



CHANGE THE FORECAST FOR WILDLIFE

SOLUTIONS TO GLOBAL WARMING

Global Warming and NEW JERSEY

From the Pine Barrens of the outer coastal plain to the Atlantic beaches that attract visitors year-round, forests and water are some of New Jersey's most valued natural resources. They are also two resources very much at risk from global warming. The Environmental Protection Agency estimates average temperatures in New Jersey could rise about 4 degrees Fahrenheit by 2100 if global warming continues unabated. Sea level is expected to rise along the state's 1,792 miles of shoreline by up to 27 inches in the same timeframe, leaving a densely populated coast and unique tidal wetland system at great risk.



Global warming effects on New Jersey wildlife

New Jersey is home to an incredible diversity of native wildlife species, including 340 birds, 71 mammals, 67 fish, 42 reptiles and 31 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.

- Salt-water intrusion and inundation due to rising sea levels could greatly reduce the state's extensive coastal wetlands, harming essential foraging grounds for many wading birds and waterfowl such as the pied-billed grebe.



- The EPA estimates that forests in New Jersey will change as temperatures rise, bringing more southern pines and oaks northward to replace the hardwood forests currently found in the northern part of the state.
- The breeding range of many species of songbirds—including several different flycatchers, swallows, chickadees and warblers—may be pushed out of New Jersey in the summer. Some of these birds are important to the state not only for their beautiful sounds, but for their appetite for gypsy moths, tent caterpillars and other invasive pests that harm vegetation.

What is Global Warming?

When coal, gas and oil are burned, they produce carbon dioxide that builds up in the atmosphere and traps the sun's heat. Much of this greenhouse gas 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, and subsequently global temperatures have risen by about 1 degree Fahrenheit in the last century. Earth has not experienced such a rapid change in temperature in thousands of years.

Unless we reduce the pollution that causes global warming, temperatures could climb between 2-10 degrees Fahrenheit this century. Such a rapid rise in temperature would fundamentally reshape the planet's climate, forever changing the landscape and water resources people and wildlife depend upon.



What's at stake for New Jersey?

Global warming poses a real threat to the future of New Jersey's economy, impacting the state's tourism, agriculture and forestry industries that depend on a healthy ecosystems.

- Sea level rise due to global warming could cost New Jersey's coast. The EPA estimates sand replenishment and seawall construction to protect Long Beach Island from a possible 1-3 foot sea level rise in the coming century could total between \$100-\$500 million. The Federal Emergency Management Agency estimates that a 1-foot rise in sea level could increase flood insurance premiums in New Jersey by 35-60 percent.
- Scientists have found that warmer temperatures caused by global warming can lead to higher concentrations of ground-level ozone pollution, a leading cause of respiratory problems such as asthma, especially in children and seniors.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2001, more than 2.3 million people spent nearly \$2.2 billion on hunting, fishing and wildlife viewing in New Jersey, which in turn supported 35,305 jobs in the state.

"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

THE REGIONAL GREENHOUSE GAS INITIATIVE:

The Regional Greenhouse Gas Initiative, or RGGI, is a cooperative effort by Northeastern and Mid-Atlantic states to reduce carbon dioxide emissions. In December 2005, seven states agreed to institute a mandatory cap and trade system for global warming pollution emitted from power plants. Legislation was passed in April 2006 that required Maryland to join the RGGI cooperative by June 2007. The Regional Greenhouse Gas Initiative requires carbon dioxide emissions to be stabilized by 2015, with a 10% reduction by 2019, and eventually achieve sharp reductions in all greenhouse gases.

Current states under the program are Connecticut, Delaware, Maine, Maryland, New Hampshire, New Jersey, New York, and Vermont. Pennsylvania, Massachusetts, and Rhode Island are observing the process and are likely to join in the future.

Visit www.nwf.org/globalwarming or www.rggi.org for more information.



New Jersey's solutions to global warming

New Jersey signed a 2001 compact between Northeast governors and neighboring Canadian provincial leaders requiring a collective reduction of global warming pollution in the region.

- The state has adopted an action plan to reduce global warming pollution, setting a goal to cut emissions by 3.5 percent below 1990 levels by 2005 using readily-available energy conservation techniques.
- New Jersey has the potential to meet more than 31 percent of its electricity needs with renewable energy. More than 84 percent of its renewable energy potential comes from wind, with the rest from biomass and landfill gas.

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

- **Plant shade trees:** The Department of Energy says planting three trees strategically around your home to block the sun in summer and wind in winter can reduce your annual heating and cooling costs by an average of 40 percent.
- **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.
- **Act locally:** Contact your mayor and ask that (s)he sign the U.S. Mayors Climate Protection Agreement, committing your city or town to meet or beat the global warming pollution reductions outlined in the Kyoto Protocol.

For more information, contact:
Catherine Bowes
802-229-0650
globalwarming@nwf.org

