

# FEDERAL CLIMATE CHANGE REPORTS.

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The National Oceanic and Atmospheric Administration recently released a two volume report on global climate change. Two websites discuss the study and provide links to the full report. The texts from relevant websites are quoted below...

## The National Climate Assessment

<https://nca2018.globalchange.gov/>

The Global Change Research Act of 1990 mandates that the U.S. Global Change Research Program (USGCRP) deliver a report to Congress and the President no less than every four years that “1) integrates, evaluates, and interprets the findings of the Program...; 2) analyzes the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; and 3) analyzes current trends in global change, both human-induced and natural, and projects major trends for the subsequent 25 to 100 years.”<sup>1</sup>

The Fourth National Climate Assessment (NCA4) fulfills that mandate in two volumes. This report, Volume II, draws on the foundational science described in Volume I, the *Climate Science Special Report (CSSR)*.<sup>2</sup> Volume II focuses on the human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways. Where possible, NCA4 Volume II provides examples of actions underway in communities across the United States to reduce the risks associated with climate change, increase resilience, and improve livelihoods.

This assessment was written to help inform decision-makers, utility and natural resource managers, public health officials, emergency planners, and other stakeholders by providing a thorough examination of the effects of climate change on the United States.

## **NOAA Press Release:** **Report highlights impacts, risks and adaptations to climate change.**

November 23, 2018

<https://www.noaa.gov/news/new-federal-climate-assessment-for-us-released>

A new federal report finds that climate change is affecting the natural environment, agriculture, energy production and use, land and water resources, transportation, and human health and welfare across the U.S. and its territories.

Volume II of the Fourth National Climate Assessment (NCA4), released today by the United States Global Change Research Program ([USGCRP](#)), focuses on climate change impacts, risks and adaptations occurring in the U.S. The report contains supporting evidence from 16 national-level topic chapters (e.g., water, oceans, energy, and human health), 10 regional chapters and two chapters that focus on societal responses to climate change. USGCRP also released the Second State of the Carbon Cycle Report ([SOCCR2](#)).

NOAA is one of 13 federal agencies that contributed significantly to the Fourth National Climate Assessment.

### **Key findings of the NCA4, Vol. II *Communities***

- Human health and safety, our quality of life, and the rate of economic growth in communities across the U.S. are increasingly vulnerable to the impacts of climate change.
- The cascading impacts of climate change threaten the natural, built and social systems we rely on, both within and beyond the nation's borders.
- Societal efforts to respond to climate change have expanded in the last five years, but not at the scale needed to avoid substantial damages to the economy, environment, and human health over the coming decades.

- Without substantial and sustained global efforts to reduce greenhouse gas emissions and regional initiatives to prepare for anticipated changes, climate change is expected to cause growing losses to American infrastructure and property and impede the rate of economic growth over this century.

***Agriculture and food production***

- Rising temperatures, extreme heat, drought, wildfire on rangelands and heavy downpours are expected to increasingly challenge the quality and quantity of U.S. crop yields, livestock health, price stability and rural livelihoods.

***Ecosystems***

- Continued changes to Earth’s climate will cause major disruptions in some ecosystems. Some coral reef and sea ice ecosystems are already experiencing transformational changes, affecting communities and economies that rely upon them.

***Water and the coasts***

- Changes in the quality and quantity of fresh water available for people and the environment are increasing risks and costs to agriculture, energy production, industry and recreation.
- Climate change will transform coastal regions by the latter part of this century, with ripple effects on other regions and sectors. Many communities should expect higher costs and lower property values from sea level rise.

***Health***

- Climate change threatens the health and well-being of the American people by causing increasing extreme weather, changes to air quality, the spread of new diseases by insects and pests, and changes to the availability of food and water.

**End.**