

CLIMATE CHANGE AND THE ECONOMY

NATIONAL

By 2090, Climate Change is expected to cost over \$225 billion/year in the US and most likely much higher. (2017 Climate Change Impacts and Risk Analysis Report, EPA)

US economy will shrink by as much as 10% by the end of the century due to climate change.



Change in Average / Extreme Temperature

Impacts

- Increased electrical costs for cooling
- Reduction in maple syrup production
- Less Snow can mean less winter tourism (impact on Ski Butternut)
- Loss of native trees (sugar maple) can reduce fall foliage tourism
- Current crops may not be successful

Actions

- Establish cooling centers
- Develop alternative uses for forested land
- Diversify economy
- Enhance natural, climate control assets such as tree cover and vegetation
- Install energy efficient technologies and building systems to reduce energy use
- Educate employers about OSHA requirements for employee protections in times of high heat
- Diversify crops and agricultural economy
- Consider using renewable energy, performing energy efficiency retrofits, and conserving energy in business processes and in employee commuting
- Assess capacity to meet the needs of employees who are vulnerable to health impacts from flooding, extreme heat, or poor air quality

BERKSHIRE COUNTY

Berkshire County GDP— \$7.1 billion ~\$19.5 Million/day

GREAT BARRINGTON

\$1.4 billion in building value



Severe Winter Events (Ice Storm, Blizzard, Nor-easter)

Impacts

- Higher impact on infrastructure and businesses when storms do hit
- More ice storms may require more sand/salt
- Disruption to electrical grid

Actions

- Bury electrical lines



Flooding (including Ice Jam, Beaver Activity)

Impacts

- Increased flooding leads to increased road maintenance
- \$168.5 million in potential floodplain loss. (building plus inventory)
 - 42.1% of industrial buildings (\$5.3 million)
 - 5.8% of Commercial buildings (\$70 million)

Actions

- Preemptively plan for Culvert Replacement—\$400,000—\$1,000,000 /culvert
- Proactively work with land owners to address flooding concerns at their properties.
- Avoid siting new business facilities in flood prone areas
- Ensure remote access and teleworking options are available for employees during extreme weather, flooding and other storm events
- Set up emergency communication notification systems so employees know of office closures or evacuations
- Consider improvements to the structural stability, water drainage, and weather-proofing of critical infrastructure and other economically vital sites as part of capital improvement projects.
- Ensure businesses in potential flood zones are flood-proofed, for example by elevating electrical and HVAC systems above ground level
- Improve storm water management at business facilities and conserve water via grey water systems
- Identify alternative materials and inventory suppliers to avoid delivery interruptions due to extreme weather or other events
- Investigate alternate transportation routes and communication systems for suppliers, customers, and workers to use during emergencies

Dam Failure

Impacts

- Rising Pond Dam—\$37.5 Million in building value in inundation area below dam

Actions

- Regularly inspect and repair dam. Ensure it is capable of handling larger storms.

Urban & Wildfire

Impacts

- \$877 Million in building values within forested areas

Actions

- Develop forest management plans for areas of concern

Landslide /Erosion

Impacts

- \$18.4 Million building value within Unstable or Moderately Unstable areas
- Infrastructure in unstable areas—loss of power, water, sewer, access

Actions

- Stabilize banks around buildings and infrastructure at risk

