



CHANGE THE FORECAST FOR WILDLIFE SOLUTIONS TO GLOBAL WARMING

Global Warming and RHODE ISLAND

Despite a 2001 commitment by New England governors and Canadian provincial leaders to cut global warming pollution in the Northeast, emissions of carbon dioxide and other global warming gases in the region are on the rise. According to an analysis by the New England Climate Action Network, fuel consumption for cars and trucks is increasing, as is coal, oil and gas consumption for home and commercial heating—all contributing to increasing emissions. This is not good news for Rhode Island, considering sea level is rising along the state's heavily populated coastline. The average temperature in Providence has risen about 3.3 degrees Fahrenheit over the last century. The Environmental Protection Agency estimates average temperatures in Rhode Island could rise another 4-5 degrees Fahrenheit by 2100 if global warming continues unabated.



Global warming effects on Rhode Island wildlife

Rhode Island is home to an incredible diversity of native wildlife species, including 277 birds, 53 mammals, 37 fish, 25 reptiles and 18 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.

- Coastal erosion and storm surges have already damaged many of the state's tidal flats and dunes, including those on Block Island and throughout the Rhode Island Refuge complex, home to animals such as the savanna sparrow, northern harrier hawk and piping plover.
- Warmer water temperatures will likely reduce the number of winter flounder spawning in Rhode Island's waters. With fewer flounder to eat their eggs, crab populations could increase. With more crabs eating scallops and quahogs—their main sources of food—the intricate food web would be thrown out of balance.



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- Many species of songbirds may no longer breed in Rhode Island, including several different flycatchers, swallows and warblers. Some of these birds are important 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 Rhode Islanders?

Rhode Island's 400 miles of coastline is home to the bulk of the state's residents. The beaches along the south shore have already been severely damaged by hurricanes and storm surges. This damage will likely increase as global warming continues to raise sea level and increase storm intensity.

- The EPA reports that sea level in Watch Hill, R.I. is likely to rise another 12.4 inches by the end of the century. The cost of sand replenishment to protect the state's coastline from a 20-inch sea level rise by 2100 could be anywhere from \$90-\$530 million.
- Many of Rhode Island's lakes and waterways are freezing for shorter periods of time, reducing traditional outdoor recreation opportunities such as hockey and ice skating.
- Rhode Island's current ozone levels exceed national health standards, and the entire state is rated as having a "serious" problem attaining safe levels. Warmer weather could increase concentrations of ground-level ozone, which is known to aggravate respiratory problems.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2001, nearly 400,000 people spent nearly \$288 million on hunting, fishing and wildlife viewing in Rhode Island, which in turn supported 4,809 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. 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, New Hampshire, New Jersey, New York, and Vermont. Legislation was passed in April 2006 that required Maryland to join the RGGI cooperative by June 2007. Rhode Island, Pennsylvania, and Massachusetts are observing the process and are likely to join in the future.

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



Rhode Island's solutions to global warming

Rhode Island signed onto a 2001 compact between New England governors and Canadian provincial leaders requiring the collective reduction of global warming pollution in the region. The Environmental Council of Rhode Island and more than 70 other state groups and businesses are part of the Rhode Island Climate Coalition, which is working to support the state's climate action plan.

- Rhode Island adopted a "renewable portfolio standard" that calls for 16 percent of the state's energy to come from clean, renewable sources like solar and wind by 2020.
- The state has agreed to adopt California's low emission vehicle standards for new cars, light trucks and SUVs sold in the state, starting in 2008.
- Providence approved an ordinance directing the city to purchase the most fuel-efficient cars and trucks for municipal operations, and to prominently label hybrid or other alternate fuel vehicles.

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 can reduce your annual heating and cooling costs by an average of 40 percent.
- **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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