FINAL REPORT

Family Forest Carbon Program Conservation Innovation Grant (CIG)

American Forest Foundation

Project start and end date

Start: 3/23/2020

End: 2/13/2023

Award number (FAIN)

NR203A750013G001

Project Summary:

This USDA Conservation Innovation Grant (CIG) funded crucial early-stage developments of the Family Forest Carbon Program (FFCP) and aligned the program with Natural Resources Conservation Service (NRCS) practices. FFCP was created by the American Forest Foundation (AFF) and The Nature Conservancy (TNC) as a scalable conservation program that provides family forest owners access to the carbon market by engaging them in climate-smart forest management.

This grant developed FFCP's public-private model and aligned its practices with NRCS priorities. It also enhanced conservation offerings to Central Appalachian Region landowners and addressed technical assistance bottlenecks. Finally, work completed through the CIG validated that FFCP's business model can be supported by third-party verifiers and a sufficient carbon credit marketplace to scale.

Project Goal and Objectives:

This CIG aimed to develop FFCP in alignment with NRCS practices to create an innovative conservation program that could leverage burgeoning carbon markets to incentivize climate-mitigating conservation practices in family-owned forests. This project addressed two NRCS challenges, "How to engage a large portion of America's 22 million family forest owners in globally significant climate change mitigation" and "How to accelerate the adoption of other conservation practices among family woodland owners in the US." FFCP pools the results of carbon sequestering forest management practices from hundreds of small landowners across a region and attracts private investment by selling produced carbon credits on the private market. The project incentivizes landowner engagement in a way that complements and supports existing programs and capacities of NRCS.

This CIG project strove to accomplish five key objectives by 2022. The objectives were as follows:

I. Develop a public-private partnership model that provides more landowners with comprehensive forest stewardship incentives.

II. Develop a model that addresses forestry technical assistance capacity constraints or bottlenecks.

III. Build a carbon market-based conservation solution to achieving NRCS' local priorities.

IV. Ensure the models are supported by third-party verifiers and key stakeholders.

V. Ensure there is both a sufficient supply and demand for the carbon credits produced to support a sustainable program.

Background:

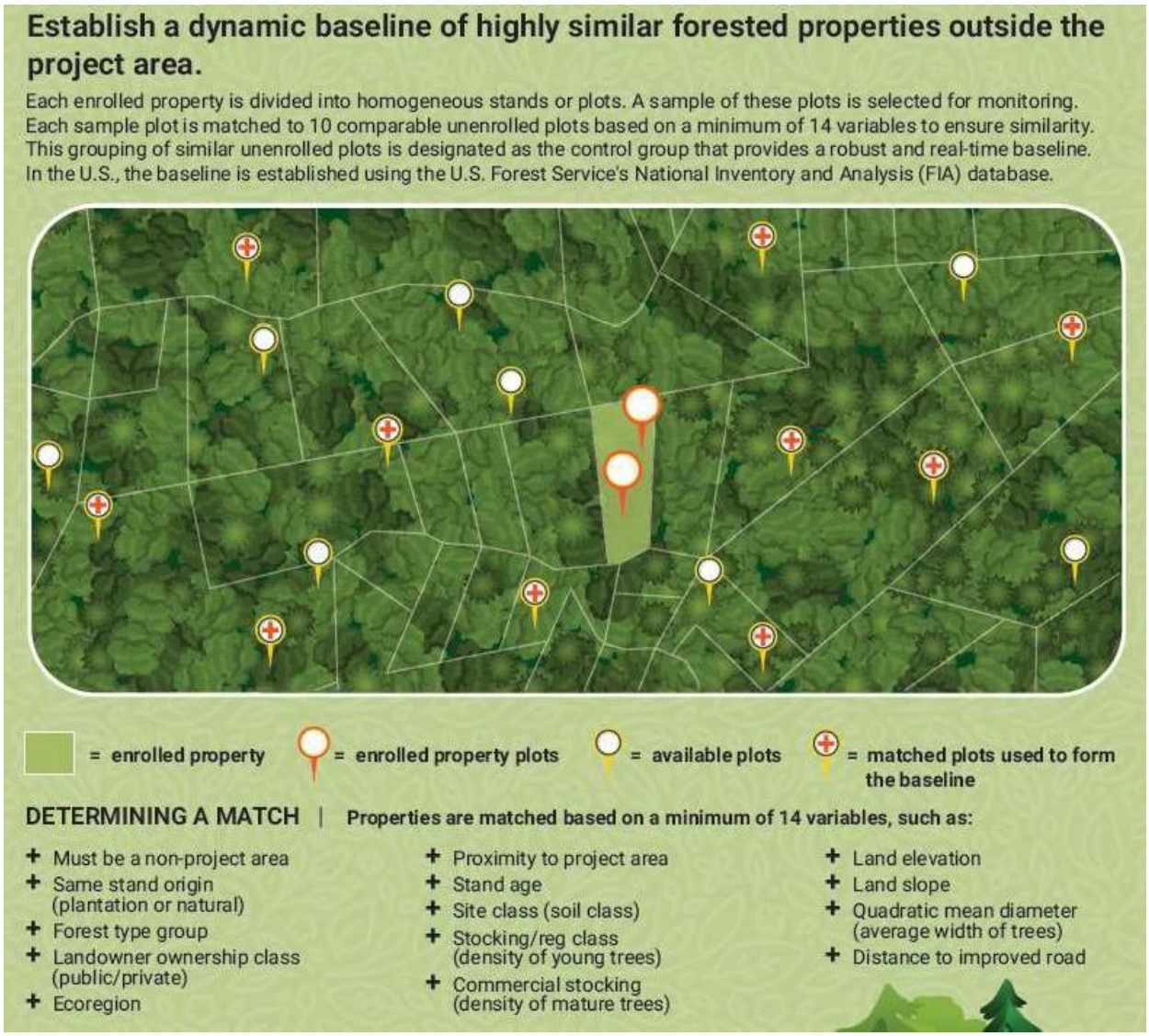
Forests cover over 750 million acres of land in the United States, making them the nation's largest natural carbon sink. Unlocking the conservation potential in family forests is crucial to climate change mitigation because family forests make up 39% of those 750 million acres. Burgeoning carbon markets represent an innovative way to incentivize engaged forest management. Companies and individuals interested in lessening their carbon impact can pay for carbon sequestering projects like improved forest management to offset emissions. However, family forest owners have traditionally been excluded from carbon markets due to high upfront costs and complexity. Less than 1% of current carbon projects are on acreages between 20 and 1,000 acres (the size range of family-owned forests).
FFCP helps landowners care for their woods through climate-friendly, sustainable management. Specifically, the program provides a forest management plan customized to the landowner's property, payments to implement forest practices that increase carbon storage and climate resiliency, and expert guidance from a professional forester. The program uses a scalable social enterprise model that funds future conservation work with the sale of carbon captured by enrolled landowners as verified carbon credits on the private marketplace.

Project Methods:

The CIG was a significant component in the development and launch of FFCP. Landowners contract with FFCP through 20 or 30-year contracts to commit to regionally specific forest management practices designed to enhance carbon sequestration and storage relative to the landscape. Then, FFCP uses a dynamic baseline tool throughout the life of the contracts to accurately estimate additional carbon sequestered and stored as a result of forest management. The dynamic baseline uses data from the U.S. Forest Service's Forest Inventory and Analysis program as the control variable matched with similar properties enrolled in FFCP to create an accurate estimate of the additional carbon sequestered because of FFCP practices. The difference between carbon stocks on aggregated enrolled properties and matched (unenrolled) plots is the amount of gross carbon attributed to the project, then sold as verified carbon credits. Aggregating the enrolled properties lowers administrative costs per property and unlocks larger credit buyers otherwise out of reach of family forest owners.

The program supports landowners throughout their journey, with professional foresters servicing enrollees and developing a complimentary forest management plan tailored to landowner goals. AFF staff work closely with NRCS state and national offices to learn how FFCP practices are aligned. FFCP project planning is done with NRCS practices in mind. For instance, NRCS priorities surrounding Cerulean Warbler habitat impacted FFCP program design in Central Appalachia. Landowners can choose between the complimentary forest management plan generated by FFCP or a third-party option. 22% of enrolled landowners chose the third-party, NRCS-ready forest management plan. FFCP also shares data and lessons learned throughout the enrollment process with NRCS to inform other conservation programs' enrollment. This demonstrates which aspects of the program most incentivize landowners to join the program and what barriers prevented enrollment.

More information on FFCP's unique methodology can be found in Addendum A.



FFCP's dynamic baseline parcel matching method.

Project Results:

Throughout the grant performance period, AFF achieved nearly all objectives for the project. Descriptions of the results of each project objective are included below.

Objective I:

This CIG's first objective was to develop a public-private partnership model that provides more landowners with comprehensive forest stewardship incentives. The objective was to be achieved through the review of FFCP practices and design implementation mechanisms to ensure their alignment with existing conservation programs administered by NRCS and others. AFF also committed to identifying and building additional practice methodologies for at least two new practices. Manuals and educational materials were to be created for each practice to enable foresters or landowners to verify eligibility, understand their obligations, and perform required monitoring. Educational materials would include a program fact sheet describing the program opportunity for NRCS staff to use in public settings and marketing materials (including templates) for landowner outreach. Finally, the public-private model would be developed by building out the legal frameworks necessary to implement the program.

Objective I Outcome:

The first grant objective has been met. FFCP expanded from a 16-county pilot in PA to all of PA, WV, and western MD with support from this CIG. FFCP grew nationally to pilot the program in the Northeast US and the Midwest. By February 2013, 300 landowners enrolled in FFCP, representing 45,010 acres of forest now under improved management. Most of those properties, 290 contracts representing 41,524 acres, are in the Central Appalachians region. Many yet-to-enroll landowners have also engaged with the program, with 5,394 landowners with 855,712 acres of land signed up to receive more information about the program.

An FFCP enrolled landowner with goats used to manage invasive species in their forest.

AFF also created a program fact sheet describing the program for NRCS staff to use in public settings and marketing materials for landowner outreach that can be found as Addendum B.

Objective II:

The second objective was to develop a model that addresses forestry technical assistance capacity constraints or bottlenecks. AFF planned to address those constraints with six manuals, one for each practice, describing how to determine eligibility for and implement the associated practices to landowners and foresters. Each practice manual would include descriptions of the compatibility of the practice with existing NRCS practices.

Objective II Outcome:

The second objective was met, though further work is needed to form and continue stronger relationships with NRCS field offices and ensure capacity and priority alignment. AFF has developed five practices with corresponding practice manuals that can be found online (familyforestcarbon.org/for-foresters/consulting-forester-resources/), and AFF is currently redesigning the Enhancing Future Forests practice, which will provide more climate-smart management options for landowners and increase enrollment. AFF also produced a guidance document on the compatibility of our practices with NRCS and other agencies/programs for staff and landowners to reference.

AFF developed a model to deliver forestry technical assistance more efficiently to FFCP landowners. Applicants are paired with an account manager and forester from the onset of their

application to FFCP to provide a seamless enrollment journey. The model features on-staff foresters in combination with consulting foresters to advise potential enrollees on their property's eligibility for the program in combination with landowner goals. After establishing fit, the foresters write forest management plans specified to the individual landowners utilizing conservation practices that fit within NRCS practices and have a climate impact as demonstrated through Verra-approved carbon accounting methodology. This significantly ameliorates NRCS forester capacity issues by adding additional options for landowners seeking technical capacity and access to markets.

FFCP foresters evaluate the conservation needs of an enrolled forest.

Objective III:
The third objective was to build a carbon market-based conservation solution to achieve NRCS' local priorities. **The objective was to be delivered by creating four third-party verified practice methodologies that describe the process for implementing and monitoring forest management practices in a way that leads to the production of carbon credits. Each practice would also have a manual for landowners and foresters to determine eligibility for and implement the associated practices. Each practice manual would include descriptions of the compatibility of the practice with existing NRCS practices.**

Objective III Outcome:
The third objective has been met by creating and expanding verified practice methodologies. A practice manual is in place for the Growing Mature Forests practice, and AFF has developed a similar manual for Enhancing Future Forests, which is currently under revision. AFF also developed practice manuals for three additional practices in the Midwest and Northeast. Detailed practice descriptions and forester manuals can be found online (familyforestcarbon.org/foresters/consulting-forester-resources/).

Of the enrolled landowners, 22% chose the third-party reviewed forest management plan option, typically selected because they are enrolled in or interested in NRCS practices.

AFF continues to identify and enhance compatibility between FFCP and NRCS practices. A summary can be found at the end of this report as Addendum C.

AFF is developing a process for confirming the implementation of these forest management practices using a combination of landowner attestation, pre and post-harvest inventories, and remote sensing.

Objective IV:

The grant's fourth objective was to ensure third-party verifiers and key stakeholders support the program's models. AFF would deliver on this objective by refining and finalizing FFCP's existing practice methodologies. Also, AFF would work with Verra to achieve verification of its framework methodology, and for modules for each of identified practices, under the Verified Carbon Standard (VCS) and to achieve verification of co-benefits of the practices (such as biodiversity or water quality) under Verra's SD VISta standard.

Objective IV Outcome:

The new Improved Forest Management methodology was approved by Verra in early 2023, meeting the fourth objective. While this approval was expected in late 2021, a few factors delayed this process more than anticipated, including some of the more innovative aspects of the methodology (such as the dynamic baseline approach) requiring Verra board approval, as well as other longer-than-usual review times by Verra and the validator. AFF is also exploring quantifying biodiversity impacts using SD VISta or another standard. AFF hired additional internal capacity to expand the science and practice development work, and continues to improve projections of the carbon benefit expected from existing forest management practices and to create new practices and options for landowners.

Of the acres enrolled in the Central Apps only through February 2023, AFF expects to verify approximately 850,000 verified carbon units, which is 850,000 t CO2e sequestered. This number has substantial uncertainty; AFF continues to refine long-term carbon impact/verified carbon unit estimates. Across FFCP, broadly, AFF has seen an increase of 1.4 million tons of CO2 equivalents sequestered by 2040.

Objective V:

This grant's final objective was to ensure a sufficient supply and demand for the carbon credits produced to support a sustainable program. To deliver on this, AFF sought to build a complete, accurate, and sophisticated financial model for the program to attract funds for pilot implementation from carbon buyers (who will "pre-order" the verified carbon produced by the program) and investors. AFF also sought to validate the program's financial model and products with a wide range of marketplace actors to meet a market need and thus generate significant funds for program implementation.

Objective V Outcome:

The fifth objective was largely met by selling carbon credit "pre-orders," developing a financial model, improving landowner enrollment, and issuing a Green Bond. AFF has secured a total of $13.9 million in debt and loans, in addition to $5.18 million in charitable contributions, towards financing the FFCP pilot. AFF secured sufficient credit buyers to meet investor requirements for this first implementation phase.

The CIG has been essential to build and revise the FFCP financial model to ensure the program's sustainability.

Due to delays in methodology approval by Verra, the first batch of FFCP carbon credits is yet to

be verified. AFF anticipates verifying the first credit batch in December 2023. FFCP has sold $53.8 million in credit sales through forward offtake agreements to date. The current value of the sales pipeline is $219.4 million.

AFF developed an analysis of lessons learned from landowner outreach, engagement, contracting, and practice implementation to ensure future iterations or scaling efforts incorporate the effort and advances of this project. In August 2022, AFF presented at the CIG Showcase at the SWCS Annual Conference, sharing lessons learned. (Presentation attached in "Project Outputs" below).
One of the key lessons learned is the value of reducing barriers to landowner enrollment. The FFCP contract was originally a barrier to enrollment for many landowners who found it too lengthy and complex to be understood without professional legal advice. To address that, FFCP redesigned the landowner contract and developed an accompanying summary that enrollees can use to interpret the document. To further increase efficiency, when landowners partner with FFCP, they are now partnered with an account manager-forester team, who work together to walk the landowner through the enrollment process. These two people are the landowner's point of contact for everything related to their woodland and contract.

Project Outputs:

Through this grant, TNC and AFF created a document with NRCS (Addendum C) outlining how landowners and conservation planners can evaluate which program meets their conservation goals. AFF also produced new research through this grant in the form of the Verra-verified Methodology for Improved Forest Management, which can be found online (verra.org/methodology/methodology-for-improved-forest-management/).

AFF has produced communication products and has received significant media coverage related to this grant. The following list includes links to those materials and select stories.
- **An in-Person presentation to the Soil and Water Conservation Society Annual Meeting as part of the CIG showcase on August 1, 2022. (view presentation here)**

Landowner Facing documents (includes blogs):
- **All updated program fact sheets and practice overviews are available on the FFCP website.**
- **AFF created an FFCP enrollment guide showing landowners the process.**
- **AFF published several dedicated to providing landowners with information, including:**
  - A recent four part "Is FFCP Right for You" series.
  - A carbon additionality explainer.
  - A look into how and what FFCP pays landowners as incentives.
  - A carbon market overview.
  - Other relevant blog posts can be found at forestfoundation.org/why-we-do-it/family-forest-blog
- **AFF created an easy-to-understand video explainer about FFCP and its methodology.**
- **An executive summary of a FFCP contract was generated and is provided to enrollees for enrollment efficiency (Addendum D).**

Recent program media coverage:
- **Quantum Commodity Intelligence, 10/27/2022. US carbon scheme to expand following methodology approval.**

- Carbon Pulse, 1/10/2023. Maryland approves revolving loan guarantee for family forest offset programme.
- Quantum Commodity Intelligence, 1/11/2023. US state's loan aims to boost credits from family-owned forests.
- Coastal Review, 2/21/2023. NC peat holds carbon market promise, but process complex.
- The Coronado Times, 7/21/2023. Full Slate of On-Site Activities, Events Announced as 'New Era' of Entertainment Debuts for Fans at The 2023 BNP Paribas Open.
- Bloomberg, no date given. Carbon Coverage Doesn't See Forest for the Trees: Nate Truitt.
- Charleston Gazette-Mail, 3/6/2023. They are my trees: Landowner advocates push back against threat of state forest carbon offset restrictions.
- Quantum Commodity Intelligence, 4/12/2023. US forest carbon initiative expands into three more states.
- Fox UP, 4/12/2023. Family Forest Carbon Program expands to UP.
- Addison County Independent, 4/20/2023. Family forest owners get money to sequester CO2.
- MLive, 4/22/2023. Yoopers with small forestland tracts can enroll in carbon markets.
- Wisconsin Public Radio, 4/26/2023. The nation now has an inventory of old- growth forests. Some hope protections will follow.
- WESA Pittsburgh Public Radio, 7/11/2023. Pa. forest owners look to carbon market to help manage their trees.

Project Impacts:

As a result of this grant, the FFCP model was vetted and developed to align with NRCS practices. As a result, family forest owners in nine states (with more in development) can now access carbon markets, providing funding for forest management to meet their specific goals. Hundreds of forest owners are now more engaged in actively managing their woodlands in alignment with NRCS practices with forest management plans and consulting foresters. Furthermore, those landowners have committed to 20 or 30-year contracts for improved forest management. Most importantly, as the FFCP model continues to scale, thousands more landowners will do the same. The FFCP model is innovative because it projects to provide an incentive and methodology that can scale for forest owners across the country with a built-in method to attract private investment. The program creates climate mitigation opportunities that bring enormous co-benefits to the forest landscape, including climate resilience, wildlife habitat, water quality, scenic beauty, and recreational opportunities.

Addendum A: FFCP's Unique Dynamic Baseline Methodology

ADVANCING INTEGRITY WITH THE NEW IMPROVED FOREST MANAGEMENT METHODOLOGY

International leaders have called for greater integrity in carbon accounting to ensure the long-term success of voluntary carbon markets. To meet this need, the **American Forest Foundation, The Nature Conservancy and TerraCarbon** have pioneered a new approach for calculating a carbon benefit that increases accuracy and transparency. This new methodology does not base its calculations on the commonly used projected baseline, which can be limiting. Rather, this methodology uses a dynamic baseline, which makes it possible to accurately attribute a carbon project and its associated forest practices as the sole intervention responsible for the additional carbon sequestration and storage. This new methodology is approved by **Verra's Verified Carbon Standard.**

IMPORTANT DEFINITIONS

Additionality *has occurred if the carbon generated from a forest carbon project resulted from the specific intervention. A project has additionality only if the carbon sequestration and storage would not have occurred absent the project.*

Baseline *is the starting point for calculating how much additional carbon is sequestered and stored as a result of a particular carbon project. A projected baseline is a model of how much carbon would be sequestered and stored on the land over the next 100 years absent the project based on assumptions of future growth and management. A dynamic baseline is a real-time sample of similar forests outside the project where improved forest management practices are not contracted to be implemented.*

A methodology that considers the dynamics of forest ownership in the U.S.

Analysis from The Nature Conservancy found that the carbon potential in forests could be nearly doubled by implementing improved forest management practices.*

The largest portion of forests – 39% – are owned by family forest owners. Yet, only 1% of the land in carbon projects is from these small parcels.

In the U.S., most family forest owners are not actively managing their land. Only one in five landowners meet with a forester, and fewer than 15% have a written forest management plan.**

*https://www.pnas.org/content/114/44/11645

**https://www.fs.fed.us/research/publications/gtr/gtr_nc97.pdf

HOW IT WORKS:

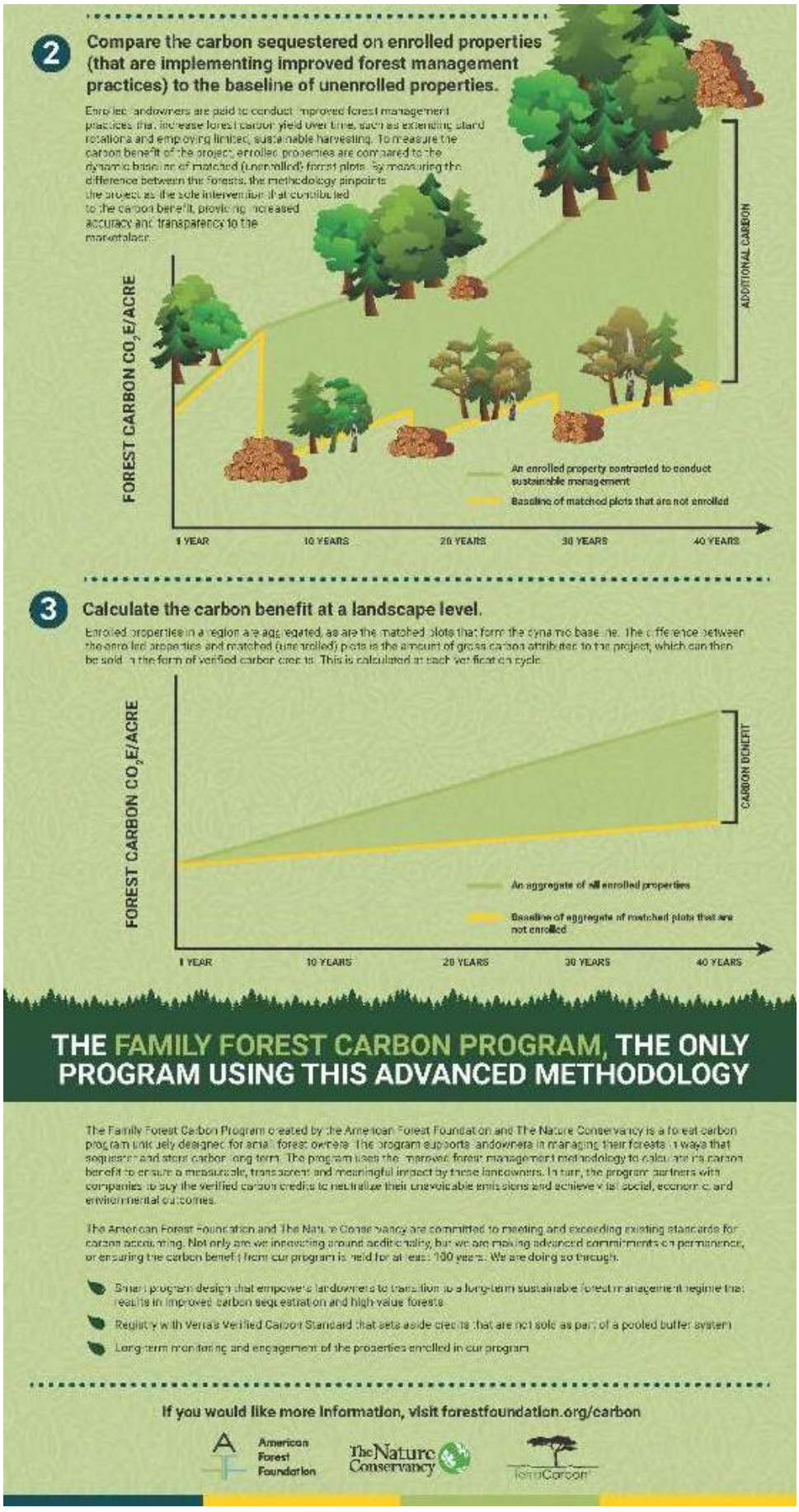
1 Establish a dynamic baseline of highly similar forested properties outside the project area.

Each enrolled property is divided into homogeneous stands or plots. A sample of these plots is selected for monitoring. Each sample plot is matched to 10 comparable unenrolled plots based on a minimum of 14 variables to ensure similarity. This grouping of similar unenrolled plots is designated as the control group that provides a robust and real-time baseline. In the U.S., the baseline is established using the U.S. Forest Service's National Inventory and Analysis (FIA) database.

= enrolled property = enrolled property plots = available plots = matched plots used to form the baseline

DETERMINING A MATCH Properties are matched based on a minimum of 14 variables, such as:

- Must be a non-project area
- Some stand origin (plantation or natural)
- Forest type group
- Landowner ownership class (public/private)
- Ecoregion
- Proximity to project area
- Stand age
- Site class (soil class)
- Stocking/reg class (density of young trees)
- Commercial stocking (density of mature trees)
- Land elevation
- Land slope
- Quadratic mean diameter (average width of trees)
- Distance to improved road



Addendum B: Program Fact Sheet for Public Use

Family Forest Carbon Program

The Family Forest Carbon Program, a partnership between the American Forest Foundation and The Nature Conservancy, is uniquely designed to expand access to carbon markets for family forest owners, empowering them to improve the health and wellbeing of their forests and help tackle climate change.

The Program works with family and individual landowners to capture and store additional carbon in their forests, and then partners with businesses who are committed to reaching their climate goals to continue to support climate-smart forestry in U. S. woodlands.

Family forests are essential to helping the U.S. tackle climate change.

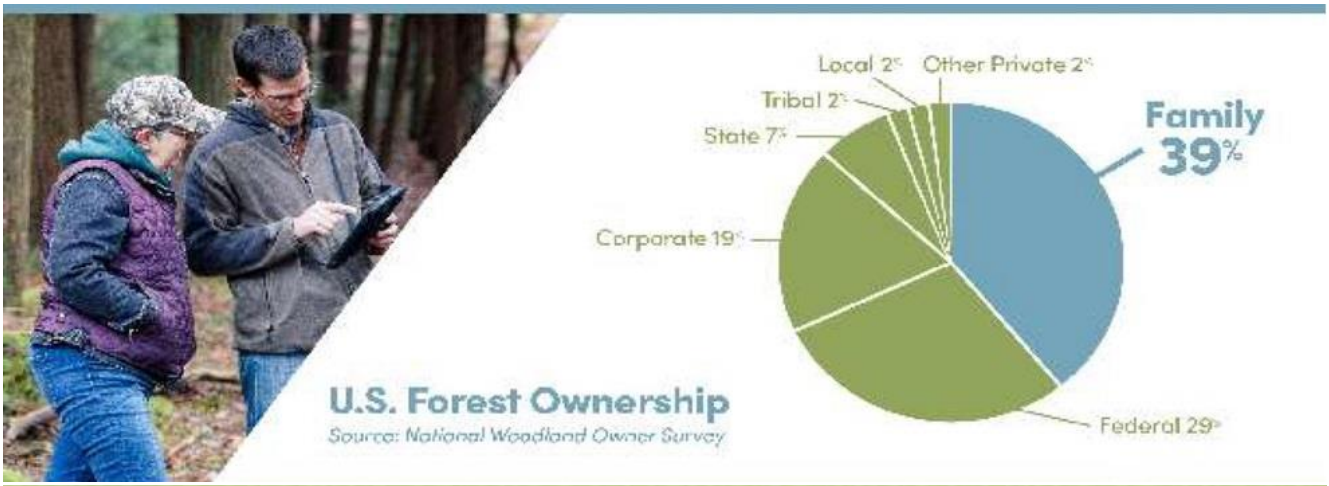
- According to the E.P.A., U.S. forests and forest products currently offset 15% of the country's annual carbon emission. More importantly, studies suggest this could be nearly doubled with the right actions.

- To effectively tap the potential in our forests, the largest ownership group – families and individuals – must be engaged.

- Family forest owners care about their lands, but face challenges such as the high cost of management and finding technical know-how that prevents them taking active steps to improve their forest.

- Traditionally, small forest owners have not been able to access carbon markets. Less than 1% of acres are in existing carbon projects are or acreages between 20 and 1,000 acres – the size range of the majority of family-owned lands.

- Leaving out these landowners shorts the potential in our forests to address climate change, withholds economic opportunities for rural Americans, and limits the carbon credit supply for corporations.



For more information, visit **familyforestcarbon.org**
or email **info@familyforestimpact.org**

American Forest Foundation

The Nature Conservancy

Family Forest Carbon Program

How does our program work?

The Family Forest Carbon Program is open for enrollment to family forest owners who have as little as 30 acres. Upon enrollment, landowners are paid annually to implement forest management practices that are scientifically proven to increase carbon capture and storage.

The program also provides landowners with professional guidance from a forester and helps them create a forest management plan customized for their land. The result is climate mitigation as well as long term climate resiliency, improved wildlife habitat and rural economic support.

The program then sells the additional carbon captured by enrolled landowners as verified carbon credits to companies who are taking a comprehensive approach to their nel-zero emissions strategy, first reducing emissions before working to neutralize those they cannot eliminate.

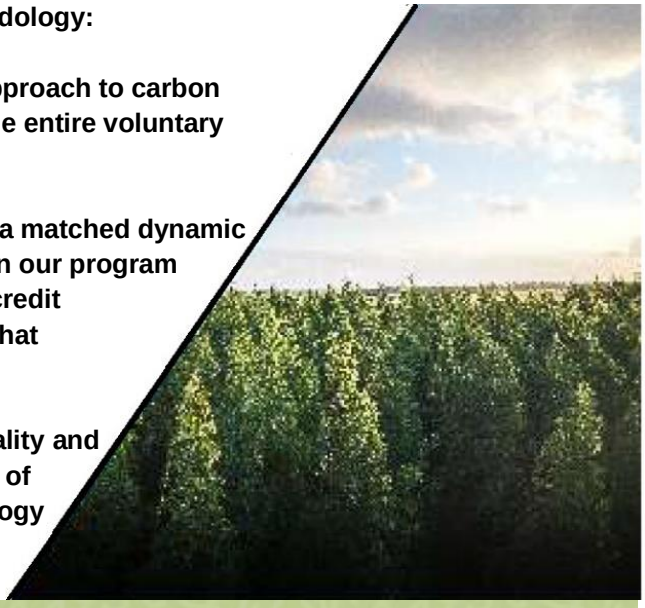
The Family Forest Carbon Program is open for enrollment to landowners in Maryland, Massachusetts, Michigan, Minnesota, New York, Pennsylvania, Vermont, West Virginia, and Wisconsin. In 2023, the program plans to expand into counties in Alabama, Kentucky, Maine, New Hampshire, Ohio, Tennessee, and Virginia.

Advancing the integrity of carbon credits with a new methodology:

The Family Forest Carbon Program has pioneered a new approach to carbon accounting that improves accuracy and transparency for the entire voluntary carbon market.

Our improved forest management (IFM) methodology uses a matched dynamic baseline that measures the performance of lands enrolled in our program against real similar lands in real time. Unlike other carbon credit methodologies, our approach reduces reliance on models that incorporate potentially outdated data or assumptions.

The first-of-its-kind methodology raises the standard of quality and integrity for the entire carbon market, addressing concerns of additionality that many carbon projects face. The methodology has been approved by Verra's Verified Carbon Standard.



For more information, visit **familyforestcarbon.org**
or email **info@familyforestimpact.org**

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Addendum C: Compatibility of FFCP and NRCS Practices

Alignment of Family Forest Carbon Program and Natural Resources Conservation Service Forestry Practices

February 2021

The American Forest Foundation (AFF) and the USDA Natural Resources Conservation Service (NRCS) provide non-industrial private forest landowners (NIPF) with financial and technical assistance through conservation programs to aid in sustainable forest management. The AFF manages the Family Forest Carbon Program (FFCP) and the NRCS manages the Environmental Quality Incentives Program (EQIP), and the Conservation Stewardship Program (CSP). In many cases, the FFCP and NRCS programs can be used on the same property and in some situations the same practice area. This guide outlines how landowners and conservation planners can evaluate which program, or both, best meets their conservation goals. In addition to this guide, it is critical for landowners to work with local NRCS staff and FFCP representatives to ensure that their specifically planned projects are compatible.

Program Overviews

The FFCP currently is offering two practices in which landowners can enroll: Growing Mature Forests (GMF) and Enhancing the Future Forest (EFF). The GMF practice is a commitment to letting forests continue to mature with parameters around timber harvesting that allow for low-intensity management but restrict regeneration timber harvests. For landowners planning to or having recently conducted a regeneration harvest, EFF provides payments to control competing vegetation within the harvest area. The list of NRCS forestry conservation practices applicable for financial assistance is broad and includes Forest Management Plan development, herbaceous weed treatment, brush management, tree and shrub site preparation, tree and shrub establishment, forest stand improvement, and early successional habitat development. The NRCS funding currently available for forestry practices is through the Environmental Quality Incentives Program (EQIP) and the Conservation Stewardship Program (CSP).

There are key differences in timing between the programs that landowners and planners should be aware of. The FFCP contracts are longer term, 20 years for GMF and 10 years for EFF, with landowner reporting requirements throughout the duration of the contract. In contrast, NRCS CSP contract lengths are 5 years in length and EQIP contracts no more than 10 years. There are also differences in the timing of enrollment between NRCS programs and the FFCP. Landowners interested in FFCP can usually enroll in the program within 1-2 months of inquiring about the program. Landowners can submit an NRCS application and complete eligibility forms at any time of year, but NRCS sets specific sign-up periods during the year in which applications for financial assistance are evaluated and ranked for available funding, so it may take a year or longer until a contract is offered to a landowner. NRCS financial assistance contracts are not guaranteed if an application is submitted and due to high demand, limited funding, and eligibility criteria NRCS contracts may not be offered or available to all applicants.

Forest Management Plans

To implement NRCS forestry practices on forest lands with NRCS EQIP Financial assistance a landowner must have a current and approved Forest Management Plan (FMP), Forest Stewardship Plan or other plan that meets NRCS FMP criteria. If an FMP does not already exist for the property, the landowner can apply for financial assistance to have a CAP 106 FMP developed by an NRCS certified Technical Service Provider. The NRCS payments for CAP 106 FMP plans are based on acreage. The FFCP GMF practice

also requires a property-wide FMP within one year after enrollment, and the program is currently paying landowners $800 for plan development regardless of acreage. Landowners without a plan in place have one year from the time of enrollment in GMF to have their plan completed.

A CAP 106 FMP reviewed by a PA DCNR Service Forester and approved by NRCS meets the FFCP plan requirements, and landowners with active FFCP and CAP 106 FMP contracts should ensure that the plan is written to CAP 106 standards to meet the requirements of both programs. Landowners with plans written to FFCP standards only may not be eligible for CAP 106 FMP funding, but the completed plan, if reviewed by a PA DCNR Service Forester and approved by NRCS staff, could make the landowner eligible for EQIP and certain CSP forestry practices.

Controlling Competing Vegetation

Controlling non-native invasive/noxious plants and native competing vegetation is a practice frequently funded by NRCS on forest lands. Common NRCS conservation practices include Brush Management (314) and Herbaceous Weed Treatment (315). Depending on the plant species being treated, NRCS may provide financial assistance for up to 3 treatments of 314 and/or 315 to help adequately control the undesirable species. In forestland these types of treatments are usually done in conjunction with other conservation practices that may manipulate the forest structure and composition such as Forest Stand Improvement (666) or Early Successional Habitat Development (647). Financial Assistance payments are made by NRCS to the landowner after the treatment has been implemented and certified by NRCS.

For FFCP, landowners that have or are planning to complete a regeneration timber harvest within 10 years are eligible for EFF if coverage of competing vegetation exceeds 30%. The FFCP requirement of a regeneration harvest significantly restricts where EFF can be applied (*note that the regeneration harvest is not paid for through EFF, just required as part of eligibility criteria*). Landowners enrolling in EFF receive most of the money for treatment upfront but are required to maintain control of the vegetation for 10 years after contract signing.

A possible case for EFF and NRCS alignment for competing vegetation control will likely be NRCS EQIP Working Lands for Wildlife (WLFW) golden-winged warbler projects in which the forest basal area is modified to meet species habitat requirements through a prescribed forest regeneration cut (typically NRCS Conservation Practice 647 - Early Successional Habitat Development). Multiple treatments are often necessary to control invasive plants, so utilizing both EFF and NRCS Financial Assistance where applicable may be a good strategy. This could be especially true for NRCS golden-winged warbler projects where post-cutting invasive control may not have been included because of contract length. Other alignment with NRCS forest conservation initiatives may be possible.

Mature Forests

Landowners enrolling in FFCP's Growing Mature Forest practice are paid for their 20-year commitment to increase forest carbon stocks on their project area. Active forest management is not required but is allowed if 1) no more than 25% of the basal area is removed, and 2) the average diameter (quadratic mean diameter) does not decrease by more than 10%. This allows for low-intensity improvements that could be contracted through NRCS, typically utilizing the Forest Stand Improvement (666) conservation practice. This could include crop tree release, selective felling of low-quality trees, small forest openings,

and thinnings. These practices provide options for creating complex mature forest habitat for priority bird species such as cerulean warbler, wood thrush, and scarlet tanager. The GMF landowner payments are based on board feet per acre at the onset of the contract so implementing habitat improvements will not affect the FFCP payments. The GMF practice is also compatible with the NRCS Conservation Stewardship Program (CSP) depending on the specific conservation activity prescribed.

Table 1. Comparison of Forest Management and Planning Options through NRCS and FFCP

	NRCS	FFCP
Forest Management Plan	• Limited funding availability and potentially longer wait time for funding allocation. • Tiered payment rates based on acreage. NRCS financial assistance for a CAP 106 FMP exceeds FFCP payments. • An approved CAP 106 FMP meets FFCP plan requirements.	• Required for GMF within 1 year of contract signing. • An $800 payment is provided regardless of property size and made available once contract is signed. • An FMP written to FFCP standards and NRCS Criteria, if reviewed by a PA DCNR Service Forester and approved by NRCS, will meet the plan requirement for NRCS Forestry practices
Controlling Competing Vegetation	• Eligible for multiple habitat types. • Contracts can cover up to 3 treatments for certain species using Brush Management (314) and/or Herbaceous Weed Treatment (315). • Payment rates depend on the practice and component selected. • Funds are provided once treatment is completed and certified.	• EFF is only eligible where a regeneration harvest is planned or has occurred within 10 years. • Payment rates depend on the density and height of competing vegetation. • Most of the money is paid upfront. • Landowners are required to maintain control for 10 years.
Mature Forests	• Certain EQIP and CSP forestry practices may be compatible with GMF. • Opportunity to enhance forest health and wildlife habitat in conjunction with GMF.	• 20-year commitment to increasing carbon stocks. • High-grading and regeneration timber harvests are prohibited. • Low intensity forestry practices that enhance wildlife habitat and forest health are permitted.

Family Forest Carbon Program

Agreement Executive Summary

Disclaimer: This Executive Summary is for informational purposes only. It is not a binding contract, nor does it reflect all the details and specific requirements found within the full Agreement. This summary is provided as an aid but is not a substitute for contract review and legal advise.

ARTICLE I, DEFINITIONS

In general, capitalized words in the Agreement have specific meanings as explained in Attachment A and in sections of the Agreement. Some of the capitalized terms are technical, such as "Basal Area" and "Quadratic Mean Diameter," and some reflect standard legal terminology such as "Confidential Information" and "Applicable Law(s)."

ARTICLE II, RESPONSIBILITIES

The primary responsibilities of the Family Forest Impact Foundation (FFIF) are to:

- **collect field data on the Landowner's Project Area related to carbon sequestration and storage,**
- **help prepare forest management plans in consultation with the Landowner, and**
- **pay the Landowner for following the agreed upon Forest Management Practice described in "Attachment E based on the formula set forth in Attachment D.**

The primary responsibilities of the Landowner are to:

- **follow the Forest Management Practice described in Attachment E**
- **provide access to FFIF representatives to collect data, and**
- **appoint a representative to serve as a liaison with FFIF.**

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Section 2.03 makes it clear that the Agreement "runs with the land" and binds future owners of the Landowner during the Term of the Agreement (20 years, unless terminated earlier.

ARTICLE III, CARBON RIGHTS AND CREDITS

This section describes the basic framework of the Agreement, in which Carbon Rights associated with the enrolled Project Area—and the ability to sell or transfer those rights—are transferred to FFIF and may not be resold by the Landowner during the Term. The section also explains that FFIF will aggregate carbon credits arising from numerous properties. Because any participating property owner is being paid for implementing a Forest Management Practice rather than for a specific quantity of or increase in carbon sequestration, this aggregation does not affect the agreed-upon payment amounts.

ARTICLE IV, TERM AND TERMINATION

The Agreement will last for 20 years unless a different term is agreed upon or the Agreement is terminated early. There are several reasons why early termination might occur, including:

- **A material breach by either party**
- **Insolvency by either party**
- **A sale of the Project Area without the buyer agreeing to continue to abide by the Agreement**
- **Optional termination by either party**

If the Landowner chooses to terminate the Agreement, they will be responsible for repaying any revenues received from FFIF plus interest, as well as a fee in the amount of 15% of the money paid to the Landowner.

If the Agreement is properly terminated by either party, FFIF will no longer own the Carbon rights, nor have access to the Project area.

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Certain promises in the Agreement continue to apply even after termination, such as obligations to protect the other party's Confidential Information.

ARTICLE V, CONFIDENTIALITY

This section states that each party's Confidential Information must be protected. Confidential Information may be disclosed by either party if it is legally compelled to, but otherwise Confidential Information must not be used except for the required purposes related to the project, and must be returned or destroyed when the Agreement ends.

Each party owns it data and information, and Landowner grants FFIF the right to use Landowner's data and information for purposes of the program (subject to the limits on use of Confidential Information).

ARTICLE VI, REPRESENTATION, WARRANTIES, AND COVENANTS

This section confirms that both parties have the legal authority to enter into the Agreement, and that the Agreement does not violate or conflict with any other legal obligation the parties may have.

ARTICLE VII, INDEMNIFICATION; LIMITATION OF LIABILITY

This is a standard clause in contracts stating that each party is responsible for it negligent or intentional acts or statements that harm the other party or third parties. Landowner is responsible for injuries to third parties caused by environmental conditions on its Property, but not responsible for injuries to FFIF representatives unless the condition is unusually hazardous, not apparent, and known but not disclosed by Landowner. There are standard limitations on the extent of one party's liability to the other.

ARTICLE VIII, FORCE MAJEURE

This section acknowledges that an event may occur outside the parties' control that prevents one or both from performing on their responsibilities under the Agreement. If this happens (a "Force Majeure Event"), neither part shall be in default.

ARTICLE IX, ASSIGNMENT; TRANSFER OF PROPERTY; DEATH OF LANDOWNER

This section explains the procedures and possible effects on the Agreement—financial and otherwise—if the Landowner wishes to sell the Project Area or the Landowner dies within the Term. This is an important section and should be read in full.

ARTICLE X, DISPUTE RESOLUTION, GOVERNING LAW AND VENUE

Any Dispute should first be discussed by the parties in an effort to resolve it informally. If that is unsuccessful, non-binding mediation must be attempted, and only if that is unsuccessful may a party go to court. The Agreement shall be governed by the laws of the District of Columbia and any litigation must be filed there. As stated in Section 11.08, in the event of formal litigation, the prevailing party shall be entitled to recover from the other party its reasonable attorney's fees and court costs.

ARTICLE XI, MISCELLANEOUS

This section includes standard legal terms, including:

- **the Agreement (which includes its Attachments) supersedes all other understandings and documents (including this Executive Summary), and any amendments must be in writing signed by both parties.**

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- **the relationship between the parties is solely with respect to the project, and the Agreement does not establish a legal or fiduciary relationship between them**
- **before making any public statement about the Agreement or the project, a party should obtain the other party's consent, but FFIF will liberally authorize Landowner's disclosure of its participation in the Program**

ATTACHMENTS

A. Definitions
This attachment provides definitions to all capitalized terms throughout the contract.

B. Legal Description of Property
This attachment provides the legal description of the property, as contained in the property deed. This sub-attachment includes the corresponding deed for property described.

C. Map of Project Area
This attachment contains a map, generated by FFIF using data from a professional forester, that outlines the project area which the contract terms apply to.

D. Program Payments Payment Schedule
This attachment provides the payment schedule of all payments from FFIF to the Landowner.

E. Forest Management Practice Requirements
This attachment described the forest management practices that must be followed in order to remain in compliance with the Agreement.

F. Project Planning and Information Form

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This attachment includes details about the forest condition and project information, as provided by the forester professional, for the enrolling property.

G. Landowner Representative
This attachment is used to establish a liaison to be point of contact with FFIF. This is only used in circumstances where the Landowner is an entity.

H. Notice of Agreement
This attachment is the Notice of Agreement, which is to be signed and notarized by both FFIF and the Landowner once the contract is signed. This Notice of Agreement formalizes the agreement by registering it with the county and establishing the transfer of carbon rights.

I. Assignment and Assumption of Agreement
This section is only to be used in the event of a sale or transfer to the property, to establish a new owner and continuation of the Agreement.

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