

National Climate Assessment (NCA)

What is the National Climate Assessment (NCA)?

The NCA report is the official US Government “State of the Union” about climate change, produced and vetted by 13 Federal agencies, that

- * Informs the nation about observed changes and impacts, the current status of the climate, and anticipated trends for the future
- * Integrates scientific information from multiple sources and sectors to highlight key findings and significant gaps in our knowledge
- * Establishes consistent methods for evaluating climate impacts in the U.S. in the context of broader global change
- * Provides input to Federal science priorities and is used by U.S. citizens, communities, and businesses as they create more sustainable and environmentally sound plans for the nation’s future
- * Focuses on the United States providing information on ten geographic regions, coasts, and ocean and marine resources amongst a variety of economic and other sectors
- * Is provided as an interactive online document containing many useful, free downloadable images and graphics and has associated materials and works with tools such as the Climate Resilience Toolkit
- * Provides links to the original research that underlies every key point
- * Is updated every four years with the latest data and knowledge
- * Is mandated by Congress through the U.S. Global Change Research Act
- * Includes “sectoral” information on the effects of climate change on topics such as biodiversity, forestry, agriculture, health, rural communities, coastal zone development and ecosystems, water resources, energy, land use, etc.
- * Provides authoritative and vetted information for understanding and communicating climate change science and impacts in the United States

What is an assessment?

An assessment like the NCA is a process in which scientists survey existing scientific studies and peer-reviewed literature and then integrate and synthesize the science within and between disciplines and across sectors and regions.



Why do we need assessments?

Assessments support the critical analysis of issues; highlight key knowledge that can improve policy choices; and identify significant gaps that can limit effective decision-making. Assessment activities also track progress by identifying changes in the condition of the integrated Earth system over time, advances in the underlying science, and changes in human responses.

Who Writes the NCA?

Assessments have been integral components of the U.S. Global Change Research Program (USGCRP) since its inception. Along with its strategic role as coordinator of Federal global change research, USGCRP is required by the Global Change Research Act of 1990 to conduct a National Climate Assessment (NCA). A team of more than 300 experts produces the full report. Stakeholders involved in the development of the assessment included decision-makers from the public and private sectors, resource and environmental managers, researchers, representatives from businesses and non-governmental organizations, and the general public.

Fourth National Climate Assessment (NCA4)

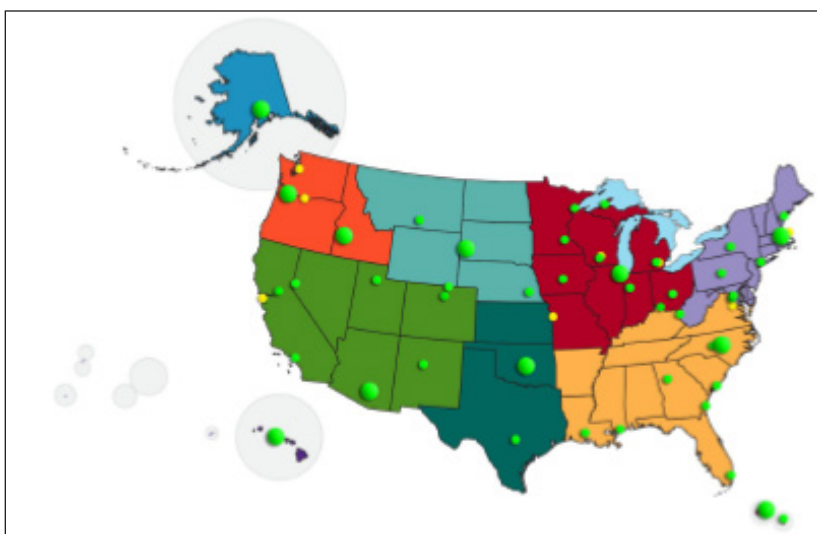
Development of the Fourth National Climate Assessment (NCA4) is currently underway, with anticipated delivery in late 2018. The underlying science for NCA4 was published as a stand-alone report in Fall 2017 (<https://science2017.globalchange.gov>). Information related to NCA4, including a list of chapters, explanation of author roles, and opportunities to participate in the process, can be found at: <http://www.globalchange.gov/nca4>

NCA4 Outline & Draft Chapters

- I. Overview
- II. Our Changing Climate
 - * National Overviews
 - * Water
 - * Energy
 - * 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
 - * Tribal and Indigenous Communities
 - * Climate Effects on U.S. International Interests
 - * Sectoral Interdependencies & Compounding Stressors: The Science of Complex Systems
- III. Regional Chapters
 - * Northeast
 - * Southeast
 - * US Caribbean
 - * Midwest
 - * Northern Great Plains
 - * Southern Great Plains
 - * Northwest
 - * Southwest
 - * Alaska
 - * Hawaii and Pacific Islands
- IV. Response
 - * Near-term Adaptation Needs and Increased Resiliency
 - * Mitigation: Avoiding and Reducing Long-term Risks

NCA4 Authorship Process

- * Ten regional engagement workshops
- * Two Coordinating Lead Author meetings
- * Using major Sustained Assessment inputs: Climate Science Special Report, Health report, Food security report
- * Outreach: at 50+ national meetings, via Federal Register Notices
- * Transparency: using systems developed during NCA3 to ensure accessibility of report materials, traceable accounts, information quality, and broad public engagement
- * Federally-led, community-developed



The public comment version of the 4th National Climate Assessment was released in the Fall of 2017, together with the Climate Science Special Report (CSSR - A component and Executive Summary of NCA4).