



Mr. Jamie Barbour
Assistant Director, Ecosystem Management Coordination
USDA Forest Service
Washington, DC

August 30, 2022

Dear Mr. Barbour.

The Forest Resources Association (FRA) is the only national association to represent all sectors of the [wood supply chain](#), with more than 350 member companies from the forest products industry. FRA promotes the interests of its members in the economic, efficient, and sustainable use of forest resources to produce products used by Americans every day. Our members include forest landowners, logging businesses, log haulers, consuming mills, associated businesses, and state forestry associations. FRA members are represented in 49 states and 377 congressional districts, and our membership provides for the livelihoods of nearly 940,000 families and contributes more than \$293 billion annually to the U.S. economy.¹ The FRA members and the rural communities which they serve as the economic base depend on a reliable and predictable supply of timber from Federal lands.

Summary

FRA appreciates the opportunity to provide comment on the USDA Forest Service Request for Information (RFI) on Federal Old-Growth and Mature Forests [*Fed. Reg. 42493-42494, July 15, 2022*] seeking input from the public on the development of a definition for old-growth and mature forests. We encourage the Forest Service to recognize the complexity of developing a national old-growth and mature forest definition or even a framework for a definition due to the variability of forests across federal forest land ownership. Instead, we recommend the Forest Service work towards developing regional old-growth definitions through individual forest plan revisions or amendments with local public review and comment. Further, we urge the Forest Service to exclude forestlands currently identified as “suited for timber production” in National Forest or Bureau of Land Management (BLM) plans from old-growth or mature forest designation.

General Comments

Federal lands currently reserved from forest management should be the focus of old-growth and mature forest designation. The amount of reserved forest acreage on federal lands exceeds lands suited for timber production by nearly three times.

¹ [Data sources: U.S. government, AF&PA, and RISI. Figures are the most recent available as of December 2020.](#)

The Federal Register [*Fed. Reg. 42493-42494, July 15, 2022*] cites the purpose of this RFI is to inform the public and gather feedback on potential future implementation efforts associated with provisions of Executive Order (EO) 14072: Strengthening the Nation's Forests, Communities, and Local Economies, issued April 22, 2022. The focus of this current RFI is in response to [E.O. 14072](#) Section 2(b) specifically, which calls on the Secretaries of Agriculture and the Interior, within one year, to define, identify, and complete an inventory of old-growth and mature forests on federal lands, accounting for regional and ecological variations, as appropriate, and making the inventory publicly available. The definition framework and inventory are scheduled to be completed during the summer of 2023.

Federal land ownership in the United States exceeds more than 615 million acres². The BLM and Forest Service account for most of the acreage, managing 244 million acres and 193 million acres, respectively. Alaska has the largest federal land ownership, with nearly 223 million acres. In the lower contiguous 48 states, most of the federal land ownership is concentrated in the western half of the U.S. where ten states account for 345 million acres (88%) of federal land ownership.

Federal forestland ownership is 237 million acres, or 31 percent of the total forest land in the United States. Of this amount the Forest Service manages more than 141 million acres, and the BLM manages 38 million acres of forest land³. A significant amount of federal forestland acreage is reserved from forest management and or timber harvest. Of the Forest Service forestland acreage, 91 million acres (64%) are reserved from forest management, and 50 million acres (36%) are identified as suited for timber management. Of the 50 million acres of land “suited for timber production” only 0.3 percent of the Forest Service forestland is harvested annually⁴. At these low harvest rates, Forest Service lands will continue to age and become more susceptible to infestations and wildfire. The amount of federal forest land reserved from timber management is nearly 3-times greater than lands that are identified as suited for timber production.

Given the vast acreage of federal forestland already reserved from forest management, the Forest Service should exclude lands that are identified as suited for timber production in current forest plans from old-growth and mature forest inventory and designation.

Forest Service Forestlands are Converting from Carbon Sinks to Carbon Sources.

The Forest Service must be mindful that forest management is a long-term commitment, applied temporally across the landscape. The agency should be cautious of supporting or promoting policies that will have negative long-term implications on forest health, productivity, and the viability of rural economies. Evidence suggests that at current levels of vegetation management have resulted in detrimental impacts on lands managed by the

² [U.S. Congressional Research Service. "Federal Land Ownership: Overview and Data. February 2021.](#)

³ Forest Resources of the United States, 2017: A Technical Document Supporting the Forest Service 2020 RPA Assessment. Table 2—Forest and woodlands area in the United States by ownership, region, subregion, and State, 2017

⁴ [USDA-Office of Sustainability and Climate. Timber Harvest and Carbon.](#)

Forest Service. This is a contributor to the severity of wildfires in the western United States. These wildfires contribute significant amounts of CO₂ into the atmosphere annually. In 2020, wildfires in the U.S. emitted more than 237 MMT/CO₂. The most significant contributors were large fires in the western states, where the federal government owns a high percentage of forest lands.

Since 1986, on Forest Service timberlands mortality has increased by 223 percent, net growth has declined 55 percent, and timber harvest has declined by 80 percent (fig. 1). The lack of timber management on Forest Service lands has resulted in significant adverse economic impacts on rural economies, increased wildfire severity, and converted Forest Service lands from net carbon sinks to net sources of CO₂.

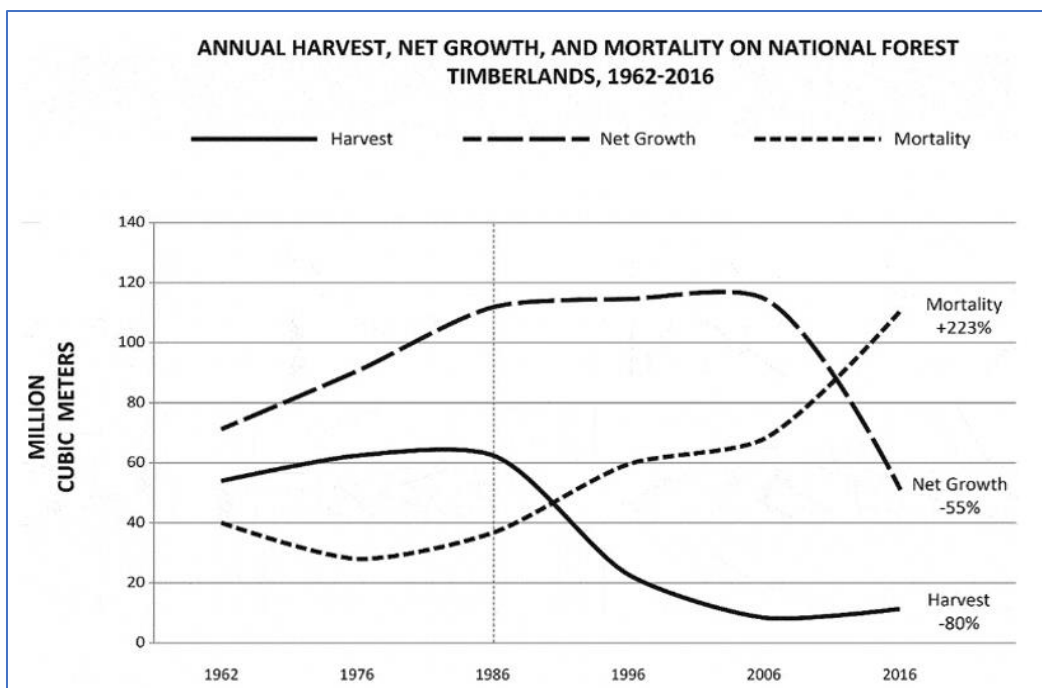


Figure 1. Annual harvest, net timber growth, and tree mortality on all National Forest System timberlands from 1962-2016. Beginning in 1986 Forest Service policies resulted in a decrease in timber harvest that led to significant increases in forest mortality⁵. The lack of management on these lands has contributed to the severity of wildfire.

Forest Service land in Alaska and the western states are increasingly becoming carbon sources and not sinks. Forest Service regions. 1-Northern Rockies, 2-Rocky Mountain, 3-Southwestern, 4-Intermountain, and 10-Alaska annually contribute more carbon to the atmosphere than they sequester (fig. 2). In fact, Forest Service lands only contribute a net carbon stock change of only 1.5 percent despite owning more than 21 percent of the U.S. forestlands. The agency must be cautious of policies (old growth and mature forests) that restrict forest management on lands suited for timber production.

⁵ [The Plant a Trillion Trees Campaign to Reduce Global Warming—Fleshing Out the Concept. Bruce Lippke, et.al. Journal of Sustainable Forestry, wo21, Vol 40, NO. 1, 1-31.](#)

Forest mortality data (standing trees at least 5 inches in diameter) from the USDA-Forest Inventory and Analysis program shows that Forest Service lands have higher forest mortality rates when compared to private or other non-federal ownerships (fig. 3, Appendix 1). Forest mortality on National Forest lands in the Western United States range from 3.7 to 5.5 times more forest mortality per acre than on private forestlands.

Many western states additionally show a decline in forest growing stock and, as a result, remove only a minimal amount of all CO₂ emissions after considering high forest mortality rates. The forestlands in these states are no longer natural carbon solutions as they have become net emitters of CO₂ due to high mortality rates. See the FRA carbon report cards for [Colorado](#), [Arizona](#), [New Mexico](#), [Montana](#), [South Dakota](#), and [Idaho](#). What is common in these western states is that the Forest Service owns most of the forestland acreage (fig. 4).

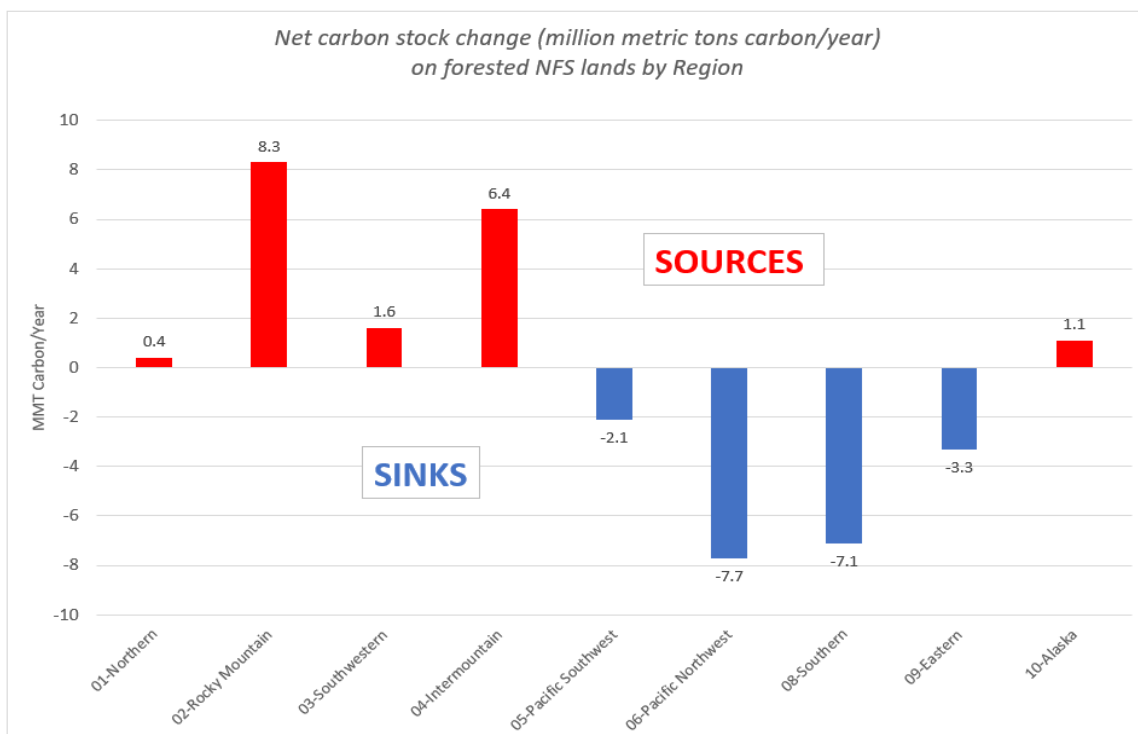


Figure 2. Net carbon stock change (million metric tons carbon/year) on forested Forest Service lands by Region⁶

The Forest Service must also recognize that as forests age, they [change from carbon sinks to carbon sources](#). In general, this is the age at which this change occurs when forests reach an age of 80 years (Appendix 2). This will vary by forest type, productivity class, and region. The Forest Service and BLM must consider the impacts an old-growth and mature forest policy will have on the forest’s ability to store carbon.

⁶ [USDA-Forest Service. Fiscal Year 2023 Budget Justification](#). Table FS-69. March 2022.

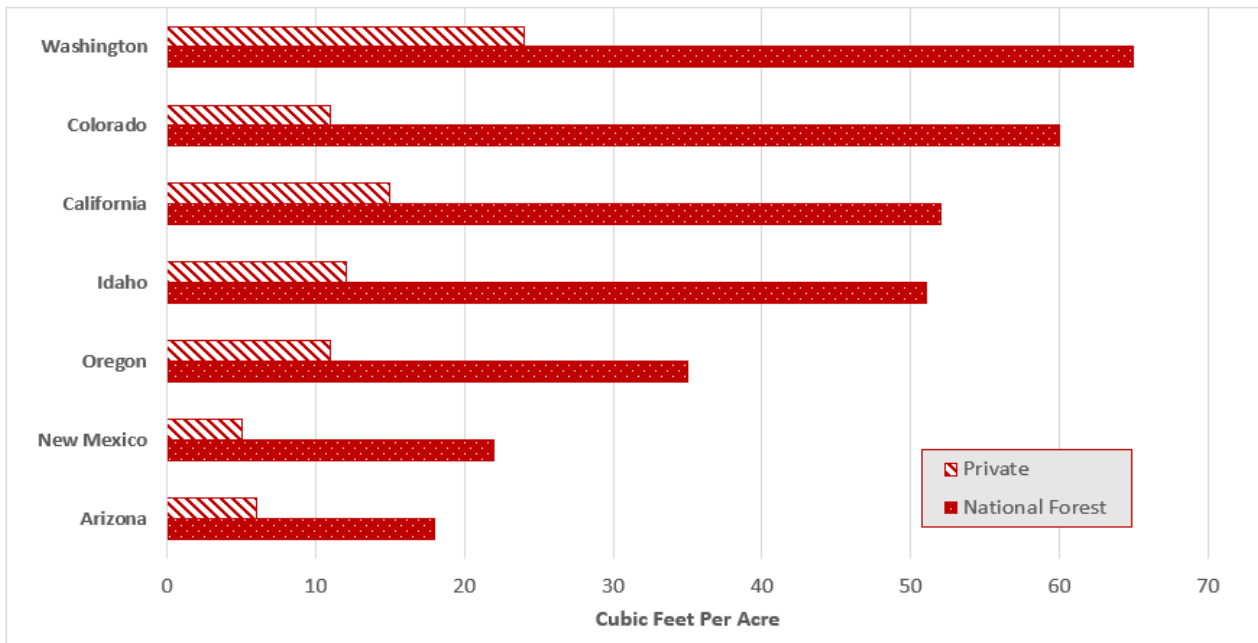


Figure 3. Forest mortality (cubic ft/ac) of trees at least 5 inches in diameter by ownership⁷.

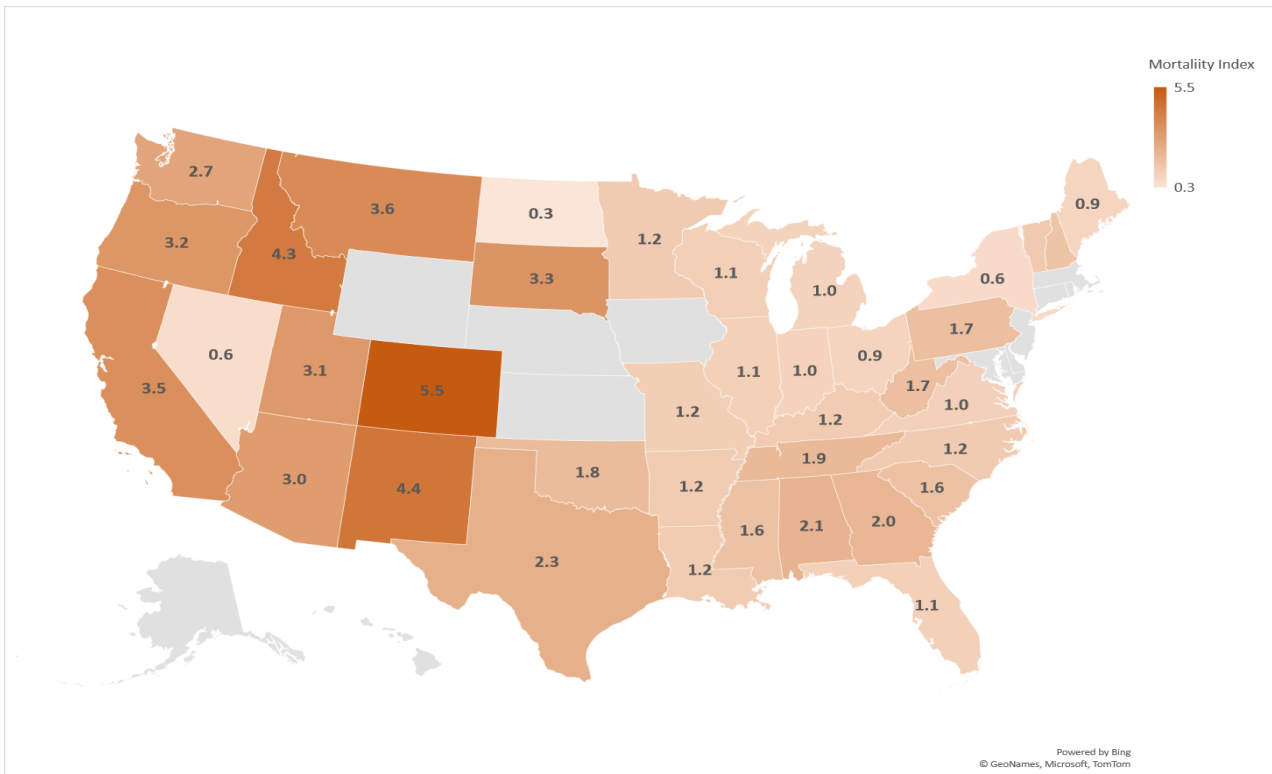


Figure 4. Forest mortality index that compares mortality rates per acre, for trees at least 5 inches in diameter, of forestlands managed by the Forest Service compared with privately owned forestlands. Values greater than 1 represent areas of national forest lands with greater mortality per acre than private lands. For example, CO has 5.5 times more mortality per acre on Forest Service ownership than on private ownership

⁷ USSDA-Forest Service Forest Inventory and Analysis--EVALIDATOR

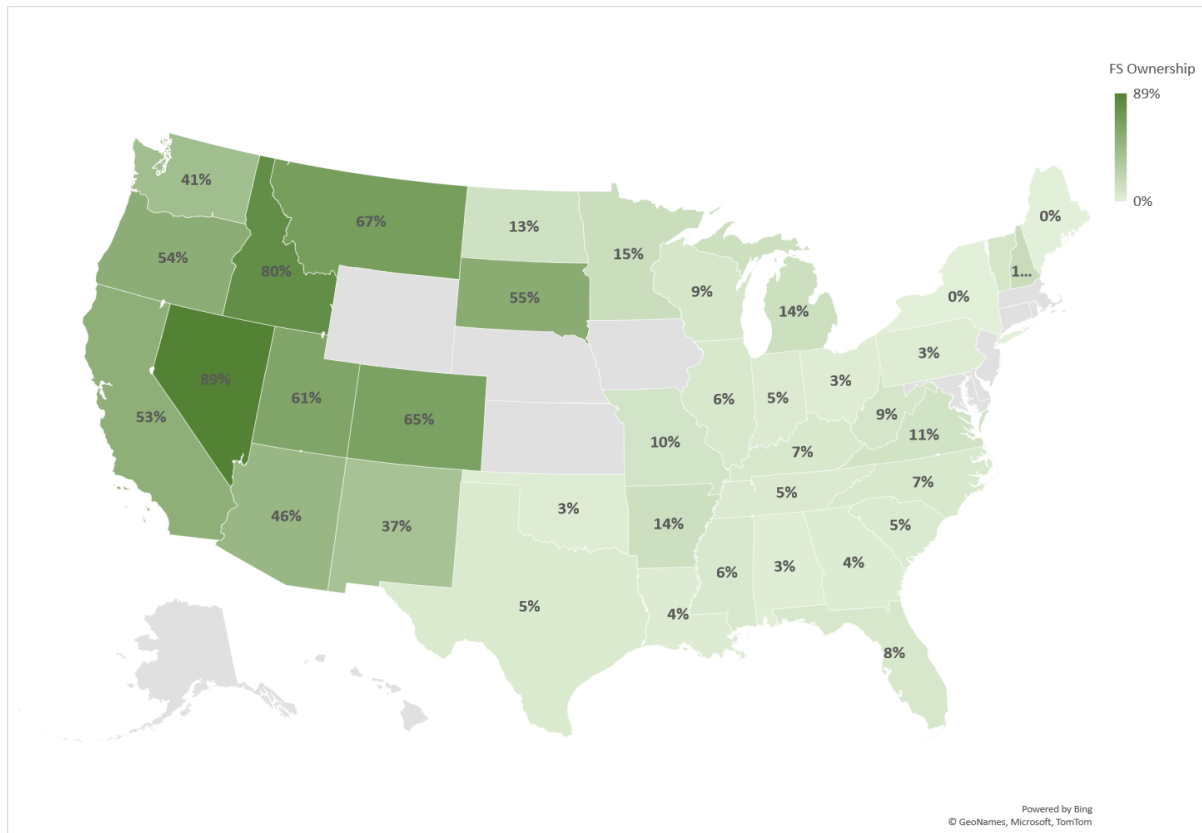


Figure 5. Percentage of forestlands owned by the Forest Service.

Response to Questions

What criteria are needed for a universal definition framework that motivates mature and old-growth forest conservation and can be used for planning and adaptive management?

A universal definition for old-growth and mature forests, even as a framework, would have little value and be too vague to practically implement across all federal ownership. The Forest Service has attempted to define old growth in the past, with little success, even at the regional level⁸. The process of defining mature forests is even more complex and is not recognized as a forest classification. Mature forests are not simply the age or size of a tree or stand of trees, they are vital to meet American citizens demands for forest products. By including mature forests in a definition framework, the Forest Service risks promoting a definition that is so vague that it leads to gridlock of management actions across federal forestland ownership. This gridlock will then cause delays in the National Environmental Policy Act (NEPA) review and progress and the implementation of forest vegetation treatments that would improve forest health, create wildlife habitat, and support rural economies. A mature forest definition may also create confusion among field staff leading to poor decisions that would contribute to perpetuating forest health issues on Forest Service lands, an unintended consequence. FRA encourages the Forest Service to

⁸ White, D.L., and F.T. Lloyd. 1994. Defining old-growth: Implications for Management. <https://www.srs.fs.usda.gov/pubs/741>.

recognize the complexities of creating a national definition framework for old-growth forests and mature forests. Instead, the agency should work to address the issue at the National Forest level through a forest plan amendment process where the public can review and comment at the local level. Further, we urge the agency to dispose of defining mature forests.

What are the overarching old-growth and mature forest characteristics that belong in a definition framework?

FRA recommends that a definition framework at the national level would be extremely complicated to implement. An overarching definitional framework should only identify lands to be included in the analysis. The focus should be on those lands that are currently reserved where the potential risks to old-growth forest are the greatest. Forest lands that are currently identified in the forest plans as “suited for timber production” should be eliminated from the analysis. Again, the agency should not create a mature forest definition as it would lead to poor decision making of field staff at the local level.

How can a definition reflect changes based on disturbance and variation in forest type/composition, climate, site productivity, and geographic region? And how can a definition be durable but also accommodate and reflect changes in climate and forest composition?

The Forest Service needs to recognize the unintended consequences of developing a definition that covers the scope of more than 140 million acres of forest lands they manage. Such a broad definition may create confusion for individual national forest leadership, planners, and field staff. The confusion may lead to delays in project analysis and implementation as Forest Service employees attempt to put a “square peg in a round hole.”

The Forest Service must additionally consider the opportunity costs of limited staffing. The agency is currently struggling to meet staffing needs to effectively implement the Wildfire Mitigation Strategy. Adding another layer of considerable analysis and fieldwork to identify and inventory old-growth and mature forests would result in delays in important, on-the-ground projects from being implemented - projects that would improve forest health and protect communities.

What, if any, forest characteristics should a definition exclude?

The Forest Service must limit the scope of the analysis. If the agency is committed to protecting old-growth forests, and not just an exercise to reserve additional working forests from management, the analysis should be limited to forestlands that are currently protected or reserved from forest management. These lands, because of the current protections, are the ones most threatened by insects, disease, and wildfire. The Forest Service alone has more than 90 million acres of protected forest lands, where old-growth forest protections should be focused. Lands that are currently identified as suited for timber production should be excluded from old-growth and mature forest consideration.

Conclusion

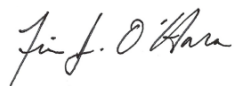
FRA urges the Forest Service to recognize the complexities of defining old-growth and mature forests at the national level. The agency should work with national forests at the region and local level to develop meaningful old-growth definitions that recognize for local variability of forested landscapes and allow for public review and comment at the local level. As old-growth forest designations on the landscape would be a significant change, forest plans would need to be amended and revised. Old-growth designations/inventories should focus only on those forestlands identified as “not suited for timber production.”

The Forest Service must also be cautioned not to develop a policy that would lead to advancing unhealthy forest conditions in the future. The amount of forest mortality on Forest Service lands has resulted in wildfires that are more severe and increased the number of large wildfires. Forest Service lands are becoming carbon sources, not carbon sinks, releasing more CO₂ into the atmosphere than storing. A broad policy or definition of old-growth and mature forest lands that leads to their reservation or protection would only perpetuate the already insurmountable forest health crisis on national forest lands in the decades to come.

FRA additionally supports the comments submitted by The National Council for Air and Stream Improvement, Inc. (NCASI). NCASI serves forest landowners, managers, and the forest products sector as a center of excellence for providing technical information and rigorous scientific research needed to achieve the sector’s environmental goals and principles, including forest conservation.

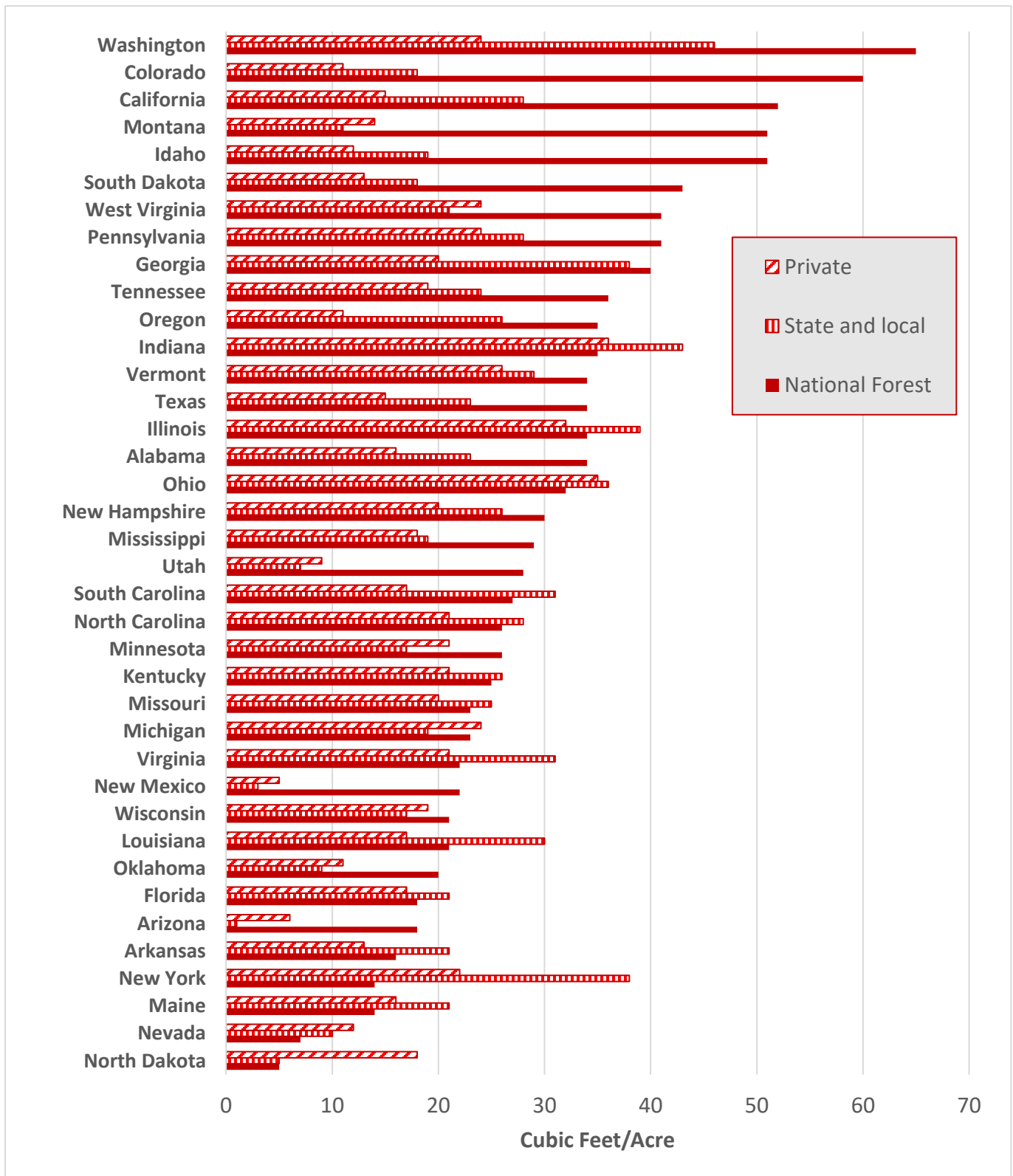
FRA appreciates the opportunity to comment on this critical issue which is important to our members and the rural forest-based economies that depend on working healthy forests.

Sincerely,

A handwritten signature in cursive script that reads "Tim J. O'Hara".

Tim J. O'Hara
Vice President, Government Affairs

Appendix 1. Forest mortality, cubic feet per acre, of trees at least five inches in diameter by forestland ownership and state. Source USDA-Forest Service FIA.



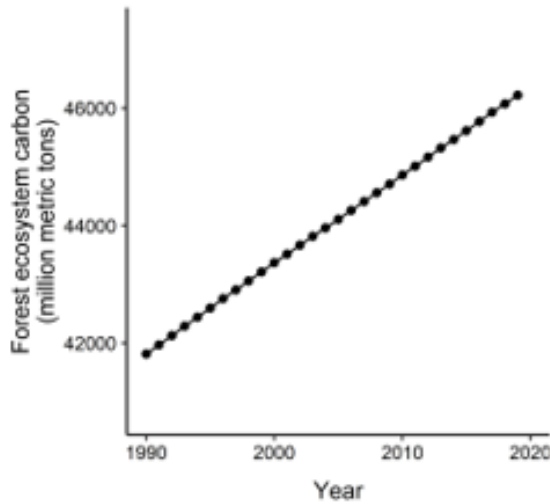
Appendix 2. Forest Carbon Report Card for the United States



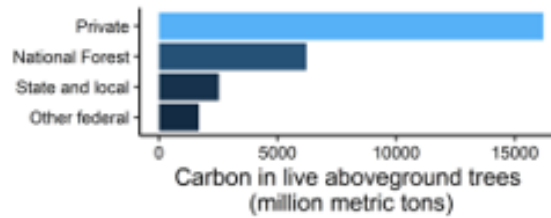
Forest Carbon Report: United States



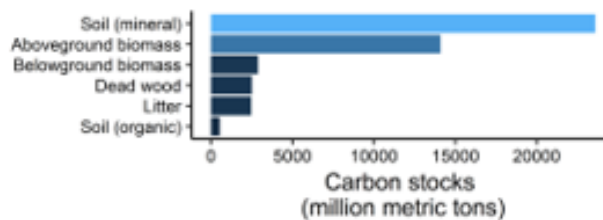
Trends in United States forests



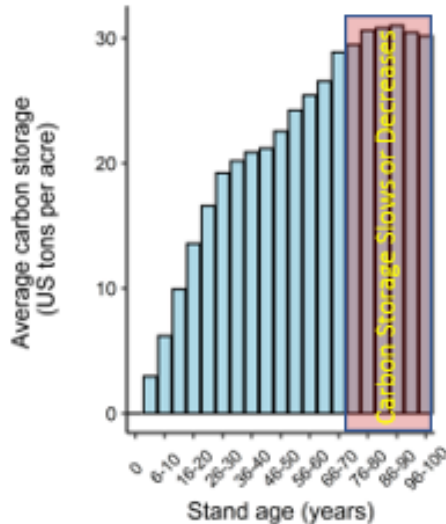
Carbon across United States ownerships



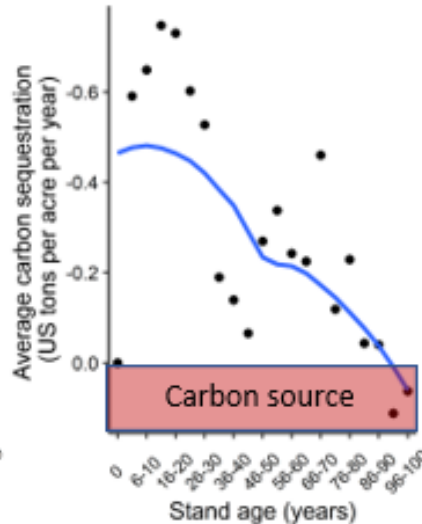
Carbon pools in United States forests



Carbon storage in United States forests



Carbon sequestration in United States forests



Carbon Definitions

Carbon pool: a component of the forest that can gain or lose carbon over time

Carbon storage: the amount of carbon retained in a forest and/or carbon pool

Carbon sequestration: the process by which trees and plants use carbon dioxide and photosynthesis to store carbon as biomass

Units: Forest carbon is typically expressed in US tons per acre or metric tons (1 metric ton = 1.10 US tons)

Quick Facts on Forest Carbon

- The lower 48 states in the US have 635.3 million acres of forests and are 34% forested.
- US forest carbon stocks have increased by 11% from 1990 to 2019.
- Average carbon density in aboveground trees across US forests is 22.6 US tons per acre.
- Across the US, forests, urban trees, and harvested wood products:
 - Remove 14% of all CO₂ emissions.
 - Store the equivalent of 33 years of all CO₂ emissions produced across the US.

Sources: Forest ecosystem carbon stocks obtained from [2020 Forest Service Report on U.S. Forests](#); Greenhouse gas emissions and removals from forest land, woodlands, and urban trees in the United States, 1990-2019; State-level CO₂ emissions obtained from [EPA State-by-State Emissions from Greenhouse Gases](#); Total forest area and land area for each state obtained from [2020 Forest Service Report on U.S. Forests](#); Forest Resources of the United States, 2017, a technical document supporting the Forest Service 2020 RPA Amendment; Values of carbon by ownership and forest type obtained from USDA Forest Service, Forest Inventory and Analysis Program using the [2020 Forest Inventory and Analysis Report](#), year 2020 (2019) (Released 27 Aug 2020).