



Bluewater Network Position Paper: Global Warming

Global Warming

The overwhelming majority of the world's scientists agree that the Earth's climate is warming at an unprecedented rate and that over the next century this global warming will be one of the biggest problems facing the environment, economy, and human health. This rise in temperatures is attributed to the significant increase in greenhouse gas emissions, mainly from the burning of fossil fuels in the transportation and energy sectors.

According to the United Nation's Intergovernmental Panel on Climate Change, temperatures during the last century rose an average of 1°F, the fastest temperature increase in the last 1,000 years. Scientists predict that over the next century, global temperatures will rise by another 2.9-10.4 °F, a rate of increase unprecedented in the last 10,000 years. This is expected to cause a variety of adverse environmental impacts, including rising sea levels, warming oceans, worsening air quality, and increasing frequency and severity of storms, coastal erosion, droughts, heat-waves, floods, and wildfires.

Global Warming in California

California's populace, economy, and environment are expected to suffer devastating consequences from the effects of global warming throughout the 21st century.

California's diverse ecosystems and long coastlines are especially susceptible to the destructive impacts of climate change. Rising temperatures are projected to melt the Sierra snowpack by one-third over the next 60 years and two-thirds by 2090. Sea levels along California's coast rose six inches in the last 100 years and are estimated to rise another 8-12 inches during this century, threatening critical freshwater resources, such as the San Joaquin Delta. In addition, catastrophic wildfires are expected to more than double in some regions of California over the next 50 years as a result of global warming.

If steps are not taken to reverse global climate change, California residents will face a host of health problems. Warmer temperatures will increase the rate of smog formation and seriously exacerbate incidences of asthma. A warmer climate will cause increased incidences of tropical diseases, including malaria, yellow fever, encephalitis, and Lyme disease, which are carried by mosquitoes, ticks, and rats. Increased temperatures will also result in fatal heat waves affecting hundreds of people, particularly young children and the elderly. Low income communities will be disproportionately impacted by adverse health impacts due to minimal access to health care and higher exposure to smog.

Global warming also threatens California's top industries including tourism, agriculture, real estate, fishing, insurance, and timber. Since the 1960s, U.S. insurance companies have witnessed a 400 percent increase in large weather disasters, with a 1,100 percent increase in insured losses, 50 percent of which occurred after 1990. California leads the nation in agricultural production, which would be seriously disrupted by the impacts of global warming. A 5°F increase, as projected over the next several decades, could result in approximately \$11 billion in annual losses for the nation's agricultural sector, significantly impacting California farmers.

Although global warming will impact the entire state, its effects on public lands and waters—those that have been set aside to protect valuable ecosystems in California—will be especially severe. In June 2002, Bluewater Network released *Scorched Earth, Global Climate Change Impacts on Public Lands and Waters*, an alarming report detailing the effects of global warming on America's national parks, forests, wildlife refuges, and marine sanctuaries. In California, snowpack loss at Tahoe National Forest will threaten not only California's water supplies, but the area's \$100 million dollar winter recreation industry. At Yosemite National Park, forested areas are expected to decline by up to 50 percent, and warming rivers and streams could devastate fish populations.

California's Contribution to Global Warming

An effort to reduce greenhouse gas emissions in California will make a significant difference in the fate of Earth's fragile ecosystems. California is the second largest contributor of global warming pollution in the U.S., emitting over six percent of the nation's greenhouse gas pollution, and between one and two percent of global carbon dioxide. The vast majority of these emissions come from the burning of fossil fuels. Combustion of fossil fuels for transportation accounts for 49 percent of California's total global warming pollution; fossil fuel combustion for electricity generation accounts for 16 percent of the total.

Solutions

For the sake of future generations, the environment, and the economy, California must do its part to stabilize the climate, by taking immediate and sensible steps to achieve sizeable reductions in greenhouse gas pollution. While working to reduce emissions, the state must also address the deleterious effects of global warming that are already occurring, and will continue to occur until the climate is stabilized.

During the next decade, California must take aggressive steps to reduce its fossil fuels dependence in order to reduce its share of greenhouse gas pollution, and lead the nation and world in forward-thinking technologies for stabilizing the climate. Reducing use of fossil fuels in both the energy and transportation sectors will help lower greenhouse gas emissions and other air pollutants, as well as save consumers money on fuel and energy. Moreover, reducing fossil fuel dependence in California will assist the nation in moving away from the importation of foreign oil supplies, particularly from politically volatile nations.

In addition, California agencies must immediately begin to analyze the impacts of global warming on the state's important natural resources, including water, forests, coasts, and protected land areas such as parks and wildlife refuges. By understanding the current and future impacts of global warming, California will best be able to implement the long-term management actions necessary to mitigate its effects.

By taking bold steps now to reduce greenhouse gas emissions and at the same time mitigate the effects of global warming on precious natural resources, California will not only protect its own economy and environment, but will lead the nation on the most important environmental problem of the century.