

U.S. Natural Climate Solutions Accelerator

Round 2 Finalist: The Nature Conservancy Massachusetts Chapter

Initiative: Family Forest Carbon Program: Southern New England

NCS Pathway: Forest Management Practices

Location: Massachusetts, Vermont

The Nature Conservancy was awarded funding to expand the Family Forest Carbon Program (FFCP) funded during the first round of Accelerator grants awarded in 2018. The FFCP is developing a new practice-based voluntary carbon protocol designed to make it easier for forest landowners with smaller acreages to access voluntary carbon markets. Together, The Nature Conservancy and the American Forest Foundation will work with partners in Massachusetts and Vermont to adapt the carbon forestry practices developed for Central Appalachian forests to the forests of southern New England. The team plans to develop and align these carbon forestry practices with state policy opportunities and programs emerging in Massachusetts and Vermont as additional mechanisms for scaling the adoption of carbon positive forest practices and securing this carbon by protecting forest land.

How it works: The carbon stock on small, family-owned parcels is greatly influenced by choices families make about the management and future of their land. Carbon-beneficial forestry practices can increase carbon stocking while generating wood products that can substitute for more fossil fuel intensive building and heating materials. Landowners interested in adopting these practices will be able to access incentive programs being developed in Massachusetts and Vermont as well as voluntary carbon markets. These incentive and market approaches provide a new source of revenue for families interested in these practices. Monitoring, reporting and verification methods used by existing offset markets make it challenging for landowners with smaller acreages to engage. The Southern New England FFCP will adapt management practices and expected carbon benefits developed for the Central Appalachians to the forest types in southern New England. The team will host expert workshops and training sessions, and recruit landowners to enroll in these programs and collect baseline measures for verification over time. The practices include removing competing vegetation, retaining legacy features and coarse wood in thinnings and regeneration harvests, and practices to address invasive plants and insects. The Family Forest Carbon Program can also educate forest landowners and the public about the importance of the full suite of forest-based natural climate solutions, even if not all of those fit within the funding structure of the program itself.

Scaling/Replication: Working together TNC and the American Forest Foundation will work with partners in Massachusetts and Vermont to launch several successful programs to assist private forest landowners in writing management plans and working with qualified private foresters. A new incentive program is being explored in Massachusetts to incentivize landowners to grow additional carbon. This program requires specific carbon and resilience forestry practices, such as those developed by this initiative. Similarly, Vermont's Forest Carbon Sequestration Working Group is considering how to increase carbon on private lands that may later enroll in carbon markets. The Massachusetts' Global Warming Solutions Act and Vermont's Act 83 require reports and action from both states in 2020 and 2021. The team's forestry practices will also be applicable in Connecticut, southern New Hampshire, Rhode Island, eastern New York, and potentially beyond.

Carbon Sequestration: The team estimates that if enrollment is scaled up over 30 years to engage 25% of landowners in the MA and VT current use programs, the initiative could sequester 11 million tCO₂e on approximately 625,000 acres. Bringing such a program to scale nationally over 30 years to encompass 50 million of the nation's 270 million small scale forest acres, is estimated to be able to sequester 992 million tCO₂e.