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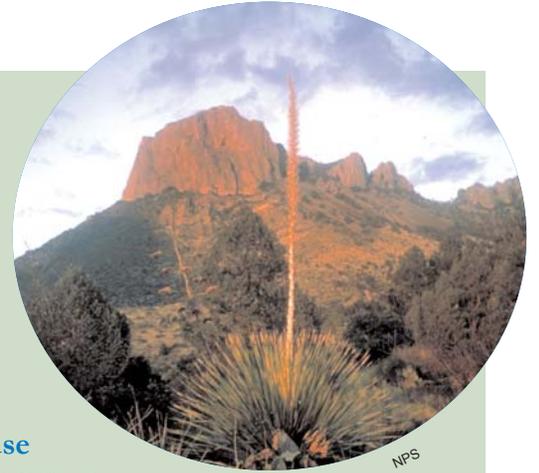


CHANGE THE FORECAST FOR WILDLIFE

SOLUTIONS TO GLOBAL WARMING

Global Warming and TEXAS

Texas' 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 Environmental Protection Agency estimates average temperatures in Texas could rise about 4 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 more flash flooding. Sea level rise may also affect people and wildlife along low-lying coastal zones.



Global warming effects on Texas wildlife

Texas is home to an incredible diversity of native wildlife species, including 477 birds, 159 mammals, 149 reptiles, 175 fish and 71 amphibians. Rising temperatures and sea level in the state will likely change the makeup of entire ecosystems, forcing wildlife to shift their ranges or adapt.

- Higher average temperatures are likely to make conditions more favorable for invasive species such as the Chinese tallow to outcompete native wildlife for habitat. The tree increased 30-fold in Southeast Texas between 1981-1995.
- The American redstart and grasshopper sparrow are among 31 songbird species whose breeding range could shift out of Texas as global warming changes the state's climate.



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- Scientists project that sea level along the Texas coast could rise as much as 38 inches in some places by 2100, inundating marshes and estuaries that provide stopover and wintering habitat for many ducks and geese found in the United States.

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 Texans?

Much of Texas is already hot and dry, but changes from global warming will push the limits of many species and ecosystems, at the same time threatening the health and economy of the state.

- The EPA estimates that sand replenishment to protect the Texas coast from a 20-inch rise in sea level could cost between \$4.2-\$12.8 billion. Models suggest that sea level could rise even higher in some areas.
- Brown shrimp caught off the U.S. Gulf Coast could decline 25 percent with only a 10-inch rise in sea level as salt water inundates the bays and estuaries behind the barrier islands separating the Texas mainland from the Gulf of Mexico.
- 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 2001, nearly 5 million people spent more than \$5.3 billion on wildlife viewing, hunting and fishing in the state, which in turn supported 101,401 jobs in Texas.

“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 37,500 new energy technology jobs in Texas by the year 2020.**
- **Provide Texas with at least \$24.2 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 Texas farmers by rewarding environmentally friendly farming and forestry practices.**

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



D.A. Black (NREL)

Texas' solutions to global warming

Texas has the potential to be a leader in developing solutions to global warming.

- Texas was one of the first states to pass a renewable portfolio standard, setting a goal to generate 2.7 percent of the state’s electricity from renewable sources by 2009.
- The Texas Loan STAR Program, administered by the Texas Energy Conservation Office, provides financing for energy efficiency projects for state agencies, state universities, school districts and local governments.
- Texas has the potential to generate more than 98 percent of its electricity needs from wind power.

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

- **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.

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