

Our Lands & Forests: Threatened by the Climate Crisis

We cannot solve the climate crisis without forests. Changing climate and extreme weather are challenging the health of our working lands and ecosystems in the United States, as well as our ability to adapt to these circumstances. Healthy lands and forests can contribute to climate mitigation, adaptation and resilience.

In 2017 and 2018, wildfires burned across more than 18 million acres of US land and resulted in a multitude of human loss as well as the devastation of entire towns, homes, and livelihoods. A warmer world, which dries trees and plant life, has made forests and land habitats more susceptible to burning. A [recent study](#) by the National Academy of Sciences found that half as much forest area would have burned between 1984 and 2015 in a world not warmed by climate change.

Protecting our forests and land from the worst effects of climate change through common sense solutions means protecting American families and communities as well as our nation's history of conservation and stewardship.

The Challenge

Forests in the United States are projected to transform significantly as changing climate and extreme weather magnify the effects of disturbance, including drought, wildfire, insects and invasive species. Higher temperatures and changing precipitation are projected to drastically increase the number of wildfires, causing at least a doubling of area burned in the US by the mid-21st century. Insects like bark beetles—that historically were suppressed by very cold winters—and other invasive species are becoming more widespread, which further increase fire risk and the vulnerability of our forests and lands. Forests ability to provide essential services, including clean drinking water and wildlife habitat, is also at risk.



We must also protect the resilience of our grasslands. Hay and forage used for grazing may be affected by changes to temperature and precipitation such as increasing drought, while livestock are vulnerable to stress caused by temperature extremes.

Catastrophic events—such as the Western fires of 2018 and the Midwestern floods of 2019—are likely to increase in frequency and intensity. This is causing tremendous amounts of stress and financial hardship. Landowners need solutions so that our lands and forests can remain resilient in the face of extreme and ever changing weather.

The Opportunity

Building resilient forest landscapes not only provides a vast sink for atmospheric carbon, it will protect rural communities from the ravages of catastrophic wildfire, sustain our native

biodiversity, and provide endless outdoor recreation opportunities (e.g., hunting, fishing, hiking, camping). A sustainable forest products industry creates hundreds of thousands of jobs and generates a renewable supply of building materials and non-timber forest products. Perhaps most importantly, forests occupy large areas in our water-supply watersheds, serving as crucial natural infrastructure to filter and clean drinking water for the majority of Americans.

The Solution

Forest resilience is diminished across much of the country, but sound, science-based, locally-appropriate management of forests will result in rapid revitalization. What's needed is a national commitment to invest resources in building forest resilience and a skilled workforce to carry out the millions of acres of thinning, controlled burns, sustainable logging and other treatments that will build forest health. Early investment in building resilience will save money in reduced firefighting, water treatment, and flood control expenditures.

Three areas of focus will kick start this national commitment to resilient forests and provide disproportionate benefit. First, we should initiate public-private partnership to reforest millions of acres of degraded farmlands. Opportunities to do so exist in most US states but are most abundant in the lower Mississippi Basin. Second, we must invest in building resilience to wildfire and reducing fuel loads in forests at risk of catastrophic wildfire. These risks are highest in the Western US (consider adding wildfire risk map below) but are growing in the southeast, as well. Finally, we should concentrate forest resilience treatments in the most critical water supply watersheds to ensure a supply of clean water into the future.

The Role for Congress

Policy options that could provide incentives to forest landowners and ranchers to promote resilience and beneficial carbon storage include:

- Federal policies that value the carbon sequestration provided by forests and ranchlands.
- Robust funding for conservation and management practices that promote carbon storage and that benefit land and forest health, to include funds to improve the management of lands and forests in the face of fires, insects and invasive species.
- Robust funding for our federal forest management agencies, especially the USDA Forest Service and DOI Bureau of Land Management.
- Tax incentives for ranchers and forest landowners who adopt conservation and other practices that benefit carbon storage and resilience.
- Government-backed insurance products that incentivize resilient forestry and grazing practices.