



BRANCHING OUT

A Market-Based Solution to Conserving Family Forests

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Conserving forests at scale is one of the most cost-effective strategies available for addressing climate change, biodiversity loss, and rural economic decline simultaneously. In the United States, family forest owners (FFOs)—who collectively control the largest share of forestland—play an outsized role in determining environmental outcomes. Yet traditional conservation models dependent on public appropriations and philanthropy have struggled to reach this constituency at scale. This paper argues that market-based conservation approaches, particularly voluntary carbon markets designed for small landowners, offer a scalable, credible, and economically durable solution. Using the Family Forest Carbon Program developed by the American Forest Foundation (AFF) and The Nature Conservancy (TNC) as a case study, this article illustrates how private climate finance can be leveraged to improve forest health, enhance biodiversity, and strengthen rural economies while maintaining high standards of environmental integrity.

The Importance of Family Forest Owners

The future of America's forests will depend significantly on private individuals and families. FFOs represent the single largest forest ownership group in the United States, numbering more than 33 million individual owners who collectively steward approximately 270 million acres of forestland. This represents roughly one third of all US forests. In many regions, particularly the eastern United States, private family ownership dominates the landscape, leaving federal and state agencies with limited direct control over ecosystem outcomes.¹

These landowners are far from monolithic. Research from the US Forest Service's National Woodland Owner Survey shows that their objectives range widely, including wildlife habitat protection, privacy, recreation, family legacy, and financial security. Many owners view their forests as intergenerational assets

rather than extractive resources, but they often lack access to consistent professional guidance or financial support for long-term stewardship.²

Despite their importance, engagement with professional advice and services is quite low. Fewer than one-third of FFOs have ever received professional forestry advice, and participation in federal assistance programs is similarly limited.³ This mismatch between ecological importance and institutional support has profound implications for climate mitigation, biodiversity conservation, and long-term sustainable timber supply.

In particular, family-owned forests are becoming more ecologically consequential just as climate risks intensify. These privately held landscapes support significant biodiversity and often form the connective

tissue that allows species movement across fragmented habitats. In the eastern United States, where public land is scarce, private forests provide the majority of ecosystem services—from clean water and carbon storage to wildlife habitat and recreation.⁴

In the western United States, where public lands dominate, private forests serve a different but equally critical function: landscape connectivity. Many family-owned parcels bridge federally managed forests, creating corridors that support wildlife migration, genetic exchange, and climate adaptation. As temperatures rise and disturbance regimes intensify, such connected networks are increasingly essential for ecosystem resilience.⁵

Yet family forests face mounting threats. Climate-driven pests, wildfire, drought, invasive species, and development pressure all converge most acutely on privately owned lands, where management decisions are made parcel by parcel and often without technical assistance. Absent new models of engagement, these pressures risk accelerating forest degradation and conversion at precisely the moment when society needs forests most.

Limits of Traditional Conservation Finance

Historically, forest conservation on private lands in the United States has relied heavily on public funding, particularly through US Department of Agriculture (USDA) programs such as the Forest Stewardship Program and the Environmental Quality Incentives Program (EQIP). While these programs are well-designed and widely supported, their reach has been constrained by persistent underfunding and administrative complexity.

Recently, federal support for private forest stewardship has been under threat, even as climate and land-use pressures have intensified. As a result, only a small fraction of eligible acres receive assistance. USDA Farm Bill conservation programs recruit between 3–4% of family forest acreage every year in what are largely short-term contracts with little long-term support. That leaves hundreds of millions of acres lacking updated management plans or any professional oversight.⁶

Moreover, the process burden associated with public programs (e.g., lengthy applications, cost-share requirements, and rigid timelines) often clashes with landowner expectations and financial realities. Philanthropy faces similar constraints. While invaluable, it cannot reasonably be expected to finance conservation across hundreds of millions of acres indefinitely.

These limitations point to the need for complementary approaches capable of mobilizing private capital at scale.

Market-Based Conservation Solutions

Market-based conservation seeks to address these gaps by linking environmental outcomes to market demand. Rather than relying solely on public appropriations, this approach leverages voluntary markets—for carbon, biodiversity, or water services—to direct private finance toward conservation activities that generate verified, measurable benefits.

Market-based models can generate stable, long-term revenue streams for landowners, providing an essential feature in our current era of timber market volatility.

In theory, this model offers several advantages. First, it allows public investments to function as catalysts, lowering transaction costs and risk while crowding in significantly larger volumes of private capital. The American Forest Foundation estimates that strategic federal investment in natural climate solutions can leverage private climate finance at ratios as high as 10:1, dramatically increasing return on public dollars.⁷

Second, market-based models can generate stable, long-term revenue streams for landowners, providing an essential feature in our current era of timber market volatility and rising management costs. By compensating landowners for stewardship rather than extraction, these models realign economic and ecological incentives.

The most mature of these markets is the voluntary carbon market. Market projections suggest that demand for voluntary carbon credits will continue to grow rapidly. Multiple analyses project the market expanding from roughly \$1.7–2 billion today to anywhere between \$15–50 billion over the next decade, depending on corporate net-zero adoption and quality credit differentiation (i.e., what constitutes a quality carbon credit).⁸ Compare these projections to the situation in 2023, when USDA Farm Bill programs spent an all-time high of \$2.8 billion on conservation activities through the infusion of Inflation Reduction Act spending.⁹ We are unlikely to see federal investments repeated at this level. And with forests reaping roughly only 10–20% of those USDA resources, forest conservation stands to gain significantly more from the infusion of climate finance via the voluntary carbon market.¹⁰

Critically, however, early forest carbon markets largely failed to serve small landowners. High transaction costs and monitoring requirements meant projects

typically required at least 5,000 acres to be financially viable, excluding millions of FFOs, most of whom own 60–70 acres on average.

Recognizing this gap, the American Forest Foundation, working closely with The Nature Conservancy, set out to design a fundamentally different model. Their goal was to unlock billions of dollars in private climate finance for family forests while maintaining high integrity standards.

The result was the Family Forest Carbon Program (FFCP), administered by the Family Forest Impact Foundation, a mission-driven program specifically created to manage a voluntary carbon market business at scale.¹¹ The program was designed around several core principles:

- **Accessibility:** Lowering minimum acreage thresholds so small landowners can participate and capitalizing on economies of scale through a

AFF Senior Manager and Applied Ecologist Holly May and landowner Alisha Logue inspect tree plantings. BEYOND ALLIANCE



portfolio approach of disaggregated landowners across a landscape.

- **Simplicity:** Reducing barriers to entry by providing key technical assistance and assuming responsibility for complex monitoring, reporting, and verification (MRV, as it is known in carbon credit markets).
- **Reliability:** Eliminating market volatility by providing landowners with guaranteed, annual payments over 20-plus-year commitments.
- **Integrity:** Prioritizing high-quality carbon accounting to ensure durable market demand and meaningful conservation impact.

As of 2026, more than 1,400 landowners and nearly 200,000 acres are enrolled in the Family Forest Carbon Program. Approximately 80% of enrolled participants had never before sought professional forestry advice, indicating that the program is reaching previously unengaged landowners in meaningful forest stewardship.

Collectively, these enrolled lands are projected to generate approximately 3.35 million verified carbon credits (equivalent to 3.35 million metric tons of CO₂ mitigated) while delivering nearly \$50 million in committed payments to rural families over the life of their contracts. As buyers increasingly prioritize nature-based, high-integrity credits, family forests are well positioned to benefit.

Complementary Economic Benefits

Beyond climate mitigation, the program delivers co-benefits that traditional carbon accounting often undervalue, including improved wildlife habitat, reduced invasive species pressure, increased forest resilience, enhanced water quality, and increased long-term timber value. At the conclusion of their 20-year partnerships, landowners have healthier, more resilient, and more valuable forest assets.

Market-based forest conservation also offers economic advantages extending beyond individual parcels. In rural regions where forestry remains a cornerstone industry, reliable stewardship income can stabilize household finances and sustain working landscapes during periods of market volatility.

By promoting sustainable forest management, programs like FFCP help ensure a consistent supply of high-quality timber over the long term, strengthening the forest products sector rather than undermining it. This is particularly important as climate impacts, labor shortages, and international competition introduce new uncertainties into wood markets.¹²

Importantly, investment in technical assistance necessary for implementing forest carbon programs rebuilds institutional capacity that has eroded alongside declining public budgets.

Integrity Ensures Market-Based Solutions Success

Critics of forest carbon projects often point to quality concerns, arguing that poorly designed projects can undermine mitigation goals they claim to achieve. These critiques are valid, but they underscore the

AFF Executive Vice President of Climate Funding Nate Truitt has a conversation with the Beam family. BEYOND ALLIANCE





LEFT Forester Ian Forte reviews FFCP landowner Kathy McClure’s forest management plan. AMERICAN FOREST FOUNDATION



RIGHT The McClure family takes a walk in their Pennsylvania woods. AMERICAN FOREST FOUNDATION

importance of integrity-first program design, *not* abandonment of markets altogether.

AFF and its partners deliberately prioritized methodological rigor, third-party verification, and innovative accounting through recognized standards such as Verra’s Verified Carbon Standard. This focus reflects the strategic understanding that high-quality credits sustain long-term demand, which is essential for landowners relying on multi-decade revenue commitments.

Conclusion

Market-based conservation is not a panacea, nor should it replace public investment in environmental stewardship. Instead, it represents a necessary complement—one capable of mobilizing private capital at a scale commensurate with today’s environmental challenges.

The experience of the Family Forest Carbon Program illustrates that when markets are thoughtfully designed around landowner needs, ecological integrity, and long-term outcomes, they can deliver meaningful climate mitigation, enhanced biodiversity, and tangible economic benefits for rural communities. Further, these projects, when done correctly, can bolster traditional forest product markets by providing diversified revenue streams and critical forest stewardship investment for long-term economic sustainability. Carbon markets in this context are means to multiple, mutually reinforcing ends, including healthier forests, more resilient landscapes, and a more inclusive climate economy.

Endnotes

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