

THE WHITE HOUSE

The Threat of Carbon Pollution: Arizona

We have a moral obligation to leave our children a planet that's not polluted or damaged, and by taking an all-of-the-above approach to develop homegrown energy and steady, responsible steps to cut carbon pollution, we can protect our kids' health and begin to slow the effects of climate change so we leave a cleaner, more stable environment for future generations. Climate change impacts including severe weather, asthma attacks, and prolonged allergy seasons are affecting our security, our economy, and our communities. In 2012 alone, the cost of weather disasters exceeded \$110 billion in the United States, and climate change will only increase the frequency and intensity of these events. Today, we already set limits for arsenic, mercury and lead, but we impose no limits on how much carbon pollution our power plants release. Carbon pollution is contributing to a higher risk of asthma attacks and more frequent and severe storms, floods, heat waves, and wildfires, driving up food prices and threatening our communities. The President's plan is a comprehensive approach to cutting the pollution that causes climate change and threatens public health, setting us on a path to make our communities healthier, safer, and more resilient.

THE IMPACT OF POLLUTION AND EXTREME WEATHER IN ARIZONA

In 2011, power plants and major industrial facilities in Arizona emitted nearly 60 million metric tons of carbon pollution—that's equal to the yearly pollution from more than 12 million cars.

Recent incidents provide a reminder of the impacts to our public health and costs due to extreme weather in Arizona. Although we cannot say that climate change is responsible for any individual event, climate change is already increasing our risks from these events.

- In Arizona, there were over 7,600 hospital admissions for asthma in 2011, with an average charge of over \$21,900 for each stay.
- Drought-sparked wildfire has killed off many of the region's trees, and warm winters have allowed the destructive bark beetle to thrive. Combined, fire and beetles have destroyed trees across 20 percent of forests in Arizona and New Mexico. In 2011, three wildfires--the Wallow Fire (the largest in Arizona history), the Monument Fire, and the Horseshoe Two Fire--burned hundreds of thousands of acres, forced the evacuation of several towns, and required more than \$5.85 million in public assistance.
- In July and August 2010, Arizona experienced devastating severe storms and flooding. The President declared a major disaster, and the state required more than \$6 million in Federal public assistance to support recovery and rebuilding efforts.

ANTICIPATED CLIMATE-RELATED RISKS IN SOUTHWEST

Temperatures in the Southwest are increasing more quickly than in other regions of the United States as a result of climate change. These increases can have important impacts on human health, particularly in cities, where 90 percent of the region's population lives. Decreases in air quality during heat waves, for example, can worsen the effects of respiratory illnesses and heart disease; high temperatures also increase the risk of heat stress. Even small increases in temperature can dry soils and vegetation, increasing the risk of wildfires. In 2012, wildfires burned 9.2 million acres across eight states, reducing air quality, damaging property and costing more than \$1 billion. Water

resources, already over-tapped in many areas, will become even scarcer as a result of increased evaporation and snowmelt caused by higher temperatures, affecting agriculture, hydroelectric power plants, and water availability in growing cities such as Phoenix and Las Vegas. This will also reduce groundwater recharge, which, combined with heavy groundwater pumping, will lower water tables and limit water availability and make it harder to support the Southwest region's cities and agricultural production. Although water scarcity will increase, the Southwest will also see increased frequency and altered timing of flooding because of increased intensity of rainfalls when they do occur, leading to increased risks to people, natural resources, and infrastructure.

CUTTING CARBON POLLUTION AND INCREASING RESILIENCE IN ARIZONA

Climate change is a long-term problem, but we can make substantial progress through a series of steady and responsible steps. The President's plan builds from progress already underway to work with states, local communities, and the private sector to reduce carbon pollution and to prepare our Nation for the impacts that cannot be avoided. Since 2009, President Obama has taken a number of common sense measures to combat carbon pollution, including:

- ***Investing in Clean Energy:*** During the President's first term, the United States more than doubled its use of renewable energy from wind, solar, and geothermal sources. In Arizona, renewable energy generation from these sources increased 1,200 percent. Since 2009, the Administration has supported tens of thousands of renewable energy projects throughout the country, including more than 9,600 in Arizona, generating enough energy to power nearly 96,000 homes and helping Arizona meet its own goal of generating 15 percent of its electricity from renewable energy sources by 2025.
- ***Improving Efficiency:*** Using less energy to power our homes, businesses and vehicles is critical to building a clean and secure energy future. President Obama has made essential investments in research and development for energy efficiency advances, and set new standards to make the things we use every day – from cars to microwaves – more efficient.
 - President Obama established the toughest fuel economy standards for passenger vehicles in U.S. history. These standards will double the fuel efficiency of our cars and trucks by 2025, saving the average driver more than \$8,000 over the lifetime of a 2025 vehicle and cutting carbon pollution.
 - Since October 2009, the Department of Energy and the Department of Housing and Urban Development have jointly completed energy upgrades in more than one million homes across the country, saving many families more than \$400 on their heating and cooling bills in the first year alone.
 - As part of the President's Better Buildings Challenge, the Dystart Unified School District in Arizona committed to reducing energy intensity 20 percent by 2020 in 25 schools totaling 3 million square feet.
- ***Preparing Communities for the Consequences of Climate Change:*** The Obama Administration has worked since its earliest days to strengthen the Nation's resilience to climate change impacts, including investing in critical science and tools, developing the first-ever Federal agency climate adaptation plans, and directly partnering with communities. With support from Centers for Disease Control and Prevention, the Arizona Department of Health Services (AZDHS) has investigated climate change models to better understand vulnerabilities to extreme heat and develop protective measures. For example, AZDHS has developed education materials to support school nurses and coaches in managing heat stress among students playing outdoor sports in hot weather.