

Opportunities to Improve New Jersey's Infrastructure

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Edgewood Properties

Panelists

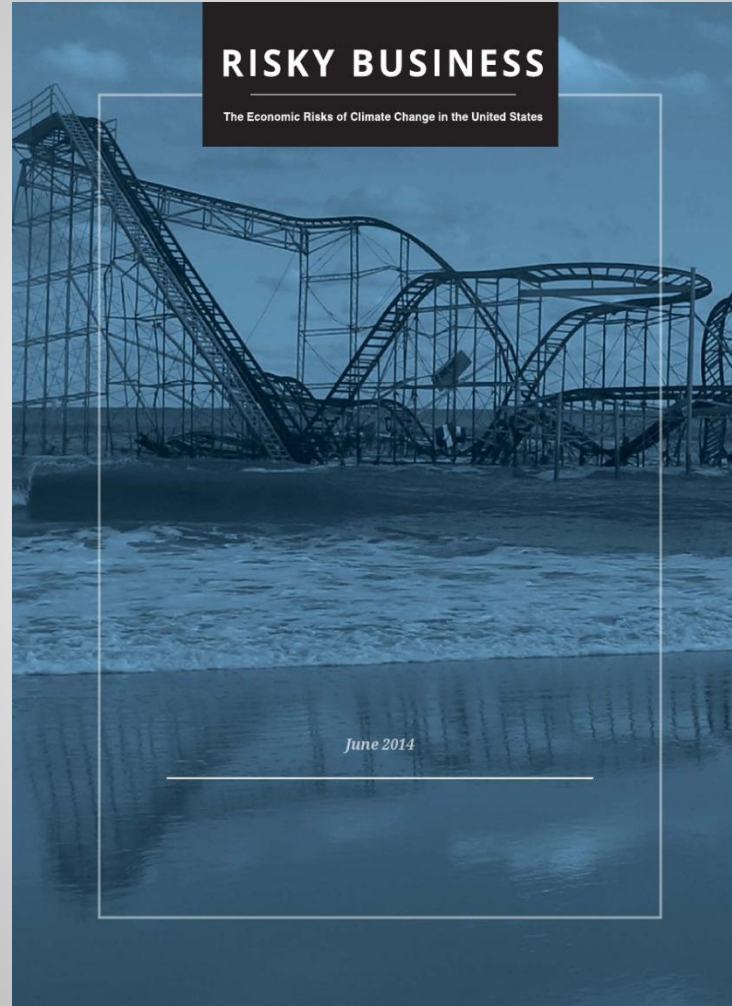
- Rick Thigpen, PSE&G Services Corporation
- Pat Natale, Mott McDonald
- John Miller, NJ Association for Floodplain Management
- Jeff Perlman, North Jersey Transportation Planning Authority
- Jen Senick, Rutgers Center for Green Building

Climate Change Impacts to NJ

- Increases in average temperature
- More frequent and extreme heat waves
- More intense heavy precipitation events and associated flooding
- More frequent short-term droughts
- More frequent and severe coastal flooding due to sea level rise
- More frequent nuisance flooding
- Urgent need for adaptation and future conditions planning



Business



Transportation

- Deterioration of asphalt pavements and rail systems from
- Scouring, erosion and inundation of roadways, bridges and
- Expansion and contracting of bridge infrastructure
- Inundation of and damage to electrical systems servicing
- Damage to traffic and transit signaling systems
- Multiple, extreme event-related impacts



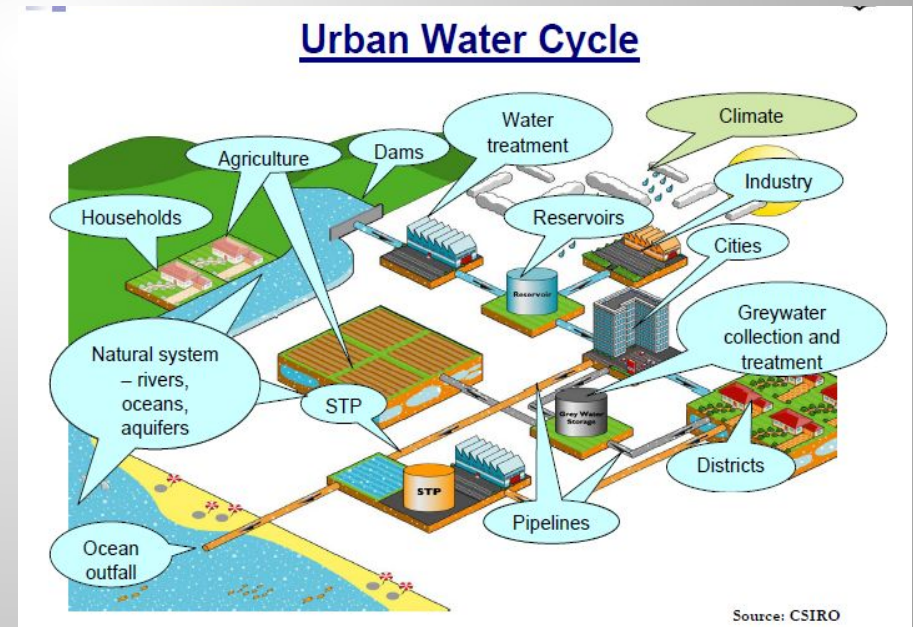
Buildings

- Inundation
- Direct wave impacts
- Foundation failure from erosion and scour
- Battering
- Inadequate land use management (zoning use, density, setbacks)

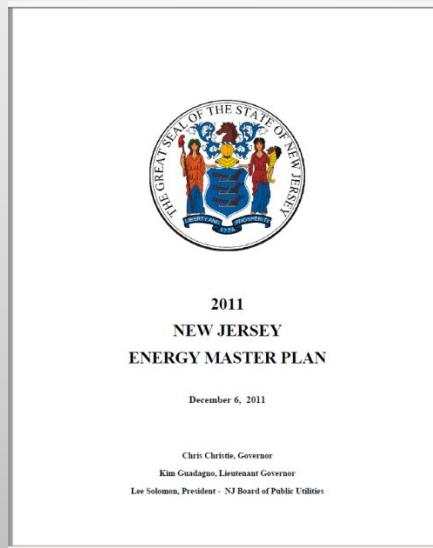


Water, Wastewater, Stormwater

- Saline intrusion
- Greater variability in water supply and water levels
- Stress to aging infrastructure
- Storm and flood impacts to water infrastructure
- Combined sewer discharges
- Contamination from flooding
- Reservoir management challenges
- Stormwater backflow and flooding



Energy



Policy Opportunities

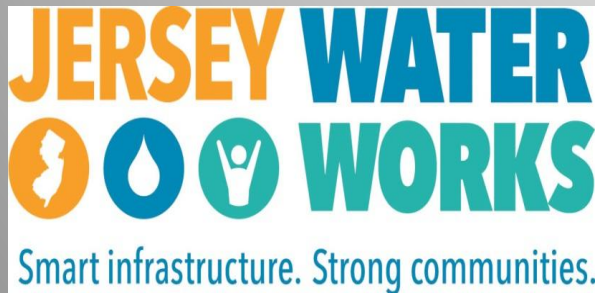
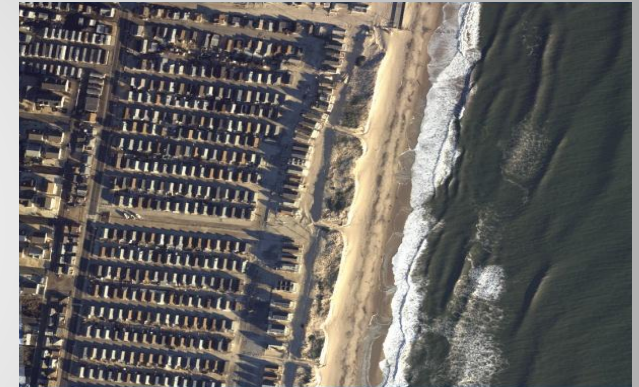
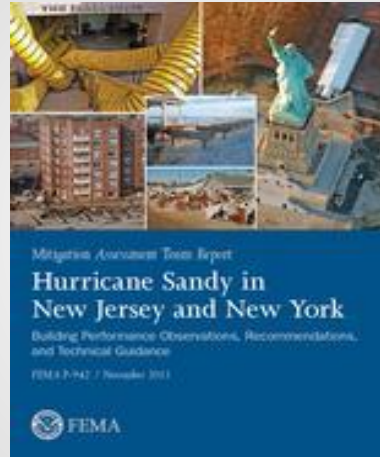


TABLE 1
Federal spending on disaster relief and recovery, 2011–2013

Fiscal year appropriations or supplemental bill spending	Estimated disaster-relief spending (in millions of \$)
FY 2011	\$21,376
FY 2012	\$32,412
FY 2012 supplemental appropriations	\$8,174
FY 2013	\$14,321
FY 2013 Superstorm Sandy supplemental appropriations	\$60,210
Total	\$136,493

Notes: The Treasury Department has two disaster-related programs, but funding levels are unavailable. Figures are rounded.
 Sources: Annual department budget reports; appropriations and supplemental appropriations law. For more detail, see the attached spreadsheet.