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CHANGE THE FORECAST FOR WILDLIFE
SOLUTIONS TO GLOBAL WARMING

Global Warming and WYOMING

Wyoming's glaciers are melting at a rapid pace due to milder temperatures brought on by global warming. The Environmental Protection Agency estimates average temperatures in Wyoming could rise about 4-6 degrees Fahrenheit by 2100 if global warming continues unabated. This will likely cause most, if not all, of the state's glaciers to disappear. Wildfires may increase, droughts could get worse, and rains—when they do come—will likely come in more severe downpours that may cause more flash flooding. Warmer temperatures also mean less snowpack in the mountains and earlier snowmelt, leading to more winter runoff and reduced summer flows in many Wyoming streams.



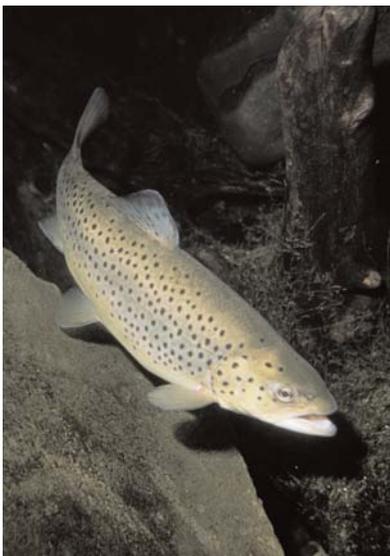
Global warming effects on Wyoming wildlife

Wyoming is home to an incredible diversity of native wildlife species, including 295 birds, 109 mammals, 56 fish, 22 reptiles and 13 amphibians. Rising temperatures in the state will likely change the makeup of entire ecosystems, forcing wildlife to shift their ranges or adapt.

- The milder winters expected under global warming scenarios could contribute to more severe outbreaks of insects such as the pine bark beetle, which can kill trees and make forests more vulnerable to wildfires.
- Global warming is likely to alter essential habitat in the Greater Yellowstone Ecosystem. Not only will the risk of wildfires increase, but warmer, drier conditions could reduce whitebark

pine forests by as much as 90 percent within 50 years, significantly reducing a critical food source for red squirrels and other wildlife.

- Researchers at the University of Wyoming estimate that a 5.4-degree Fahrenheit increase in average July temperatures could eliminate 50 percent of currently viable trout stream habitat in the Rocky Mountain region before the end of this century.



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 Wyomingites?

Global warming threatens not only to degrade the natural forest and aquatic ecosystems of Wyoming but also the health and economy of the state.

- Warmer winters could seriously hurt Wyoming's ski industry, as less snow and reduced snowpack lead to more unpredictable seasons. To compensate, resorts would have to spend more money on costly snow-making.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2001, more than 662,000 people spent more than \$634 million on hunting, fishing and wildlife viewing in Wyoming, which in turn created 13,064 jobs in the state.
- Snowpack also stores much of Wyoming's clean water supply for drinking, agriculture and wildlife. Any reduction would increase pressures on this valuable and scarce resource.
- Warmer temperatures could increase the lifespan of disease-carrying insects like mosquitoes and ticks, causing more cases of Lyme disease and other illnesses in Wyoming.

“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 100 new energy technology jobs in Wyoming by the year 2025.
- Provide Wyoming with at least \$4.8 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 Wyoming's farmers by rewarding environmentally friendly farming and forestry practices.

Visit www.nwf.org/globalwarming or www.climatenetwork.org/csa for more information.



Tom Hall (DOE)

Wyoming's solutions to global warming

Wyoming has a number of incentive programs and tax breaks to encourage businesses and individuals to become more energy efficient and use renewable energy sources such as wind and solar power, a key step to reducing harmful carbon pollution.

- The state's Photovoltaic Grant Program offers grants of \$3,000 or 50 percent, whichever is less, to residents who install photovoltaic or photovoltaic hybrid systems on their homes. Both off-grid and grid-connected systems are eligible.
- Wyoming has the potential to generate more than 2000 percent of its electricity needs from wind power, giving it the potential to be a leader in the growing wind power market.

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.
- **Act locally:** Contact your mayor and ask that (s)he sign the U.S. Mayors Climate Protection Agreement, committing your city or town to meet or beat the global warming pollution reductions outlined in the Kyoto Protocol.

For more information, contact:

Myra Wilensky
303-786-8001
globalwarming@nwf.org

