

CASE STUDY

WESTERN RESERVE LAND CONSERVANCY

SANDY CROSS FOREST PRESERVATION

EXECUTIVE SUMMARY

Western Reserve Land Conservancy leveraged verified carbon credits to earn over \$200,000 in funding for forest conservation in Northeast Ohio.

Background

Western Reserve Land Conservancy (WRLC) is Ohio's largest land conservancy and among the largest in the country. WRLC embraces a wide definition of conservation and restoration that includes preserving natural areas and farmland, creating public parks, revitalizing urban centers, and reforesting cities.

About Sandy Cross Forest Preservation Project

The 132-acre Sandy Cross Forest is situated in the Mansfield metro area. The 85-year-old forest was threatened by rapid agricultural conversion and urban expansion from the adjacent Village of Lexington.

By protecting this forest, WRLC offers residents a wide variety of community and conservation benefits, including improving equitable access to greenspace, preserving valuable open space, enhancing human health and wellbeing, and conserving critical habitat.



AT A GLANCE

Project Details

Year Registered: 2021

Size: 132 acres

Location: Mansfield, OH

Lifetime Credits:

17,144 tons CO₂

Credits Issued to Date (2021):

6,497 tons CO₂

Financial Snapshot

Staff Time: 80 hours

WRLC Gross Revenue to Date (2021): \$221,000

Average Price per Credit: \$34

Registry Fees: \$25,000

Carbon Credit Opportunity

More revenue for greater impact

With carbon crediting as a new funding source, WRLC has been able to conserve more forestland, secure more resources for long-term stewardship and maintenance, and grow their impact in the community.

"Carbon crediting is a tool to do more conservation, protect more land, and better steward forests long-term."

Alex Czayka, Senior VP for Conservation Transactions at WRLC

INTRODUCTION

Urban growth is projected to add close to 100 million acres of urban land to the United States by 2060, an area roughly equivalent to the size of Montana. Trees and forests in cities have acquired greater significance as “green infrastructure,” providing services such as stormwater reduction, carbon storage, energy savings, public health benefits, and air quality improvements.

City Forest Credits (CFC) is a national nonprofit carbon registry that serves one sector of carbon – the carbon stored in forests and trees in metropolitan areas in the United States. Through third-party verified carbon crediting, CFC is providing a new way for private-sector dollars to finance conservation projects that contribute to the health and well-being of people and the environment. CFC’s 40 and 100-year Tree Preservation Protocol protects urban forests that are at risk of conversion to non-forest use such as residential or commercial use.

Land Trusts can leverage urban forest carbon credits as a finance tool to protect land. Western Reserve Land Conservancy (WRLC) employed carbon crediting to expand equitable access to open space, improve human health, and preserve critical habitat in Mansfield, OH.

BACKGROUND

WRLC is dedicated to building thriving, prosperous communities nourished by vibrant natural lands, working farms, and healthy cities. WRLC embraces a wide definition of conservation and restoration that includes not just conserving natural areas, but also preserving farmland, creating public parks, establishing land banks, revitalizing urban centers devastated by foreclosure, and reforesting cities. It has a team of about 50 staff.

Building thriving communities

Urban revitalization and community education is a top priority. Through its Thriving Communities program, WRLC partners with cities and organizations throughout Ohio to set up land banks, increase tree canopy in cities, and conserve urban natural areas. The Tree Steward Training Program in Cleveland seeks to rebuild the city’s tree canopy by engaging community members to become leaders in maintaining their neighborhood trees.

GEOGRAPHIC AREA

- serves 29 counties
- conserved over 68,000 acres
- conserves on average 35 properties annually
 - 3000 to 4000 acres
 - **About 50% of properties are eligible for carbon crediting**

OPPORTUNITY

For WRLC, carbon crediting is a tool to unlock new sources of funding for land conservation and long-term stewardship. WRLC had been interested in carbon crediting for at least a decade, but their conservation projects were too small or didn't fit the eligibility for crediting under most carbon registries. However, City Forest Credits and the Tree Preservation Protocol were a great fit for an urban forest like Sandy Cross.

New land acquisition is well-suited for carbon crediting. Outright acquisition gives WRLC full control over timbering and harvest rights, enabling specific protections for trees that may not always be possible when negotiating easements with private landowners.

BENEFITS

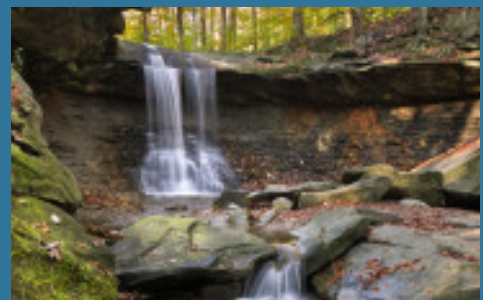
The main benefit of carbon crediting has been its use as a new tool in the conservation toolbelt, allowing WRLC to conserve more forestland and grow their impact. Every potential conservation project at WRLC goes through an internal vetting process. Evaluating a property's potential for carbon crediting is now a standard step in that process because carbon crediting can generate funding for acquisition, restoration, and long-term stewardship. The Carbon Program has influenced significant acquisition decisions: for example, a decision to purchase a \$3 million property hinged on the potential to generate non-traditional funding through carbon crediting.

THE PROCESS

Selecting a property

Sandy Cross Forest is the second project in WRLC's Carbon Program and fits into a county-wide comprehensive plan involving the Richland County Parks district and other conservation entities. Preservation of this property was vital, as intact forests are becoming increasingly rare in Richland County due to agricultural development and urban expansion from the adjacent Village of Lexington.

FUNDING SOURCES FOR ACQUISITIONS & STEWARDSHIP



WRLC has an innovative and entrepreneurial fundraising approach, including via state and federal grants, philanthropy, and personal giving. The organization also generates revenue from stewardship fees, conservation easements, and service fees.

PROJECT SNAPSHOT

The Forest

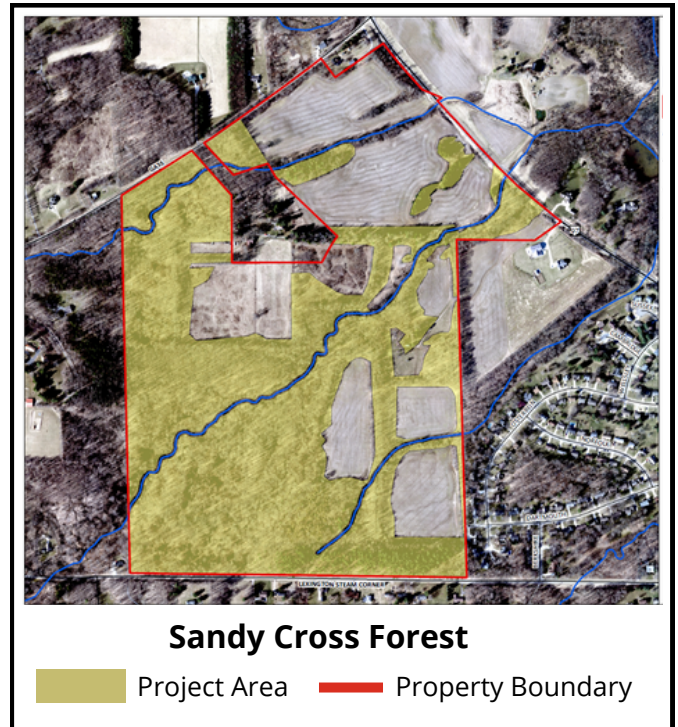
The Project includes 132 acres of majority 85-year-old forest on a 214-acre property. The forest consists of two diverse stands dominated by yellow poplar, sugar maple, black cherry, and pine.

Urban Location

The forest is adjacent to the Village of Lexington boundary, which is included in an "Urban Area" per the 2010 U.S. Census Bureau.

Preservation Commitment

Natural Areas Land Conservancy (NALC), a supporting non-profit wholly managed by WRLC, purchased the property in 2018. After NALC secured the property, it entered into a conservation easement with WRLC to steward the site. The easement prohibited development but allowed for removal of trees. An amended easement was recorded in 2021 to protect the trees from removal per CFC's Tree Preservation Protocol. The trees are protected in perpetuity, exceeding CFC's 40-year Protocol requirement.



Threat of Loss

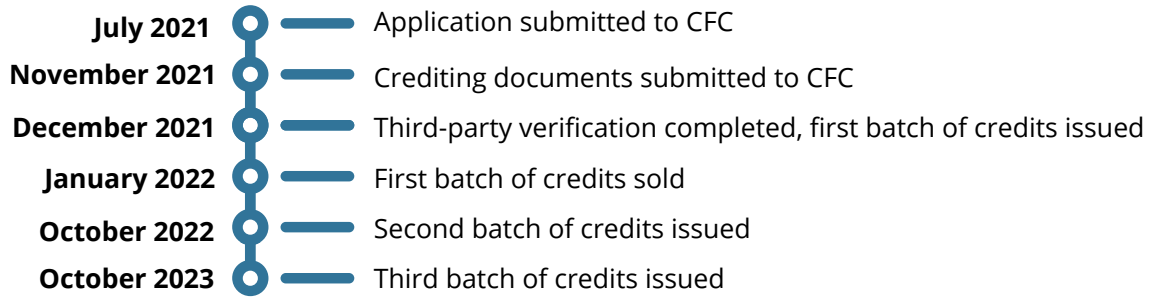
The property is zoned residential, with more than 60% of the perimeter bordered by residential development. The appraisal noted "the subject is located adjacent to high-end residential subdivisions, which have essentially reached their sellouts. As such, it is the next area in line for development."

Project Credits (tons CO2)

Credits Attributed to the Project	19,048
10% Registry Reversal Pool	1,905
Lifetime Credit Issuance	17,144
Credits Issued to Date (2021)	6,497
Credits to be Issued in 2022-23	10,647

Projects between 100-150 acres in size are issued third-party verified credits over three years.

Timeline



Effort and Due Diligence

About 80 hours of staff time were spent completing the crediting documentation for the project. Four people were involved to allow multiple team members in the organization to gain experience with the crediting process. WRLC leveraged in-house GIS and legal expertise for the mapping and legal review.

With 20 years' organizational experience in writing federal/state grant applications, WRLC staff said they would prefer to do carbon crediting compared to grants because overall the crediting process is easier, more straightforward, and takes less time, with similar or greater outcomes.

Monitoring and Reporting

WRLC is an accredited land trust with a professional team dedicated to stewardship of its easements. Per CFC's Tree Preservation Protocol, the project duration spans 40 years. Monitoring reports will be submitted to CFC every three years within that 40-year project lifetime. Should a loss of trees occur due to neglect or willful harm, WRLC will be responsible for compensating or returning the reversed credits. Per the Protocol, WRLC may request credits for additional carbon sequestered in new growth.

Co-Benefits

Well-designed and managed urban forests make significant contributions to the environmental sustainability, economic viability and livability of cities. Carbon projects like the Sandy Cross Forest provide social, human health, and equity impacts that contribute towards the achievement of global targets such as the UN Sustainable Development Goals.

Quantified Co-Benefits

Rain interception	63,000 m3/yr	\$135,000/yr
Air Quality Improvements	4.43 t/yr	\$10,900/yr
Energy Savings	193,000 kWh/yr 7,979,000 kBtu/yr	\$138,000/yr

Sustainable Development Goals

 3 GOOD HEALTH AND WELL-BEING Improve health and well-being for residents	 11 SUSTAINABLE CITIES AND COMMUNITIES Promote wellness and livability	 15 LIFE ON LAND Support climate resilience
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THE OUTCOME

Credit Sale

To increase efficiency, 13 urban forest carbon projects pooled their 31,000 credits into a national sale to a single buyer. WRLC participated in the national sale to lighten the administrative and organizational burden of finding a buyer and negotiating a sale, while still selling the credits at a competitive price. Through the sale, WRLC sold 6,497 credits at \$34/credit to Regen Network. Gross revenue amounted to \$220,898, with 5% of revenue (\$22,089) paid in registry fees.

“CFC has been one of the most helpful organizations we’ve ever worked with.”

Sarah Blakely, Grants Manager at WRLC

WRLC also leverages its relationships with local businesses to find credit buyers, particularly in the Cleveland area where the organization is well-known. They are currently in talks with a local buyer.

Long-Term Commitment

The CFC Tree Preservation Protocol requires at least a 40-year preservation commitment; however, WRLC elected to protect the forest in perpetuity. WRLC will manage the forest to improve its health over time and allows public recreation, including a public hunting program. WRLC has received positive community feedback on the project.

TIPS FROM WRLC

Be open-minded and embrace new opportunities for funding to benefit your local community. Start a conversation with your Board and see where that leads.

Reach out to WRLC! They’re happy to discuss all aspects of carbon crediting with any land trust or organization interested in pursuing a carbon project. Contact Sarah Blakely, Grants Manager at WRLC, at sblakely@wrlandconservancy.org for more information.

