

Published on *American Geosciences Institute* (<https://www.americangeosciences.org>)

Home > National Climate Assessment warns of environmental impacts and societal and economic damages

National Climate Assessment warns of environmental impacts and societal and economic damages

November 22, 2018

The White House released the second volume of the U.S. Global Change Research Program's (USGCRP) Fourth National Climate Assessment (NCA4) on November 22, warning of potential damage to the U.S. economy, environment, and human health in the coming decades as a result of climate change.

The report finds that the impacts of climate change are already being felt in communities across the country. In the absence of significant global mitigation, annual losses in some economic sectors could consequently reach hundreds of billions of dollars by the end of the century.

The report includes information and projections regarding the negative impacts of climate change on different aspects of society and the economy. It suggests the growing impacts could disrupt the vitality of the nation's communities and lead to increased risks in other vital, interconnected systems including water resources, public health, agriculture, tourism, and national security.

According to the release, "Future climate change is expected to further disrupt many areas of life, exacerbating existing challenges to prosperity posed by aging and deteriorating infrastructure, stressed ecosystems, and economic inequality. Impacts within and across regions will not be distributed equally."

The report highlights adaptation strategies implemented in the energy sector—including replacing coal use with natural gas and increased deployment of renewable energy—along with policy actions that are reducing greenhouse gas emissions in the United States. However, it indicates that efforts must be expanded substantially to avoid the most severe, long-term consequences.

The National Climate Assessment was mandated by Congress in the Global Change Research Act of 1990, which requires the USGCRP to deliver a report every four years on the current trends and effects of global climate change. The first volume of NCA4 was released in November 2017.

The National Oceanic and Atmospheric Administration (NOAA) served as the administrative lead agency for the preparation of this report. The report's development was overseen by a steering committee, composed of representatives from thirteen federal agencies that participate in the USGCRP, and it was produced by a team of more than three hundred federal and non-federal experts. The authors evaluated scenarios that span a range of plausible changes in greenhouse gas emissions, and the report highlights some of the most decision-relevant uncertainties in key environmental parameters.

Sources: Library of Congress; The New York Times; U.S. Global Change Research Program.
