The Fourth National Climate Assessment (NCA4):
A Brief Overview

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Legislative Origins of the NCA

*Global Change Research Act of 1990, Section 106:*

Not less frequently than every 4 years [USGCRP] shall prepare and submit to the President and Congress an assessment which:

- Integrates, evaluates, and interprets the findings of [USGCRP] and discusses the scientific uncertainties associated with such findings
- 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
- Analyzes current trends in global change, both human-induced and natural, and projects major trends for the subsequent 25 to 100 years.
NCA4: A Two-Volume Effort

I. Climate Science Special Report
science2017.globalchange.gov
• Observed & projected changes in the Earth system
• 15 chapters, ~500 pages, ~50 authors

II. Impacts, Risks, and Adaptation in the U.S.
nca2018.globalchange.gov
• Observed & projected change in sectors and regions (“climate change & society”)
• Response Actions
• 29 chapters, ~1500 pages, 300+ authors
Volume II: Table of Contents

I. Overview

II. Our Changing Climate

III. National Topics
• Water
• Energy Supply, Delivery and Demand
• Land Cover and Land-Use Change
• Forests
• Ecosystems, Ecosystem Services, and Biodiversity
• Coastal Effects
• Oceans and Marine Resources
• Agriculture and Rural Communities
• Built Environment, Urban Systems, and Cities
• Transportation
• Air Quality

• Human Health
• Tribes and Indigenous Peoples
• Climate Effects on U.S. International Interests
• Sector Interactions, Multiple Stressors, and Complex Systems

IV. Regional Chapters
• Northeast
• Southeast
• U.S. Caribbean
• Midwest
• Northern Great Plains
• Southern Great Plains
• Northwest
• Southwest
• Alaska
• Hawai`i and U.S.-Affiliated Pacific Islands

V. Response
• Reducing Risks Through Adaptation Actions
• Reducing Risks Through Emissions Mitigation

VI. Appendices
• Process
• Information Quality Act
• Data Tools and Scenario Products
• International
• Frequently Asked Questions

Other New & Improved Aspects
• Economics
• Case Studies
• Scenario Products
• Localized Information
NCA4 Volume II in 5 Bullets

- Earth’s climate is now changing faster than at any point in modern civilization.
- These changes are primarily the result of human activities, the evidence of which is overwhelming and continues to strengthen.
- The impacts of climate change are already being felt across the country, and climate-related threats to Americans’ physical, social, and economic well-being are rising.
- Americans are responding in ways that can bolster resilience and improve livelihoods.
- However, neither global efforts to mitigate the causes of climate change nor regional efforts to adapt to the impacts currently approach the scales needed to avoid substantial damages to the U.S. economy, environment, and human health and well-being over the coming decades.
THANK YOU!

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nca2018.globalchange.gov