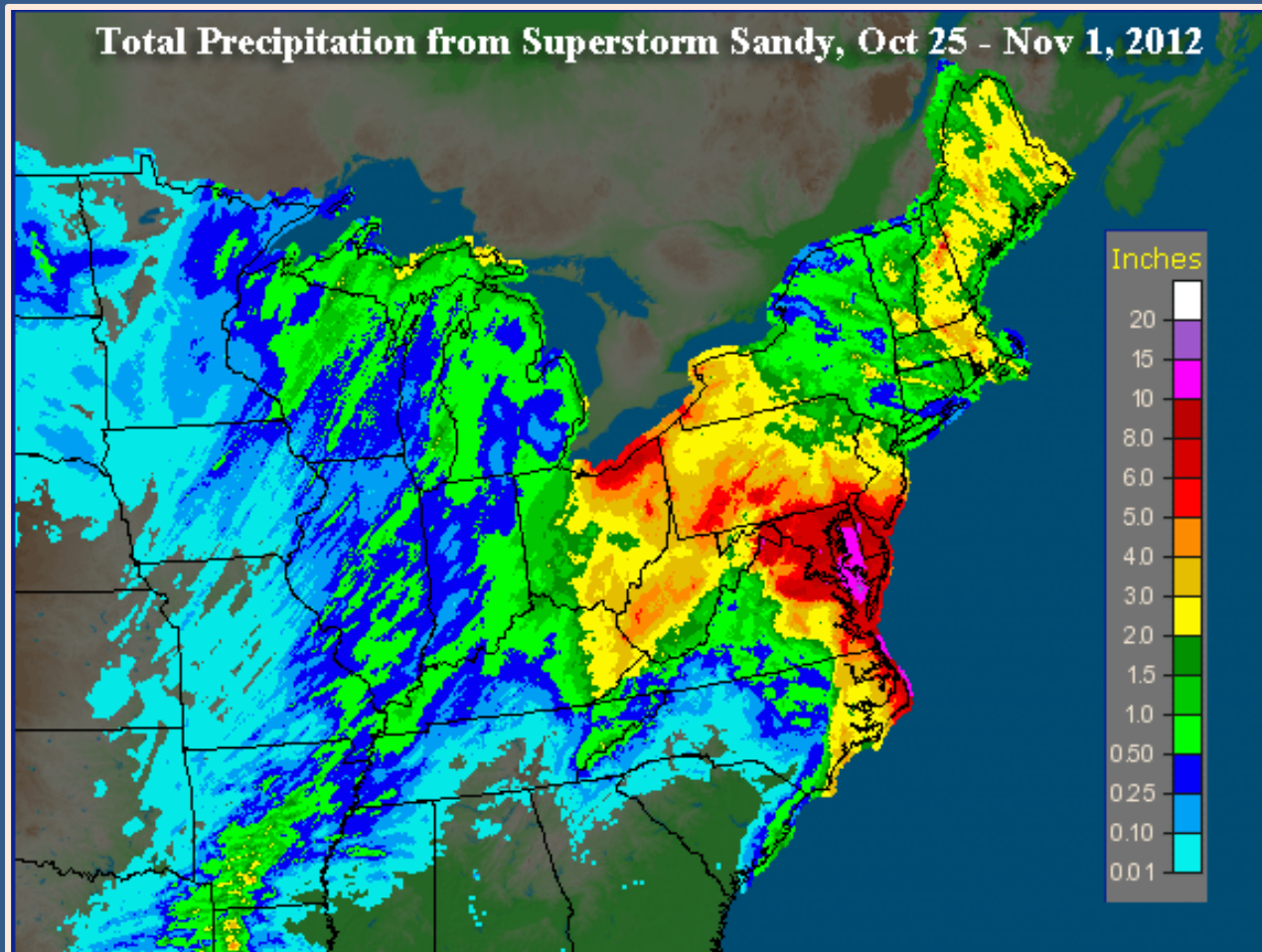
Ammended Forecasted Trajectory



Creating the Superstorm



Rainfall



Flooding



Lat: 40.9404 Lon: -74.0204

Legend

Height above NGVD-29 (feet)

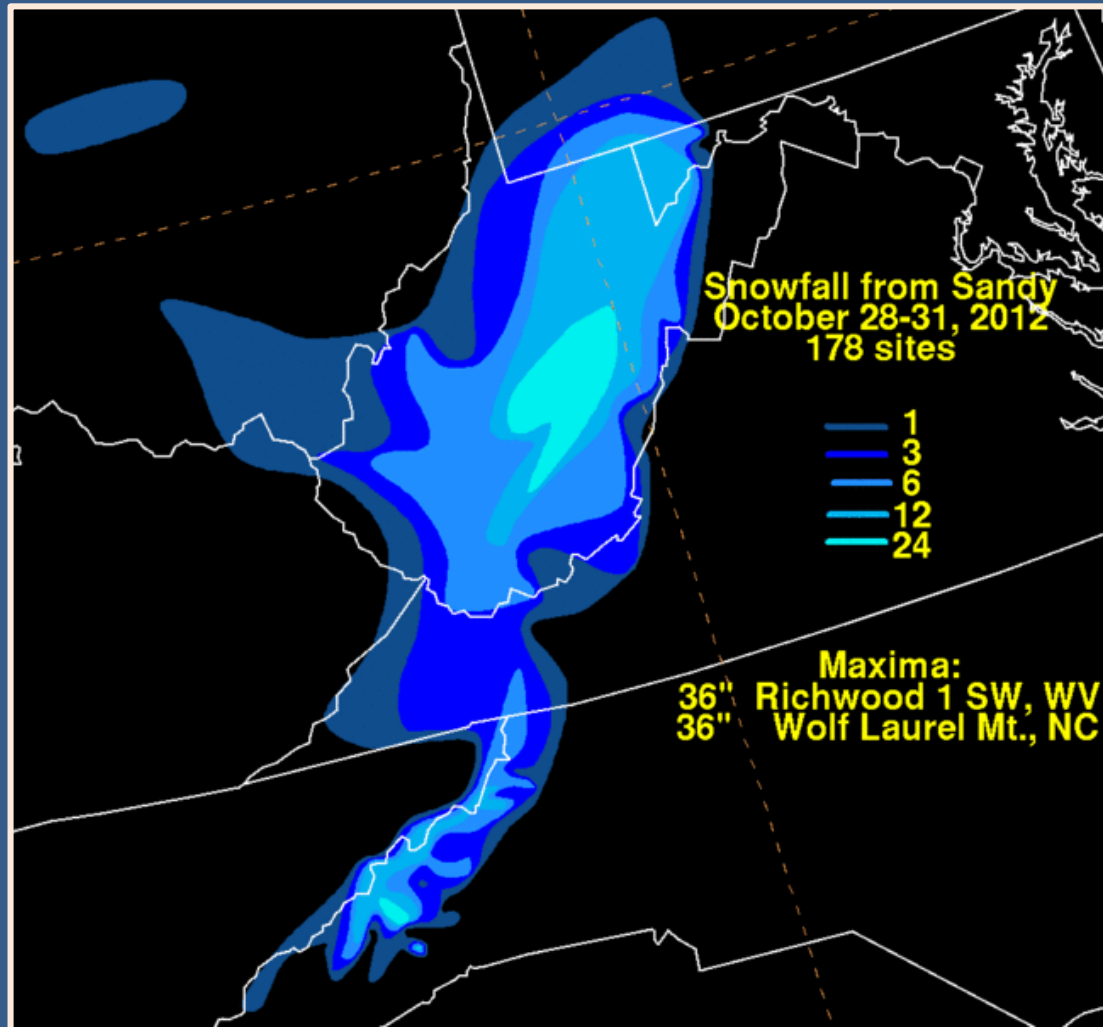
0 to < 2	11 to < 13	23 to < 25
2 to < 3	13 to < 15	25 to < 27
3 to < 5	15 to < 17	27 to < 29
5 to < 7	17 to < 19	29 to < 36
7 to < 9	19 to < 21	
9 to < 11	21 to < 23	

Disclaimer



Historical Data:
 NHC this storm
 NHC all storms
 MDL

Snowfall



Aftermath



Aftermath



Aftermath



Aftermath



Aftermath



Aftermath



Aftermath



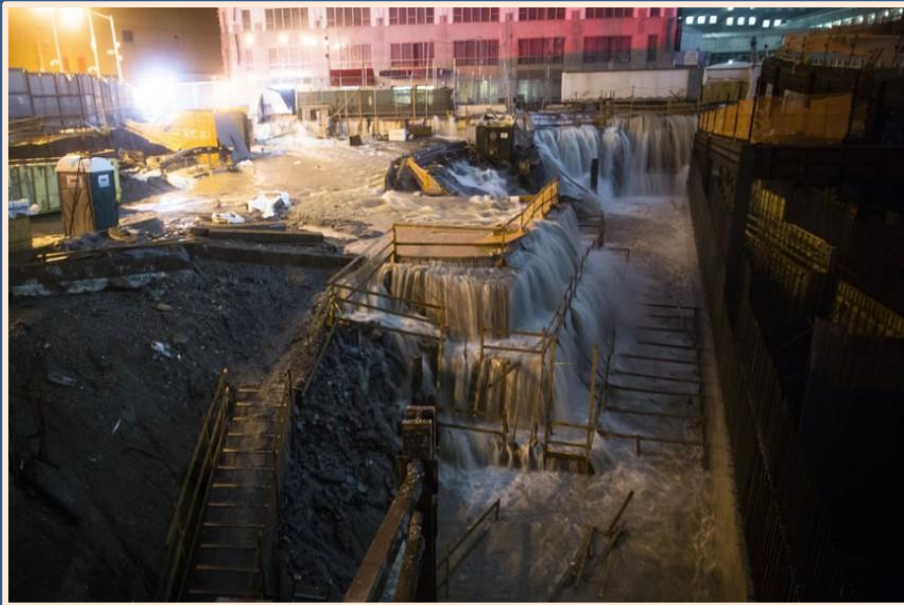
Aftermath



Aftermath



Aftermath



Aftermath



Aftermath



Aftermath

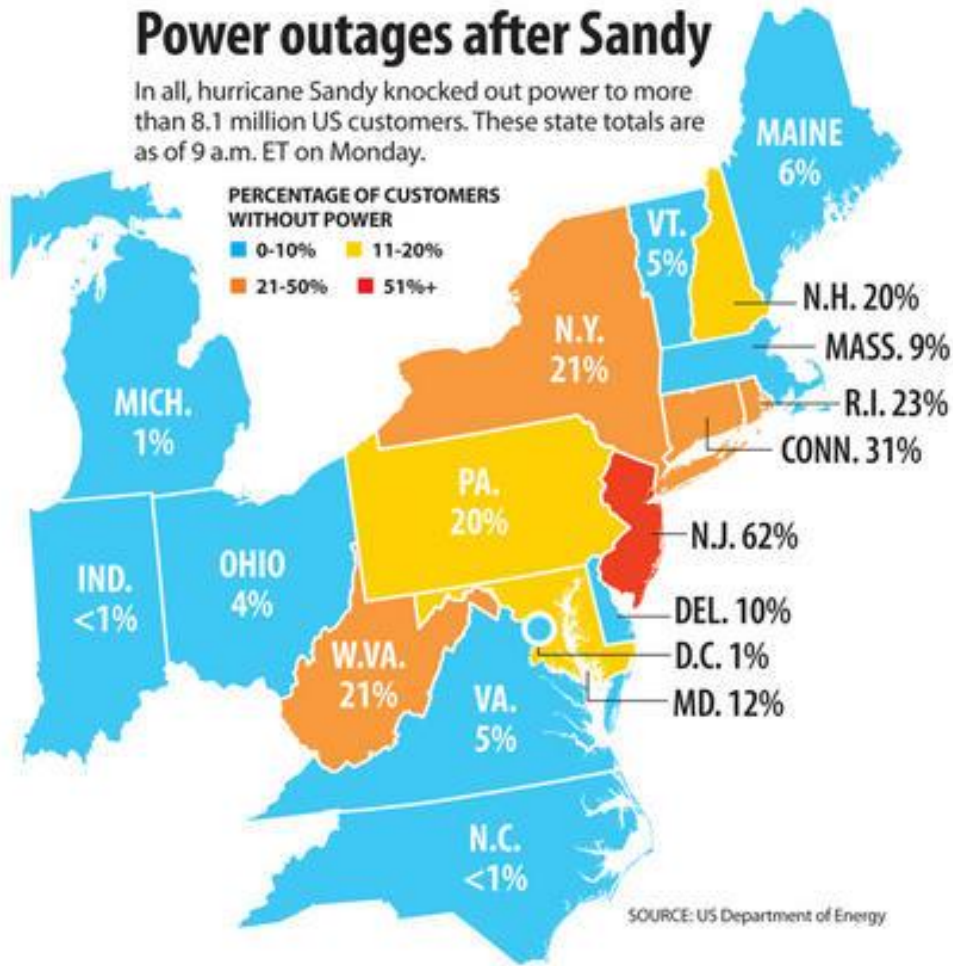
Power Outages



Power Outages

Power outages after Sandy

In all, hurricane Sandy knocked out power to more than 8.1 million US customers. These state totals are as of 9 a.m. ET on Monday.



STATE	CURRENT CUSTOMER OUTAGES
1. New Jersey	2,498,447
2. New York	1,967,874
3. Pennsylvania	1,267,512
4. Connecticut	626,440
5. Maryland	311,020
6. Massachusetts	298,072
7. Ohio	254,207
8. West Virginia	212,183
9. Virginia	182,811
10. New Hampshire	141,992
11. Rhode Island	116,308
12. Maine	90,727
13. Michigan	68,619
14. Delaware	45,137
15. Vermont	17,959
16. Indiana	7,537
17. North Carolina	4,005
18. District of Columbia	3,583

SOURCE: US Department of Energy

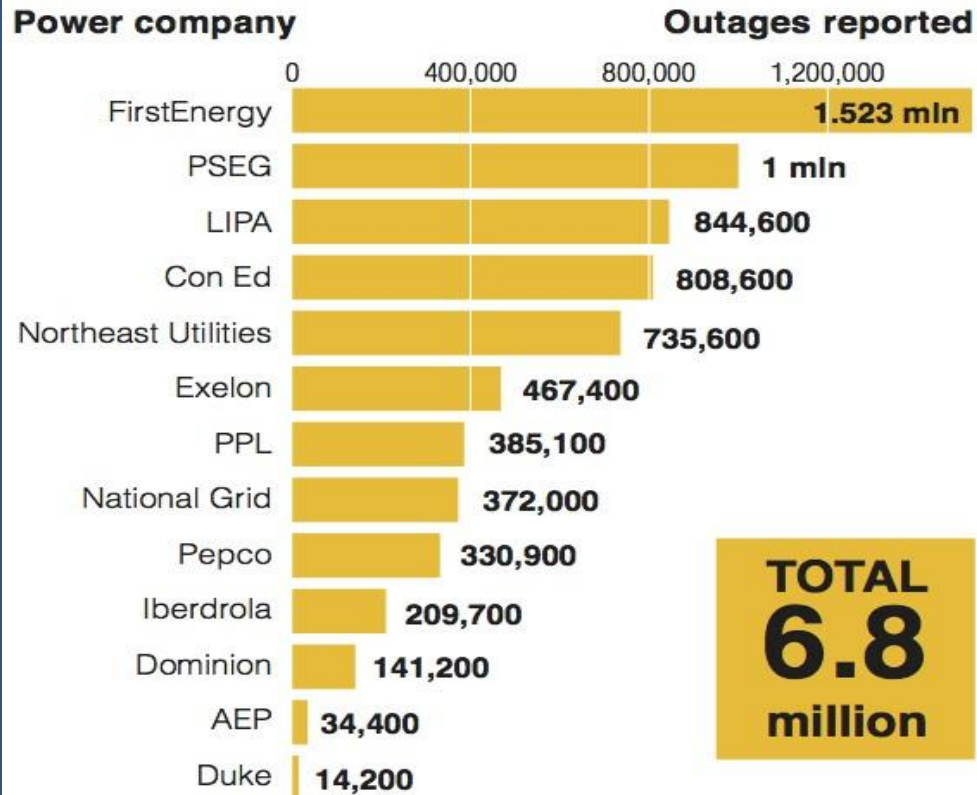
RICH CLABAUGH/STAFF

Power outages as of 29 October 2012

Power Outages

U.S. EAST COAST POWER OUTAGES

Hurricane Sandy has knocked out power to more than 6.8 million homes and businesses



Forecast as of Monday 11pm EDT (0300 GMT, Tuesday)

Power Line Hazards



Power Line Hazards



Power Line Hazards



Con Edison - 14th St.



Expectations vs. Reality

- **What Was Expected?**
- **What Really Happened**
- **Flood Zones: 100-year and 50-year**
- **Range and Extent of Damage**

Range and Extent of Damage

- **Con Ed, LIPA, Equipower Photos to show;**
- **Transformers, Substations, Local transmission, Underground junctioning, structures**

FEMA

- **Their Response**
- **Assistance to Power Companies**

Repair Issues

- **Out-of-state workers**
- **Code Variance**
- **Emergency repairs**
- **Staged repairs**
- **Work quality**
- **Delays**
- **Long-term repairs**

Coverage Issues

- **Limits**
- **Nature and Extent of Damage**
- **Improvements and Betterments**
- **Deductibles**
- **Interpretations**

Improvements and Betterments

Storm Hardening Efforts (photos)

- Cabling
- Barriers

- **RISK IMPROVEMENT**

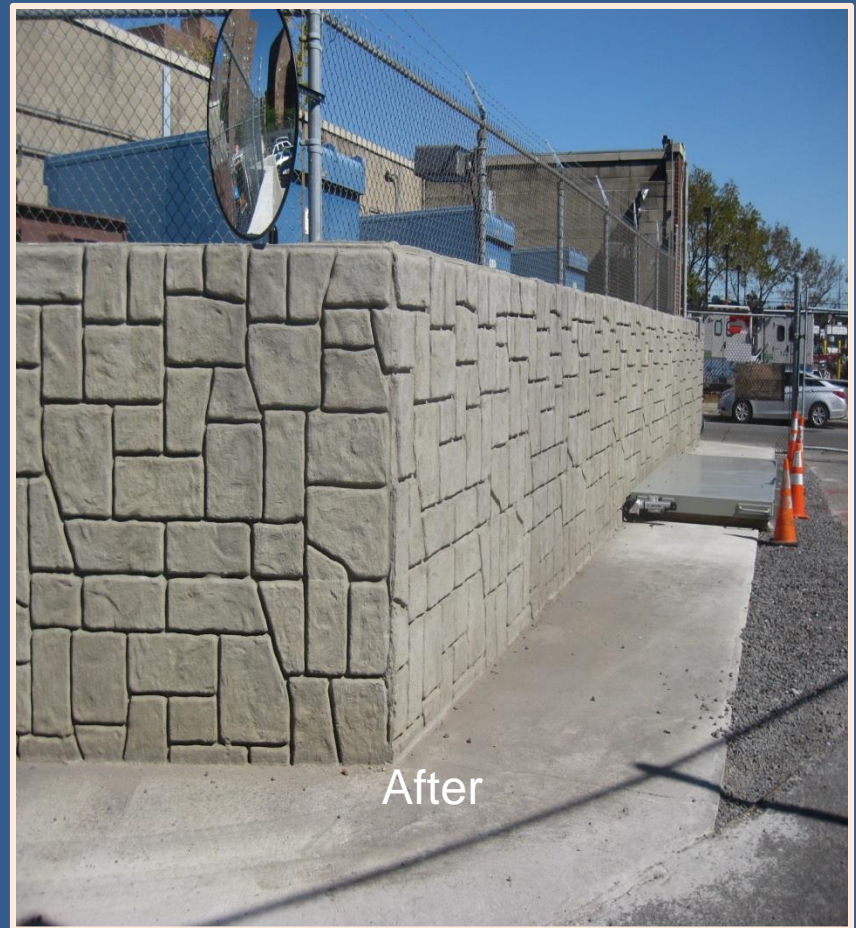
Storm Hardening Photos

59th Street Steam Station



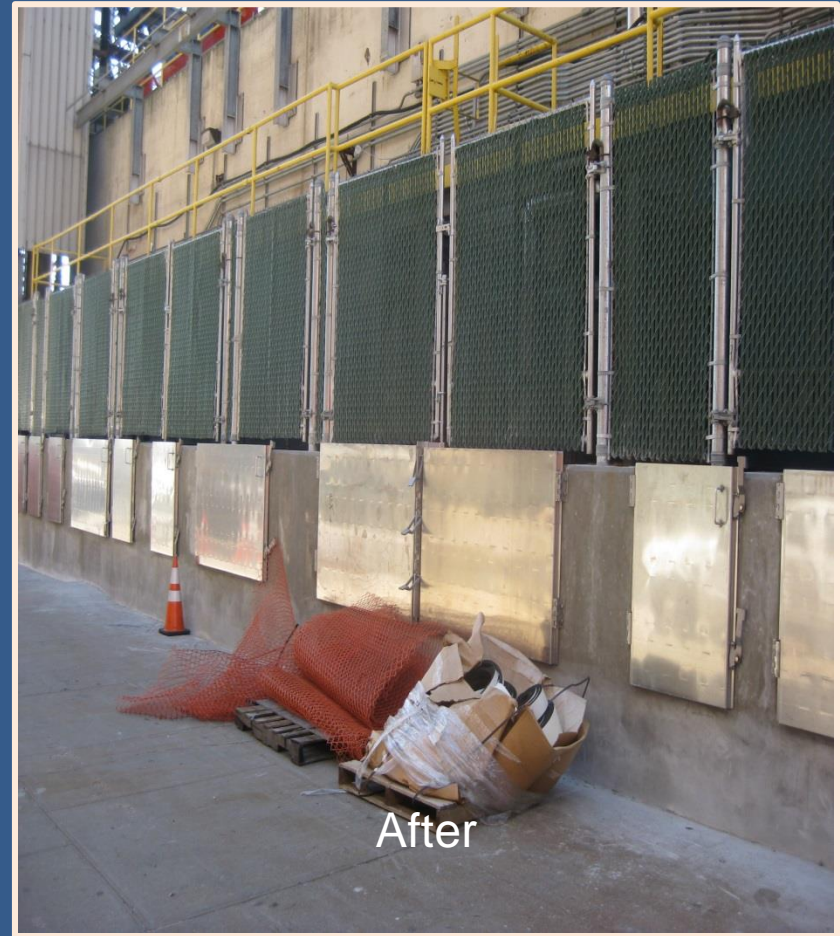
Storm Hardening Photos

16th Street PURS



Storm Hardening Photos

East 13th Street Substation



Storm Hardening Photos

74th Street Steam Station



Storm Hardening Photos



Storm Hardening Photos



Storm Hardening Photos



Storm Hardening Photos



Storm Hardening Photos



Deductibles

- **FEMA Codings**
- **Flood Zones**

Adjustment Issues

- **Expert Resources**
- **Equipment Relocation**
- **Repairs vs. Improvements**
- **Code Upgrades**
- **Vehicle Loss**
- **Specialist Equipment Loss**
- **Extra Expense**
- **Loss Estimation – Advance Payments**
- **Time Frame**

Impact on the Industry

- **FEMA Maps changes**
- **Climate Change Consideration**
- **Policy wording changes**
- **Risk improvement**

Policy Wording Changes

- **Limits**
- **Deductibles**
- **Exclusions**

- **Measurement of Risk Improvements**

