



# Global Warming Impacts on Florida

Increased greenhouse gas concentrations are already changing the Earth's climate, and temperatures will rise to much more dangerous levels unless we greatly reduce our emissions.

**G**lobal temperatures have risen steadily over the past century with damaging impacts on our environment, health and livelihoods. A recent report from the Intergovernmental Panel on Climate Change (IPCC)<sup>1</sup> estimates average Florida temperatures could rise by approximately 4.95 degrees Fahrenheit by 2100, if global warming continues unabated. The effects of global warming pose serious risks to Floridians' health, wildlife and ecosystems, and may adversely impact recreational activities, tourism and state revenues.

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## HEALTH RISKS:

According to the IPCC, there is a direct connection between global warming and the health of Floridians. As a result of air quality degradation from global warming, many people could face increased heart and respiratory diseases. In some cases, higher temperatures can increase the incidence of heat stress and heat stroke.<sup>2</sup> In addition, rising sea levels from melting glaciers from warmer temperatures may also contaminate freshwater reserves vulnerable with saltwater.

## ENVIRONMENTAL PROBLEMS:

Florida coral reefs are particularly susceptible to the effects of global warming. Warming ocean temperatures have already caused significant coral bleaching by killing off the colorful algae in the coral's tissue, and the process is expected to continue. Sea level rise could also lead to coastal erosion and saltwater encroachment, which would drastically change the Everglades and the Florida Keys. Florida's coastal wetlands are also vulnerable as sea levels continue to rise, potentially reducing some habitats.<sup>3</sup>

## WILDLIFE VULNERABILITY:

Wildlife will be negatively impacted as warmer weather alters their surroundings. Both migratory and resident waterfowl could lose their wetland habitats to rising sea levels. Aquatic as well as terrestrial species would have to move to areas with more suitable weather or adapt to the changing climate. A decrease in biodiversity could occur as those plants and animals unable to adapt quickly to climate changes die off.

## ECONOMIC FACTORS:

The impact of global warming on wildlife and habitats would have serious repercussions on Florida's tourism. Hunting, fishing and wildlife viewing in Florida's unique ecosystems brought in \$7.9 billion during 2006 alone. Florida's beaches and coastal developments are also at risk as sea levels rise as much as 20 inches in this century. Agriculture is also susceptible, because warmer weather and compromised freshwater reserves could reduce citrus yields.<sup>4</sup>

## A GLOBAL WARMING SOLUTION

To avoid the worst impacts of global warming, the IPCC has concluded that industrialized nations such as the United States need to cut their global warming pollution 80 percent by 2050. Overwhelming scientific evidence regarding the adverse effects of climate change should compel the United States to establish mandatory federal policies to steadily reduce greenhouse gas emissions.

For more information, visit [www.pewglobalwarming.org](http://www.pewglobalwarming.org), or to view the full IPCC report, "Climate Change 2007: Impacts, Adaptation and Vulnerability," visit <http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg2-chapter14.pdf>.

For more information contact Phyllis Cuttino, Director, Pew Campaign on Global Warming, at 202-887-8867 or [pcuttino@pewtrusts.org](mailto:pcuttino@pewtrusts.org)

<sup>1</sup> Intergovernmental Panel on Climate Change (IPCC), *Fourth Assessment Report*, April 2007, Working Group I, "Climate Change 2007: The Physical Science Basis." [www.ipcc.ch/ipccreports/ar4-wg1.htm](http://www.ipcc.ch/ipccreports/ar4-wg1.htm).

<sup>2</sup> IPCC *Fourth Assessment Report*, April, 2007. Working Group II, "Climate Change 2007: Impacts, Adaptation, and Vulnerability." §14.2.5

<sup>3</sup> IPCC *Fourth Assessment Report*, April, 2007. Working Group II, "Climate Change 2007: Impacts, Adaptation, and Vulnerability." §14.4.3

<sup>4</sup> National Wildlife Federation Fact Sheet 2008. "Global Warming and Florida."