

Greetings from

NEW



JERSEY



NASEO CONFERENCE

Running On Empty

The Story of the Energy Industry
During Hurricane Sandy

DENVER, COLORADO

Petroleum Infrastructure

‘A three legged stool’

Marine transport

Refining and Storage

Pipeline

Experience and Preparation

Historical Presence

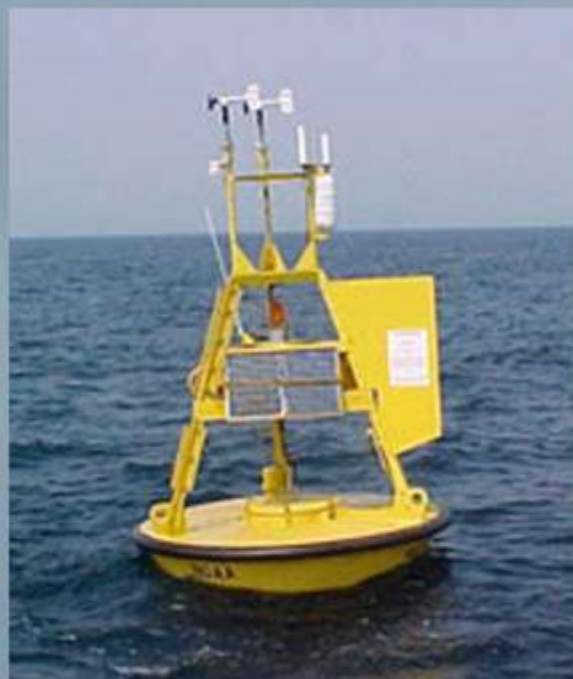
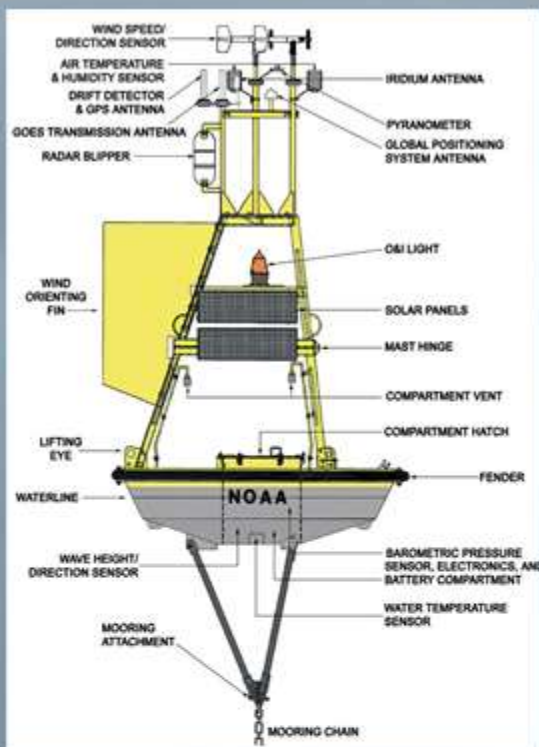
Regional / National Experience through
participation

Gulf Coast Hurricanes

Hurricane Irene

Table top Preparation / October 2011

RECORD SETTING WAVE HEIGHTS AT OFFSHORE BUOYS DURING COASTAL STORM SANDY



Images Courtesy National Data Buoy Center (NDBC)



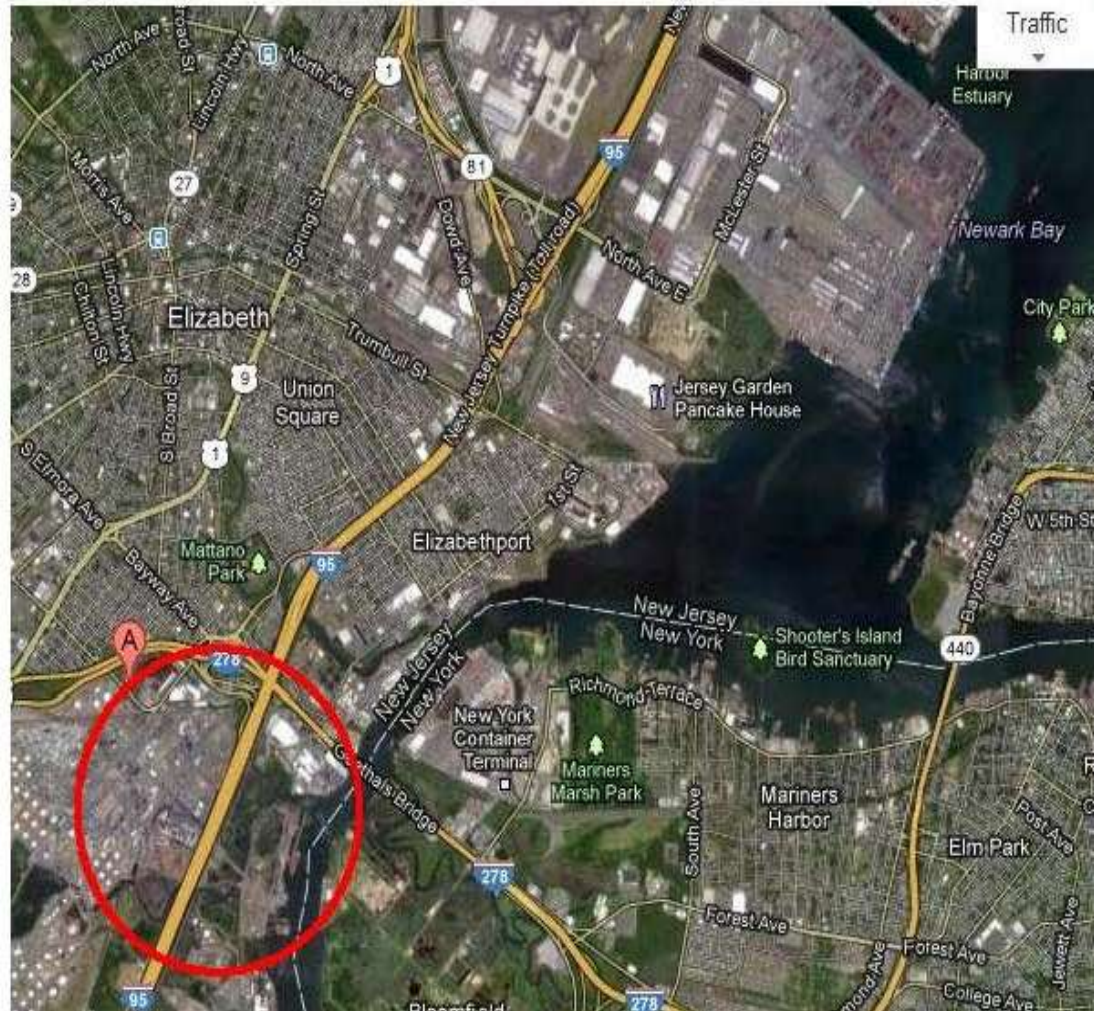
1. **BUOY 44065**; 15 NAUTICAL MILES SE OF BREEZY POINT, NY; RECORDS ONLY DATE BACK TO 2008.
2. **BUOY 44025**; 30 NAUTICAL MILES SOUTH OF ISLIP, NY; RECORDS DATE BACK TO 1975.

- **AT BUOY 44065, A WAVE HEIGHT OF 32.5 FEET REPORTED AT 8:50 PM EDT OCTOBER 29, 2012 EXCEEDED THE PREVIOUS RECORD OF 26 FEET SET AROUND 9 AM EDT AUGUST 28, 2011, ASSOCIATED WITH IRENE.**
- **AT BUOY 44025, A 31 FOOT WAVE HEIGHT WAS RECORDED AT ABOUT 8PM EDT OCTOBER 29, 2012, EXCEEDED THE PREVIOUS RECORD OF 30 FEET SET ON DECEMBER 11, 1992.**
- **ONE CAN INFER FROM THE DATA THAT THESE WAVE HEIGHTS WERE THE LARGEST SINCE RECORD KEEPING BEGAN IN THIS PORTION OF THE WESTERN ATLANTIC IN 1975.**

**** RECORD INFORMATION COURTESY OF US NATIONAL WEATHER SERVICE MOUNT HOLLY NJ**



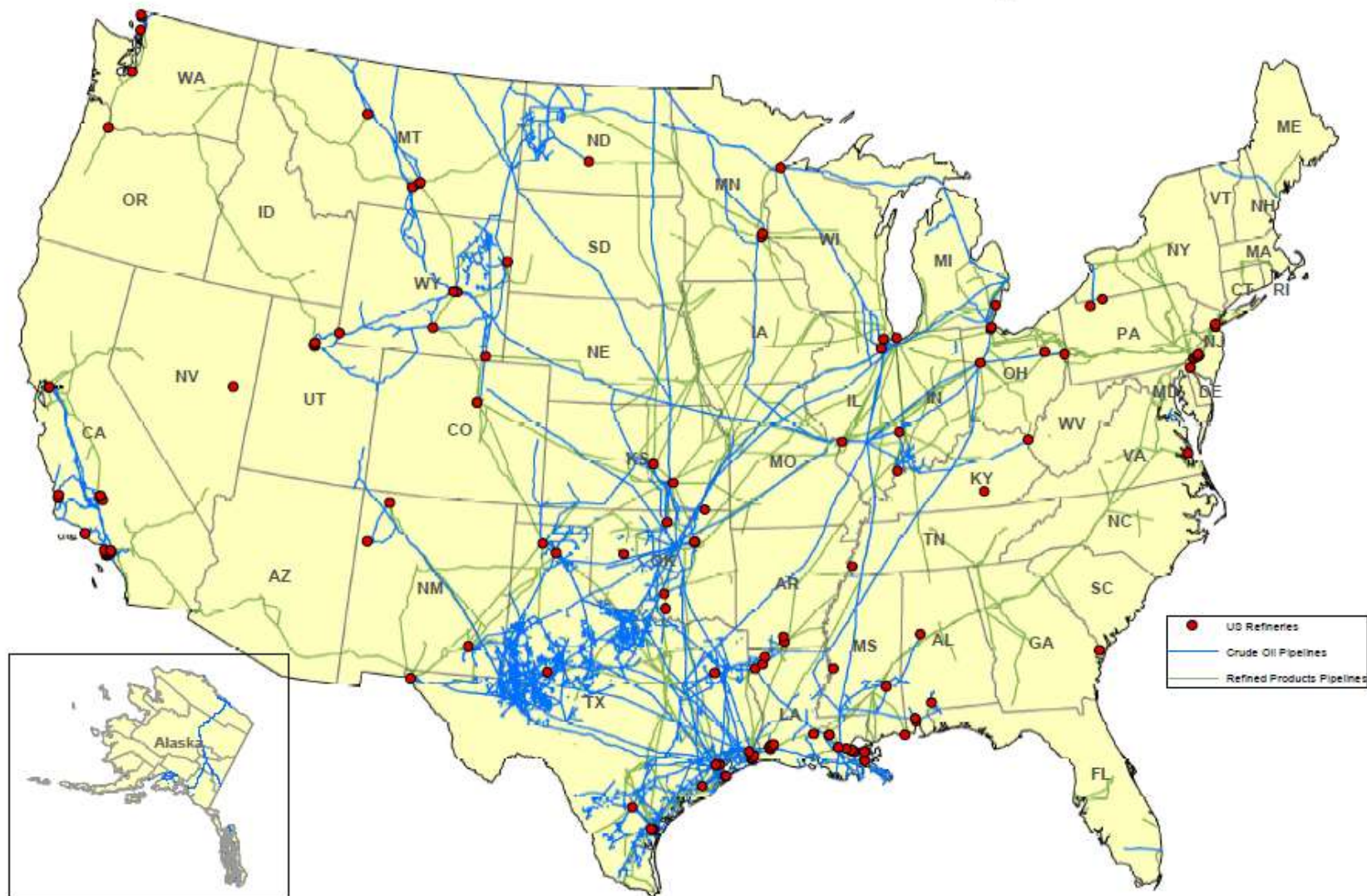
Arthur Kill Overview



Sustained Winds

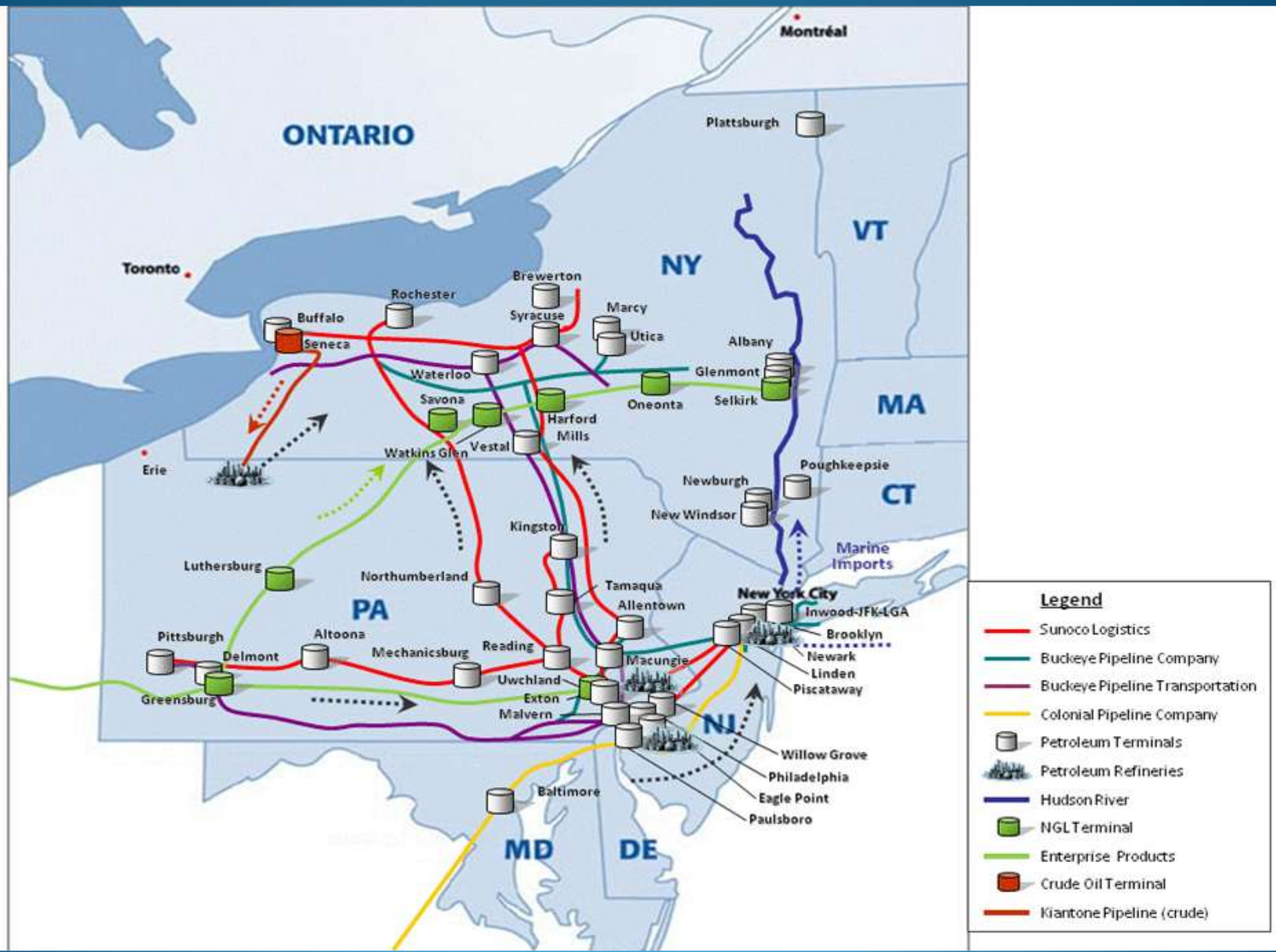


U.S. Refineries Crude Oil and Refined Products Pipelines



Source: Crude Oil, CO₂ and Products Pipelines (REXTAG Strategies Corp and the Alaska Department of Natural Resources, as interpreted by API, 2011) and Refineries (EIA, 2007).

Northeast Fuel Supply



Terminal Storage Water Impact





Marine

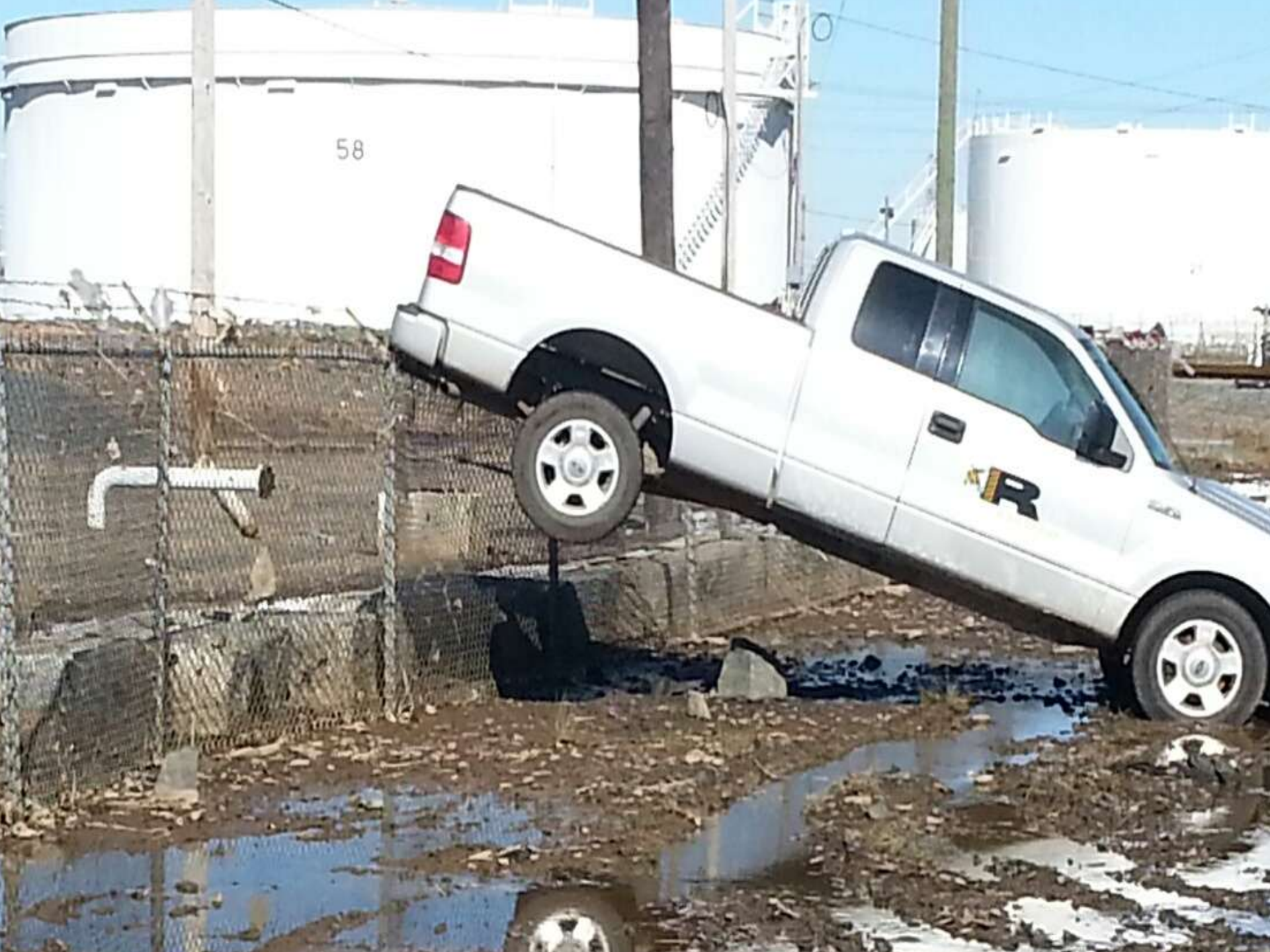
Arthur Kill Closed –

USCG Assessment to Reopen

Vessels / Deliveries at Sea

Marine infrastructure impacted by record surge





Refineries

Phillips 66 Bayway Linden closed -

Damage to units - restart uncertain and
massive storm /surge impact –

6 weeks to restart

Hess Port Reading

Berms and Infrastructure offered protection–

3 weeks to restart



FOR ASSISTANCE AFTER HOURS

PLEASE DIAL ZERO 90 ON THE PHONE BELOW
IF YOU ARE UNABLE TO REACH SOMEONE ON
THE PHONE. BEHIND THE PHONE IS THE PAYPHONE TO
DIAL ONE OF THE FOLLOWING NUMBERS:

CHGO DOCK 862-3332
CHGO TREMULEY 862-4444

COMMUNICATE TO THE PERSON WHO ANSWERS
THE PHONE THAT YOU ARE A DRIVER AND
THAT YOU NEED ASSISTANCE

AND
**FEDERAL REQUIREMENTS
FOR ON-HIGHWAY USE.**



Governor Chris Christie



Odd / Even Rationing



Lisa Jackson

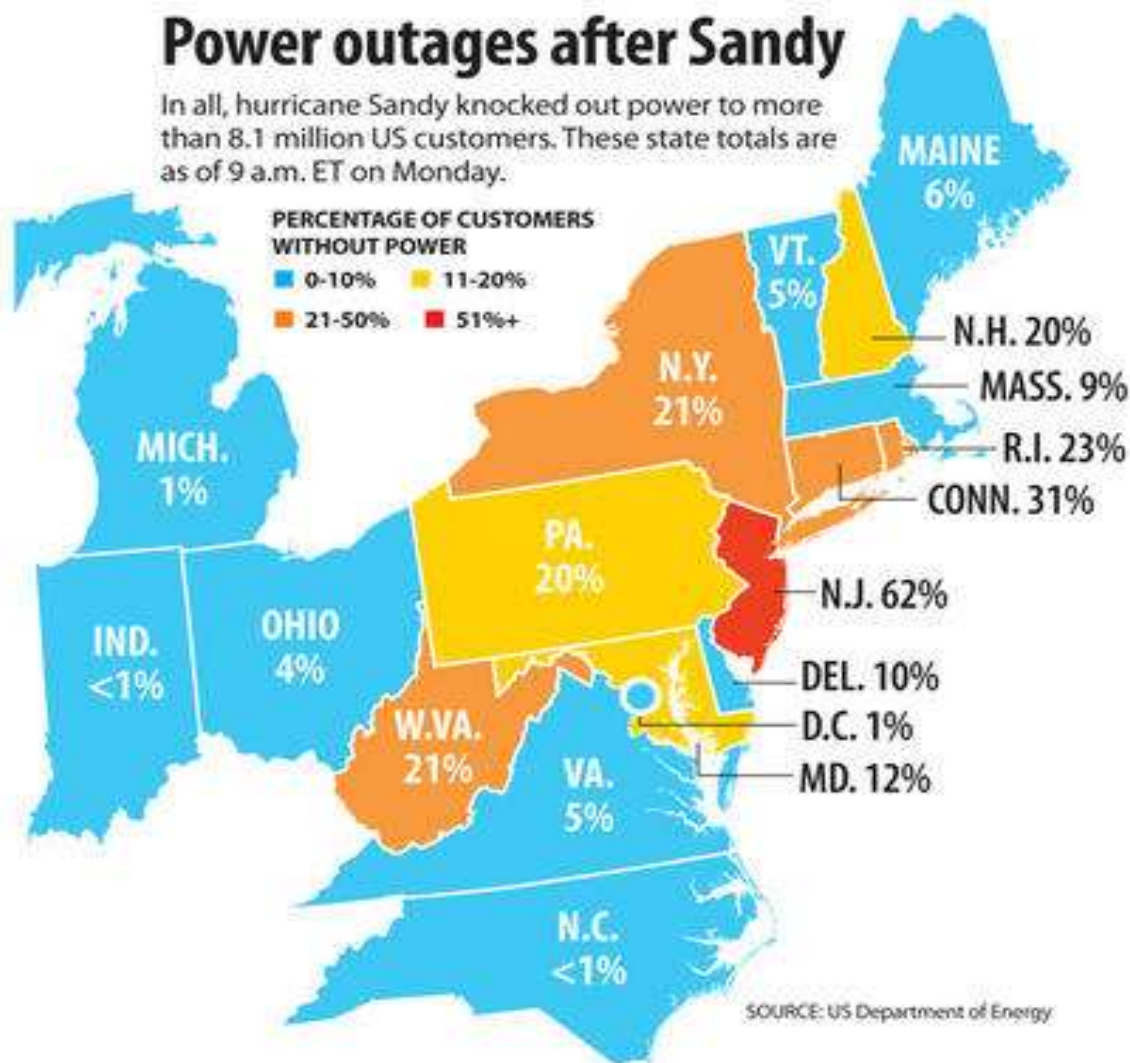
EPA Administrator



Commercial Power Loss

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.



SOURCE: US Department of Energy

RICH CLABAUGH/STAFF

STATE

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

Marketing Impacts

- Distributors – Presence at ROIC
- Motor Truck - Deliveries – routes
- Retailers -
 - Fuel – electric – storm damage – trees – employees safety - generators
- Containers – Delays for refueling

Containers bring challenges



'All emergencies start and end locally'

- Advance review
- Planning
- May not be a natural disaster - high consequence event
- Identify resource response volunteers and assets
- Mutual aid assistance management



Thanks for making this day necessary !!

