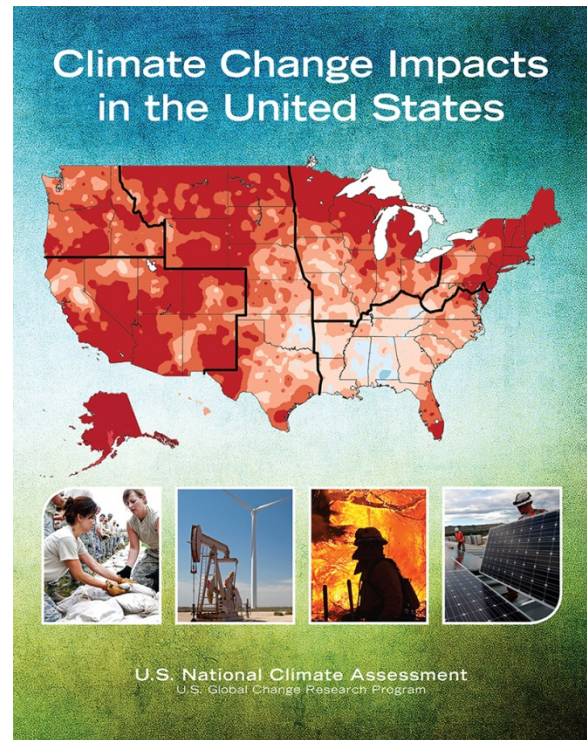


## NOAA Product Highlight: Third National Climate Assessment

On May 6, 2014, the White House released the [third National Climate Assessment](#) (NCA), which “assesses the science of climate change and its impacts across the United States, both now and throughout this century” (p. iv). Mandated at least every four years by the Global Change Research Act of 1990, the NCA “documents climate change related impacts and responses for various sectors and regions, with the goal of better informing public and private decision making at all levels” (NCA Full Report, p. iv).

The NCA contains a variety of findings that help us understand the climate changes already underway and provides the context for how we can minimize impacts, build resilient communities, and protect the ecosystems that sustain us. The global climate is changing and “multiple lines of independent evidence confirm that human activities are the primary cause of the global warming of the past 50 years” (p. 7).



As the NCA demonstrates in the [Ecosystems](#) chapter, climate change is affecting “the living world...through changes in ecosystems, biodiversity, and ecosystem services” (p. 196). “Climate change impacts on ecosystems reduce their ability to improve water quality and regulate water flows” (p. 197). Combined with other stressors, climate change is also “overwhelming the capacity of ecosystems to buffer the impacts from extreme events like fires, floods, and storms” (p. 199).

“Landscapes and seascapes are changing rapidly, and species, including many iconic species, may disappear from regions where they have been prevalent or become extinct, altering some regions so much that their mix of plant and animal life will become almost unrecognizable” (p. 200). Additionally, the “timing of critical biological events, such as spring bud burst, emergence from overwintering, and the start of migrations, has shifted, leading to important impacts on species and habitats” (p. 201).

All of the NCA findings address the important social, economic, and environmental challenges that arise due to climate change as well as potential solutions to meet these challenges.

To view the [full report](#), visit the third National Climate Assessment’s interactive website at [nca2014.globalchange.gov](http://nca2014.globalchange.gov). For a synopsis of the key findings from the Assessment, see the [Highlights](#) report or [download the 20-page Overview booklet](#).