Global Warming and CONNECTICUT

Connecticut's unique mix of urban and rural communities face a number of potential challenges if global warming continues unabated. The Environmental Protection Agency estimates average temperatures in the state could rise about 4 degrees Fahrenheit by 2100. These warmer conditions could contribute to more extreme fluctuations in precipitation, as well as continued sea level rise along Connecticut's coast. The dense, urban areas around New York City could see a decline in air quality and increased smog levels. Scientists monitoring ice cover on New England waters over the past 40 years have also seen a definite decline in the amount of time lakes and rivers stay frozen, a trend expected to continue. Not only could this hurt wildlife habitat, but traditional activities like ice skating and hockey could have to move indoors permanently. We can solve global warming and revitalize our economy by rebuilding America with clean energy.

Global warming effects on Connecticut wildlife

Connecticut is home to an incredible diversity of native wildlife species, including 273 birds, 62 mammals, 46 fish, 27 reptiles and 22 amphibians. Rising temperatures and sea level in the state will likely change the makeup of entire ecosystems, forcing wildlife to shift their ranges and adapt.

- Conifer and mixed forests in New England are expected to gradually change to temperate deciduous forests similar to that found today in southeastern Pennsylvania and northern Virginia. Some forest species, such as sugar maple, are projected to disappear entirely from the U.S. over the next century.
- The breeding range of many species of songbirds may be pushed out of Connecticut in the summer, including several different 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 native vegetation.

- Sea level rise at Connecticut's Stewart B. McKinney National Wildlife Refuge is expected to inundate precious habitats like the barrier islands and tidal salt marshes that are home to numerous waterfowl and birds like the endangered roseate tern.

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 Connecticut?

Changes from global warming threaten not only to degrade the natural forest and aquatic ecosystems of Connecticut but also the health and economy of the state.

- Sea level in Connecticut has already risen 8 inches over the past century, and is likely to rise another 22 inches by 2100. The state's extensive tidal flats and diverse freshwater marshes could be inundated by sea water, as could expensive development along the coast. The EPA estimates the cost of protecting Connecticut's coastline from a 20-inch sea level rise could be anywhere from $500 million-$3 billion in the next century.

"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

- Connecticut's current ozone levels exceed national health standards, and the 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 such as asthma.
- A 4-degree Fahrenheit temperature rise in Connecticut could mean lower peak stream flows in spring and greater evaporation, which could lead to a reduction in groundwater levels.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2006, more than 1.5 million people spent nearly $833 million on hunting, fishing and wildlife viewing in Connecticut. This industry created 9,835 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.**

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Connecticut's solutions to global warming

Connecticut has been a leader in developing solutions to global warming. The state signed a 2001 compact between New England governors and neighboring Canadian provincial leaders requiring a collective reduction of global warming pollution in the region.

- Connecticut recently finalized an aggressive action plan to reduce global warming pollution to 1990 levels by 2010 and to 10 percent below 1990 levels by 2020.
- Connecticut is adopting California's low emission vehicle standards for new cars, light trucks and SUVs sold in the state, starting with model year 2008.

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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