



## 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 Intergovernmental Panel on Climate Change estimates that by 2100, average summer temperatures in the state could increase 5.85 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. We can solve global warming and revitalize our economy by rebuilding America with clean energy.



## 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.

## 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 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.
- 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 2006, more than 1.7 million people spent nearly \$1.9 billion on wildlife viewing, hunting and fishing in Louisiana. The industry in turn supported 35,335 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](http://www.nwf.org/globalwarming).



Warren Gretz (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.

For more information, contact:  
**Marya Fowler**  
512-610-7767  
[Fowler@nwf.org](mailto:Fowler@nwf.org)

