Verification Report

Southington Forest Preserve

City Forest Credits Project Number 054

May 13, 2024

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1 INTRODUCTION

City Forest Credits engaged Zachary Boerman (a Validation and Verification Body (VVB) acting as a third-party verifier) to verify the Southington Forest Preserve Project (Project), Southington Township, OH, for the reporting period April 3, 2024 through April 2, 2027. 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 Southington Forest Preserve is a 43-acre property in Southington Township, OH, that was donated to West Creek Conservancy in December 2021. The Project Area consists of 34.9 acres of mature, upland hardwood forest, containing a mix of impressive upland hardwoods including hickory, oaks, beech and sugar maples. West Creek Conservancy will permanently preserve this high-quality forested area in order to protect the property from the pattern of timbering that is prevalent in the immediate surrounding community, as well as from any future commercial development. West Creek Conservancy's conservation of Southington Forest Preserve through encumbrance with a Declaration of Development Restrictions will preserve the property's trees and other natural assets in perpetuity. Southington Forest Preserve will also be integrated into West Creek Conservancy's guided nature hike series, to promote public access and appreciation for the area's natural resources.

1.2 CONTACT INFORMATION

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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 Southington Township, Trumbull County, OH, within parcel 57-101650 specifically described in the Project Design Document.

- The Project Operator acquired development rights to these parcels December 28, 2021, and within the associated declaration of development restrictions, have agreed not to cut down, destroy, or remove trees located on the Property, except as necessary to control or prevent hazard, disease, or fire or to improve forest health.

- The Project avoids emission of CO_2 from trees and soil, by avoiding conversion of forest to non-forest land cover and avoiding conversion of forest soil to impervious surface.

- The Project duration is 40 years, beginning April 3, 2024. 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 includes a review of supporting documents, data, imagery and other evidence provided by the Project Operator; independent checking of selected data; independent review of ownership records, tax maps, and municipal zoning ordinances; analysis of inventory and plot sampling data and i-Tree Eco-based carbon stock calculations as well as checking of calculations for accuracy and conformance with the Protocol. All forest carbon input values were independently checked, and calculations were independently replicated.

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 6,216 tons CO_2e

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 the Project Operators identity by visiting their website at www.westcreek.org. Verifier also confirmed that the Project Operator is the landowner by reviewing the Project parcel deeds.

- 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 November 8, 2023.

- Project Location (Section 1.3): Verifier reviewed the maps and shapefile provided by the Project Operator and confirmed that the data is geospatially accurate. Verifier also confirmed that the Project area is within the planning area for the Eastgate Regional Council of Governments (Metropolitan Planning Organization). Trumbull County, OH, and all townships and villages therein, is verified as a participating organization based on the most recent audit of Ohio Regional Councils. This satisfies section 1.3 D of the Protocol.

- Defining the Project Area (Section 1.4): Verifier confirmed that 98% of the Project Area is covered by tree canopy after reviewing the provided i-Tree Canopy and Forest Composition Reports. This satisfies Protocol section 1.4 C that states the Project Area must have at least 80% canopy cover in locations that receive 20" of precipitation per year.

- 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 and was previously zoned for Commercial and Residential/Agriculture use. Both zoning districts allow for non-forest uses including, but not limited to, development of retail stores, hotels, apartments, farming and ranching.
    - Verifier confirmed that trees within the Project Area are now preserved from removal by a recorded declaration of development restrictions dated March 29, 2024 and recorded April 3, 2024.
    - 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 non-forest cover

- No Double Counting and No Net Harm (Section 5):
    - Verifier confirmed that Attestation of No Double Counting and No Net Harm is on file.
    - Verifier compared the Project geospatial data to the registered urban forest carbon preservation projects geospatial database using ArcMap and determined there is no overlap with other registered carbon projects in the state of Ohio.

- 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

- The trees in the Project Area face some risk of removal or conversion out of forest, demonstrated by 79% of the Project area's perimeter being adjacent to improved uses. This surpasses the 30% threshold outlined in Protocol Section 4.4 A.

- 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 for 40 years. The recorded declaration of development restrictions protecting the Project Trees and lands is permanent.

4.2.4 Accounting

The Project documents an on-site plot-sample forest inventory, and uses required factors in carbon stock and offset calculations.

The Project Operator elected to quantify the stored carbon stock in compliance with CFC Protocol Section 11.1 B. To meet these requirements, the Project Operator contracted Kathryn Downie, ACF of Legacy Forestry Consulting to provide on-site plot-sample inventory. The inventory established 20 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 the ground, where the height above the ground is measured on the uphill side of the tree. Species diameter and overall tree condition were recorded for each tree. The Verifier confirmed the above sampling method resulted in a standard error of 10%.

The Verifier confirmed that all 20 sample plots fell within the outlined 34.9 acres of the Project Area via the Southington Preserve Cruise Map supplied by the Project Operator.

The Verifier confirmed that the tC/ac of biomass calculated by the Project Operator is correct. This number was verified by repeating the calculation (biomass tC/ac = (metric tons of carbon–standard error)/Project Area acre) where metric tons of carbon and standard error were supplied by the Project Operators i-Tree Eco carbon biomass results. tCO2e/ac was then verified by dividing tC/ac by the ratio of the molecular weight of carbon dioxide to that of carbon (44/12). The Verifier confirmed that the measurement of 183.10 tCO2e/ac is correct for the Project Area using this method.

The Verifier confirmed that 90% of the accounting stock on the 12.5 acres zoned residential/agriculture is at risk of tree removal. Southington Township's Zoning Resolution stipulates that the minimum lot area for a single-family dwelling is 100'X200' or .46 acres. 90% of the accounting stock, or 624.25 tCO2e, for 12.5 acres is less than the avoided shown in the calculation 6390*(((2*27)+((12.5-(2*27))*0.1))/12.5) = 25,483.32 tCO2e. Therefore, 90% of the accounting stock is used to factor the percent at risk of tree removal in accordance with Protocol Section 11.1.B.

The Verifier also confirmed that 90% of the accounting stock was at risk of tree removal for the 22.4 commercially zoned acres in the Project Area. This is because it is a non-residential zone as outlined in Southington Township's Zoning Resolution.

Since both zoning areas comprise the entirety of the Project Area, 90% of the cumulative accounting stock is at risk of tree removal resulting in 5,751.21 tCO2e of Avoided Biomass Emissions.

The Verifier confirmed that Southington Township's residential zoning and development rules do not specify a maximum fraction of parcel area that may be in impervious surface. However, the rules do specify minimum yard setbacks. Using the avoided impervious surface formula with the minimum yard setback specifications resulted in an output greater than the standard deduction of 50%. To be conservative, the Project Operator claimed the standard 50% avoided impervious surface deduction outlined in Protocol Section 11.3.B on the 12.5 acres of residentially zoned Project Area.

The Verifier also confirmed that Southington Township's commercial zoning and development rules do not limit impervious area. Therefore, 90% of the commercially zoned Project Area is eligible as avoided impervious surface as outlined in Protocol Section 11.3 A.

The Verifier confirmed that with 50% of 12.5 acres and 90% of 22.4 acres accounting for avoided impervious surface, 76%, or 26 acres, of the Project Area is accounted for as avoided impervious surface.

Section 11.3 of the Protocol also stipulates that per acre of avoided impervious surface, the Project may claim 120 metric tonnes of carbon dioxide equivalent of avoided soil carbon emissions per acre of net avoided impervious surface. The Verifier confirmed that this allows the Project to account for 3,167 tCO2e of avoided soil emissions.

4.2.5 Leakage

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

The Verifier confirmed that the Project Operator accurately followed Protocol section 11.5 A to determine that, of the total number of tonnes of avoided biomass emissions from within the Project Area, 18.3% are assumed to be emitted from development displaced from the Project Area. After repeating the calculations to remove the Displaced Biomass Emissions from the total Avoided Biomass Emissions, the Verifier confirmed the total Credits from Avoided Biomass Emissions (4,699 tCO2e) is correct.

The Verifier also confirmed that the Project Operator accurately followed Protocol Section 11.5 B to determine that, of the total number of tonnes of Avoided Soil Carbon Emissions from within the Project Area, 30.3% are assumed to be emitted from development displaced from the Project Area. After repeating the calculations to remove the Displaced Soil Emissions from the total Avoided Soil Carbon Emissions, the Verifier confirmed the total Credits from Avoided Soil Emissions (2,207 tCO2e) is correct.

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 West Creek Conservancy.

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. The Verifier makes no further recommendations.

6 VERIFICATION RESULTS AND CONCLUSION

This verification of the Southington Forest Preserve Project for the reporting period April 3, 2024 through April 2, 2027 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 ($mtCO_2e$)
Southington Forest Preserve Project	2024 (after verification)	6,906	691	6,216
Cumulative		6,906	691	6,216

The Project Operator calculated ecosystem co-benefits using the CFC tool to determine dollar values of other ecosystem services. The Verifier corroborated the CFC tool inputs and outputs to produce the values below. The Verifier does not make an assessment to the plausibility of these values.

Table 2. Ecosystem Co-Benefits Per Year

Ecosystem Services	*Resource Units*	*Value*
Rainfall Interception (m3/yr)	17,491.5	$36,970.07
Air Quality (t/yr)	1.2068	$2,974.89
Cooling – Electricity (kWh/yr)	53,113	$7,441.11
Heating – Natural Gas (kBtu/yr)	2,198,600	$30,750.26
Grand Total ($/yr)		**$78,136.32**

Because the project area is less than 50 acres, all credits will be issued in the first year.

Verifier Signature

Zachary Boerman