Verification Report

Spring Creek Preserve

City Forest Credits Project Number 049

6/28/2024

Matthew Lee

1307 Ashbourne Dr.

Lynchburg, VA 24501

TABLE OF CONTENTS

1 INTRODUCTION

City Forest Credits engaged Matthew Lee (a Validation and Verification Body (VVB) acting as a third-party verifier) to verify the Spring Creek Preserve (Project), located in Montville Township, Geauga County, Ohio, for the reporting period October 7, 2022 – October 6, 2025. The goal of the verification is to ensure that the GHG assertion is materially correct, and that the assertions made by the project are well documented.

1.1 PROJECT BACKGROUND

The Spring Creek Preserve property was identified as a priority conservation acquisition by West Creek Conservancy due to the property's tremendously high-quality natural resources - including dense, mature upland hardwood forest stands - combined with the risk of development of the property caused by its listing on the open market, its residential zoning, and land use conversion trends in the area. West Creek purchased the property in October of 2022 using funding through the Ohio EPA's Water Resource Restoration Sponsor Program, and encumbered the property with an environmental covenant to preserve the property's trees and natural assets in perpetuity.

The total Spring Creek Preserve property protected by West Creek Conservancy is 361 acres, but the project area is 151 acres comprising of three mature forest stands, predominated by hardwood species including red maple and sugar maple with significant presence of American beech, tulip tree, black cherry and northern red oak as well. The property has been sustainably managed for timber for a long time, with selective cutting done on the property within the last seven years. West Creek Conservancy's goal is to manage the property as a nature preserve, integrating the property into West Creek Conservancy's guided nature hike series to promote public access and appreciation for the unique natural heritage of the area. Revenue generated from the sale of carbon credits will support West Creek Conservancy's ongoing stewardship and management of the property, including supporting invasive species and deer population management to protect and enhance the ecological quality of the forest habitat within the project area.

1.2 CONTACT INFORMATION

Project Operator
West Creek Conservancy
7381 Camelot Drive
Parma, OH 44134
Contact: Brett Rodstrom, Director of Conservation
Phone: (440) 867-6659
Email: brett@westcreek.org

Verification Body
Matthew Lee
1307 Ashbourne Drive
Lynchburg, VA 24501
Phone number: (434) 426-2448
Email: leematthew82@gmail.com

1.3 OBJECTIVE

The goal of this GHG emission reduction verification is to ensure that the GHG assertion made by the Project is materially correct, that the assertions and assumptions used in the offset calculations are appropriate, that the offset calculations conform to the City Forest Credits (CFC) Protocol, and that the Project is in compliance with all CFC requirements relating to eligibility, accounting, and documentation.

2 VERIFICATION CRITERIA

2.1 GENERAL

The Registry will accredit VVBs to act as third-party verifiers who meet the Registry's qualifications and complete training. Those accredited VVBs can then act to verify compliance with this Tree Preservation Protocol per International Standards Organization 14064-3. Specifically, the Registry adopts and utilizes the following standards from ISO 14064-3:

- Upon receiving a Project Design Document with data on eligibility, quantification of carbon and co-benefits, and a request for credits, the Registry will conduct a validation. If it validates the project at that stage, the Registry will retain a VVB to act as third-party verifier to verify compliance with this Protocol.
- The Registry requires a reasonable level of assurance in the accuracy the asserted GHG removals to a reasonable level.
- The verification items identified in the Tables 1 and 2 are all material elements, and any asserted GHG removals must be free of errors, misstatements, or omissions regarding those elements.
- The Registry will record, store, and track all quantification and verification data and either display it for public review or make it available for public review upon request.

2.2 PROTOCOL

The verification was conducted to the City Forest Credits Tree Preservation Protocol, version 12.40, February 22, 2023.

2.3 LEVEL OF ASSURANCE

This verification was conducted to a reasonable level of assurance. The Verification Report accurately reflects the documentation contained in the Project Design Document and supporting documents.

3 SCOPE OF VERIFICATION

- The Project encompasses land in Montville Township, Geauga County, Ohio specifically described in the Project Design Document. This Project meets the location eligibility by being located in the Northeast Ohio Areawide Coordinating Agency (NOACA), a metropolitan planning organization.

- The Project is a 151 acres of high value conservation property (as a portion of a larger 361 acres acquisition) with a series of forested wetland complexes and upland forest that make it valuable aquatic and terrestrial habitat. The Project Operator acquired the property through Ohio EPA funds to protect the property from commercial logging and potentially future development rights. The recorded environmental covenant prohibits any future development or agriculture on the property. The covenant prohibits any fill, ditching or draining of surface waters on the property. Vegetation management is limited to restoration or control of invasive species through means of mechanical or chemical removal. A Conservation Plan for the property is filed with the Ohio EPA. Trail construction is permitted (including boardwalks) so long as they have limited impact on the conservation values of the property and provide passive recreation. Vehicles are strictly prohibited unless necessary by law enforcement or the conservation management of the property.

- The Project avoids emission of CO_2 from trees and soil, by avoiding conversion of forest to temporary non-forest land cover and avoiding loss of forest soil through commercial logging.

- The Project duration is 40 years, beginning November 8, 2023. The Project Operator commits to protecting the trees within the Project Area and monitoring the project carbon stocks for the entire Project duration.

- The verification included the review of documents, carbon quantification data, maps and photos. The verifier reviewed all materials and evidenced submitted by the project operator. The verifier confirmed this site was not already part of a previous carbon project by comparing CFC's database for Ohio. The stand composition and sampled tree inventory plots data were reviewed and found to be consistent with CFC's protocols for calculating carbon stocks.

4 VERIFICATION PROCESS

4.1 VERIFICATION ACTIVITIES

The verification process consisted of the following activities:

- Verifier checked all requirements in the Protocol (outlined in 4.2), confirmed that documentation satisfies the requirements of the Protocol, and that values extracted from the documents and conclusions drawn from the documents are accurate and appropriate

- Verifier independently checked mapping and calculated values in each stage of calculations

- Verifier reviewed the credit calculations. Verifier reviewed the Project Operator's assertion that the Project results in GHG emissions mitigation of 15,009 tons CO_2e

- Verifier submitted to the Project Operator concerns about the assumed of threat of loss for the project. The original threat of loss was based on the zoning for the parcel and potential development impacts along with the potential for commercial logging. The assumed development was disregarded due to required permits by the Ohio Environmental Protection Agency for isolated wetlands which would have required mitigation for any development permits. For the commercial logging of the site, the PO submitted examples of forested wetlands in the area that were logged in the last two decades along with a letter by a professional forester who works in Ohio, certifying that commercial forestry in wetlands is not prohibited or regulated under current state law and therefore vulnerable to clearing. To account for the natural regeneration of the forest post-clearing, CFC consulted a different forester to calculate the carbon stored by a regenerating forest stand of a similar composition as the site over a 40-year period. The consulting foresters' calculations were based on the Forest Vegetation Simulator, a model based on peer reviewed forest science research and developed by the U.S. Forest Service. CFC revised the carbon quantification tool and reduced the total carbon credits available to the PO based on how much carbon would be stored by the new forest. Verifier reviewed the new quantification, and confirmed that it more accurately reflects the total carbon emissions this project would avoid in a commercial logging scenario over a 40-year period. Verifier also confirmed with the PO that the name "Bronson Creek Preserve" is an accidental misnaming by a former staffer. The name "Bronson Creek Preserve" is found in the recorded encumbrance document, but it is the same property as named now "Spring Creek Preserve". This is simply a note for future verifiers to avoid any confusion about the name discrepancy.

4.2 CITY FOREST CREDITS TREE PRESERVATION PROTOCOL REQUIREMENTS

4.2.1 Eligibility

Verifier reviewed the Project against all CFC Tree Preservation Protocol requirements and confirmed the following:

- Project Operator Identity (Section 1.1): Verifier confirmed identity by reviewing Project Operator website or state/local records

- Project Documentation (Section 3): Verifier reviewed and confirmed Project Documentation including Project Design Document is complete and accurate.

- Project Implementation Agreement (Section 1.2): Verifier reviewed and confirmed fully executed Project Implementation Agreement on file signed and dated by both parties on November 9, 2023.

- Project Location (Section 1.3): Verifier reviewing mapping and location data. The project location falls within the Northeast Ohio Areawide Coordinating Agency (NOACA), a metropolitan planning organization, which satisfies Protocol Section 1.3.D.

- Defining the Project Area (Section 1.4): Verifier confirmed the Project Area meets forest canopy cover requirements. I-Tree Eco canopy coverage assessment provided a canopy coverage estimate of close to 95%, supported by aerial imagery, which satisfies the requirement of 80% according to Protocol section 1.4.

- Land Ownership or Right to Receive Credits (Section 1.5): Verifier confirmed that there is a clear title to carbon credits and the Project Operator has legal authority to create and dispose of greenhouse gas offsets generated on the project lands

- Demonstrating Preservation and Threat of Loss (Section 4):
    - Verifier confirmed that trees within the Project Area were not protected from removal prior to the Project.
    - Verifier confirmed that trees within the Project Area are now preserved from removal by a recorded fee simple environmental covenant with restrictions.
    - The Project Operator has committed to meeting the permanence requirements.
    - Prior to the Preservation Commitment action by the Project Operator there was threat of conversion of the project lands to a temporary non-forest cover through silviculture.

- No Double Counting and No Net Harm (Section 5):
    - Verifier confirmed that Attestation of No Double Counting and No Net Harm is signed and on file.
    - Verifier compared the Project geospatial data to the registered urban forest carbon preservation projects geospatial database (Preservation Master File_Ohio) using ESRI's ArcGIS Pro Intersect Tool to intersect the project shapefile with the registry's geodatabase. The analysis returned an empty feature output which signifies there is no overlap between the project area and any other CFC forest preservation projects. The PO's map submitted to confirm no double counting also agrees.

- Monitoring and Reporting (Section 8): Verifier confirmed that Project Operator has a plan for monitoring and reporting over the Project Duration, and the plan is plausible and reasonable.

4.2.2 Additionality

Verifier reviewed and confirmed that Project lands met the additionality requirements of the Protocol:

- Prior to the Project, lands were not protected from conversion by easement, zoning, or other legal mechanism

- Zoning allows development including removal of existing trees; however, since the site is mostly a forested wetland, mitigation required under Ohio state law and an isolated wetland permit is required for land disturbance and filling. The wetland and subsequently forest cover would require mitigation for development impacts.

- The trees in the Project Area face some risk of temporary removal or conversion out of forest through silviculture, demonstrated by maps of nearby forested wetland sites. A letter signed by a regional professional forester stated that logging forested wetlands is permitted under Ohio state law and is a common practice. Additionally, 61.3% of the project land perimeter is adjacent to developed parcels.

- Project Operator signed an Attestation of Additionality on April 1, 2024.

4.2.3 Permanence

The Project Operator has committed to CFC that the Project Operator will protect the trees on the Project Area at least 40-years. The fee simple environmental covenant protecting the Project Trees and lands are described with deed and preservation commitment documents submitted by the PO. The encumbrance protects the property in perpetuity.

4.2.4 Accounting

The Project Operator quantified present stored carbon stock according to CFC Protocol standards in Protocol Section 11.1 B. The Project documents forest type and age through an on-site sub-sample of 46 tree inventory plots at 1/10th acre size, where all live trees greater than 5-inches DBH, 4.5 feet above ground level, were measured and the species identified within each plot. This data was fed into iTree Eco to calculate the carbon storage for the site and generate the species composition and the aboveground biomass report for the project area. This method is an approved method according to the protocol. Carbon quantification is based on the sample plots. The metric tons of carbon are 8,625.44. The standard error is 505.47. The standard error of the sample was 5.86% of the mean of the estimated carbon stock, which is well under protocol allowance of 20%. The iTree Eco data was inputted into the carbon quantification calculator tool and used to calculate the additional carbon values reported below in Table.1. This method uses required factors in carbon stock and offset calculations.

Additionally, natural regeneration rates were estimated and included as a deduction in the biomass calculations to be conservative. A consulting forest carbon scientist estimated that at year 40, results show that ingrowth would average 2.06 tonnes C/acre, resulting in 51.80 tc/acre for biomass. The Project Area was stratified into three distinct strata, identified as Area A-SW Corner (29.79 acres), Area B-Center (20.73 acres) and Area C-SE Corner (100.24 acres).

Of the 150.76 acres of the Project Area, only 13.69 acres are upland and unregulated from protection from development. This area is zoned as R-1: Residential District. The Montville Zoning Resolution stipulates a minimum lot size of 3 acres; 4 total residential units could thus be developed within the 13.69-acre Project Area. Clearing for each unit is estimated at 2 acres per unit (8 acres), plus an additional 10% of the remaining area (0.57 acres) for a total of 8.6 potentially cleared acres. 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 development. 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 forester's 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.

State and federal permitting requirements for construction and draining/filling in wetlands would be required for conversion to impervious surface on the 137.07 wetland acres within the Project Area. To be conservative, West Creek Conservancy is therefore not claiming avoidance of impervious surface and emissions from soil carbon for those 137.07 acres of the Spring Creek Preserve property. The Montville Zoning Resolution stipulates a maximum lot coverage of 40% for residentially zoned parcels. Therefore, 40% avoided impervious surface was used for the 13.69 non-wetland acres of the Spring Creek property.

4.2.5 Leakage

Offset accounting makes deductions for expected displacement of emissions following the requirements of the Protocol.

5 VERIFICATION FINDINGS

All issues raised by Verifier were clarified or corrected by the Project Operator and all issues were closed by appropriate responses by City Forest Credits and the Project Operator.

The Project documents and data were reviewed, and the Verifier found that the emission reductions claimed are reasonable and in accordance with the Preservation Protocol and best available science in forest carbon quantification modeling. The Verifier recommends no further projects allowable under a threat of loss from silviculture.

6 VERIFICATION RESULTS AND CONCLUSION

This verification of the Spring Creek Preserve for the reporting period October 7, 2022 – October 6, 2025. was completed in a manner consistent with ISO 14064-3 and in conformance with relevant CFC standards and guidelines. The table below is a summary of the emission reduction or removals.

Table 1. Project GHG Removals

Project Name	**Issuance Year**	**GHG Reductions and Removals Attributed to the Project ($mtCO_2e$)**	**Reversal Pool Account (10%) ($mtCO_2e$)**	**Emission Reductions to be Issued to Project ($mtCO_2e$)**
Spring Creek Preserve	2024	16,677	1,668	15,009
Cumulative		16,677	1,668	15,009

Table 2. Ecosystem Co-Benefits Per Year

Ecosystem Services	***Resource Units***	***Value***
Rainfall Interception (m3/yr)	71,704.8	$151,556
Air Quality (t/yr)	4.947	$12,195
Cooling – Electricity (kWh/yr)	217,732	$30,504
Heating – Natural Gas (kBtu/yr)	9,012,973	$126,058
Grand Total ($/yr)		**$320,313**

Table -3. Credit Issuance Schedule

Because the project area is greater than 50 acres but less than 200 acres, credits issued are attributable to 50 acres of the project on a yearly basis until all credits are issued. The following table from the carbon quantification calculator shows the credit issuance schedule for this project.

Year	Credits Issued This Year	Credits Issued	Buffer Credits Issued
1	4,978	4,978	553
2	4,978	9,956	553
3	4,978	14,934	553
4	75	15,009	9
5	-	15,009	0

Verifier Signature

_____

Matthew Lee