

Connecticut Climate Coalition

Connecticut Climate Coalition, c/o Clean Water Action, 118 Oak Street, Hartford, CT, 06106, 860-728-1254

Top 10 Climate Change Facts

1. The year 2001 is the second warmest year on record.¹ The nine warmest years in this century have all occurred in the last 14 years.²

2. Atmospheric levels of greenhouse gases are increasing. Since 1750, the atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased approximately 31%, 151%, and 17% respectively.³

3. In 2001, US carbon dioxide emissions were 13 percent above 1990 levels; a sharp contrast with the 7 percent cut in greenhouse gases by 2010 that the Kyoto Protocol requires.⁴

4. Sea-level is rising. Along the New England coast, sea-level is rising at a rate ten-times faster than at anytime in the past 1,000-2,000 years.

Cumulative costs through 2100 to protect Connecticut's coastline from a 20-in sea level rise could be \$0.5-\$3 billion.⁵

5. An estimated 95% of all homes located 500 meters from any ocean will suffer serious ocean intrusion/damage within the next 60 years.⁶

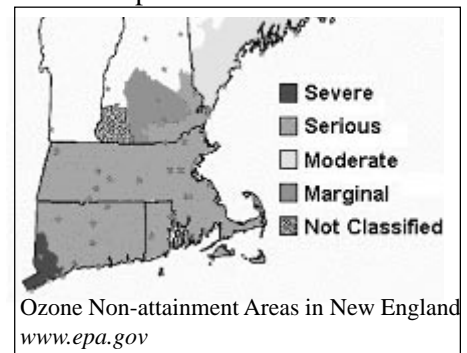
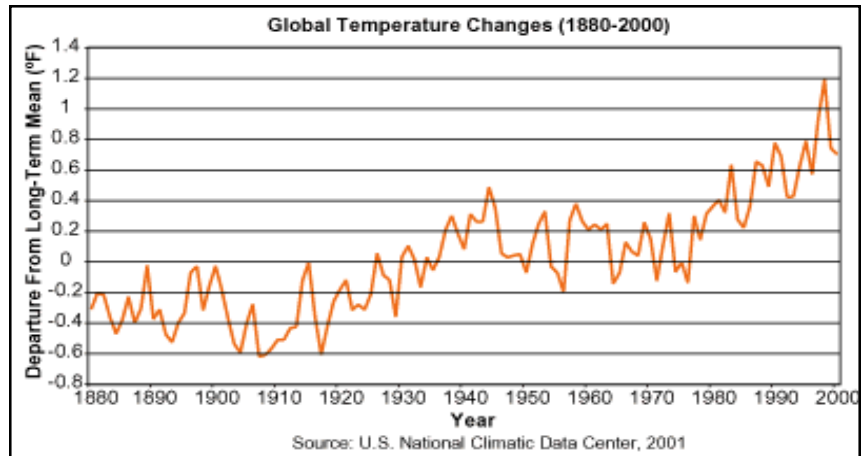
6. Anthropogenic climate change will persist for many centuries. Emissions of long-lived greenhouse gases, such as carbon dioxide, have a lasting effect on climate. Several centuries after carbon dioxide emissions occur, about 1/4 of the increase in carbon dioxide concentration caused by these emissions is still present in the atmosphere.⁷

7. Air quality will likely decrease. Excessive levels of ground-level ozone will likely increase with a climate warming trend. Ground-level ozone has been shown to aggravate respiratory illnesses such as asthma and reduce existing lung function. All of Connecticut is classified as a "serious non-attainment" zone for ground-level ozone.⁸

8. Increased incidences of Lyme disease and West Nile Virus. Connecticut is second in the nation with incidence of Lyme disease and this is expected to increase with climate warming.⁹ Continued warming combined with increased extreme weather events is likely to increase mosquito populations and amplify the size of recurrent West Nile Virus outbreaks.¹⁰

9. Snow cover and ice extent have decreased over the past century. Data show there has been decreases of approximately 10 percent in the extent of snow cover since the late 1960's and there is very likely to have been a reduction of approximately 2 weeks in the annual duration of lake and river ice cover in the mid- and high latitudes of the Northern Hemisphere.¹¹

10. The character of Connecticut's forests could change. Between 30 and 60 percent of the maple-dominated hardwood forests could be replaced by warmer climate forests with a mixture of pines and hardwoods.¹²



1. Hansen, J. et al., 2002: Global warming continues. *Science*, 295, 275.

2. US Environmental Protection Agency. September 1997. Climate change and Connecticut.

3. IPCC Third Assessment Report: Climate Change 2001: The Scientific Basis. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC).

4. Vital Signs 2001. Worldwatch Institute.

5. US Environmental Protection Agency. September 1997. Climate change and Connecticut.

6. Prediction by Dr. Bob Musil, Executive Director, Physicians for Social Responsibility. Excerpt from a presentation given at forum sponsored by the Environment and Energy Study Institute (EESI) in Washington D.C. 2002.

7. IPCC Third Assessment Report: Climate Change 2001: The Scientific Basis. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC).

8. US Environmental Protection Agency. September 1997. Climate change and Connecticut. Publication EPA 230-F-97-008g.

9. World Wildlife Fund. August 2000. New England's Global Warming Solutions. Prepared by Tellus Institute.

10. Clean Air-Cool Planet. Fact Sheet. www.cleanair-coolplanet.org

11. IPCC Third Assessment Report: Climate Change 2001: The Scientific Basis. Contribution of Working Group I to the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC).

12. US Environmental Protection Agency. September 1997. Climate change and Connecticut.