



**CHANGE THE FORECAST FOR WILDLIFE**  
SOLUTIONS TO GLOBAL WARMING

## Global Warming and ILLINOIS

**T**he drought emergency declared throughout much of Illinois in 2005 illustrates the potential problems global warming poses in the coming decades. Farmers, communities and wildlife all depend on healthy streamflows throughout the state. While global warming projections indicate higher rain and snow levels in winter and spring in Illinois, the Union of Concerned Scientists and the Ecological Society of America estimate that by 2100, average summer temperatures in the state could increase between 9-17 degrees Fahrenheit depending on the extent to which greenhouse gas emissions are curbed. This could contribute to higher evaporation rates and drier conditions overall. Rain—when it does come—is projected to come in more severe downpours, contributing to major flooding in parts of the state.



### Global warming effects on Illinois wildlife

**I**llinois is home to an incredible diversity of native wildlife species, including 311 birds, 67 mammals, 60 reptiles, 188 fish and 39 amphibians. Rising temperatures will likely change the makeup of ecosystems, forcing wildlife to shift their ranges or adapt.

- By 2080, warmer weather could reduce up to 91 percent of the wetlands in the Prairie Pothole Region, an area in the northern Great Plains on both sides of the U.S./Canadian border that is one of the most important waterfowl breeding grounds in North America. This could lead to a 9-69 percent decline in the number of ducks breeding in the region, affecting Mississippi and Central Flyway populations of mallards, gadwall, blue-winged teal and northern pintail.
- Global warming is likely to alter the composition of the state's forests. Warmer, drier summers, for example, could enable southern pines to replace deciduous trees in the southern part of the state, forcing some animals that depend on the trees to migrate northward to survive.



- Higher water temperatures along with reduced streamflow and lake levels could significantly reduce habitat for lake trout, brook trout and walleye in Illinois' lakes and streams.

### 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 Illinoisans?

Illinois is no stranger to severe weather conditions. In the past 15 years, the state has seen severe drought in 1988, flooding in 1993 and 2002, heat waves in 1995 and 1996, and a destructive windstorm in Bloomington in 1999. The severity of such storms is consistent with what climate scientists expect will occur more and more as global warming continues, and is only one way global warming will touch upon the lives of the people in the state.

- Recently mosquitoes carrying dengue fever, Eastern equine encephalitis and LaCrosse encephalitis have spread north into Chicago. Global warming could shift their range further northward as the predicted hotter and wetter conditions allow them to breed faster and survive longer.
- Inconsistent precipitation levels are projected to put more pressure on already scarce water resources, causing Illinois' farmers to take a hit. Scientists predict corn yields will decrease by as much as a 32 percent and soybean yields as much as 24 percent due to changing weather patterns.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2001, more than 3.3 million people spent nearly \$2 billion on hunting, fishing and wildlife viewing in Illinois, which in turn created 34,492 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 CLIMATE STEWARDSHIP ACT:

The Climate Stewardship Act is a bipartisan plan of action in Congress that sets achievable goals for reducing global warming pollution in the United States. The bill requires power plants, oil companies and other major sources to collectively reduce emissions of carbon dioxide and other greenhouse gases to what they emitted in the year 2000. The bill also allows businesses to implement their own solutions, using a flexible emissions trading system that has successfully reduced air pollution under the Clean Air Act at a fraction of the anticipated costs. The Act will:

- Create more than 27,000 new energy technology jobs in Illinois by the year 2020.
- Provide Illinois with at least \$16.5 million each year in additional wildlife conservation funding to help protect the state's wildlife from the impacts of global warming.
- Provide new income to Illinois' farmers by rewarding environmentally friendly farming and forestry practices.

Visit [www.nwf.org/globalwarming](http://www.nwf.org/globalwarming) or [www.climatenetwork.org/csa](http://www.climatenetwork.org/csa) for more information.



## Illinois' solutions to global warming

Illinois is among six states that have passed laws against any mandatory reductions in global warming pollution; however, the state has enacted various state-level initiatives to protect the environment and cut carbon pollution.

- In April, 2002, then-Gov. George Ryan issued an executive order committing Illinois to purchase green power for at least 5 percent of the electricity used by buildings owned or operated by the state. The amount of renewable energy purchased will increase to at least 15 percent by 2020.
- In July, 2005, the Illinois Commerce Commission passed a plan urging state power companies to obtain at least 2 percent of their electricity portfolio from renewable energy sources by 2006, increasing that amount 1 percent every year to 8 percent by 2012.
- Illinois has the potential to produce up to 85 percent of its electricity needs from wind and up to 35 percent from biomass.

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](http://www.nwf.org/energy).

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**Prairie Rivers Network**  
Protecting Illinois' Streams