# The Connecticut Institute for Resilience and Climate Adaptation: A Review

#### Northeast Monthly Climate Update: Coastal Management May 26, 2016







## Agenda

- Need for Climate Adaptation in CT
- CIRCA Mission and Priority Areas
- Funding and Research
- The Big Picture

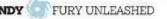






Record flooding, March 2010 Tropical Storm Irene, August 24, 2011 October Snowstorm, October 30, 2011 Superstorm Sandy, August 2012





OUTAGES: More than 600,000 power failures in Connecticut as of Monday night. EVACUATIONS: National Guard called out, helping in Greenwich and Darien FATALITIES: One person killed, two hurt in Mansfield when a tree fell on them. ECONOMY: \$10 hillion to \$20 billion expected in damage to the U.S. economy.

#### SANDY STRIKES







#### **CIRCA** Mission

- Mission Increase the resilience and sustainability of vulnerable communities along Connecticut's coast and inland waterways to the growing impacts of climate change on the natural, built, and human environment.
- CIRCA Priority Research Areas:
  - Living Shorelines
  - Critical Infrastructure
  - Coastal Flooding
  - Inland Flooding
  - Policy and Planning
  - Sea Level Rise



#### UCONN

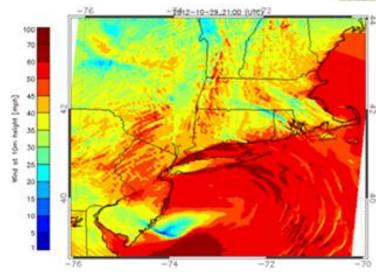




#### **Actionable Science**

- Funding:
  - Matching Funds Program
  - Municipal Resilience Grant Program
  - Research Funding
- CIRCA Research











### Matching Funds Program

- http://circa.uconn.edu/funds/
- Examples of past recipients:
  - Dr. Zhang & Team: Resilient Coastal Communities under Wind and Flood Hazards
  - Dr. Swallow & Team: Public Support for Adaptation to Sea Level Rise





#### Municipal Resilience Grant Program

- http://circa.uconn.edu/funds-muni/
- Examples of past recipients:
  - Town of Waterford: Waterford Municipal Infrastructure Resilience
    Project
  - Northwest Hills Council of Governments: Building Municipal Resilience and Climate Adaptation through Low Impact Development
  - City of New Haven: New Haven Industrial Toolbox





#### **Research Funding**

- Real-time Flood Prediction and Vulnerability Analysis of Connecticut's Inland River Network
- Jarvis Creek Flooding Project



Photo Credit: W. Horne







#### **CIRCA** Research

- Sea Level Rise Projections
- Simulations of Riverine/Coastal Interaction during Storms and Impact on Municipal Infrastructure
- Develop Methods/Tools for Infrastructure Vulnerability Assessments
- ID Policy/Financing Options for Municipalities
- Living Shorelines
- Other

### UCONN





#### Adaptation and Resilience in CT

- State Agencies Fostering Resilience Council (SAFR)
- National Disaster Resilience Competition
- Partner Institutions and Organizations with Climate Resilience Goals







Connect with CIRCA:

Jessica LeClair jessica.leclair@uconn.edu 860-405-9214

Email: <u>circa@uconn.edu</u> Twitter: @UConnCIRCA Web: circa.uconn.edu







