Report predicts environmental disaster for US Northeast

Alan Whyte 19 July 2007

A two-year study published this month entitled "Confronting Climate Change in the U.S. Northeast" analyzes the impact of global warming on the environment and the threat it poses to human survival in the northeastern US states along the coast of the Atlantic Ocean.

The report issued by the Northeast Climate Impacts Assessment was conducted in collaboration with the Union of Concerned Scientists and involved no less than 100 scientists and technical experts in such fields as geology, atmospheric and oceanic research, biology, the forest service, agriculture and economics. The study can be found at: www.ucsusa.org.

The authors refer to a report published earlier this year in which the world's leading climatologists, working through the Intergovernmental Panel on Climate Change, concluded that the burning of fossil fuels, as well as other human activities, such as deforestation, were responsible for an increase in the earth's temperatures over the last half century to the highest point in more than 650,000 years.

By focusing on the Northeast—where 57 million people or about one fifth of all Americans live—the study revealed the consequences of climate change on densely populated areas. In this regard the report is a development of the findings of a 1999 study done by the advocacy group Environmental Defense Fund, which projected environmental changes for New York City in the next 100 years. (See "Hot nights in the city: New York City's environmental future").

Since 1970, the Northeast has experienced increasing temperatures of 0.5 degrees Fahrenheit per decade, with the rate of increase even higher in the winter with an increase of 1.3 degrees per decade. The study projects two scenarios—one in which fossil fuel emissions increase and another where they are reduced. The authors have concluded that due to the damage that has already been done, temperatures will rise 2.5F to 4F in the winter and 1.5F to 3.5F in the summer over the next few decades, irrespective of what measures are taken to improve the situation.

If nothing is done the next number of decades could see winter temperatures rise by 8F to 12F and summer temperatures jump 6F to 14F. In many states, the winter snow season will be cut in half. Summers will start three weeks earlier and end three weeks later. Also, during the summer, cities that now experience a few days over a 100F, will be experiencing 20 to 30 such days. This would increase the number of people suffering and dying from heat exhaustion, especially the most vulnerable such as the sick and elderly.

Droughts lasting one to three months could occur as frequently as once each summer in some areas, threatening the water supply. People in the hotter summer days will experience greater thirst. The decline in the water supply, combined with an increased need from rising temperatures, poses a dire threat to human survival.

In addition, the global sea level is projected to increase by one to two feet. Some parts of the Northeast would be subject to coastline erosion not only because of the rise in sea level, but also because of the impact of waves produced by storms. In addition, there will be an increase in the frequency and intensity of damaging rainstorms throughout the entire Northeast.

Extreme coastal flooding—which in the past occurred once every century in New York City—is predicted to happen once every decade. Water would flow into the city's subway system making the movement of trains impossible. It is projected that Atlantic City, New Jersey and Boston will experience coastal flooding once every year or two instead of once a century. The ozone level will also increase. For Philadelphia, which now ranks tenth in the country for cities failing to meet federal air quality standards, it is projected that the number of such days the city's inhabitants would experience such intolerable breathing conditions will quadruple.

Generally speaking, there will be an increase in air pollution, which would produce a greater frequency of cardiovascular and respiratory diseases such as asthma. The combination of growing temperatures and heavy rainstorms will increase pollen-based allergies and increase the prevalence of mosquitoes, ticks and bacteria that cause such illnesses such as the West Nile virus and Lyme disease.

The rise in ocean temperatures will play havoc on the fishing industry. In addition to creating an earlier migration of Atlantic salmon, cod and lobster are expected to entirely disappear from their traditional habitats off the coast of Long Island and Rhode Island and move northward in search of cooler waters. This may increase the number of lobsters in the most northern state of Maine, but it may also have the opposite effect if lobsters become more susceptible to lobster shell disease.

Global warming will also threaten the current ecological dynamic of the forests. It is expected that some species of trees, such as the Maple, Beech and Birch, will not survive in their current locations, and the pulp and paper industry, a key source of income in the state of Maine, will be seriously undermined. Connected with the danger to the trees is the threat to associated animal life such as the Snowshoe Hare and the Canada Lynx. The population of migratory songbirds, such as the song sparrow and the Baltimore oriole, are expected to decline.

It is also expected that parts of some states such as Massachusetts, New Jersey, and Pennsylvania will become unsuitable for growing popular varieties of apples, blueberries and cranberries. The greater heat will disturb cows, reducing milk production by at least 15 percent in some areas.

Global warming that will reduce snow pack and snow density will also threaten the winter tourist and leisure industry, threatening not only skiing but also snowmobiling, which is even more vulnerable because it cannot utilize machine-made snow. By the end of the century only western Maine will have a viable ski industry under the higher emissions projections.

The report calls for more efficient uses of existing energy supplies and the utilization of renewable energies such as solar, wind and geothermal power. Towards the very end of the document, the authors conclude, "The actions highlighted here for meeting the climate challenge are consistent with and complementary to other widely shared goals such as enhancing our energy and economic security, creating jobs, producing cleaner air, and building a more sustainable economy."

While presenting a devastating picture of the human impact of global warming, the report concludes with an appeal to the economic and political powers-that-be to change course before they destroy the planet. Such appeals, however, ignore the real economic and social relations of modern capitalist society, in which every aspect of life-including the very environment upon continued human existence depends-is which subordinated to the enrichment of a financial elite. including those that control the vast oil conglomerates, which dominate energy production. The very survival of mankind, therefore, depends on the reorganization of economic life on the basis of a far more rational use of the world's energy, technological and human resources to meet the needs of society as a whole, not private profit.



To contact the WSWS and the Socialist Equality Party visit:

wsws.org/contact