

#### **CLIMATE CHANGE – RISKS, REWARDS, RESILIENCY**

#### REGULATORY PERSPECTIVE AWMA October 27, 2016

Cynthia Greene, Manager Energy and Climate Unit EPA Region 1

## **Topics**

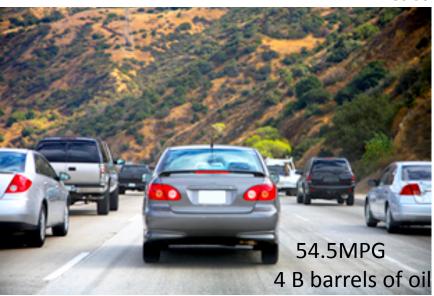
**MITIGATION** 

**EXECUTIVE ORDER 13514** 

**REGIONAL CLIMATE ADAPTATION PLANS** 

**TOOLS AND RESOURCES** 

# MITIGATION - EPA REGULATORY AND VOLUNTARY INITIATIVES









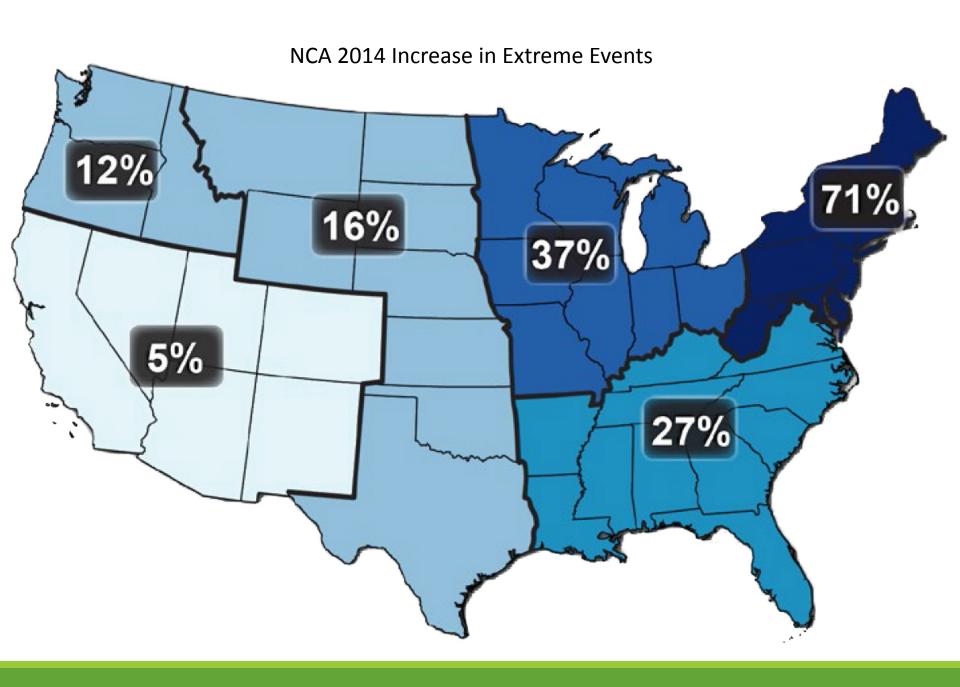
# Executive Order 13514 Federal Leadership in Environment, Energy and Economic

Regional Climate Adaptation Plan (RCAP)

- Existing and Forecasted Conditions
  - Heat, extreme precipitation, sea level rise, flooding, drought, storm surge, ocean acidification
- Vulnerability Assessments by Program
  - Air
  - Water
  - Waste
  - Pesticides
  - Facilities
- Priority Actions

## Peer Reviewed Science

- International Panel on Climate Change (IPCC) Report 5
- >2014 National Climate Assessment
- > EPA National Indicators Report (updated in 2016)



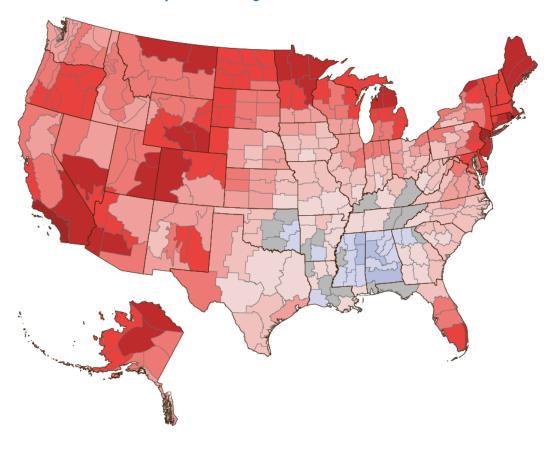


#### U.S. and Global Temperature

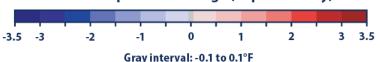
This indicator describes trends in average surface temperature for the United States and the world.

The North, the West, and Alaska have seen temperatures increase the most, while some parts of the Southeast have experienced little change. Not all of these regional trends are statistically significant, however.

Rate of Temperature Change in the United States, 1901–2015







# PRIORITY ACTIONS IN FINANCIAL MECHANISMS

- •Wetlands grant applicants must address impact of climate change.
- •Healthy Communities grants require applicants to consider climate change impact risks.
- •Brownfields national grant requires the consideration of climate conditions and the Region created adaptation and a checklist of considerations for cleanup and reuse.
- •The SRF program's Clean Water Infrastructure Sustainability Policy has an annual review checklist that asks each facility questions on adaptation and resiliency.
- •FY '17 applicants to the SRF program will have to include a 500 year flood assessment for infrastructure funding.

# OTHER PRIORITY ACTIONS AND ACCOMPLISHMENTS

- •Each State Performance Partnership Agreement has a priority and commitment to work on integrating climate impacts into their programs.
- •GIS mapping for vulnerability assessment of our regulated sites
- •Creation of sentinel monitoring network to determine change in the northeast ocean and coastal ecosystem
- Marsh migration modeling
- •Water and wastewater emergency preparedness trainings.
- •Federal collaboration to protect the Passamaquoddy POTW and homes threatened by an eroding shoreline

### TOOLS AND RESOURCES

- ► EPA Tools Adaptation Resource Center (ARC-X) <a href="https://www.epa.gov/arc-x">https://www.epa.gov/arc-x</a>
- ➤ Climate Resilience Toolkit <a href="https://toolkit.climate.gov/">https://toolkit.climate.gov/</a>
- Smart Growth Assistance <a href="https://www.epa.gov/smartgrowth/building-blocks-sustainable-communities#2016rfli">https://www.epa.gov/smartgrowth/building-blocks-sustainable-communities#2016rfli</a>

### **NEW ENGLAND TOOL**

#### **RAINE** database

- Local Examples of Energy & Resilience Projects in New Hampshire
- Updated 3x per year
- Only projects with publicly available reports.

