

New guidebook provides framework for managing US forests in face of climate change

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Resource managers at the nation's 155 national forests now have a set of science-based guidelines to help them manage their landscapes for resilience to climate change.

Developed by the Forest Service's western research stations, the four-part framework details a practical and credible management approach, grounded in strong partnerships between local resource managers and scientists, that will help national forests meet their management mandate. The guidelines are published in *Responding to Climate Change on National Forests: A Guidebook for Developing Adaptation Options*, a new report published by the U.S. Forest Service's [Pacific Northwest Research Station](#).

"This guide lays out an important foundation and provides useful, real-life examples to help managers and citizens build their climate-smart adaptive capacity," said David Cleaves, the Forest Service's climate change advisor. "It will be an important source for practices and tools for enhancing the future of our Nation's forests."

Since 2008, when Forest Service Chief Tom Tidwell issued an agency-wide strategy for responding to climate change, every national forest across the country has been required to develop options to adapt natural resource management to the potentially harmful effects of a [changing climate](#). Forests use an annual performance "scorecard" to outline

specific goals and objectives and to document their success in meeting the framework's direction.

The new adaptation guidelines support this process by providing managers with specific information about decision tools, models, and planning instruments and by offering guidance on setting priorities, assessing resource vulnerabilities, and developing goals. Central to the guidelines are four steps – reviewing, ranking, resolving, and observing – that managers can follow to localize climate change science, evaluate sensitivity of specific natural resources, develop adaptation options, and monitor their effectiveness. This approach makes the guidebook flexible enough to apply to all national forests, regardless of which ecosystems they contain or what their management priorities are.

"There is no one 'recipe' for adapting to a warmer climate, but there are things that can be done to build resilience and help manage forests sustainably," said David L. Peterson, a research biologist with the station and the guidebook's lead author. "The adaptation guidebook provides a toolkit from which various tools can be selected, all based on current science. We expect the toolkit to evolve over time as we learn more about the effects of [climate change](#) and about which adaptation techniques are effective."

Peterson developed the guidelines along with counterparts from the Forest Service's Pacific Northwest, Pacific Southwest, and Rocky Mountain Research Stations, with input from university scientists and national forest resource managers.

More information: The guidebook is available online at www.treearch.fs.fed.us/pubs/39884

Provided by USDA Forest Service

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