



# Forest Carbon Stewardship Principles for Our Nation's Forests

## A Position Statement of the National Association of Forest Service Retirees

Approved February 6, 2024

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### Purpose

To encourage the development of science-based stewardship principles for the carbon stored in the nation's forests and grasslands, and integrating them into policies and management strategies that advance climate change mitigation and improve the long-term resilience of these lands to disturbances that threaten the resources and services they provide. This advocacy also supports expanding forest carbon science and forest sector carbon literacy for everyone, especially youth.

### Scope

Carbon stewardship has already become a new challenge for both public and private forest and rangeland managers who are facing an uncertain future being shaped by changing climatic patterns that are often beyond their control. Carbon is a core component of forest and grassland systems playing many roles in sustaining their structure and functioning that are critical to their health and productivity. The forest carbon sink is vitally important in offsetting greenhouse gas emissions made by the rest of the nation's rural and urban economies. However, prospects for the nation's forest carbon sink are in question because of: (1) rapidly changing disturbance patterns; (2) changes in ecological and socio-economic systems in response to extreme climate change effects; and (3) the challenges of balancing carbon goals with wildland fire, forest health and other stresses as well as resource demands and needs for long-term system resilience. Some of these challenges were introduced in NAFSR's initial climate change [position](#) and [science](#) statements (February 2023).

### Position

**NAFSR supports the Forest Service in developing a strong leadership role in defining the concept of forest carbon stewardship for all lands.** Given the importance of the nation's forests and grasslands in global carbon cycles and national goals for both mitigation and adaptation, we would support all mission areas of the agency bolstering and giving prominence to their contributions to policy dialogues at national, state, and local levels. A key to strong leadership is aligning programs with forest carbon implications across the agency. Doing so would help will enhance the agency's carbon credibility.

**NAFSR believes that a clear and compelling set of forest carbon stewardship principles are needed to better frame policy dialogues and guide carbon considerations in forest and grassland management strategies and programs.**

Actionable, science-based principles are needed that are incorporated into strategic guidance for regional ecosystems and translated into goals, baselines, and performance measures—not only for the agency, but all forest sector stakeholders. Achieving long-term resilience for carbon across the sector requires a consistent coordinated approach by everyone.

**NAFSR is encouraged that the Forest Service has developed and adopted a set of forest carbon stewardship principles.** We support their implementation both inside and outside the agency. The principles were approved by the agency's Executive Leadership Team in 2013. They have been shared with, and received approvingly by, an assortment of stakeholders but to our knowledge have not been formally transformed into field direction or guidance. A focused implementation effort would help influence positive sector-wide outcomes.

The five principles, below, flow from the premise that land management and use of forest products can be designed to sequester and store carbon while meeting other objectives. They are a guide for integrating carbon into national and regional policies and programs, thus making carbon stewardship a core part of sustainable forest management and climate change response. The principles assert that sustainable uses of wood can help reduce carbon emissions in the forest sector over the long-term. They also offer a framework for setting investment priorities both inside and outside the agency for research and development; for integrating science-based climate adaptation and mitigation goals into land management planning, decisions, and major initiatives; and as the basis for developing partnerships with like-minded organizations. Already, they have helped some national forests and agency programs integrate carbon stewardship in land management and climate adaptation planning and better communicate the roles of the agency in responding to a changing climate.

- 1. Emphasize ecosystem function and resilience. (Function First).** Carbon sequestration capacity depends on sustaining and enhancing ecosystem function to maintain resilient forests adapted to changing climate and other conditions.
- 2. Recognize carbon sequestration as one of many ecosystem services. (One of Many Services).** Carbon sequestration is one of many benefits provided by forests, grasslands, and forest products, now and in the future. Consider carbon sequestration in context with other ecosystem services.
- 3. Support diversity of approaches in managing carbon, reflecting differences in ownership goals, policies, ecology, geography, socioeconomic concerns, and others. (Diverse Approaches).** Recognize that decisions about carbon in America's forests are influenced by ownership goals, policy, ecology, geography, socioeconomic concerns, and other factors that vary widely. Support a variety of approaches to payments and exchanges for carbon sequestration to provide choices that are compatible with the objectives of different owners.
- 4. Consider system dynamics and scale in decision making. (Scale and Timeframe).** Evaluate carbon sequestration and cycling at landscape scales over long time periods. Explicitly consider uncertainties and assumptions in evaluating carbon sequestration consequences of forest and grassland management options.
- 5. Use the best information and methods to make decisions about carbon management. (Decision Quality).** Base forest management and policy decisions on the best available science-based knowledge and information about system response and carbon cycling in forests, grasslands, and wood products. Deal directly with uncertainties, risks, opportunities, and tradeoffs through sound and transparent risk management practices. Strive to develop and adopt uniform and consistent methodologies in carbon estimation, climate forecasting, and other elements of decision making to compare alternatives and reliably detect changes in forest conditions. Where practical, consider the full life cycle impacts of management decisions in influencing atmospheric greenhouse gas (GHG) concentrations.

The carbon stewardship principles have been featured in [Considering Forest and Grassland Carbon in Land Management, GTR-WO-95](#) and are displayed on the [Carbon page of the Forest Service website](#) along with portals to agency programs and actions that illustrate some of the principles. Carbon stewardship and resilience are core concepts in the agency's new [Climate Adaptation Plan](#) which was developed to implement [Executive Order 14008 on Tackling Climate Crisis at Home and Abroad](#), [EO 14072: Strengthening the Nation's Forests, Communities, and Local Economies](#), and the [USDA Secretary's Memo on Climate Resilience and Carbon Stewardship of America's National Forests and Grasslands \(1077-004\)](#). Carbon-related actions in Forest Service Regions are being documented and reported through the [FS Climate Action Tracker](#) reporting tool which highlights actions consistent with these principles.

**NAFSR supports creation of new scientific knowledge and tools to quantify carbon sequestration, stocks, flows and emissions.** Knowledge gaps related to long-term resilience appear to be knowing below-ground carbon's role in the whole carbon cycle; improving carbon cycle evaluation at various scales; and understanding the interplay of land management actions and climate-influenced disturbance processes. Filling these gaps would make it easier to set priorities and expectations for carbon stewardship inside and outside the agency.

NAFSR scientists have prepared a statement on [forest carbon science](#) underpinning this position statement.