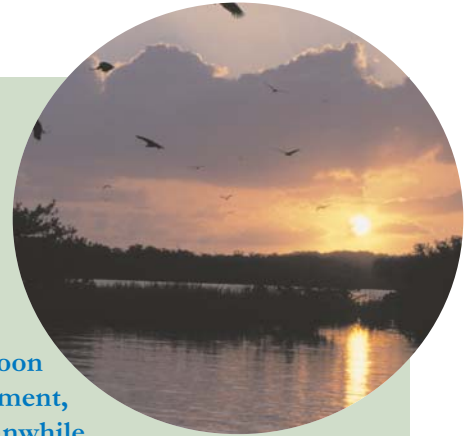




## CHANGE THE FORECAST FOR WILDLIFE SOLUTIONS TO GLOBAL WARMING

# Global Warming and FLORIDA

Florida is a world tourism destination, attracting millions of beachgoers, water lovers and outdoor enthusiasts each year. But global warming is threatening the state's 8,400 miles of tidally influenced coastline. The Intergovernmental Panel on Climate Change estimates that by 2100, average summer temperatures in the state could increase between 4.95 degrees Fahrenheit depending on the extent to which greenhouse gas emissions are curbed. If sea level rises as projected, coastal estuaries around the Everglades, Florida Keys, Indian River Lagoon and Apalachicola Bay will be drastically changed by salt water encroachment, impacting important habitat for recreational fish and other wildlife. Meanwhile, oil interests are chomping at the bit to place the state's offshore reserves on the auction block, threatening open waters with pollution and picture-perfect vistas with oil rigs. The key to protecting the state from both these threats lies in a common solution: reducing our dependence on fossil fuels. Through innovation, this goal can be achieved. Cutting carbon pollution and developing renewable energy will help slow global warming, create jobs and reduce the need to drill for oil off Florida's coast.



## Global warming effects on Florida wildlife

Florida is home to an incredible diversity of native wildlife species, including 386 birds, 86 mammals, 90 reptiles, 136 fish and 56 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.

- Snook, redfish, grouper, billfish, pompano, permit and bonefish all have adapted over thousands of years to variations in climate. However if similar variations occur within a few decades, as projected with global warming, some of these fish might not fare so well.
- As much as 90 percent of the region's coral reefs are dead or dying due to a host of factors, including global warming. An increase in average sea temperatures over the past 30 years has caused widespread coral bleaching, where corals lose the colorful algae in their tissues that they need to survive.
- Florida's coastal wetlands are home to large numbers of



wintering ducks, including scaup, green-winged teal and ring-necked ducks, as well as resident mottled ducks and wood ducks. Continuing land development pressures combined with inundation from sea level rise will likely reduce waterfowl habitat in the coming decades.

## 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 Floridians?

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

- Scientists project sea level along Florida's coast will rise about 18-20 inches by 2100, endangering houses, hotels and other development within 200-250 feet of the shoreline and leaving the areas more vulnerable to storm surges during tropical storms and hurricanes. It will also jeopardize the more than \$15 billion in revenue generated by Florida's sand beaches.
- 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.
- Warmer ocean temperatures could cause longer, more intense algal blooms, damaging habitat and contaminating seafood.
- 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 such as asthma.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2001, more than 4.8 million people spent nearly \$6.2 billion on wildlife viewing, hunting and fishing in Florida, which in turn supported 122,518 jobs in the state.

**“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:

#### **2% POLLUTION REDUCTION PER-YEAR**

A federal legislative solution can drive American ingenuity, create a new generation of American jobs, and meet our moral responsibility to confront global warming.

#### **A GLOBAL WARMING BILL SHOULD:**

\* Reduce U.S. global warming pollution 2% per year, or 20% per decade, and on the order of 80% by the middle of this century. Scientists say the United States must cut our pollution at least this much to avoid the most catastrophic impacts of global warming.

\* Encourage innovation and prevent facilities from being built that lock us into many years using old, inefficient technology.

\* Provide funding to protect wildlife and their habitat. Global warming is already adding new wildlife management burdens. Funding is needed to help continue the long tradition of fish and wildlife associated recreation.

For more information, visit: [nwf.org/globalwarming](http://nwf.org/globalwarming).



Steven Spencer (NREL)

## Florida's solutions to global warming

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

- Numerous rebates and incentives are available for Florida homeowners and businesses to install solar energy systems. The Sunshine State is also on the cutting edge of photovoltaic research, with the largest state-supported renewable energy research institute in the U.S., the Florida Solar Energy Center.
- The U.S. Department of Energy estimates Florida can generate 13.9 billion kilowatt-hours of electricity using renewable biomass, organic material such as plant fiber and animal waste which can be converted into electricity and fuel. This would supply 16 percent of residential electricity needs annually.

**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.
- **Use a low-emission boat motor:** When purchasing your next boat, consider gas mileage and emissions. Boat engines such as a low emission, four-stroke motor pollute only one-sixth the amount of older two-stroke engines.
- **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](http://www.nwf.org/energy).

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