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SOLUTIONS TO GLOBAL WARMING

Global Warming and MARYLAND

From the estuaries and rivers that flow into the Chesapeake Bay to the Atlantic beaches that attract visitors year-round, water is one of Maryland's most valued natural resources. Global warming looms large on the state's horizon, as sea level rise threatens the state's 3,100 miles of shoreline. The Environmental Protection Agency estimates average temperatures in Maryland could rise about 3 degrees Fahrenheit by 2100 if global warming continues unabated. Water levels in the Chesapeake Bay are already rising twice as fast as the global average rate of sea level rise, inundating many of the bay's small islands. The EPA estimates that sea level in the bay could rise another 19 inches by 2100, threatening coastal habitat for the nearly 1.5 million shorebirds that pass through each spring, not to mention for the beach-goers who flock to the shores in the summer.



Global warming effects on Maryland wildlife

Maryland is home to an incredible diversity of native wildlife species, including 305 birds, 88 mammals, 89 fish, 46 reptiles and 40 amphibians. Rising temperatures and sea level in the state are changing the makeup of entire ecosystems, forcing wildlife to shift their ranges or adapt.

- The Chesapeake Bay historically has been an important waterfowl wintering ground, but sea level rise is changing the makeup of salt marshes, making them less attractive to ducks and geese. Projections for the region suggest sea level rise will further reduce shallow water waterfowl habitat.
- The breeding range of Maryland's state bird, the Baltimore oriole, could shift out of the state under certain global warming scenarios. At the very least, the number of nesting orioles within Maryland is likely to be reduced in the coming century.



- Since 1938, one-third of the marshes at the Blackwater Wildlife Refuge on the eastern shore of Maryland have been destroyed by sea level rise. Scientists expect the rest to disappear within the next 30 years, seriously impacting the habitat, for one of the largest concentrations of nesting bald eagles on the east coast north of Florida.

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 Marylanders?

Poplar Island, visited by Captain John Smith on his voyage up the Chesapeake in 1608 and made famous in the 1930s and 1940s as an exclusive retreat for presidents Franklin D. Roosevelt and Harry S. Truman has all but disappeared thanks to sea level rise and erosion. It is only one example of what global warming has in store for Maryland's Chesapeake Bay islands.

- Ocean City underwent \$30 million in beach replenishment in the 1980s, but still could be threatened by sea level rise. The EPA estimates the cost to replenish Maryland's coastline from a 20-inch sea level rise by 2100 could be \$35-\$200 million.
- Smith Island, home to about 400 Marylanders and the subject of a recent documentary on global warming, is disappearing. Since 1850, Smith Island has lost 30 percent of its land mass to sea level rise and erosion, and unless fill is brought in, Smith Island will likely be submerged by the end of the century, displacing dozens of families.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2001, more than 1.9 million people spent nearly \$1.7 billion on hunting, fishing and wildlife viewing in Maryland, which in turn supported 38,304 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

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.

MARYLAND HEALTHY AIR ACT:

Maryland state legislators are currently considering the “Healthy Air Act,” legislation that will reduce carbon dioxide, mercury, sulfur, and nitrogen pollution from Maryland’s oldest and dirtiest coal-burning power plants within the next 5 years. The bill also encourages Maryland to participate in a regional greenhouse gas reduction agreement already underway between nearly every other northeastern state. Participating in the Regional Greenhouse Gas Initiative (RGGI) offers flexible solutions for reducing Maryland’s carbon pollution. Contact your state Delegate or Senator and encouraging them to support the Healthy Air Act. For more information, contact:
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Maryland's solutions to global warming

For the latest news on action opportunities in the Maryland area, you can join the Action Alert list of the Chesapeake Climate Action Network (CCAN) online at www.chesapeakeclimate.org

- Maryland provides a tax credit for commercial developers that meet certain energy-efficiency standards as well as one for the production and sale of electric power from biomass combustion.
- Maryland offers an excise tax exemption of up to \$2,000 for the purchase of new electric vehicles, and up to \$1,500 for new hybrid-electric vehicles. The state legislature is considering adopting California's low emission vehicle standards for new cars, light trucks and SUVs.

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.
- **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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