



CHANGE THE FORECAST FOR WILDLIFE

SOLUTIONS TO GLOBAL WARMING

Global Warming and LOUISIANA

The devastating impact of Hurricane Katrina will be felt throughout Louisiana and the region for years. Scientists believe storms of this magnitude will become more common due to warming ocean temperatures. The Union of Concerned Scientists and the Ecological Society of America estimate that by 2100, average summer temperatures in the state could increase between 3-7 degrees Fahrenheit depending on the extent to which greenhouse gas emissions are curbed. In addition, sea-level rise could submerge at least 70 percent of Louisiana's remaining salt marshes over the next century. Coastal Louisiana has already lost 1.2 million acres of wetlands this century and is losing an additional 24 square miles of wetlands each year—roughly equivalent to a football field every 30 minutes. Global warming is expected to accelerate this trend in the coming decades, making it even harder for waterfowl and other wildlife to thrive in the Pelican State.



Global warming effects on Louisiana wildlife

Louisiana is home to an incredible diversity of native wildlife species, including 322 birds, 59 mammals, 78 reptiles, 51 amphibians and 160 fish. Rising temperatures and sea level in the state will likely change the makeup of entire ecosystems, forcing wildlife to shift their ranges or adapt.

- Louisiana is at risk of losing its state tree, the bald cypress, due to flooding from severe hurricanes as well as subsidence and changes in salinity caused by sea level rise. Cypress plays an important role in providing habitat for wildlife such as wood ducks, beavers, Louisiana black bears, ospreys, peregrine falcons and alligators.
- Bacteria-carrying algal blooms are already a problem in Louisiana, causing outbreaks of cholera in the state's shellfish populations. As water temperatures rise, so too does the intensity, duration and extent of these blooms.



• Nearly 70 percent of waterfowl migrating along the Mississippi and Central flyways winter at sites in coastal Louisiana. Rising seas caused by global warming threaten to inundate marsh habitats, making it difficult for ducks, geese and other waterfowl to survive.

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 Louisianians?

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

- Research from MIT shows that hurricanes and other major storms have increased in intensity and duration by about 50 percent since the 1970s and are linked to increases in average sea surface temperatures. Rising sea levels due to global warming will leave beachfront development more vulnerable to storm surges and erosion.
- Warmer water temperatures could spread disease among seafood like shellfish, an industry that contributes more than \$2 billion to the state's economy and provides 50,000-70,000 jobs.

“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

- Coastal wetland loss is being exacerbated by sea level rise. Without these important storm buffers for homes and businesses in Louisiana's coastal zone, breaches in levees such as those in New Orleans after Hurricane Katrina could become a bigger threat.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2001, more than 1.5 million people spent more than \$1.6 billion on wildlife viewing, hunting and fishing in Louisiana, which in turn supported 29,306 jobs in the state.

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 7,000 new energy technology jobs in Louisiana by the year 2020.
- Provide Louisiana with at least \$7.3 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 Louisiana's farmers by rewarding environmentally friendly farming and forestry practices.

Visit www.nwf.org/globalwarming or www.climate-network.org/csa for more information.



Warren Greitz (NREL)

Louisiana's solutions to global warming

The state has begun addressing the threat of global warming by switching most of its electricity production from coal to natural gas—a cleaner fossil fuel that releases less carbon pollution into the atmosphere. The state also offers incentives to residents to encourage energy efficiency.

- Louisianians who incorporate energy efficiency into newly constructed home or who make energy improvements to existing homes are eligible to receive up to \$2,000 from the Home Energy Rebate Option (HERO) program. Since 1997, the program has helped more than 10,300 state residents make their homes more energy efficient.
- The state has the potential to generate 20 percent of its electricity from renewable sources such as biomass, which is organic matter such as plant fibers and animal waste that can be converted into electricity and fuel.

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. 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.

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