

**Statement of the Honorable Lee M. Thomas**  
**Former Administrator, U.S. Environmental Protection Agency**  
**before the**  
**United States Committee on Environment and Public Works**  
**Subcommittee on Clean Air and Nuclear Safety**  
**Washington, D.C.**  
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Good morning, and thank you for the opportunity to contribute to the deliberations of this Subcommittee.

I am pleased to be here to offer a perspective on climate change based upon my experience at the Environmental Protection Agency dealing with similar issues. I've approached the issue using a risk assessment and risk management process. This is the approach I used during my time at EPA as we addressed a range of environmental problems.

Whether it was assessing the impact of stratospheric ozone depletion caused by Chlorofluorocarbons, or the impact of lead in gasoline on children's health, scientific data and analysis were the first step in evaluating the risk posed by the problem.

During my six years at the Environmental Protection Agency I dealt with many contentious issues, first as Assistant Administrator and later as Administrator. As Assistant Administrator, challenges involved implementing the new Superfund statute and working with Congress on reauthorizing and putting into effect law on the disposal of hazardous waste and leaking underground storage tanks. Then as Administrator, addressing major environmental issues. I can't remember any of the matters I dealt with during my tenure at the Environmental Protection Agency that were not controversial, some more so than others, ranging from setting safe drinking water standards to clean air requirements.

The issue of climate change is one that the EPA and the global scientific community have studied and analyzed for decades. And since my time as Administrator, the assessment of risk global warming poses to public health and the environment has continually improved and become more certain. Whether it is the Intergovernmental Panel on Climate Change, or the latest scientific valuation authorized by Congress, the National Climate Assessment, there is clear evidence regarding climate change and its anthropogenic foundation.

We know that carbon dioxide concentrations in the atmosphere have increased by 40 percent since pre-industrial times.

We know that carbon dioxide and other greenhouse gases are warming the atmosphere, contributing to a more than 1.5°F rise in global temperatures since 1880.

We know global sea level has risen by an average of eight inches since 1870 primarily from thermal expansion caused by warmer oceans and the melting of glaciers and the Greenland and West Antarctic ice sheets.

We know that ocean acidification is occurring, harming our coral reefs and marine ecosystems. Absorbing about a quarter of our emissions each year, the current rate of acidification is roughly 50 times faster than known historical change.

We know that communities in our country are already dealing with the effects of the changing climate today. In my state of Florida, we see increasing salt water intrusion infiltrating our drinking water supply due to sea level rise. Coastal communities are dealing with the impact sea level rise is having on their drainage systems, resulting in an investment of more than \$300 million to upgrade flood mitigation infrastructure in Miami Beach alone. The economic impact is undeniable, and local governments struggle to address today's impacts of climate change while trying to anticipate the increased risk it poses in the future.

On a broader scale, scientific analysis of the issue points to widespread impacts across our country. They range from depleted shellfish harvests in the Pacific Northwest due to ocean acidification, to increased drought and wildfires in the Southwest and a more than 70 percent rise in the occurrence of heavy downpours in the Northeast since the late 1950s.

Given this assessment of the impacts and risk posed by global warming, the EPA has the responsibility given to it by Congress, and affirmed by the courts, to address the risk management challenge. We know there are many approaches that can be taken, and all are controversial. We know the gases we have emitted will remain in the atmosphere for decades to centuries, and recognize that the solution will require a long-term commitment if we are to mitigate both the effects already occurring and those forthcoming.

But we also know what many of the solutions are, like improving energy efficiency and increasing our reliance on low-emission energy production. Widespread adoption of strategies like these can supplement an international agreement to reduce emissions. In addition, a coordinated national and international approach is needed to assist states and countries implement adaptation measures dealing with the impacts of climate change already taking place today.

Clearly more action is needed to address the impacts today while addressing the larger issue of committing ourselves to avoiding dangerous levels of future warming. The recent steps taken by the EPA to reduce greenhouse gas emissions are significant mitigation measures and once again position the US to demonstrate international leadership on an issue of global significance and consequence.

Thank you again for the opportunity to present my views to the Subcommittee on this critically important issue.