

THE WHITE HOUSE

The Threat of Climate Change: Alaska

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, prolonged allergy seasons, and sea-level rise 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 ALASKA

In 2011, power plants and major industrial facilities in Alaska emitted nearly 20 million metric tons of carbon pollution—that's equal to the yearly pollution from more than 3.9 million cars.

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

- Over the past 50 years, temperatures across Alaska increased at a rate twice the national average—3.4°F overall and an average of 6.3°F during the winter.
- Many of Alaska's highways are built on permafrost. When permafrost thaws, roads buckle. In the past 30 years, the number of days when travel is allowed on the tundra has decreased from 200 days to 100 days per year.
- Along Alaska's northwestern coast, increased coastal erosion is causing some shorelines to retreat at rates averaging tens of feet per year. Warming is contributing to the loss of protective sea ice along Alaska's northwestern coast, leading to increased rates of coastal erosion. In Shishmaref, Kivalina, and other Alaska Native Villages, erosion has caused homes to collapse into the sea. Severe erosion has forced some Alaska Native Villages' populations to relocate in order to protect lives and property.

ANTICIPATED CLIMATE-RELATED RISKS IN ALASKA AND THE ARCTIC

Sea ice has declined dramatically in the Arctic in the past few decades and is projected to disappear entirely. The loss of sea ice changes ecosystems, opening the door to invasive species, and alters habitat and plankton blooms, affecting Alaska's commercial fishing industry, which leads the United States in the value of its catch. Ocean acidification caused by carbon pollution further damages fisheries, and coastal storms increase risks to villages and fishing fleets. Much like wetlands, landfast

ice – the ice that is attached to the shore – protects communities from flooding and erosion from storms. With the loss of landfast ice, the rate of erosion along Alaska’s northeastern coastline has doubled over the past 50 years and several coastal villages, such as Newtok, have had to be relocated. Changes in sea ice are having dramatic impacts on traditional ways of life, and on fish and marine animals. Hotter, drier summers have made wildfires more common. The area burned in North America’s northern forests, which span Alaska and Canada, tripled between the 1960s and 1990s. Thawing permafrost damages roads, runways, water and sewer systems, and other infrastructure.

CUTTING CARBON POLLUTION AND INCREASING RESILIENCE IN ALASKA

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. Since 2009, the Administration has supported tens of thousands of renewable energy projects throughout the country.

- ***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.

- ***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. For example, the U.S. Army Corps of Engineers has been working with 178 Alaskan communities affected by erosion from melting sea ice. In some places this means building man-made protective structures; in others it means helping residents develop a relocation plan.