



CHANGE THE FORECAST FOR WILDLIFE
SOLUTIONS TO GLOBAL WARMING

Global Warming and NEW YORK

Global warming poses a threat to both wildlife and people throughout New York. The Environmental Protection Agency estimates average temperatures in the state could rise about 4 degrees Fahrenheit by 2100, affecting everything from New York's forests and coastal ecosystems to the health of its residents. People living along the coast of Manhattan and Long Island could face expensive sand replenishment projects to protect their beaches from sea level rise. Those living in cities could face more respiratory problems from increased smog, as well as more heat-related deaths. The state as a whole emits more global warming pollution than all of Central America and Mexico combined, but it has an important resource—its people—who have the opportunity to lead the way in finding solutions to global warming, reducing the impact on future generations. We can solve global warming and revitalize our economy by rebuilding America with clean energy.



Global warming effects on New York wildlife

New York is home to an incredible diversity of native wildlife species, including 327 birds, 91 mammals, 159 fish, 35 reptiles and 32 amphibians. Rising temperatures and sea level in the state will likely change the makeup of entire ecosystems, forcing wildlife to shift their ranges or adapt.

- Lower summer stream flows and higher stream temperatures due to global warming could significantly reduce viable habitat for brook trout and other cold-water fish in New York. Already, fish habitat in the Northeast is in decline due to water pollution, competition from invasive species and loss of habitat from development.
- The breeding range of many species of songbirds—including several different flycatchers, swallows and warblers—may be pushed out of New York's borders. Cape May and bay-breasted warblers are among some important predators of pests such as the eastern spruce budworm, which can cause major damage to the state's forests. Fewer birds mean more bugs.



• A warmer climate will likely favor more invasive species, parasites and pathogens such as the woody adelgid that is attacking hemlocks in New York's forests.

Global Warming Pollution

Burning coal, gas and oil produces carbon dioxide, which is a greenhouse gas that warms the planet as it builds up in the atmosphere. Some of the carbon dioxide released today remains in the atmosphere after even 100 years, trapping more and more heat.

Since the mid-1800s, emissions of carbon dioxide have skyrocketed, causing global temperatures to rise by about 1° Fahrenheit in the last century. Earth has not experienced such a rapid change in temperature in thousands of years.

A Global Solution

The U.S. must lead the world by passing global warming legislation at home and working with other nations at the Copenhagen climate summit at the end of 2009 to sign a new climate treaty that keeps further warming below 2° Fahrenheit.

With a global solution, we can avoid the worst impacts of global warming.



What's at stake for New Yorkers?

Whether it's fishermen on Long Island, maple farmers in the Adirondacks, hoteliers who count on annual fall foliage tourism or residents of the Big Apple, the people of New York will be affected by global warming in a number of ways in the coming decades.

- In New York City, one study projects that a 1-degree rise in average temperatures could more than double heat-related deaths during a typical summer, from about 300 to more than 700.
- By mid-century, the number of summer days in Buffalo with "good" air quality could drop 17 percent, from an average of 51 days per summer to 42 days per summer. "Red alert" air quality days could increase from 2 per summer today to 5 per summer.
- The make-up of forests in New York is expected to change as the climate warms faster than tree species can adapt. Sugar maples, one of the dominant species of the state's mixed forests, may disappear entirely from the state by the end of the century.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2006, more than 5.5 million people spent nearly \$3.2 billion on hunting, fishing and wildlife viewing in New York. The industry in turn supported 59,492 jobs in the state.* (*Jobs are an average of 2001 and 2006 data.*)

GLOBAL WARMING NATIONAL POLICY SOLUTION:

A federal legislative solution can drive American ingenuity, create millions of green jobs, and restore America's global leadership on global warming. Legislation should:

- * Include ambitious targets to reduce America's global warming pollution as swiftly and deeply as possible. Scientists say that developed countries as a whole need to reduce their global warming pollution by at least 80% from 1990 levels by 2050 to avoid the worst impacts of global warming.
- * Move America toward a 100% clean electricity future by maximizing energy efficiency, modernizing the electric power grid, expanding power generation from renewable energy resources, and investing in clean transportation infrastructure.
- * Invest in natural resources. Forests, coasts, wetlands, clean air and clean water are already being impacted by global warming. Funding is needed to safeguard the natural resources that are critical to wildlife populations and human health.
- * Lead a worldwide effort to finance clean energy technology, forest conservation, and adaptation to unavoidable impacts of global warming.

For more information, visit: www.nwf.org/globalwarming.

"Global warming poses an overriding challenge to our responsibility to protect wildlife for our children's future. We must advance balanced solutions that work for people, wildlife and the economy to overcome this challenge."

Larry Schweiger
President, CEO
National Wildlife Federation



Mary Kate Piletsch (NREI)

New York's solutions to global warming

- New York adopted a "renewable portfolio standard" that requires 24 percent of the state's energy to come from renewable sources such as wind and biomass by 2013.
- The state has the potential to meet nearly 84 percent of its electricity needs with renewable energy such as wind. New wind farms are in the works, including one off Long Island.

The Regional Greenhouse Gas Initiative (RGGI)

On December 20, 2005, the governors of seven Northeastern states, including New York, announced the creation of the Regional Greenhouse Gas Initiative (RGGI), the first mandatory U.S. cap-and-trade program for carbon dioxide. RGGI sets a cap on emissions of carbon dioxide from power plants, and allows sources to trade emissions allowances. The program will begin by capping emissions at current levels in 2009, and then reducing emissions 10% by 2019.

Following some simple guidelines, you can cut your global warming pollution, become more energy efficient and give something back to nature.

- **Convert to compact fluorescent bulbs:** If every household in America replaced its next burned out light bulb with a compact fluorescent, we would prevent more than 13 billion pounds of carbon dioxide from being emitted.
- **Become a Green Tag subscriber:** Many states now offer options for homeowners to buy electricity from clean, renewable sources such as wind, solar and biomass that produce little or no global warming pollution. Green energy can also be purchased through the National Wildlife Federation by visiting www.nwf.org/energy.

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