



CHANGE THE FORECAST FOR WILDLIFE
SOLUTIONS TO GLOBAL WARMING

Global Warming and COLORADO

Colorado's growing population is putting pressure on the state's water resources like never before. Global warming may well make the state's water woes even more troubling in the decades to come. The Intergovernmental Panel on Climate Change estimates average temperatures in Colorado could rise about 6.75 degrees Fahrenheit by 2100 if global warming continues unabated. This will likely bring hotter, drier summers. Wildfires may increase, droughts will get worse and rains—when they do come—will likely come in more severe downpours that may cause flash flooding. Warmer temperatures also mean less snowpack in the mountains. Earlier snowmelt would mean more winter runoff and reduced summer flows in many Colorado streams. We can solve global warming and revitalize our economy by rebuilding America with clean energy.



Global warming effects on Colorado wildlife

Colorado is home to an incredible diversity of native wildlife species, including 371 birds, 133 mammals, 49 reptiles and 17 amphibians. Rising temperatures in the state will likely change the makeup of entire ecosystems, forcing wildlife to shift their ranges or adapt.

- Global warming could reduce habitat for Colorado's cool- and cold-water fish, including the endangered greenback cutthroat trout, whose habitat has already been significantly reduced due to competition with non-native fish species. While higher average water temperatures could improve the productivity of populations currently limited to the colder headwater reaches, those already at the edge of their tolerance levels could face declines.
- Much of the Platte River basin in Colorado, Wyoming and Nebraska depends on snowmelt and spring and summer rains as its primary sources of water. Higher average temperatures and reductions in average snowpack due to global warming would contribute to a



JR Douglass (NPS)

reduction in marshes that provide important roosting areas for migrating whooping cranes, sandhill cranes and waterfowl.

- Many alpine and sub-alpine species like the American pika may be threatened as tree lines rise by roughly 350 feet for each degree Fahrenheit of warming. Pikas spend their lives in high elevation islands on alpine peaks in the Rocky Mountains, giving them little option to escape the pressures of global warming.

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 Coloradoans?

Over the last 100 years, precipitation has decreased by up to 20 percent in many parts of Colorado, putting a heavy strain on the state's water resources. These destructive weather events are just one way global warming will likely touch the lives of Coloradoans, as the warmer climate resonates through tourism, agriculture, wildlife recreation and timber industries.

- The recent drought has left Colorado struggling with half-full reservoirs and the challenge of meeting the water needs of a growing population.
- The ski industry is taking note of the threat global warming poses to the sport. Fourteen ski resorts in Colorado have signed onto a letter supporting the Climate Stewardship Act and many have taken steps to reduce their own greenhouse gas emissions.
- EPA analyses show that global warming could cause yields of Colorado's two major crops, corn and wheat, to fall anywhere from 8-33 percent as water shortages lead to less soil moisture and less water for irrigation.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2006, more than 2.3 million people spent more than \$2.4 billion on hunting, fishing and wildlife viewing in Colorado, which in turn supported more than 36,000 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.



Colorado's solutions to global warming

Colorado has a number of incentives to encourage people and businesses to incorporate alternative and renewable sources of energy into their daily lives, cutting carbon pollution and helping to slow global warming.

- In November, 2004, Colorado voters passed a landmark statewide renewable energy requirement. The law requires Colorado's large utility companies to provide 10 percent of their electricity sales from renewable sources by 2015.
- Colorado has the potential to generate more than 1,100 percent of its electricity needs from wind power and more than 35 percent from geothermal energy, giving it the potential to be a leader in the new renewable energy market.

Following some simple guidelines, you can cut your global warming pollution, become more energy efficient and give something back to nature.

- **Cut back on mowing:** If the 6 million people who buy new homes every year designed water-conserving landscaping, they would collectively save 250 billion gallons of water and prevent 2.2 million tons of carbon pollution from being emitted each year.
- **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.
- **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, an international treaty being implemented by 141 countries, but not the United States.

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