

CLIMATE CHANGE IS DANGEROUS FOR NEW HAMPSHIRE'S POPULATION, AGRICULTURE, INFRASTRUCTURE, AND WILDLIFE

EXTREME HEAT, RISING SEA LEVELS, AND INCREASED PRECIPITATION HURT NEW HAMPSHIRE'S AGRICULTURE AND INFRASTRUCTURE

For New Hampshire, Climate Change Means Warmer Temperatures, Rising Sea Levels, More Frequent And Heavier Precipitation, And Vector-Borne Diseases. Over the past five decades, average temperatures in New Hampshire have risen by more than 1.5 degrees. If carbon emissions continue to increase, the northeast could be 10 degrees warmer by 2080. This extreme heat disproportionately affects vulnerable populations such as young children, the elderly, and those with preexisting health conditions like asthma. Much of the northeast's population lives in cities with the so-called "heat island effect" – a high concentration of concrete combined with a lack of natural cooling system – which can raise temperatures by as much as 22 degrees. In a shift from historical norms, New Hampshire is seeing increasingly heavy rainfalls. Since 1900, sea levels in the northeast rose by one and a half times the global average. With rising sea levels, more New Hampshire residents will find themselves living in areas at risk of being affected by intense flooding; often, these risks can include the loss of life. Between 1980 and 2014, New Hampshire faced 14 extreme weather events that each caused more than \$1 billion in damages. Climate change also increases the risk of vector-borne diseases in the northeast, such as Lyme disease, and West Nile Virus. [EPA, [Future Climate Change](#); National Climatic Data Center, [1980-2014](#); NH Fish and Game Dept., [October 2013](#), pg.8; 2014 National Climate Assessment, [Northeast](#), pg. 373-374, 377-378; Risky Business Report, [9/18/14](#), pg. 22; Risky Business Report, [9/18/14](#) (pg. 22), [About](#)]

New Hampshire Farmers – Who Contribute Nearly \$250 Million Annually To The State Economy – Face Reduced Crop Yields, And Longer And Drier Summers. For New Hampshire farmers, increased spring precipitation delays harvest dates and reduces crop yields. In the future, with long and hotter summers, farmers may face too little water to meet the increased crop water demand. The state's agriculture industry – including more than 4,000 farms and 474,000 acres of farmland – contributes \$239 million to its economy. [2014 National Climate Assessment, [Northeast](#), pg. 380; National Crop Insurance Services, [March 2015](#)]

Rising Sea Levels And More Frequent Flooding Threaten Infrastructure All Over The Northeast. Rising sea levels threaten infrastructure safety by exposing communications, energy, and transportation systems to saltwater encroachment, coastal erosion, and increased release of pollution and sewage runoff. More frequent and intense coastal flooding causes more power outages, and decreased the usage of roads while simultaneously increasing congestion. [2014 National Climate Assessment, [Northeast](#), pg. 379]

NEW HAMPSHIRE WILDLIFE ARE ADVERSELY AFFECTED BY CLIMATE CHANGE

For New Hampshire's Moose Population, Warmer Temperatures Lead To Heat Stress, Which Leaves Them More Vulnerable To Parasites. Moose struggle with warm weather, and at high enough temperatures, start experiencing heat stress. Trees which offer the best source of shade from the increasing heat are all species that are predicted to decline. This heat stress leads to weakened immune systems in moose, which leaves them more vulnerable to parasites such as winter ticks and brain-worm. [NH Fish and Game Dept., [October 2013](#), pg. 88]

For New Hampshire's Brook Trout Population, Warmer Temperatures And Increased Storms Can Ultimately Lead To Local Extinction; State's Economy Will Likely Suffer, Too. For much of New Hampshire's brook trout, water temperatures will increase enough to risk local extinction; an increased frequency and intensity of storms leads to road washouts, erosion and sediment deposition, and increased acid deposition. With rising ocean temperatures, commercially important fish and shellfish species' suitable habitats shift away from New Hampshire's shores, presenting an economic challenge for northeastern fishermen and communities. [NH Fish and Game Dept., [October 2013](#), pg. 90; 2014 National Climate Assessment, [Northeast](#), pg. 381]

CLEAN ENERGY AND ENERGY EFFICIENCY PROGRAMS, LIKE CLEAN POWER PLAN AND RGGI, HELP NEW HAMPSHIRE COMBAT CLIMATE CHANGE

New Hampshire's Carbon Footprint Has Steadily Decreased Since 2000; Its 13,000 Clean Energy Jobs, On Average, Pay Better Than The State's Median Income. New Hampshire ranks 38th nationally in carbon pollution per capita, and has reduced its per capita carbon pollution by more than 13 percent since 2000. Between 2008 and 2013, New Hampshire's carbon emissions dropped by nearly 50 percent. Nearly 13,000 clean energy jobs are current available in the state. The average annual wage for a clean energy job is higher than the median wage for all jobs in the state. By switching to renewable energy, New Hampshire – a state with no fossil fuel resources – can keep some of the \$2.6 billion it spends every year to import petroleum from other states. [*EIA, [August 2014](#), pg. 3, 10; New Hampshire Dept. of Environmental Services & Public Utilities Commission, [10/21/14](#), pg. 7; Brookings Institution, [7/13/13](#); Public Citizen, [6/30/15](#)*]

With The Clean Power Plan, New Hampshire Residents Can Save Almost \$140 On Their Electricity Bills Every Year; For Every Dollar Invested In Energy Efficiency, The State Gets \$7 In Return. The Clean Power Plan will reduce carbon pollution from power plants, creating jobs in the United States and making homes and businesses more energy efficient. It is a flexible proposal which allows states to implement a plan that best fits its needs. It will help cut individual New Hampshire consumers' electricity bills by roughly \$136 per year. Their savings may, in fact, be greater, because the EPA's conservative estimates don't account for state-level efficiency measures. According to a June 2015 Public Citizen report, "customer return on electric energy efficiency investments in New Hampshire is \$7 for every program dollar." Making all New Hampshire buildings energy efficient can save consumers nearly \$200 million a year, and add \$160 million to the GDP annually. [*EPA Fact Sheet, [6/2/14](#); Public Citizen, [6/30/15](#); [6/25/15](#); pg. 5-6*]

Thanks To The Regional Greenhouse Gas Initiative, New Hampshire's Homes And Businesses – And Those Across The Country – Are Becoming More Energy-Efficient, And Fighting Carbon Pollution. New Hampshire participates in the Regional Greenhouse Gas Initiative (RGGI), a multi-state, market-based regulatory program that works to reduce carbon pollution. Because of RGGI, nearly 4 million households and 18,000 businesses nationwide are working to reduce carbon pollution, and training 3,700 workers along the way. Americans have already saved almost \$400 million in energy costs, and lifetime savings are projected to be nearly \$3 billion. Thanks to RGGI, Americans have already mitigated enough carbon pollution to take nearly 250,000 cars off the road. In New Hampshire, RGGI efforts have weatherized nearly 600 homes, helped buy 137 high-efficiency appliances, nearly 80,000 energy-efficient light bulbs, and upgraded equipment at almost 460 businesses and municipalities. [*RGGI, accessed [7/13/15](#); Program [Overview](#); RGGI, New Hampshire, [5/1/15](#); RGGI Benefits, accessed [7/13/15](#)*]