Governor Patrick's Plan for Coordinated Climate Preparedness

Elizabeth Hanson

Policy Advisor for Climate Preparedness and Environmental Affairs

Executive Office of Energy and Environmental Affairs





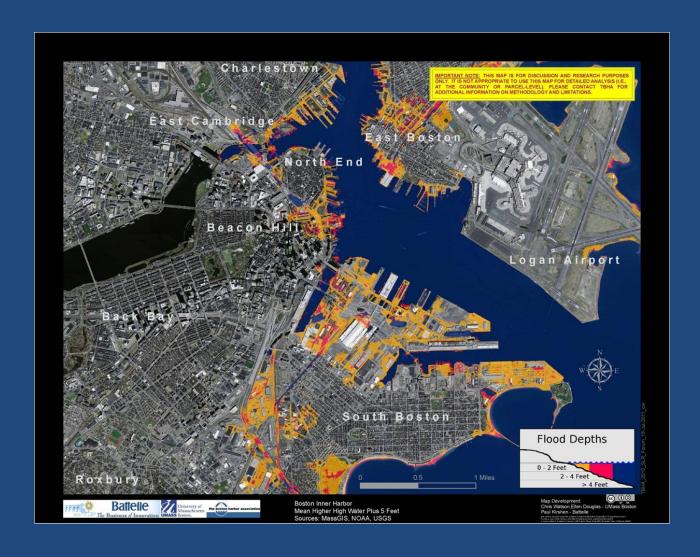
Recent Climate Analysis

- "Human influence on the climate system is clear. This is evident in most regions of the globe, a new assessment by the Intergovernmental Panel on Climate Change (IPCC) concludes." –IPCC
- "Heat waves, heavy downpours, and sea level rise pose growing challenges to many aspects of life in the Northeast. Infrastructure, agriculture, fisheries, and ecosystems will be increasingly compromised. Many states and cities are beginning to incorporate climate change into their planning." –National Climate Assessment

Key Impacts in Massachusetts by 2100

- Temperature Increases
 - 5-10 degree F increase in average temperature
 - Days of greater than 90 degrees expected to rise from 5-20 to 30-60 annually.
 - Days over 100 rise from 2 to 28
- Precipitation Changes: amount, frequency and timing - more droughts and floods
- Sea Level Rise between 1 and 6 ft and Flooding
- Longer and more intense extreme weather events

5 feet of Sea Level Rise or Surge



7.5 feet of Sea Level Rise or Surge



Mother's Day Storm 2006



Ice Storm 2008



Route 2, Hurricane Irene



Plum Island Winter 2013



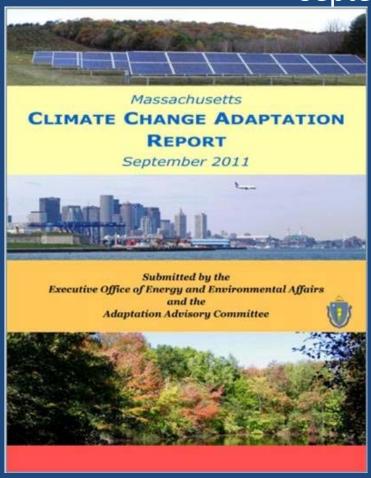
Massachusetts Global Warming Solutions Act

SECTION 9. Notwithstanding any general or special law to the contrary, the secretary shall convene an advisory committee to analyze strategies for adapting to the predicted impacts of climate change in the Commonwealth. The advisory committee shall be chaired by the secretary, or his designee, and comprised of representatives with expertise in the following areas: transportation and built infrastructure; commercial, industrial and manufacturing activities; low income consumers; energy generation and distribution; land conservation; water supply and quality; recreation; ecosystems dynamics; coastal zone and oceans; rivers and wetlands; and local government.

Executive Office of Energy and Environmental Affairs

Massachusetts Climate Change Adaptation Report

September 2011



- Climate Change Impacts
- Natural Resources and Habitat
- Key Infrastructure
- Human Health and Welfare
- Local Economy and Government
- Coastal Zone and Oceans
- Cross-Cutting Strategies

Climate Preparedness Named a Top EEA Priority

"We need to do more to address the extreme threats from climate change...We must properly assess the risks and vulnerabilities, plan for them and ensure our emergency services have the ability to keep our residents safe. And we must take action to protect our natural habitats to maintain healthy communities."

> -Governor Deval Patrick July 24th, 2013



(Photo: Eric Haynes/Governor's Office)

Executive Office of Energy and Environmental Affairs

Coordination Across Administration and with Stakeholders



(Photo: Eric Haynes / Governor's Office)

Governor Patrick Announces Coordinated Climate Preparedness



(Photo: Taylor Nealand /Governor's Office)

Climate Preparedness

"The Patrick Administration will expand its climate change efforts through a \$52 million cross-Secretariat investment using operating, capital and trust resources. Of the \$52 million investment, the Governor's FY15 budget includes \$2 million for the Executive Office of Energy and Environment Affairs to collaborate with Secretariats in determining the investments that will have the most effective, immediate and long-lasting impact on our climate change preparedness. The preparedness strategies that will benefit most from enhanced collaboration relate directly to the Commonwealth's infrastructure, specifically transportation, energy, our communities and public health."

Transportation

- •Efforts are already underway to assess the vulnerability of our transportation assets, including the Central Artery, MBTA and Massport
- •Secretary Davey has convened a team of senior managers from each division at MassDOT to serve on a task force at his Office of Transportation Planning
- •The Patrick Administration is committed to conducting a system-wide transportation assessment at MassDOT and DCR



Executive Office of Energy and Environmental Affairs

Energy

•EEA is partnering with NEPGA to prepare and distribute a survey identifying resiliency efforts taken or planned at our generation facilities and soliciting feedback on recommended steps

 DPU is prioritizing climate preparedness through grid modernization

•DOER has released a RFR for a \$40M Municipal Energy Resilience grant that prioritizes clean energy resources



Built Environment



Executive Office of Energy and Environmental Affairs

Public Health

- DPH has been partnering with U.S. Center for Disease Control and Prevention through their Climate Ready States and Cities Initiative for the past three years and has identified additional support needed by our LBOH
- Following the increases in vibrio parahaemolyticus in 2012 and 2103, EEA and DPH have been partnering to conduct analysis on monitoring vector-borne disease in oysters and assisting the industry
- DEP will be working to help communities identify and address vulnerable elements of their critical water infrastructure

Additional Efforts

- Investing Wisely
 - FY15 Capital Investment Plans
 - FY15 Operating Budget
- Additional Data
 - State Climatologist
- Transition Planning



Photo: Eugena Ossi / Governor's Office

Questions?

Budget Documents

http://www.mass.gov/bb/h1/fy15h1/exec 15/hbudbrief6.htm
http://www.mass.gov/bb/h1/fy15h1/os 15/h6.htm
http://www.mass.gov/bb/gaa/fy2015/app 15/act 15/h2000101.htm
http://www.mass.gov/bb/gaa/fy2015/app 15/act 15/h20001207.htm

- MA Adaptation Report
 http://www.mass.gov/environment/cca
- Global Warming Solutions Act
 http://www.malegislature.gov/Laws/SessionLaws/Acts/2008/Chapter298
- Email: elizabeth.hanson@state.ma.us