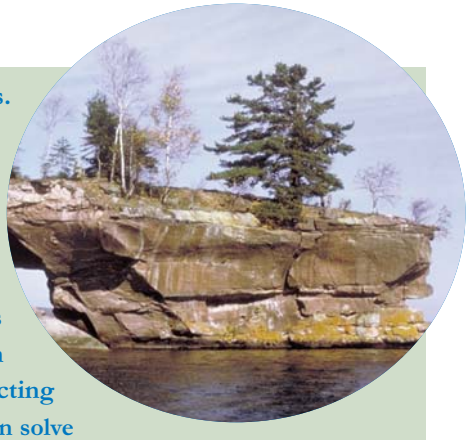
Global Warming and WISCONSIN



Signs of global warming are apparent throughout the Great Lakes. Over the past 150 years, the average extent of ice cover on many of Wisconsin's lakes has continuously declined—a trend expected to continue. The Union of Concerned Scientists and the Ecological Society of America estimate that by 2100, average summer temperatures in the state could increase between 8-17 degrees Fahrenheit depending on the extent to which greenhouse gas emissions are curbed Some models suggest that average summer water levels in the Great Lakes could drop 1.5–8 feet by the end of the century, affecting fish and wildlife as well as communities that depend on them. We can solve global warming and revitalize our economy by rebuilding America with clean energy.

Global warming effects on Wisconsin wildlife

Wisconsin is home to an incredible diversity of native wildlife species, including 279 birds, 146 fish, 67 mammals, 35 reptiles and 19 amphibians. Rising temperatures will likely change the makeup of entire ecosystems, forcing wildlife to shift their ranges or adapt.

- During the 1850s, ice covered Lake Mendota for four months during the winter. Today, the lake freezes only 2.5 months out of the year. As ice coverage declines and water temperatures increase, cool-water fish such as walleye and perch and cold-water fish such as lake trout and salmon could face serious declines.
- The extent of forested areas in Wisconsin could decline by as much as 55–70 percent as a result of global warming, thereby disrupting forest ecosystems and displacing birds, mammals and other wildlife.

- Scientists project global warming and resulting drier weather conditions will thin and fragment conifer forests in southern Wisconsin, possibly altering these ecosystems and the wildlife they support.
- Already, development and agriculture have reduced wetland habitat in Wisconsin. Additional losses of wetland and forest habitat due to global warming would jeopardize food resources necessary for migratory songbirds, shorebirds and waterfowl.

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 Wisconsinites?

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

- Global warming models project that extreme "100-year floods"—named because they happen once every 100-200 years—could begin to occur on a much more frequent basis.
- Inbetween more extreme floods, higher temperatures in Wisconsin could cause more drought conditions due to increased evaporation. The reduced soil moisture may force farmers to rely more on irrigation, raising the competing needs of water in an already water-stressed state.
- 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, especially in children and seniors.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2006, more than 4.1 million people spent more than $3.7 billion on hunting, fishing and wildlife viewing in Wisconsin. The industry in turn created 90,659 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.**

MSB Energy Associates (NREL)

Wisconsin's solutions to global warming

The state has taken various initiatives to reduce emissions of carbon pollution by developing renewable energy sources.

- Wisconsin enacted a minimum renewable electricity standard that requires utilities to provide 2.2 percent of the state's power from renewable sources by 2011.

Midwestern Governors Association Energy Platform and Greenhouse Gas Accord

Nine midwestern states, Wisconsin, Minnesota, Illinois, Iowa, Michigan, Kansas, Indiana, Ohio, South Dakota, and the Canadian Province of Manitoba, have signed the Midwestern Regional Greenhouse Gas Reduction Accord. The Accord will establish greenhouse gas reduction targets and a market based cap & trade mechanism to help acheive these targets. Part of the agreement by these Midwestern states is an aggressive energy security and climate program that includes major steps forward on renewable energy, energy efficiency, next generation biofuels, and carbon capture and storage.

To support the shared goal of reducing greenhouse gases, the Midwestern states launched new cooperative regional initiatives to include the following:

•CO2 management to create a regional transportation and storage infrastructure;

•A bioproduct procurement program to support the growth of the region's bioeconomy;

•Electricity transmission adequacy to support thousands of new megawatts of wind energy;

•Advanced bioenergy permitting to assist states with the latest technologies; and

•Low-carbon energy transmission infrastructure that will provide a cost-effective way to supply the Midwest with sustainable and environmentally responsible energy.

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NATIONAL WILDLIFE FEDERATION

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