

MAJOR IMPACTS BY 2100 FROM CLIMATE CHANGE ON METROPOLITAN BOSTON

- During the 21st century, sea level along metropolitan Boston's coastline could rise at least 24 inches (0.61 meters)
- Higher sea levels of just 12 inches or more could give a typical 10-year storm the intensity of the present 100-year storm; similarly, a 100-year storm would hit with the intensity of the present 500-year storm
- Property damage from coastal flooding, plus the cost of emergency services, could total \$94 billion during this century
- Homeowners in metropolitan Boston's 100- and 500-year floodplain could sustain flood damage averaging between \$7,000 and \$18,000 per home
- Boston could face at least 30 days of temperatures above 90°F, more than double the current number. Mortality rates tend to rise in Boston when temperatures exceed 90° F.
- By 2030, the average number of days in July requiring air conditioning could increase by over 24% with a corresponding rise in energy use.
- Global warming will reduce water quality in rivers and streams making parts of them uninhabitable for fish and aquatic plants.
- During and immediately after extreme weather events, motorists could spend an estimated 80% more hours on the road due to traffic delays; likewise, 82% more trips could be cancelled because of road flooding.
- River flooding related to global warming is expected to impact twice as many properties and double the overall cost of damage during this century.
- Water systems relying totally upon local supplies may need to draw on the Massachusetts Water Resources Authority system to supplement their supplies to maintain acceptable local water service affected by climate and demographic changes.