



AMERICAN FORESTS
- SINCE 1875 -

How Land Conservation Can Unlock Forest-Climate Solutions

Jad Daley, President & CEO



@JadDaley

Eastern Forest Partnership

Take Action

»Focus Areas

»Resources

»Home



EFP Member Organizations

- »Appalachian Mountain Club
- »Appalachian Trail Conservancy
- »Environmental Defense
- »Highlands Coalition
- »National Wildlife Federation
- »Northern Forest Alliance
- »South Carolina Coastal Conservation League
- »Southern Appalachian Forest Coalition
- »Southern Environmental Law Center
- »Tennessee Parks and Greenways Foundation
- »The Wilderness Society
- »Trust for Public Land
- »Western Pennsylvania Conservancy

About Us

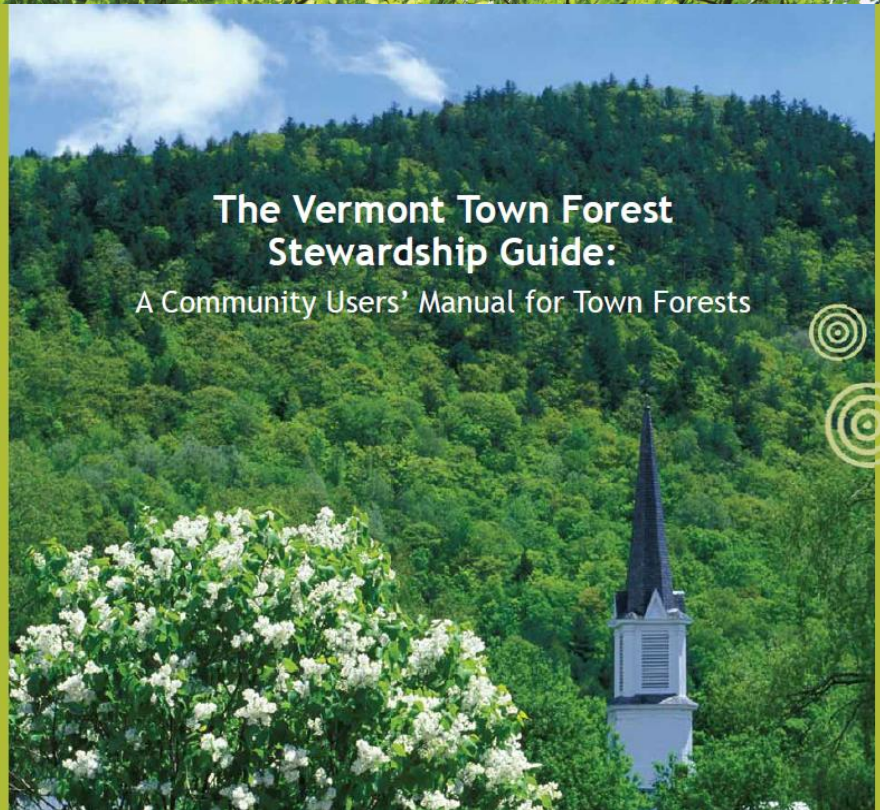
The Eastern Forest Partnership was founded in 2000 to provide a focused and unified voice for increased federal investment in eastern forest conservation. The Partnership has grown to thirteen member non-profit conservation organizations (right), a mix of large national organizations, leading state and regional groups, and three large conservation coalitions that are themselves made up of more than 170 member groups total.

Our core activity is joint federal advocacy in support of key federal conservation funding programs for eastern forests, most notably the Forest Legacy Program and the Land and Water Conservation Fund. The Partnership welcomes the participation of interested organizations and potential funders at our annual spring meeting and advocacy day in Washington, annual fall meeting in Washington, and regional outreach summits. **We are actively seeking new members and encourage you to join us!**

The Partnership is directed by a steering committee of eleven representatives from the member organizations under the leadership of Jad Daley, the Partnership's paid Coordinator. Daley, a graduate of Brown University and Vermont Law School, has led the Partnership since its inception and also serves as the Campaign Director for the Northern Forest Alliance. The Partnership is represented by Rich Innes Conservation Strategies, LLC in support of our federal advocacy.

For more information on the Partnership, please contact Jad Daley at 802-253-8227 X13 or coordinator@easternforest.org.

The Vermont Town Forest Stewardship Guide: A Community Users' Manual for Town Forests





How to Optimize Forest Conservation for Climate?

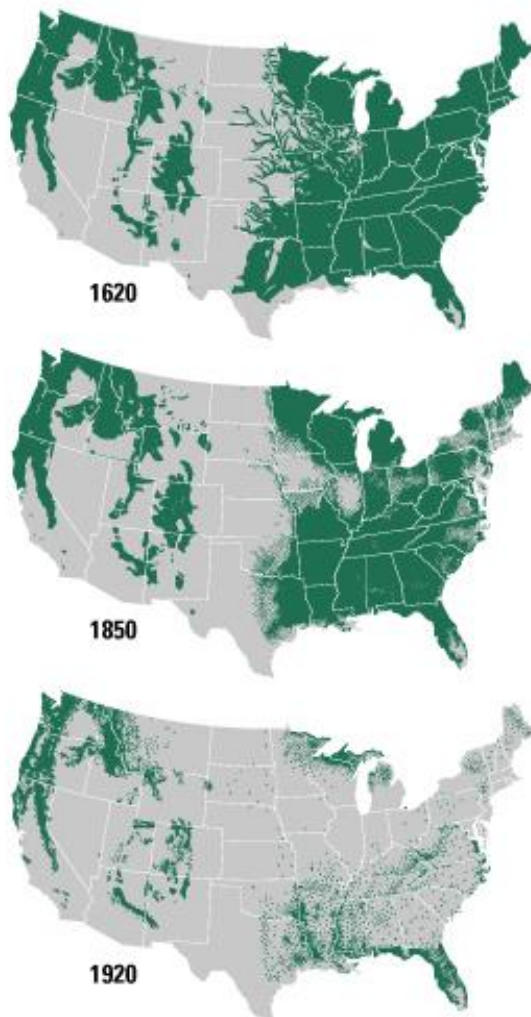


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Setting the CONSERVATION Context



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Eastern Forest Recovery



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1911 WEEKS ACT

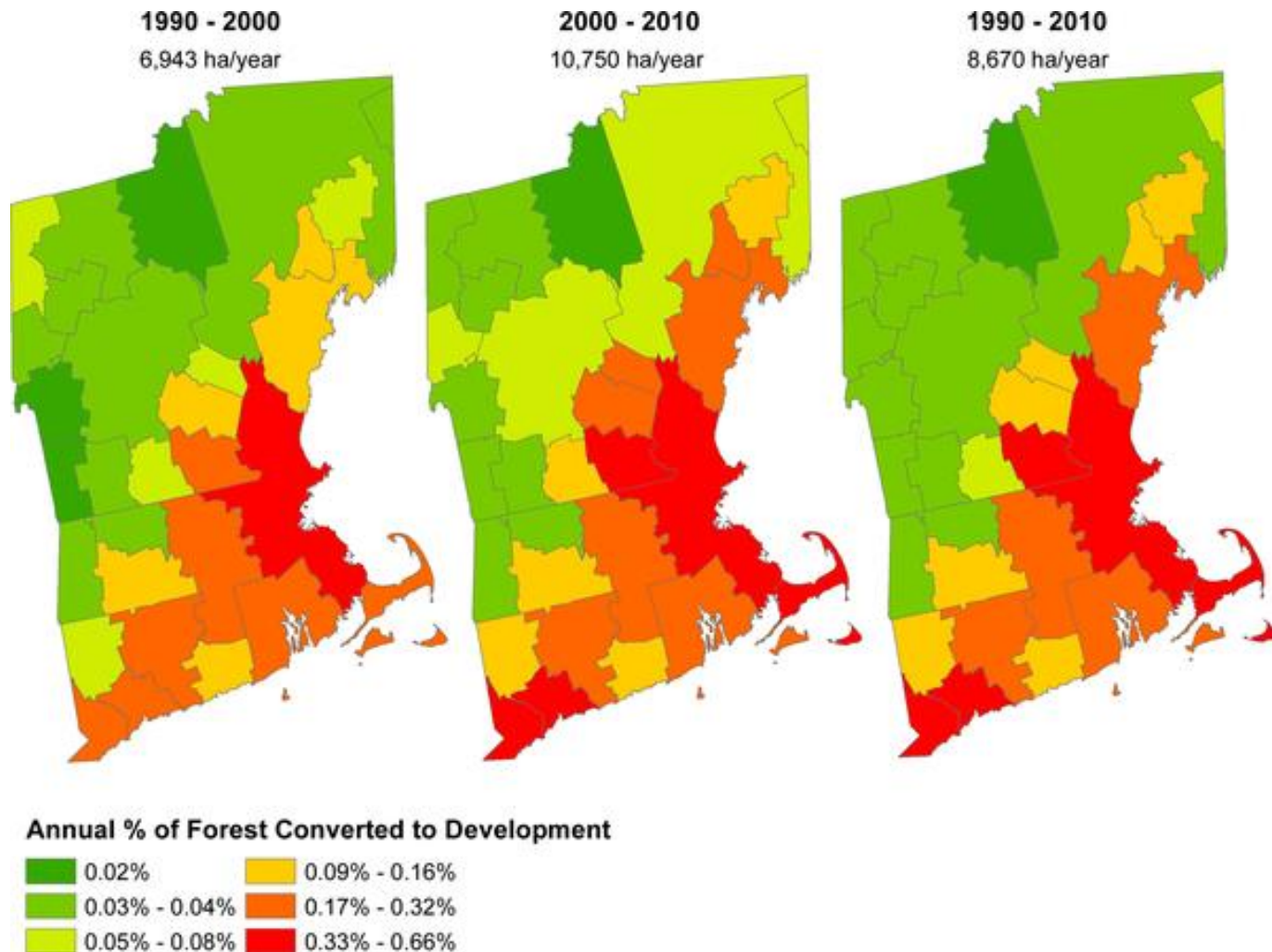
REP. JOHN WEEKS

Land Conservation Leads Recovery



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Fig 2. Rates of forest conversion to development for the three reference periods used in this study: 1990–2000, 2000–2010, and 1990–2010.



Thompson JR, Plisinski JS, Olofsson P, Holden CE, Duveneck MJ (2017) Forest loss in New England: A projection of recent trends. PLOS ONE 12(12): e0189636. <https://doi.org/10.1371/journal.pone.0189636>
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0189636>

Suburbanization is Not the Answer To COVID-19

Yes, contraction rates are higher in denser cities. No, that doesn't mean that the burbs are safer — and in many ways, they're worse.

By Kea Wilson | Mar 24, 2020 | 79 COMMENTS



Source: <https://www.flickr.com/photos/sshb/2912708983> Flickr/Creative Commons.

Wildlands & Woodlands Vision for New England in 2060

30 million acres conserved forest
 90% Woodlands / 10% Wildlands
 3-6 million acres conserved farmland
 5 million acres efficiently developed

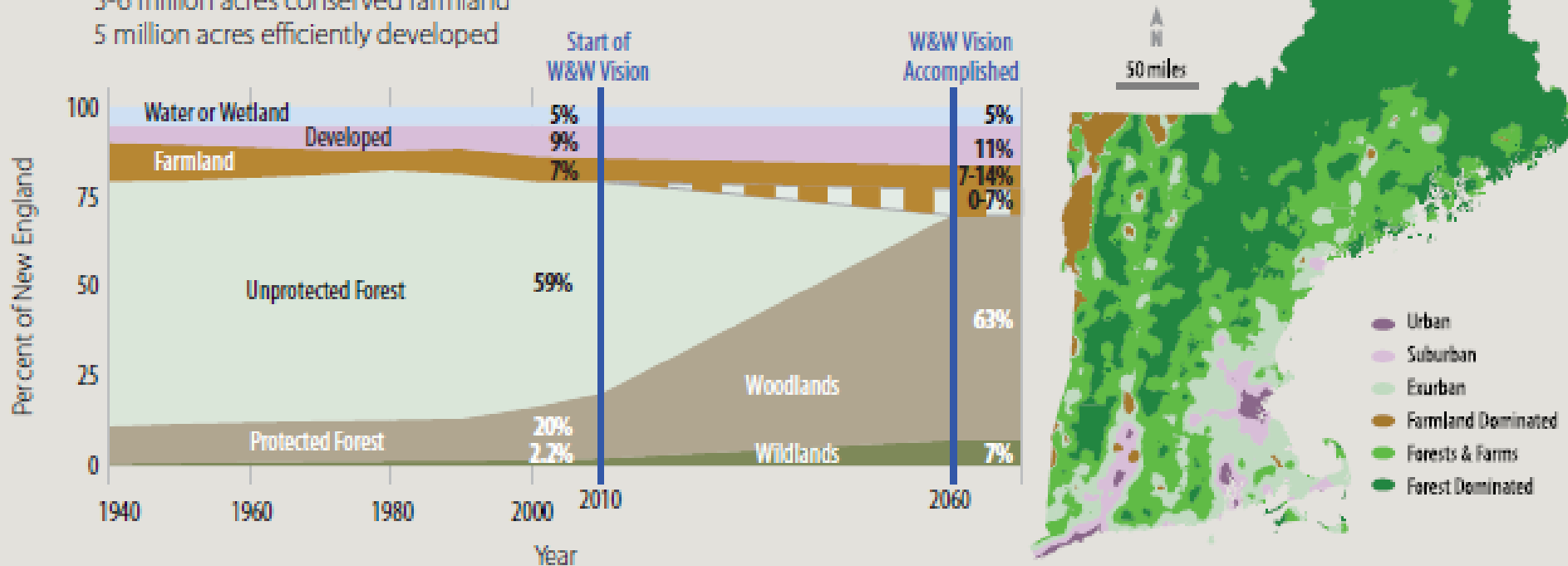


Figure 1. *In a Wildlands and Woodlands future, New England will remain a diverse landscape with local conditions, community priorities, and landowner choices determining the relative amounts of forest, farms, and developed lands in each location.*

A Path Divides in the Wood....



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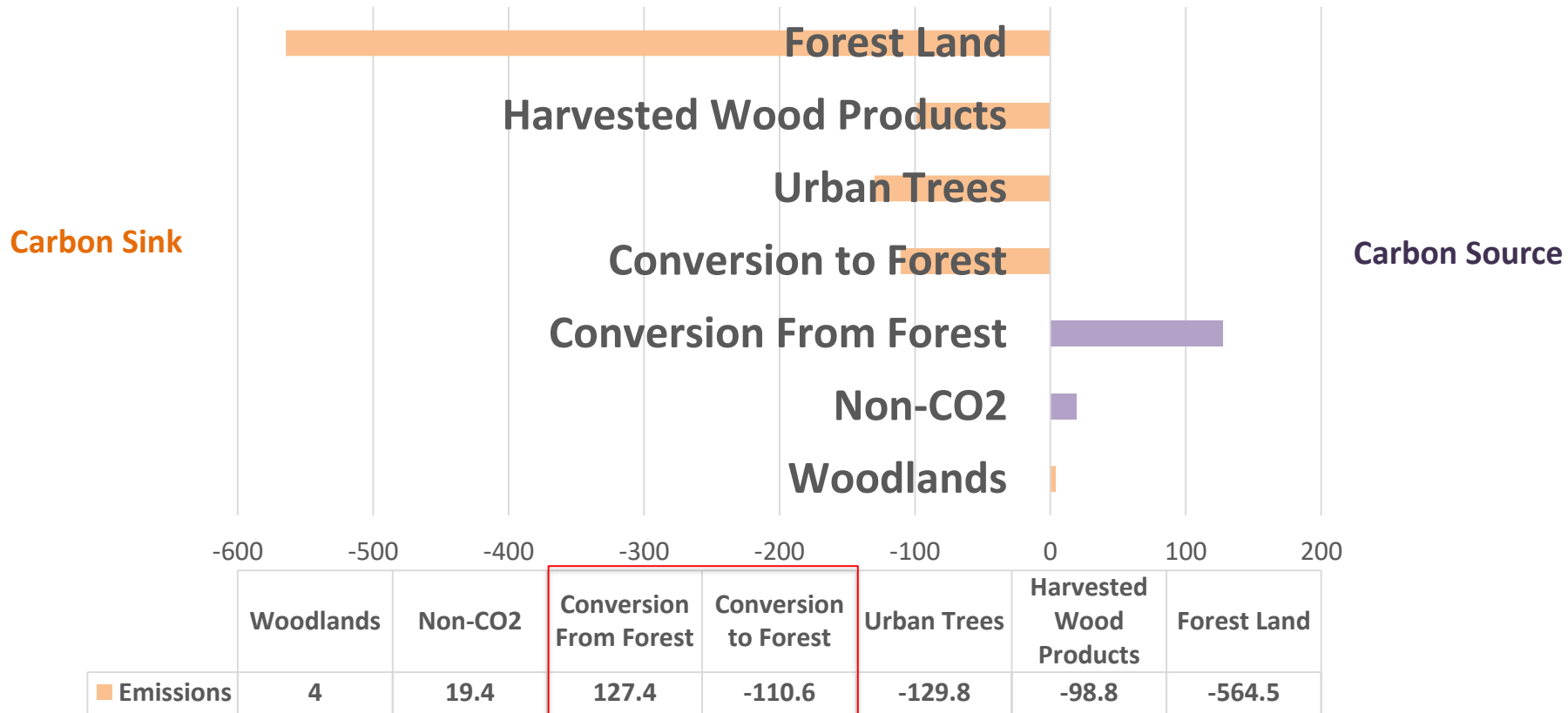
Setting the CLIMATE Context



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U.S. Forest Carbon Inventory (U.S. EPA, 2020)

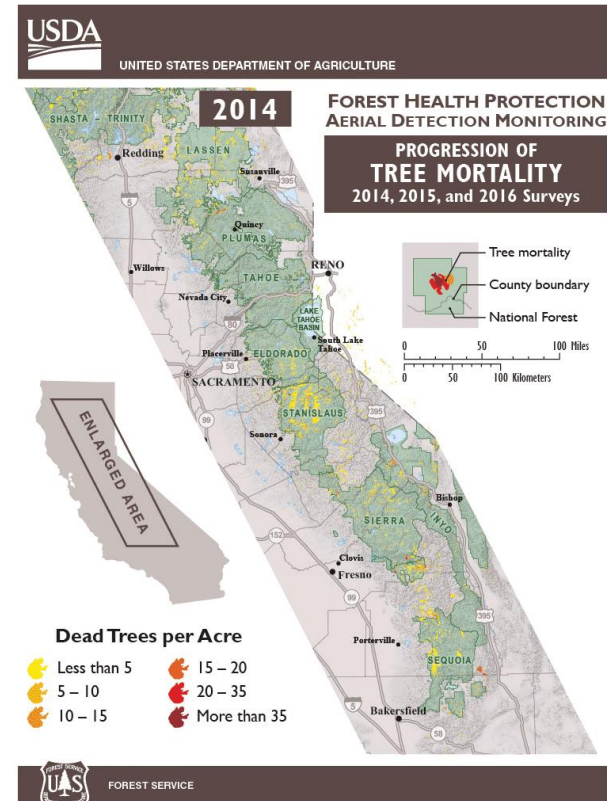
U.S. Forest Carbon Sink = 14.96% CO₂e from Fossil Fuels



Our Forest Carbon Sink Is Working!

FOREST CARBON 1990-2015

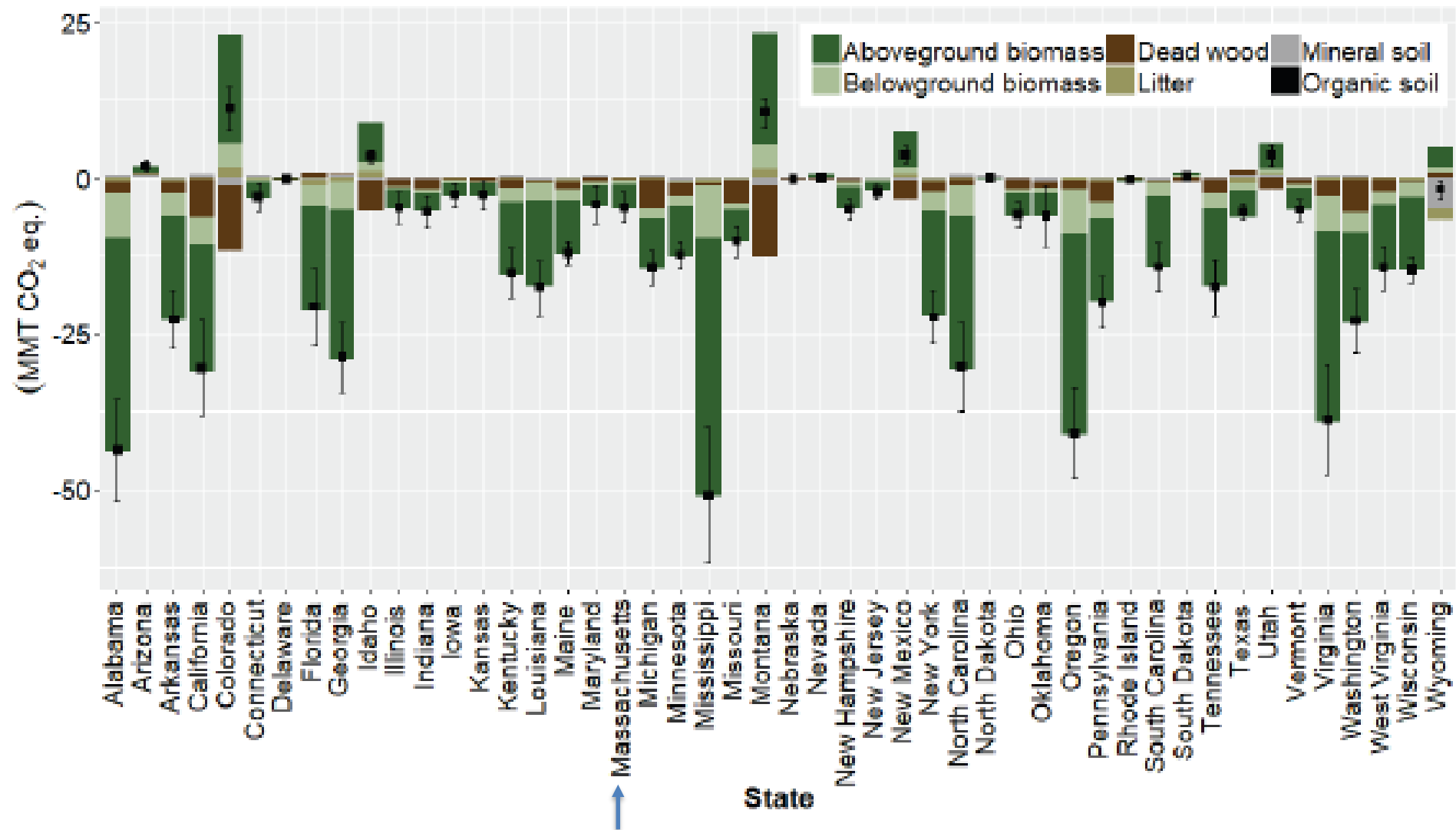
80% of Net Sequestration in Eastern Forests



Eastern Forests Lead for Carbon



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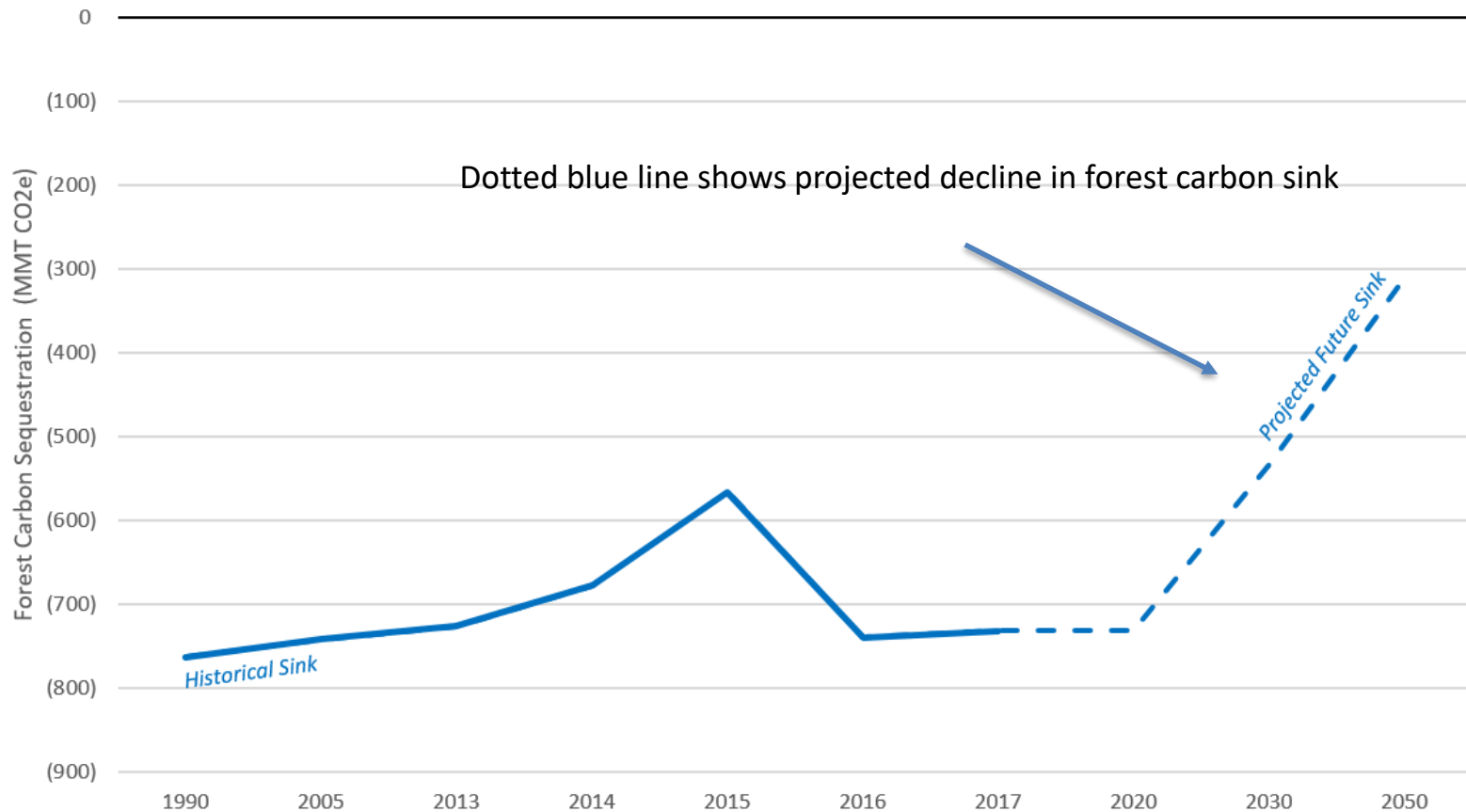


Eastern Forests Lead for Carbon



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Future US Forest Carbon Sink and Mitigation Potential



Note: Negative/parenthetical values indicate a carbon sink (sequestration). Positive values indicate a carbon source (emissions).

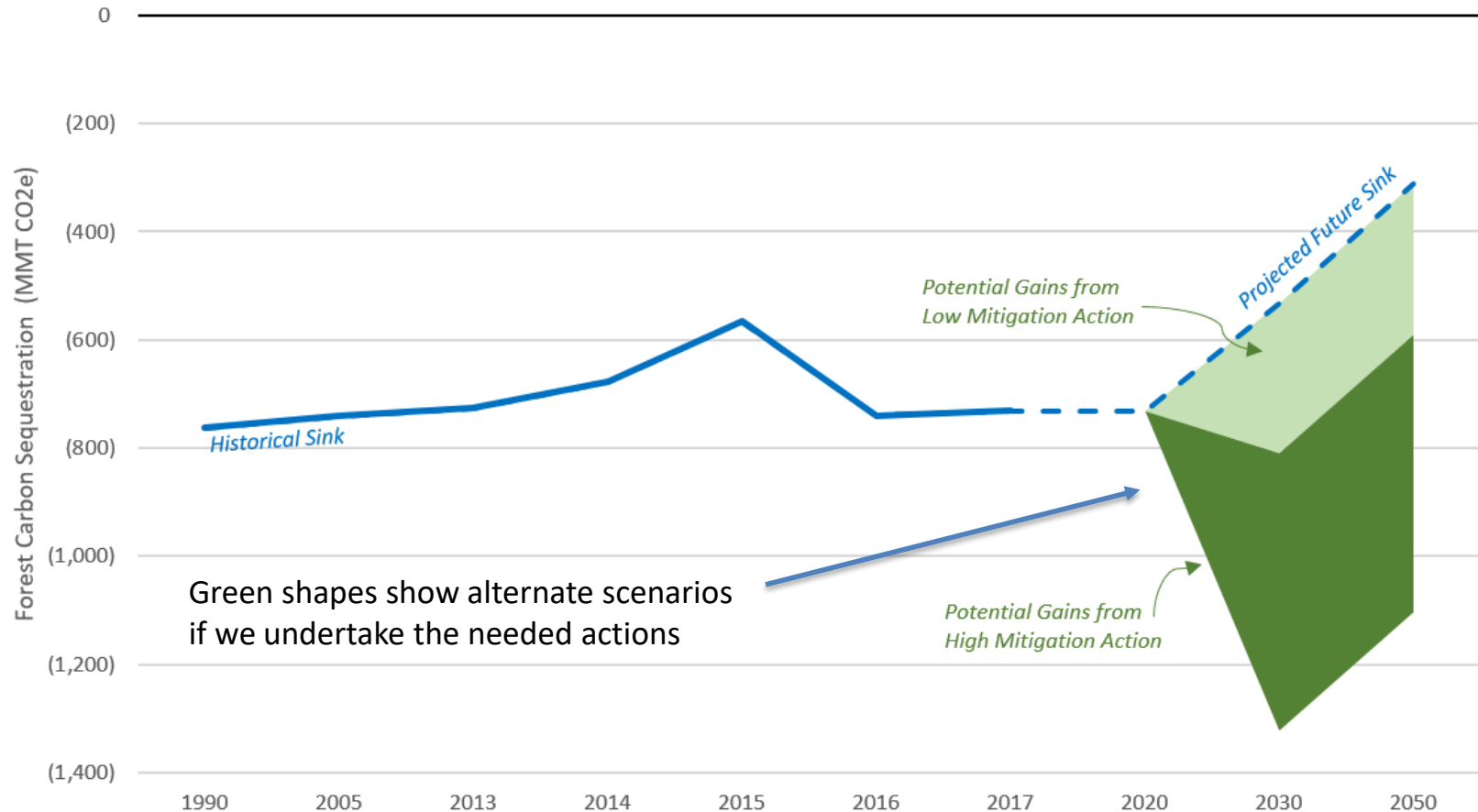
Source: U.S. Department of Agriculture, 2016. Integrated Projections for Agriculture and Forest Sector Land Use, Land Use Change, and GHG Emissions and Removals: 2015-2060.

Forest Loss Could Reduce C Sink



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Future US Forest Carbon Sink and Mitigation Potential



Note: Negative/parenthetical values indicate a carbon sink (sequestration). Positive values indicate a carbon source (emissions).

Our Carbon Sink Can Be Saved

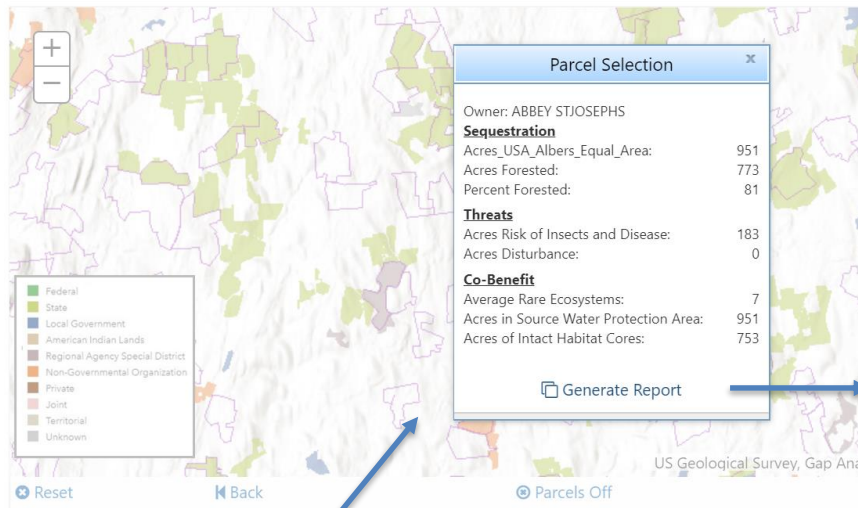


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Optimizing Forest Conservation for Climate: *A Four-Part Strategy*



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Forest Carbon Map

Parcel Report

May 11, 2020

Page 1 of 1

Parcel ID: R59-1	Acres: 951.0
Forested Acres: 773.5	Percent Forested: 81.3%

Forest Carbon - Existing carbon stocks (metric tons)			
Total Forest Carbon All Stocks:	45,007.7 tons	Total Forest Carbon Litter:	4,342.4 tons
Total Forest Carbon Aboveground:	19,022.0 tons	Total Forest Carbon Standing Dead:	308.1 tons
Total Forest Carbon Belowground:	3,802.2 tons	Total Forest Carbon Soil Organic:	15,313.9 tons
Total Forest Carbon Dead Down:	1,810.5 tons	Total Forest Carbon Understory:	460.0 tons

Forest Carbon Threats			
Average Human Modification:	0.4	Acres Risk of Insects and Disease:	183.9
Average Wildfire Hazard Potential:	1.0	Percent Risk of Insects and Disease:	19.3%
Average Development Risk:	0.0	Acres Disturbance:	0.0
		Percent Disturbance:	0.0%

Forest Carbon Co-Benefits			
Average Rare Ecosystems:	7.0	Average Intact Habitat Score:	2.8
Avg. Source Water Protection Score:	2.1	Acres of Intact Habitat Cores:	753.5
Acres in Source Water Protection Area:	951.0	Percent Intact Habitat Cores:	79.2%
Pct. in Source Water Protection Area:	100.0%		

Legend

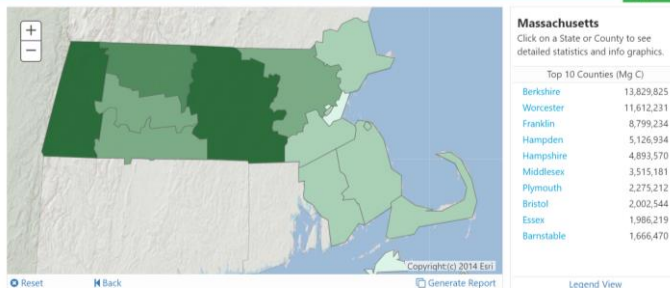
 Parcels



This report was created on May 11, 2020 using the Forest Carbon Map interactive mapping site. It is for informational purposes only. The purpose of this report is to provide a general overview of the forest carbon data for a particular purpose or merchantability, and make no representation that the report is complete, accurate, or error free. Use and reliance on this report is at the sole risk of the party using same.

© 2019 The Trust for Public Land

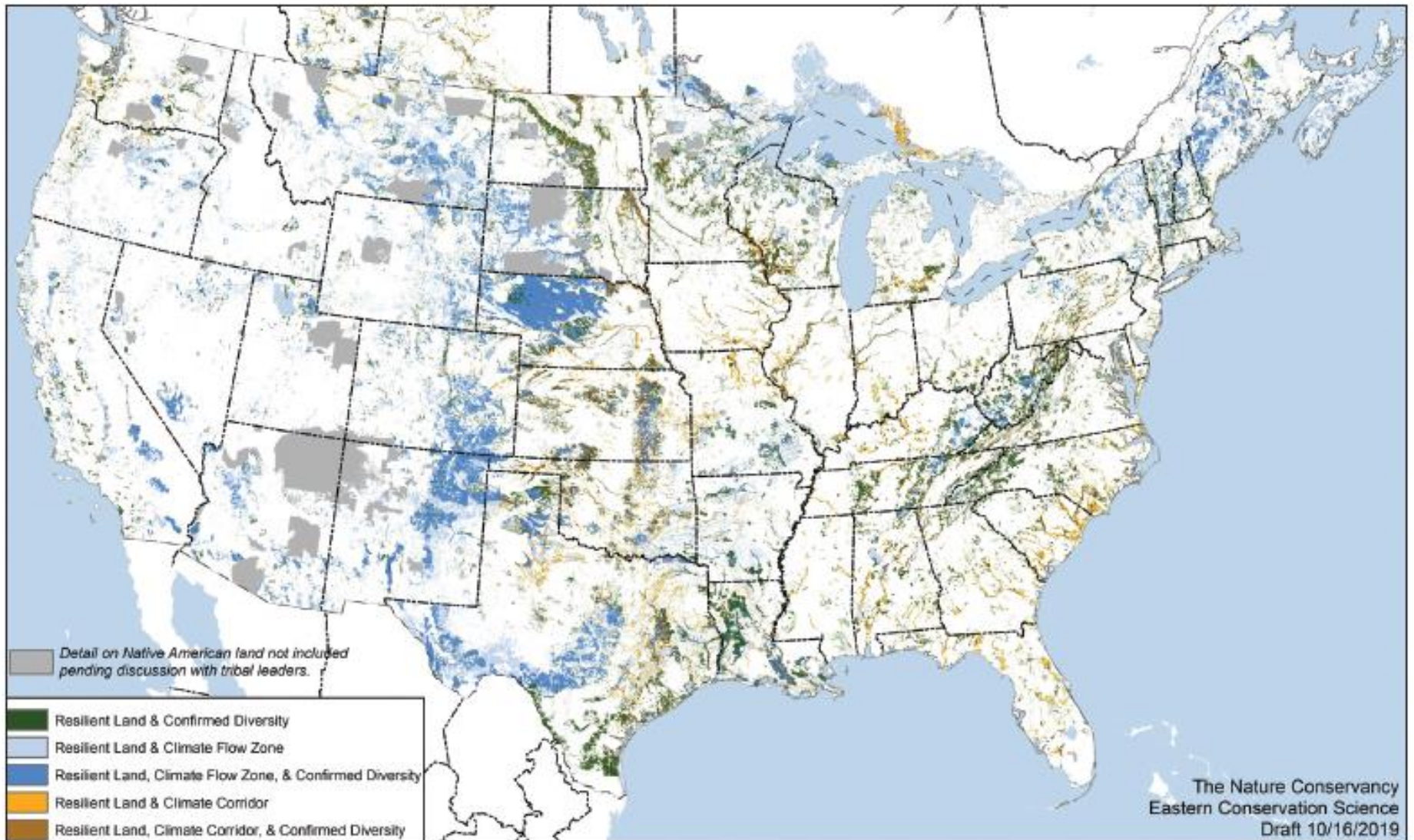
The Trust for Public Land - Forest Carbon Map



Prioritize High-C Forests



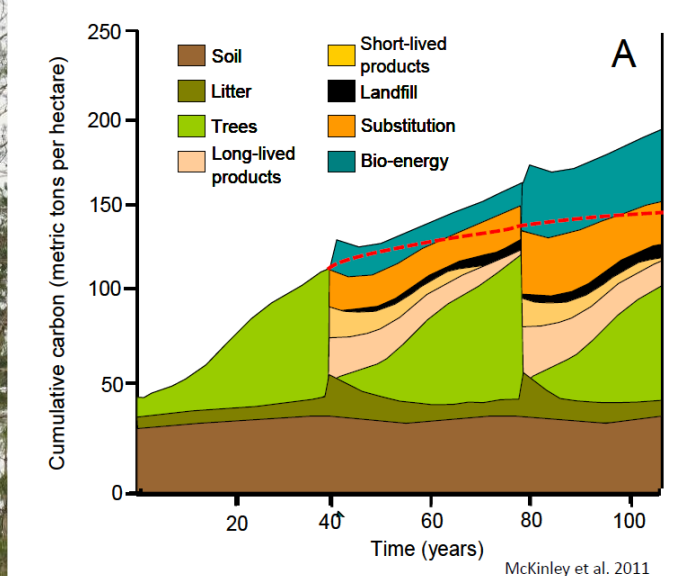
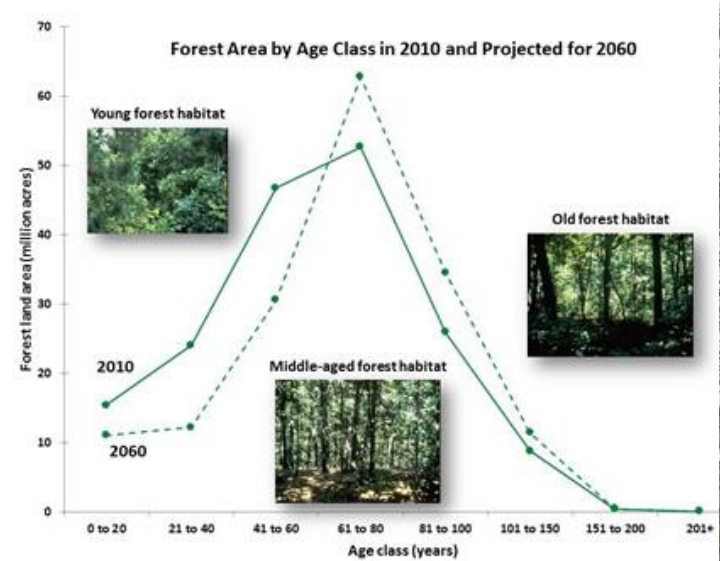
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That Have Inherent Resilience



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Optimize Management For Carbon Gains

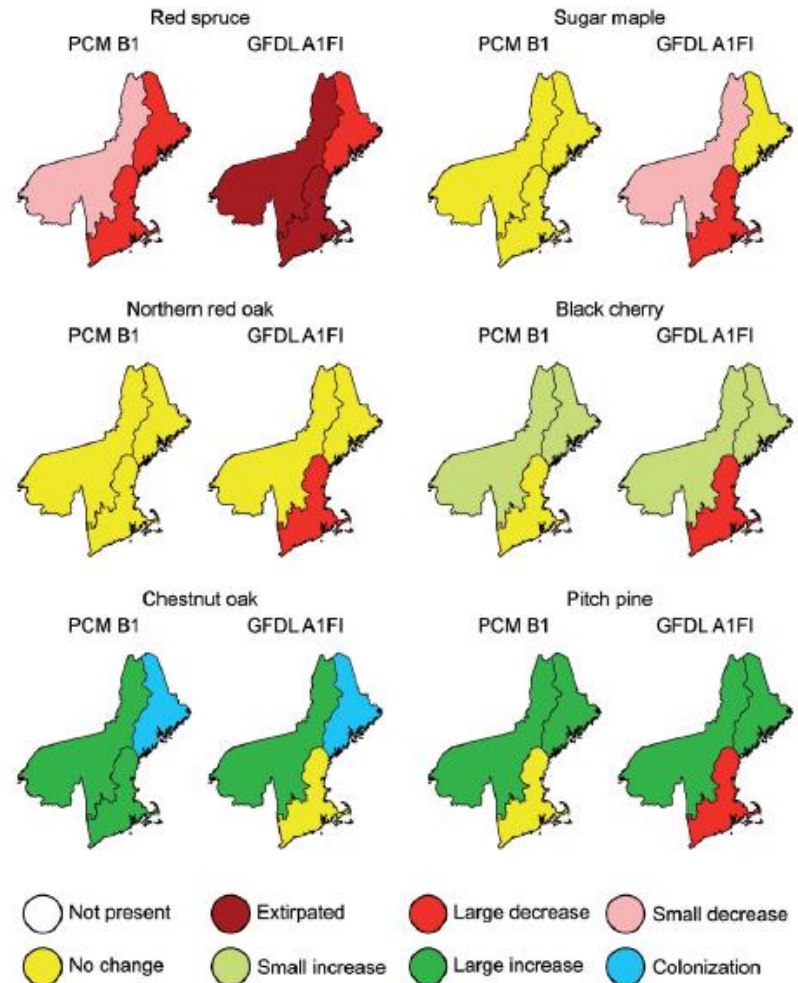
**New England and Northern New York
Forest Ecosystem Vulnerability
Assessment and Synthesis:**
A Report from the New England Climate Change
Response Framework Project



Forest Service
Northern
Research Station

General Technical
Report NRS-173

January 2018



Use Forest Adaptation As Carbon Defense



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Effects of land use and forest management on soil carbon in the ecoregions of Maryland and adjacent eastern United States

L.E. Nave^{a,*}, K. Delyser^{a,c}, P.R. Butler-Lacopold^a, E. Sprague^b, J. Daley^c, C.W. Swanston^d

^aUniversity of Michigan, Biological System and Dept. of Ecology and Evolutionary Biology, 9123 Biological Rd., Pellston, MI 49769, United States

^bNorth Carolina, Nicholas School of the Environment, Durham, NC 27708, United States

^cAmerican Forest, Washington, DC 20005, United States

^dMichigan Technological University, Houghton, MI 49931, United States

ABSTRACT

The impacts of forest-related land use and management on soil organic carbon (SOC) stocks have been investigated through years of primary research and review articles. This attention is justified given the importance of land use and management to greenhouse gas mitigation, soil and forest productivity, and other ecosystem services. However, there is a gap of scale and scope between the level studies that control for sources of variation, producing high-confidence results for limited locations, and the broad reviews that offer more general conclusions. The present analysis is intended to fill that gap. Here, we focus on six ecoregions of the eastern United States, and integrate meta-analysis of published literature with synthesis of geo-referenced soil observations to: (1) test whether common land use and management practices quantitatively impact SOC; (2) identify key sources of variation to these effects; (3) assess how sources of variation translate to decisions about land use and management at ecoregional to landscape levels. Results corroborate general trends, such as (i) forest SOC losses with harvesting and fire and SOC gains during restoration, but provide greater detail about the influence of specific practices and site-level controls on SOC stocks and change in the study region. Results also show that: (1) harvest impacts depend upon landowners and soil taxonomy; (2) harvesting forests that are recovering on previously cultivated lands decreases SOC; (3) fire biomass and SOC recovery increase uncertainty during restoration; (4) specific harvest, site preparation, and fire management practices affect the magnitude and variability of change in SOC. Perhaps more importantly, ecoregional classification and soil taxonomy provide spatial frameworks for plotting quantitative estimates of SOC stocks and changes in the geographic context of the study region, providing greater detail and specificity for individuals and institutions concerned with SOC management at more localized levels.

1. Introduction

Individuals and institutions concerned with land and soil management have long known that soil organic matter (SOM), which is primarily comprised of soil organic carbon (SOC), is critical to agricultural and forest productivity and myriad other ecosystem services (Vance, 2005). More broadly, the central roles played by soils in greenhouse gas mitigation are acknowledged in greenhouse gas reporting and policy (Gentile et al., 2017; Gherini et al., 2017; Wilsey et al., 2017). Unfortunately, there is a wide gap in scale and scope between such high-level national and global reviews and the SOC assessments needed to inform decision making at sub-regional, landscape, and project levels. Broad reviews provide general answers to critical questions, such as the distribution of SOC stocks and their sensitivity to management at large scales (Giblin and Jackson, 2000; Ojo et al., 2002; Nave et al., 2010; Schimann et al., 2014). However, land owners, forest managers, policy and reporting professionals often need information for specific locations, where generalizations (Achat et al., 2015) frequently break

down (Clarke et al., 2005; Vance et al., 2018). In such cases, targeted synthesis of empirical data provides a way to assess SOC management under the geographic, land use, and management constraints present in the regions, landscapes, and projects where decisions are implemented.

The ecoregions of Maryland, which extend into adjacent states from the Mid-Atlantic down to the Southern Appalachians, are home to some of the most biologically diverse forests, wide-ranging soils, and complex physiography in the U.S.A. (Gardner et al., 2015; Butler-Lacopold et al., 2018). Complex topography at ecoregional to landscape levels drives corresponding variation in climate, vegetation, and soil. These sources of geographic and ecologic variation interact with a large and patchily distributed population, such that its history of land use, shape, and management is also a history of soil change. Through agriculture and fire, Native Americans impacted the soils and ecosystems of the Central Appalachians and Mid-Atlantic for at least centuries before Euro-American colonization (Forsythe and Christensen, 2010; Springer et al., 2010). During the centuries following Euro-American colonization, more widespread deforestation, cultivation, and a lack of soil

* Corresponding author.
E-mail address: nave@umich.edu (L.E. Nave).

<https://doi.org/10.1016/j.foreco.2018.08.072>

Received 4 March 2019; Received in revised form 30 May 2019; Accepted 31 May 2019

Available online 11 June 2019

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Push New Horizons Like Forest Soil Carbon





Published in *Journal of Forestry* on November 30, 2019 As Supplemental Resource 1
(fvz062, <https://doi.org/10.1093/jofore/fvz062>)

Practitioner's Menu of Adaptation Strategies and Approaches for Forest Carbon Management

Authors: **Todd A. Ontl** (todd.ontl@usda.gov), **Maria Janowiak** (maria.janowiak@usda.gov), **Chris Swanston** (christopher.swanston@usda.gov), **Jad Daley** (jdaley@americanforests.org)



Strategy 6: Maintain or enhance existing carbon stocks while retaining forest character

- 6.1 Increase structural complexity through retention of biological legacies in living and dead wood
- 6.2 Increase stocking on well-stocked or understocked forest lands
- 6.3 Increase harvest frequency or intensity due to greater risk of tree mortality
- 6.4 Disfavor species that are distinctly maladapted
- 6.5 Manage for existing species and genotypes with wide moisture and temperature tolerances
- 6.6 Promote species and structural diversity to enhance carbon capture and storage efficiency
- 6.7 Use seeds, germplasm, and other genetic material from across a greater geographic range

Examples of adaptation tactics are:

- Forest management practices that emulate aspects of disturbance, such as variable density treatments
- Smaller, more frequent management interventions to encourage the development of multiple age cohorts or greater species diversity
- Silvicultural treatments that encourage diverse regeneration of native species, such as larger patch cuts
- Using salvage methods that create desired residual stand structures following disturbance

New Menu Guides Offense + Defense



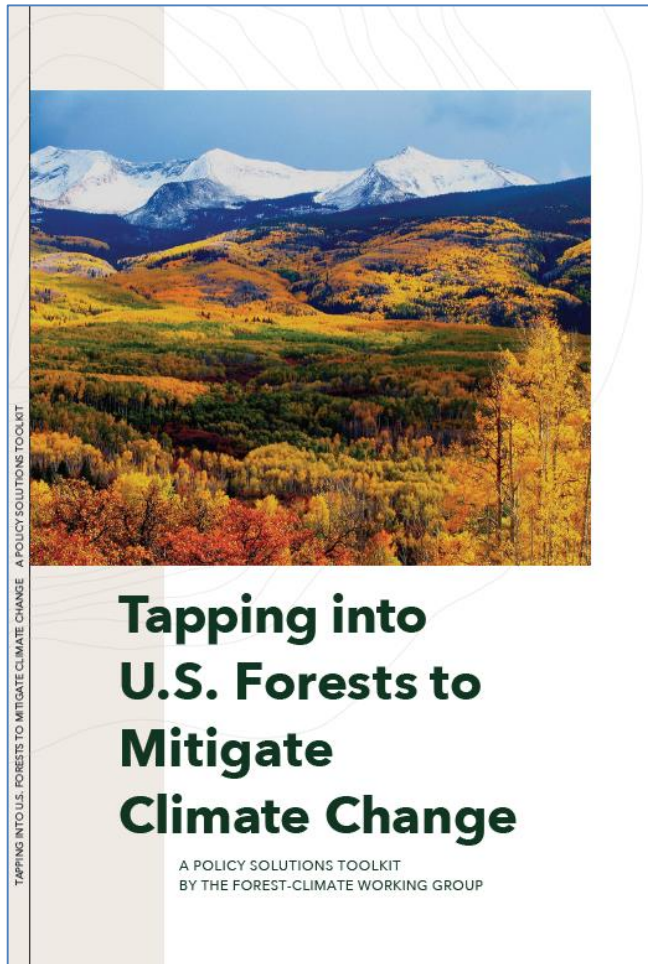
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Financing Forest Conservation for Climate:

Help Is on the Way



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- Compliance and voluntary offsets
- Carbon incentive programs
- Tax incentives
- Conservation grants
- Public land management
- Climate technical assistance
- Promoting markets for key forest products
- And much more...

<http://forestclimateworkinggroup.org/resource/tapping-into-u-s-forests-to-mitigate-climate-change-a-policy-solutions-toolkit-2019/>

“All of the Above” Policy Approach



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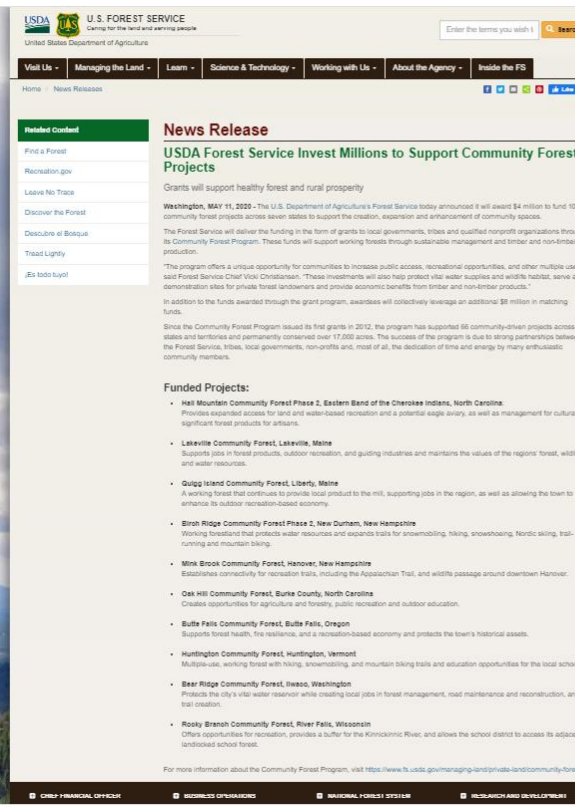
Massachusetts Is Leading



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\$495 MILLION
GENERATED BY FOREST LEGACY
PROJECTS IN:
MAINE | NEW HAMPSHIRE |
VERMONT | NEW YORK
#FUNDLWCF



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- Tread Lightly
- Es todo tuyo!

News Release

USDA Forest Service Invest Millions to Support Community Forest Projects

Grants will support healthy forest and rural prosperity

Washington, MAY 11, 2022 - The U.S. Department of Agriculture's Forest Service today announced it will award \$4 million to fund 10 community forest projects across seven states to support the creation, expansion and enhancement of community spaces.

The Forest Service will deliver the funding in the form of grants to local governments, tribes and qualified nonprofit organizations through its Community Forest Program. These funds will support working forests through sustainable management and timber and non-timber production.

"The program offers a critical opportunity for communities to increase public access, recreational opportunities, and other multiple uses," said Forest Service Chief Vicki Christensen. "These investments will also help protect vital water supplies and wildlife habitat, serve as demonstration sites for private forest landowners and provide economic benefits from timber and non-timber products."

In addition to the funds awarded through the grant program, awardees will collectively leverage an additional \$8 million in matching funds.

Since the Community Forest Program issued its first grants in 2012, the program has supported 66 community-driven projects across 23 states and territories and permanently conserved over 17,000 acres. The success of the program is due to strong partnerships between the Forest Service, tribes, local governments, non-profits and, most of all, the dedication of time and energy by many enthusiastic community members.

Funded Projects:

- Hell Mountain Community Forest Phase 2, Eastern Band of the Cherokee Indians, North Carolina**
Provides expanded access for land and water-based recreation and a potential eagle aviary, as well as management for culturally significant forest products for artisans.
- Lakeville Community Forest, Lakeville, Maine**
Supports jobs in forest products, outdoor recreation, and guiding industries and maintains the values of the region's forest, wildlife and water resources.
- Quigg Island Community Forest, Liberty, Maine**
A working forest that continues to provide local product to the mill, supporting jobs in the region, as well as allowing the town to enhance its outdoor recreation-based economy.
- Brook Ridge Community Forest Phase 2, New Durham, New Hampshire**
Working landscape that protects water resources and provides tasks for snowmobiling, hiking, snowshoeing, Nordic skiing, trail-running and mountain biking.
- Mink Brook Community Forest, Hanover, New Hampshire**
Establishes connectivity for recreation trails, including the Appalachian Trail, and wildlife passage around downtown Hanover.
- Oak Hill Community Forest, Burke County, North Carolina**
Creates opportunities for agriculture and forestry, public recreation and outdoor education.
- Butte Falls Community Forest, Butte Falls, Oregon**
Supports forest health, fire resilience, and a recreation-based economy and protects the town's historical assets.
- Huntington Community Forest, Huntington, Vermont**
Multiple-use, working forest with hiking, snowmobiling, and mountain biking trails and education opportunities for the local school.
- Bear Ridge Community Forest, Iwaco, Washington**
Protects the city's vital water reservoir while creating local jobs in forest management, road maintenance and reconstruction, and trail creation.
- Rosky Branch Community Forest, River Falls, Wisconsin**
Offers opportunities for recreation, provides a buffer for the Kinnickinnic River, and allows the school district to access its adjacent undeveloped school forest.

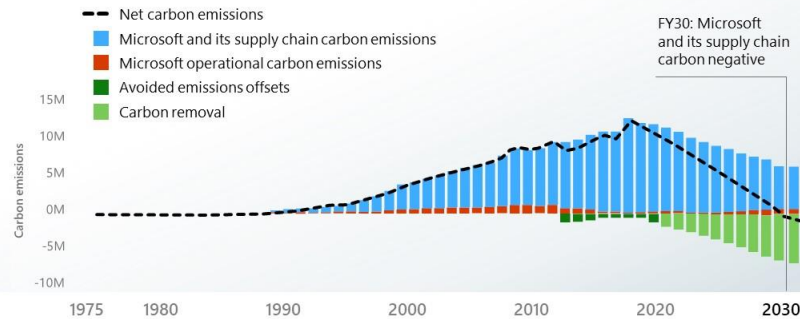
For more information about the Community Forest Program, visit <https://www.fs.usda.gov/managing-land/private-land/community-forest>.

CHIEF FINANCIAL OFFICER | ECONOMIC DEVELOPMENT | NATIONAL FOREST SYSTEM | RESEARCH AND DEVELOPMENT

**Federal Funding Is Trending Up—
Likely to Add Climate Criteria**

Microsoft's pathway to carbon negative by 2030

Annual carbon emissions



Corporate Investment Is Rising



Eligible Activities

1. Adding Trees Through Planting and Assisted Regeneration
 - ✓ Reforestation
 - ✓ Afforestation
 - ✓ Agroforestry
 - ✓ Urban Reforestation
2. Preventing Tree Loss through Conservation
 - ✓ Permanent Conservation
 - ✓ Land Use Protections
 - ✓ Sustainable Forestry Commitments
3. Supporting Actions for Trillion Trees

**Reshaping Trillion Trees to
Include Forest Conservation**



JDaley@AmericanForests.org

202.370.4507



@JadDaley