

Verification Report

Twinsburg Heights Preserve

City Forest Credits Project Number 050

April 15, 2024

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1 INTRODUCTION

City Forest Credits engaged Todd Douglass (a Validation and Verification Body (VVB) acting as a third-party verifier) to verify the Twinsburg Heights Preserve (Project), located in the City of Twinsburg and Twinsburg Heights, Ohio, for the reporting period of September 6, 2022 to September 5, 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 Twinsburg Heights Preserve project preserves 49.3 acres of mixed hardwood forest across ten contiguous parcels in Summit County, Ohio. The Project area includes land in both Twinsburg Township and the City of Twinsburg, suburbs located in the Akron, Ohio metropolitan area to the northeast of the City of Akron. The Project area is flanked by I-480 to the northeast, a cemetery to the south, and business and residential development to the north and west. The preserve contains a mostly mid-successional mixed hardwood forest dominated by red and sugar maples, along with smaller portions of beech, black cherry, hickory, and yellow poplar. The Project area has been forested for at least the last 50 years based on available aerial imagery, however, individual trees present within the preserve are older. The land was purchased in September of 2022 by West Creek Conservancy with aims to preserve the natural area as a resource to local residents.

1.2 CONTACT INFORMATION

Project Operator

West Creek Conservancy
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Verification Body

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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 the City of Twinsburg and Twinsburg Township, both located in Summit County, Ohio. The property covers ten contiguous tax parcels including three in Twinsburg Township (62-00695, 62-00607, and 62-00609), and seven in the City of Twinsburg (64-01498, 64-00992, 64-01269, 64-00627, 64-01270, 64-01271, and 6409071), specifically described in the Project Design Document.
- The Project Operator purchased the Project parcels as part of a larger sale on September 6, 2022. A Declaration of Restrictions on the Project parcels was signed by the Project Operator and recorded on September 6, 2022. The declaration language includes use restrictions that protect trees and vegetation consistent with the protocol. On page 2 of the Declaration of Restrictions in section 1.(a), it states that the “Property shall remain in its natural condition and be managed in a manner consistent with its preservation as a natural, scenic, open and wooded area.” Section 1.(h) on page 3 continues, “Except as may be required in the course of any activity permitted herein, there shall be no removal or destruction of native growth, nor the cutting of trees, shrubs, or other vegetation on the Property...”
- The Project avoids emission of CO₂ 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 September 6, 2022. 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 review of 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; and 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 5,346 tons CO₂e
- Verifier did not require any clarifications or corrections to be submitted to the Project Operator.

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 of the West Creek Conservancy by reviewing Project Operator website and included tax document issued by the IRS.
- 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 signed by the Project Operator on November 9, 2023 is on file.
- Project Location (Section 1.3): Verifier reviewed mapping and location data. Project falls with the U.S. Census Bureau’s designated Urban Area for the greater Cleveland, Ohio area. The City of Twinsburg is also an incorporated city and Twinsburg Township falls along the boundary of the incorporated city, and therefore satisfies the urban location criteria according to the Protocol Section 1.3.
- Defining the Project Area (Section 1.4): Verifier confirmed the Project Area meets forest canopy cover requirements. The I-Tree canopy coverage assessment provided a canopy coverage estimate of close to 95% which is corroborated with aerial imagery and the plot sample inventory canopy assessment on i-Tree Eco (93%), and 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. Verifier confirmed that the Project Operator is the legal owner of the entire Project Area.
- 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. All pertinent zoning regulations were independently reviewed and verified from the original source. The Project area includes land crossing over two separate municipalities including one residential zoning district in Twinsburg Township, and one business zoning district in the City of Twinsburg. Both zoning districts permit

the removal of trees and vegetation for building development. The Summit County zoning ordinance permits clearing for residential subdivision development with guidelines for retained open space, however, the percentage of tree cover required is only under 3% of total area. Verifier confirmed that landscaping and tree preservation ordinances in building codes allow for 90% of forested accounting stock to be removed. Any prohibitive hydrological or terrain features that would limit development, including required riparian setbacks, were removed from consideration in the Project area.

- Verifier confirmed that trees within the Project Area are now preserved from removal by a recorded Declaration of 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 non-forest cover. Threat of conversion was verified according to protocol section 4.4 A. and 4.4 B. The Project area is bordered on greater than 30% of its perimeter by non-forest uses including residential and highway right-of-way. Land was conveyed prior to preservation at well over \$8,000 per acre.
- 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 ArcGIS and determined upon manual inspection that no overlap of registered projects occurred.
- Monitoring and Reporting (Section 8): Verifier confirmed that the 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. Areas within the parcels where trees do not face threat of removal and non-forested areas, such as utility right-of-way, cleared openings, wetlands, and riparian setbacks were removed from credited acreage.
- 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 bordering non-forest uses including residential development and interstate right-of-way. Verifier confirmed over 30% of perimeter property is non-forest.
- Project Operator signed an Attestation of Additionality on March 5, 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 at least 40 years. The Declaration of Restrictions protecting the Project Trees and lands are 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 quantified present stored carbon stock according to CFC Protocol standards in Protocol Section 11.1 B. This method involved the collection of a random sample of 1/10th acre fixed radius forest inventory plots, measuring all live trees greater than 5" at 4.5' above ground level (DBH). The Project Operator hired a consulting forester from Legacy Forestry Consulting to complete the inventory of the Project area. Twenty-two plots were distributed randomly across the sample area and a total of 259 trees were measured. The standard error of the sample was 13.06% of the mean of the estimated carbon stock, which meets the protocol allowance of 20%. The entire project area was sampled and summarized as one stand and stratification was not necessary. Collected plot data was summarized in Davey Tree's i-Tree Eco modeling software to produce stand metrics and calculate forest biomass stock according the protocol. The model produced a standing carbon stock estimate of 1,390.2 metric tons of carbon or 5,097.9 metric tons of carbon dioxide equivalents. The verifier validated the model inputs to be accurate.

The verifier summarized plot and tree data independently of i-Tree to verify stand density and forest structure. The data produced an average live-tree basal area of 73 ft²/ac and an average of 117 trees per acre within the project area. The verifier determined that this density estimate is appropriate for the given forest type.

The Project Operator provided an estimate of 93% canopy which reflects the almost complete canopy cover of the Project area. Verifier confirmed this value to be accurate for use in the co-benefit calculator.

The Project Operator provided calculations of biomass fraction at risk of removal for each separate set of zoning requirements within the Project area (City of Twinsburg C-3, and Twinsburg Township R-3). Verifier determined the calculations accurately followed the Protocol's allowances for avoided biomass emissions detailed in section 11.2. To determine risk of soil carbon loss due to conversion to impervious surfaces, the Project Operator followed Protocol section 11.3 A. and B. The Project Operator calculated the maximum lot coverage, given required setbacks for Twinsburg Township zone R-3, at 58%. To be conservative, the Project Operator chose to use the protocol allowance of 50% avoided impervious surfaces even though it is less than the zoning allows for. Similarly, for the C-3 commercial district in the City of Twinsburg, which allows up the protocol specified threshold of 90% impervious surfaces, the Project Operator chose to apply a more conservative estimate of 70% avoided impervious surfaces based on consultation with City of Twinsburg Planning Division. The verifier reviewed and confirmed adherence to local zoning regulations.

4.2.5 Leakage

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

5 VERIFICATION FINDINGS

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 Twinsburg Heights Preserve for the reporting period of September 6, 2022 to September 5, 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 (mtCO₂e)	Reversal Pool Account (10%) (mtCO₂e)	Emission Reductions to be Issued to Project (mtCO₂e)
Twinsburg Heights Preserve	2024 (after verification)	5,940	594	5,346
Cumulative		5,940	594	5,346

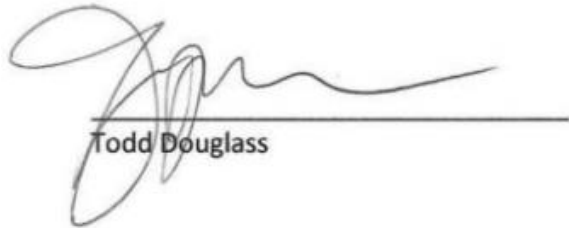
The Project Operator calculated ecosystem co-benefits using the CFC tool to determine dollar values of other ecosystem services. The verifier corroborated the CFC tool inputs and outputs to produce the values below. The verifier does not make an assessment to the plausibility of these values.

Table 2. Ecosystem Co-Benefits Per Year

<i>Ecosystem Services</i>	<i>Resource Units</i>	<i>Value</i>
Rainfall Interception (m3/yr)	23,449.8	\$49,563.68
Air Quality (t/yr)	1.6178	\$3,988.26
Cooling – Electricity (kWh/yr)	71,205	\$9,975.87
Heating – Natural Gas (kBtu/yr)	2,947,538	\$41,225.12
Grand Total (\$/yr)		\$104,752.94

Because the Project area is less than 50 acres, all credits are issued on the first issuance date. See Table 1. above.

Verifier Signature



Todd Douglass