

Spring Creek Preserve Validation Report

Document Prepared by City Forest Credits

June 28, 2024

PROJECT OVERVIEW

Project Name	Spring Creek Preserve
Project Registry Number	49
Project Type	Tree Preservation
City Forest Credits Protocol Version	Version 12.40, February 22, 2023
Project Start Date	October 7, 2022
Project Location	Montville Township, Geauga County, OH
Project Operator	West Creek Conservancy

SUMMARY

Provide a few sentences about the overall project

West Creek Conservancy, the Project Operator, is preserving 150.76 acres of mature hardwood forest within a larger, 361-acre property in Montville Township, Geauga County, OH, as part of a carbon project. The forest includes three mature stands, consisting primarily of red maple and sugar maple, as well as northern red oak, black cherry, and American beech. The property is zoned for residential use (R-1 Residential District); preserving the Project Area will protect high-quality wetland and upland habitat and expand the community's access to nature-based benefits and recreation.

ELIGIBILITY

Project Operator Identity (Section 1.1)

Criteria

A Project requires at least one Project Operator ("PO"), an entity organized and licensed under the laws of its jurisdiction, or a governmental body, which undertakes a Project, registers it with the registry of City Forest Credits (the "Registry"), and is ultimately responsible for all aspects of the project and its reporting.

Issue Validated

The Project Operator, West Creek Conservancy, provided the Registry with a copy of its 501c3 letter from the IRS as documentation demonstrating that it is an organized and licensed entity.

Project Submittal Dates (Section 2.1, 2.3)

Criteria

Project must submit applications to the Registry within two years of the date of the Preservation Commitment. The Preservation Commitment must be recorded no later than 6 months after Registry Approval of the Project Application. Projects whose Preservation Commitment dates from prior to November 1, 2017 are not eligible.

Issue Validated

Project Operator submitted the application on November 1, 2023. The Preservation Commitment recordation date is October 7, 2022, which is within two years of the application submittal date, meeting protocol criteria Section 2.1 and 2.3.

Permanence – Project Duration and Reversals

A. Project Duration (Section 1.2 and 2.2)

Criteria

Project Operator must sign a Project Implementation Agreement with the Registry setting forth the Project Operator's obligation to comply with the protocol. Project Operator must monitor and report for 40 years.

Issue Validated

The West Creek Conservancy and City Forest Credits signed a Project Implementation Agreement on November 9, 2023 for the Spring Creek Preserve Project (Project Registry Number 49). The project has a 40-year duration under City Forest Credits Tree Preservation Protocol Version 12.40.

B. Reversals (Section 9)

Criteria

A "Reversal" is loss of stored carbon such that the remaining stored carbon within the Project Area is less than the amount of stored carbon for which Registry credits have been issued. The Registry will retain in a Reversal Pool account 10% of all credits issued to preservation projects. This Reversal Pool account shall be used to compensate for Unavoidable Reversals.

Issue Validated

The Project Design Document and request for credits based on GHG mitigation includes a 10% deduction for the Reversal Pool of credits. 1,668 credits were contributed from this Project to the Registry Reversal Pool. The carbon quantification and Reversal Pool deduction were verified by the Validation and Verification Body, Matt Lee.

Project Location (Section 1.3 and 1.4)

Criteria

Project Area must be located in parcels within or along the boundary of at least one of the urban area criteria. The Project Operator must specify the Project Area and provide an electronic map of the Project area with geospatial location.

Issue Validated

The Project is located in Montville Township, Geauga County, OH, within the planning boundaries of the Northeast Ohio Areawide Coordinating Agency (NOACA), which meets protocol criteria Section 1.3D. The Project Operator has provided maps as supporting evidence, including geospatial location, regional-scale, and project area maps.

The 150.76-acre Project Area includes portions of contiguous parcel numbers:

Municipality	Parcel Number	Acreage	
Montville Township	20-047400	117.25 Project Area acres	
		(305.93 acres total)	
	20-070969	33.51 Project Area acres	
		(55.63 acres total)	
	Total Project Area	150.76	

The Project Area is in a location that receives more than 20 inches of precipitation per year and has more than 80% tree canopy, meeting protocol criteria Section 1.4 C. The Project Operator has provided an iTree Eco report to demonstrate the percentage of canopy cover for the Project Area, which was determined to be 93% based on a plot sample inventory.

Ownership or Eligibility to Receive Potential Credits (Section 1.5)

Criteria

Project Operator must demonstrate ownership of potential credits or eligibility to receive potential credits.

Issue Validated

The Project Operator, West Creek Conservancy, is the landowner for the Spring Creek Preserve, meeting protocol criteria Section 1.5A. The Project Operator provided a copy of the recorded deed of transfer, recorded October 7, 2022, as supporting documentation.

Tree Preservation Commitment (Section 4.1)

Criteria

Project Operator must demonstrate that trees in the Project Area are preserved for at least 40 years.

Issue Validated

Project Operator entered into an environmental covenant, recorded October 7, 2022, with the Ohio EPA to protect the property in perpetuity as a natural area.

Specific language protecting the trees is found in Section 9(n) on Vegetation Controls: "Except for those actions that are necessary for environmental preservation, management, or restoration purposes, for the protection of human health and safety, or for the maintenance of a diversity of naturally occurring habitat types and control of exotic species of plants, there shall be no removal, destruction, cutting, trimming, or mowing of any trees or other vegetation."

The project meets protocol criteria Section 4.1.

Demonstration of Threat of Loss (Section 4.2, 4.3, 4.4)

Criteria

Project Operator must demonstrate that prior to the Preservation Commitment, the project trees were not preserved from removal. The Project Area must be in a land use designation that allows for at least one non-forest use and is not in an overlay zone that prohibits all development. The Project Area must

also meet one of three conditions that demonstrate threat of loss as described in Section 4.4 A, B, or C such as surrounding developed or improved uses, per acre value, or fair market value.

Issue Validated

The Project Operator signed an Attestation of Additionality on April 1, 2024, stating that prior to the start of the Project, the trees in the Project Area were not protected by easement, recorded encumbrance, or protected zoning status.

The Project Area is zoned for at least one non-forest use, as both parcels are zoned R1 Residential District. This zoning class permits the construction of single family detached dwellings, as well as churches, government office, schools, and other developed uses.

137.07 acres, or 91% of the property, are considered wetlands according to the US Fish and Wildlife Service National Wetland Inventory. Permits are required from the Ohio EPA and/or the US Army Corps of Engineers to develop on wetlands; however, the Project Operator submitted documentation from the Ashtabula County Soil and Water District Manager, as well as a commercial forester, that no permits are required to harvest trees from wetlands. The Project Operator also submitted documentation showing that timber harvesting has occurred in wetlands on neighboring properties adjacent to the Project Area. To be conservative, the Project Operator is claiming GHG emissions avoided for the fraction at risk of tree removal, but not for impervious surface avoided, for these wetland areas.

The Project Area is surrounded by development on over half of its perimeter (61.3%), meeting the Threat of Loss test Section 4.4A. The Project Operator provided a map demonstrating the developed uses around the property.

No Double Counting of Credits and No Net Harm (Section 5)

Criteria

The City Forest Credits Standard describes safeguards and the "No Net Harm" Principle in Section 5. Project activities shall not cause net harm to the environment or urban communities. Project Operator must sign an Attestation of No Net Harm.

The City Forest Credits Standard describes prevention of double-counting in Section 5. Project Operator must sign an Attestation of No Double Counting of Credits. Per Section 5.2 of the Tree Preservation Protocol, the Project Operator must submit documentation showing no overlap of Project Area with any other registered urban forest carbon project. As part of Validation, the Registry shall use the appropriate tool on GIS software (such as the Intersect tool on ArcGIS) to independently investigate whether there is any overlap between the Project Area and other registered urban forest carbon projects.

Issue Validated

Project Operator has submitted a signed Attestation of No Double Counting and No Net Harm on April 1, 2024, and the Registry sees no evidence of net harm from this project. The Registry has analyzed geospatial data of the Project Area against that of all other registered urban forest carbon preservation projects to confirm that the Project Area for this project has not already received credits under the CFC standard.

Additionality (Section 6)

Criteria

The City Forest Credits Standard and Tree Preservation Protocol (Section 6) ensure additionality for every carbon project. A project activity is additional if it can be demonstrated that the activity results in emission reductions or removals that are in excess of what would be achieved under a "business as usual" scenario and the activity would not have occurred in the absence of the incentive period provided by the carbon markets.

Projects must demonstrate the following:

- Prior to the start of the project, the trees in the project area cannot be protected via easement or recorded encumbrance or in a protected zoning status that preserves the trees.
- The zoning in the project area must currently allow for a non-forest use.
- The trees in the project area face some risk of removal or conversion out of forest.

The Tree Preservation Protocol sets out three tests to determine whether the trees or forest in a project area face a threat or risk of tree removal or conversion out of a forested use, as described in Section 4.4. Taken together, these elements allow crediting only for unprotected trees, at risk of removal, which are then protected by a project action of preservation, providing additional avoided GHG emissions.

Additionality is embedded also in the quantification methodology. Projects cannot receive credits for trees that would have remained had development occurred, nor can they receive soil carbon credits for soil that would have been undisturbed had development occurred.

Project Operator must sign an Attestation of Additionality.

Issue Validated

Project Operator has demonstrated that prior to the start of the project the trees were not protected, the zoning allows for a non-forest use, that the trees are at risk of removal or conversion out of forest, and that carbon revenues are additional and play a significant role in ensuring the project's long-term success and durability. Project Operator has followed the carbon quantification methodology to demonstrate how the number of credits to be issued. Project Operator signed the Attestation of Additionality on April 1, 2024.

Carbon Quantification (Section 11)

Criteria

Project Operator must follow the carbon stock and soil carbon quantification methods outlined in Section 11 of the Protocol.

Issue Validated

Project Operator engaged an independent consultant, Legacy Forestry Consulting, to perform on-site assessment of the carbon stock, per protocol criteria Section 11.1B. Legacy Forestry Consulting conducted a plot-sample forest assessment adhering to the standards set in CFC Tree Preservation Protocol Section 11.1.B. Legacy Forestry Consulting established 46 sample plots sized at 1/10th-acre. Within every plot, each live tree was inventoried that was at least 5" in diameter at 4.5' above ground, where the height above ground is measured on the uphill side of the tree. The plot data was used as input for iTree Eco to quantify the carbon biomass across the entire Project Area.

Forest composition from the plot-sample inventory was provided as supporting documentation, but forest age was not necessary for carbon quantification for this project.

The Fraction at Risk of Tree Removal, or "Avoided Biomass Emissions", was 69.60% for the Project Area. Montville Township's R-1 Residential District zoning allows residential development with a minimum lot size of 3 acres. Within the Project Area, 13.69 acres are upland and able to be developed into residential housing. As such the Fraction at Risk was calculated to be 62.59% of the 13.69-acre upland portion of the Project Area vulnerable to conversion into housing. Since 100% of the wetland areas are at risk of timbering, a fraction of risk was calculated for the 137.07 acres of wetlands. Based on the consulting foresters opinion for timber harvesting rates in this region, a 0.018 removal rate over a 40-year period was determined which calculated a fraction of risk of 70%. A fraction of risk of tree removal was calculated using both upland and wetland fractions of risk to determine a weighted fraction of risk of 69.33% for the entire site. To be conservative and align with the Protocol Section 11.2 guidance on quantifying the fraction at risk of removal, 69.33% was used as the Fraction at Risk.

Project Operator quantified the avoidance of emissions from soil carbon caused by conversion of soils to impervious surfaces under Protocol Section 11.3.

- The non-wetland areas (13.69 acres) are zoned R-1 residential district, which has a 40% maximum lot coverage limit according to the Montville Zoning Resolution. The Project Operator claimed 40% as the avoided impervious surface for these areas.
- The wetland areas (137.07 acres) are also zoned R-1 residential district. However, since state and federal permits would be required for construction in the wetlands, to be conservative, the Project Operator is not claiming credits for avoided soil emissions.

A deduction of 18.3% for displaced development was included in carbon quantification, per Protocol Section 11.4.

The Carbon Quantification Summary is as follows:

Project Area (acres)	150.76
Does carbon quantification use stratification (yes or no)	Yes
Accounting Stock (tCO ₂ e)	28,634
On-site avoided biomass emissions (tCO ₂ e)	19,852
On-site avoided soil carbon emissions (tCO ₂ e)	657
Deduction for displaced biomass emissions (tCO₂e)	3,633
Deduction for displaced soil emissions (tCO₂e)	199
Credits from avoided biomass emissions (tCO ₂ e)	16,219
Credits from avoided soil emissions (tCO ₂ e)	458
Total credits from avoided biomass and soil emissions (tCO₂e)	16,677
Credits attributed to the project (tCO ₂ e), excluding future growth	16,677
Contribution to Registry Reversal Pool Account	1,668
Total credits to be issued to the Project Operator (tCO₂e)	15,009
(excluding future growth)	

Co-Benefits Quantification (Section 11.5)

Criteria

Project Operator follows co-benefit quantification for rainfall interception, air quality, and energy savings, per protocol criteria Section 11.5.

Issue Validated

Project Operator has followed the co-benefits quantification method using the templates provided by City Forest Credits. Project Operator included 93 percent deciduous, and 7 percent non-tree for the 150.76-acre Project Area, per the iTree Eco report. The following table documents the quantified ecosystem services in resource units and avoided costs.

Ecosystem Services	Resource Units	Value
Rainfall Interception (m3/yr)	71,704.8	\$151,555.67
Air Quality (t/yr)	4.9470	\$12,195.30
Cooling – Electricity (kWh/yr)	217,732	\$30,504.19
Heating – Natural Gas (kBtu/yr)	9,012,973	\$126,058.07
Grand Total (\$/yr)		\$320,313.23

Monitoring and Reporting (Section 8)

Criteria

Project Operator must report on tree conditions across the Project Area for the Project Duration. Reports must be submitted no less frequently than on the triennial anniversary of the date of the first Verification Report.

Issue Validated

Project Operator has agreed to submit written reports every three years using the template provided by City Forest Credits. West Creek Conservancy staff will visit the project annually as part of their stewardship activities and implement invasive species and deer population management to ensure forest health and habitat quality.

Social Impacts (Section 12)

Criteria

Project Operator shall use the Carbon Project Social Impact template to evaluate the SDGs to determine how a Project provides social impacts that contribute towards achievement of the global goals, as described in Section 12.

Issue Validated

Project Operator has submitted a completed Carbon Project Social Impact document. The project meets protocol criteria Section 12.

VFRIFICATION RFPORT

CFC reviewed the Verification Report to ensure it accurately reflects the documentation contained in the Project Design Document and supporting documents.

VALIDATION CONCLUSION

All the information provided in this validation report is free of material misstatement, to the best of our knowledge. The project complies with the validation criteria outlined in the City Forest Credits Standard and Tree Preservation Protocol Version 12.40.

Approved by City Forest Credits on June 28, 2024.