



NATIONAL CLIMATE ASSESSMENT: THE NORTHEAST

The National Climate Assessment is the most comprehensive report on climate change impacts in the United States. Here are a few things we learned from the assessment about impacts in the Northeast region: Pennsylvania, New York, Vermont, New Hampshire, Maine, Massachusetts, Delaware, Rhode Island, Connecticut, Maryland, New Jersey, West Virginia, and the District of Columbia.

Storms

- Climate change is happening now, and is primarily caused by carbon pollution from fossil fuels like coal, oil, and gas. How much the climate changes in the future is up to us.
- The Northeast, home to 64 million people and some of America's largest cities, is increasingly vulnerable as sea levels rise and coastal storms become more intense.
- The amount of very heavy rain and snow in the Northeast has increased about 71 percent since 1958. The heavy rainstorms are damaging crops, homes, and roads.
- Atlantic hurricanes are expected to intensify as carbon pollution increases. In the last two years, Hurricane Irene and Superstorm Sandy caused 180 American casualties and upwards of \$75 billion in damages — mostly in the Northeast.

Sea Level Rise

- Sea level rise has already increased coastal flooding in the Northeast. Global sea levels could rise between 1 and 4 feet by 2100.
- Sea level rise makes hurricane-driven storm surge more dangerous. During Superstorm Sandy, nearly 14 feet of surge flooded all three New York City-area airports and much of Manhattan's subway system.
- Two feet of sea level rise could flood nearly a third of Maryland's port facilities — including the Port of Baltimore, which generates tens of thousands of jobs.

Heat

- If carbon emissions continue to increase, regional temperatures could be up to 10 degrees Fahrenheit higher by the 2080s — a dramatic change likely to bring harmful and unforeseen consequences.
- More frequent and severe heat waves will increase the number of "bad air" days. Asthma-related emergency room visits are likely to go up because of increased ground-level ozone, or smog.
- The early arrival of spring weather tricks some plants into blooming early, making them vulnerable to late-season cold snaps. That means frost and freeze damage to crops is actually increasing as winters get warmer.