



CHANGE THE FORECAST FOR WILDLIFE
SOLUTIONS TO GLOBAL WARMING

Global Warming and DELAWARE

From the estuaries and rivers to the Atlantic beaches that attract visitors year-round, water is one of Delaware's most valued natural resources. Global warming looms large on the state's horizon, as sea level rise threatens the state's 381 miles of shoreline. The Environmental Protection Agency estimates average temperatures in Delaware could rise about 3-4 degrees Fahrenheit by 2100 if global warming continues unabated, threatening coastal wetlands along Delaware Bay, a major spawning ground for horseshoe crabs and a place that boasts the second largest concentration of migratory shorebirds in the Western Hemisphere. We can solve global warming and revitalize our economy by rebuilding America with clean energy.



Global warming effects on Delaware wildlife

Delaware is home to an incredible diversity of native wildlife species, including 295 birds, 54 mammals, 62 fish, 37 reptiles and 27 amphibians. Loss of wetlands from sea level rise could be costly for a state whose waterways are a stopping-off point for migrating birds and home to 70-90 percent of the state's commercial fish and shellfish species.

- At Lewes, Del., sea level has already risen by 12 inches in the last century, and some models predict an additional rise of 23 inches by 2100. A 20-inch rise in sea level would inundate about 50 percent of the wetlands in Delaware Bay, affecting key habitat for migratory shorebirds and horseshoe crabs.
- Historically, the Delaware Bay has been an important waterfowl wintering ground, but sea level rise within the bay is changing the makeup of salt marshes, making them less attractive to many ducks and geese. Projections for the region suggest sea level rise will further reduce shallow water waterfowl habitat.



- The breeding ranges of many species of songbirds may be pushed out of Delaware, including several flycatchers, swallows and warblers. 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.

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 Delawareans?

The effects of global warming on Delaware's prized coastal resources could have significant impacts on the state's economy, resonating through the tourism, agriculture and wildlife recreation industries.

- Shoreline erosion already plagues many of Delaware's inland bays, and continued sea level rise will likely exacerbate this problem. Sand replenishment from a projected 20-inch sea level rise by 2100 is estimated at \$34-\$143 million.
- Shoreline erosion and rising sea levels will negatively impact many acres of farmland, thousands of shore homes and millions of dollars of infrastructure.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2006, 486,000 people spent more than \$283 million on hunting, fishing and wildlife viewing in Delaware. This industry supported 3,428 jobs in the state.* (*Jobs are an average of 2001 and 2006 data.*)

“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

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.



Delaware's solutions to global warming

Delaware has the potential to become a leader in renewable energy technology and is beginning to take actions to address global warming.

- In 2000, the Delaware Climate Change Consortium, comprised of representatives of state government, business, labor, environment and community groups, adopted a state climate action plan that calls for reducing the state's global warming pollution by 7 percent below Delaware's 1990 emissions by 2010.
- Delaware has the potential to meet nearly 95 percent of its electricity needs with renewable energy, mainly from wind and solar. The University of Delaware is on the cutting edge of photovoltaic solar energy technology and offshore wind research.

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. That's the same as taking 1.2 million cars off the road for an entire year.
- **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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