Forests: The Original Carbon Sinks

Recommendations for the upcoming Farm Bill

WHY FORESTS?

Forests remove carbon from the atmosphere — critical to combating climate change, while also strengthening rural economies, providing clean air, water, recreation, and wildlife habitat, and increasing resilience to natural disasters.

Forest restoration and management can scale carbon removal and provide strong benefits for working families and communities. To preserve our forests and realize their carbon-removing potential, we need the next Farm Bill and related legislation to take a holistic approach to forest management — building workforce capacity for impactful restoration and management, sourcing and planting seedlings in appropriate ecosystems including urban and community settings, helping existing forests remain healthy and intact long-term, and requiring effective monitoring of these goals.

CURRENT CHALLENGES

- **The need for tree planting across national, state, and Tribal forests, as well as urban and community settings, is continuously high.** In urban and community settings, increased funding is needed to keep pace with demand. In national forests, severe disturbance events often necessitate reforestation and soil rehabilitation, but replanting efforts are limited by workforce availability, nursery capacity, and knowledge gaps. Replanting in Tribal and state forests is hindered by all of these challenges.
- **Forest management projects tend to have singular goals**, such as reducing risk of wildfire or meeting predetermined timber targets, which is a missed opportunity to approach forest management holistically. By managing for overall ecosystem health, multiple goals can be accomplished concurrently. For example, healthy forests store more carbon and are more resilient to wildfire, pests, diseases, and other disturbances.
- **Current metrics, such as "number of acres treated" and "board feet harvested," are inadequate** when it comes to tracking progress and measuring success. We need metrics to better track whether forest management activities are having the desired effect.

THE FARM BILL OPPORTUNITY

- **Invest in private tree nurseries, workforce capacity, and research** to ensure that seedling supply meets replanting demand.
- **Invest properly in reforestation and other tree planting programs** so that planting and replanting demands can be met in all settings, including urban and community landscapes.
- **Ensure that incentive programs and resources** offer long-term protection to working forests.
- **Require proper monitoring and metrics** that will accurately measure success.

1. *Expand reforestation and replanting efforts across state and national forests by supporting nursery capacity expansion and seed collection activities.*

The national seedling shortage has illuminated the critical role that tree nurseries and seed extractories play in supplying the young trees required to restore forests at scale. Congress should improve science and research integration into programs that already support state seed sourcing, seedling cultivation, and genetic resource management to maximize their impact and address the national seedling shortage.

- **Integrate the best available research** to guide the Forest Stewardship Program's Rural Forestry Assistance Program (RFA) and Reforestation, Nurseries, and Genetic Resources (RNGR) programs. RFA should utilize the latest climate science and economic research to identify priority areas for enhanced nursery and seed sourcing activities.
- **Prioritize climate-focused genetic work** that centers climate-resilient and regionally appropriate tree species across different ecological and climate contexts. For example, selective breeding can focus on traits for resistance to drought, fire, and other severe disturbances.
- **Include workforce development** as a form of technical assistance delivery under RNGR to ensure that state nurseries and seed extractories are well-staffed and create high-quality career pathways.

2. *Increase investments in tree planting across urban and community settings.*

Trees provide a myriad of benefits for communities, including lowering temperatures, improving air quality, increasing property values, and providing important recreation and green spaces. It is estimated that **urban trees store more than 12% of annual US carbon emissions**.[1]

The Urban and Community Forestry (UCF) Program is the only federal program dedicated to growing and maintaining urban and community trees, forests, and green spaces.

The UCF Program has traditionally received $35-40 million annually;[2] however, research suggests that **funding needs are closer to $85 million per year**.[3]

Congress should rightsize this funding shortfall as a necessary first step in properly scaling the UCF program to ensure all communities benefit.

3. *Realign the mission of the Forest Service so that land management goals of national forests address the issues of today, and establish metrics that can adequately measure progress and success.*

When the idea for our country's national forests was first conceived in 1897, it was envisioned that **these forests would be managed for multiple purposes** — to keep forests healthy, to conserve freshwater sources, and to provide a continuous supply of timber.[4]

While these goals are still relevant and can exist in harmony, **updates to the Forest Service are needed** to ensure these goals are being met **in light of today's challenges, specifically the climate crisis, the biodiversity crisis, and the wildfire crisis.**

The Forest Service currently manages several objectives across the national forests, including harvesting enough trees to hit predetermined timber targets, mitigating the wildfire crisis, and protecting and restoring watersheds, among others. However, more needs to be done to ensure forest management activities advance multiple objectives, because our national forests are complex ecosystems that must be managed holistically.

By **prioritizing ecosystem health as the primary goal** — a goal that aligns with the original Organic Act — we can create more resilient forests that store even more carbon, which in turn, will mitigate uncharacteristically severe wildfires, protect freshwater sources, provide improved habitat for wildlife, and so on.

Forest management, including mechanical thinning and tree harvesting, has always and will continue to play a critical role in restoring our national forests, as many of these forests are overcrowded due to decades of fire suppression. However, harvesting trees with the primary goal of reaching timber targets encourages harvesting in areas that are easy and cheap to access, as opposed to prioritizing harvesting in areas that need thinning — paired with complementary restoration measures. To correct issues like this, the agency should:

- **Change the system of land management performance metrics** beyond acres treated or timber volume output to measure success. **Performance metrics should, instead, focus on outcomes** grounded in ecological resilience, values at risk, and social outcomes, which would better incentivize work toward more meaningful measures of success and improve accountability.[5]

TITLE II: CONSERVATION

3. *Authorize a new Forest Conservation Easement Program (FCEP) to alleviate pressure to convert forests to non-forest land uses.*[6]

Voluntary conservation easements can ensure that private working forests remain intact long-term using sustainable management practices. Existing programs already support these goals, but face a series of programmatic restrictions limiting their impact on US forestlands.

- **Authorize $100 million per year in additional mandatory funds** to prevent conversion of forests under FCEP, modeled after the Agricultural Conservation Easement Program (ACEP).
- **Absorb the existing Healthy Forest Reserve Program (HFRP) into a new FCEP subprogram, Forest Reserve Easements (FRE), modeled after the ACEP Wetlands Reserve Easements.** FCEP-FRE should maintain HFRP language prioritizing carbon sequestration and supporting government-held easements with an emphasis on endangered species habitat and biodiversity.
- **Establish a second FCEP subprogram, Forest Land Easements (FLE), modeled after the ACEP Agricultural Land Easements.** FCEP-FLE should allow eligible entities like land trusts, state agencies, and other trusted actors to purchase easement titles from landowners with financial support from NRCS. Working forestlands should be eligible for these entity-held easements.
- **Provide federal cost-share splits over 60%** for socially disadvantaged farmers, ranchers, and forest landowners under both programs.

Endnotes

[1] City Leaves: The Benefits of Urban Forests, Forest Service, US Department of Agriculture

[2] Urban and Community Forestry Program, Forest Service, US Department of Agriculture

[3] Ten-Year Urban Forestry Action Plan: 2016-2026, National Urban and Community Forestry Advisory Council

[4] Forest Management, A Historical Perspective, Forest Service, US Department of Agriculture

[5] On Fire: The Report of the Wildland Fire Mitigation and Management Commission, Wildland Fire Mitigation and Management Commission

[6] Land Trust Alliance 2023 Farm Bill Recommendations, Land Trust Alliance

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