Verification Report

Big Woods Forest Preservation Project

City Forest Credits Project Number 059

September 26, 2025

Zachary Boerman

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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 Big Woods Forest Preservation Project (Project), Chatham County, NC, for the reporting period July 25, 2025 through July 24, 2028. 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 Big Woods Forest Preservation project is an effort to protect 206.77 acres of mature upland forest in the Research Triangle region of central North Carolina. Named after its state-recognized natural community, the project supports a mix of loblolly pine, sweetgum, yellow-poplar, wooded wetlands, and other mixed upland hardwood tree species. In addition to the significant ecological value of the land, the property helps protect clean drinking water for several downstream communities. Located in the Durham-Chapel Hill-Carrboro metropolitan planning area, the Big Woods Forest project has faced significant development pressure from neighboring residential growth. Large, forested tracts of land in this region have become increasingly rare, as rapid development continues to change land use and fragment large parcels.

Triangle Land Conservancy's long-term goals for the project are to protect the land in perpetuity through fee simple acquisition and a state held conservation easement. The organization purchased the property in June 2023, with the hope to open it up to the community in the future as a public nature preserve. It is currently split between R-5 and R-1 Chatham County zoning districts, which allow for low-density residential development. Big Woods Forest would be TLC's first carbon crediting project. The organization has been exploring carbon crediting options for several years to help serve its mission in creating a healthier and more vibrant Research Triangle region by safeguarding clean water, protecting natural habitats, supporting local farms and food, and connecting people with nature. Triangle Land Conservancy envisions that funding from this project could be reinvested into protecting neighboring forested land facing similar development pressures.

1.2 CONTACT INFORMATION

Project Operator
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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 13.40, February 29, 2024.

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 Chatham County, NC. The project area is comprised of a portion of parcel 19351 specifically described in the Project Design Document.

- The Project area was acquired by the Triangle Land Conservancy on June 30, 2023. The associated conservation easement prohibits the disturbance of natural features plants and animals in Article III Section C. Specific language outlines that "there shall be no cutting or removal of trees and no disturbance of other natural features on the property". However, the Grantor reserves the right to manage vegetation for fire containment, disease control, and invasive exotic plant control through common forestry practices.

- 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 July 25, 2025. 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 19,041 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.triangleland.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 that the fully executed Project Implementation Agreement signed March 11, 2024 is on file.

- Project Location (Section 1.3): Verifier reviewed the provided maps and shapefiles and confirmed that the Project area is located within the Triangle West Transportation Planning Area (formerly the Durham-Chapel Hill-Carrborro Metropolitan Planning Area). This satisfies section 1.3 D of the Protocol.

- Defining the Project Area (Section 1.4): Verifier confirmed that 90.5% of the Project Area is covered by tree canopy after reviewing the provided Forest Composition Report and i-Tree Eco Raw Inventory Data. 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. More than 30% of the Project Area's perimeter is adjacent to zoning districts that allows for non-forest use including, but not limited to, residential development.
    - Verifier confirmed that trees within the Project Area are now preserved from removal by a recorded conservation easement.
    - The Project Operator has committed to meeting the permanence requirements stated in the PIA.
    - Prior to the Preservation Commitment action by the Project Operator there was threat of conversion of the project lands to non-forest cover as evidenced by 51% of the Project area perimeter being adjacent to developed or improved uses.

- No Double Counting and No Net Harm (Section 5):
    - Verifier confirmed that Attestation of No Double Counting and No Net Harm is on file and signed August 29, 2024.
    - Verifier confirmed that there is no overlap between other registered carbon projects because this is the first carbon project located in North Carolina.

- 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 Preservation Commitment, lands were not protected from conversion by easement, zoning, or other legal mechanism. Relevant critical areas were excluded from the Project Area.

- Prior to the Preservation Commitment, the R-1 and R-5 zoning ordinances that encompass the Project area allowed for residential development that included removal of existing trees

- Prior to the Preservation Commitment, the trees in the Project Area faced risk of removal or conversion out of forest, demonstrated by 51% 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 August 11, 2025 that includes information on the impact of carbon revenues to project success.

- The Project is not common practice, demonstrated by either 1) an analysis of project-specific activities or 2) the current version of the Registry's Activity Penetration Analysis – Demonstration of Additionality of Urban Forest Preservation.

- Verifier confirmed that the landowner is a land conservation entity and that the Project lands were acquired within two years of the date of Project application.

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 conservation easement 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 appointed staff from Gelbert, Fullbright, and Randolph (GFR) to establish 29 - 1/10th acre plots. Within every plot, each live tree was inventoried that was at least 5' in height. Species, diameter at breast height, and crown condition were

recorded for each tree in addition to plot specific canopy cover. The Verifier confirmed the above sampling method resulted in a standard error of 6%.

The Verifier confirmed that all 29-sample plots fell within the 206.77-acre Project Area via the provided Plot Location Map.

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 146.16 tCO2e/ac is correct for the Project Area using this method.

The Verifier confirmed that 53% of the accounting stock is at risk of tree removal. The Chatham County R-1 zoning regulations stipulate that the minimum residential lot size is 1 acre. Since the minimum lot size is smaller than 2.25 acres, 90% of the accounting, or 4,131.90 tCO2e, on the 30.55 acres zoned R-1 stock is at risk of tree removal. Alternatively, the 176.22 acres zoned R-5 have a minimum lot size of 5 acres, which allows for 35 potential units. 90% of the accounting stock, or 23,066.1 tCO2e, is more than the avoided biomass emissions resulting from the calculation accounting for 35 dwellings on 176.22 acres 25,629*(((2*35)+((56.67-(2*35))*0.1))/176.22) = 9,986.76 tCO2e. Therefore, in accordance with Protocol Section 11.2 B, 9,986.76 tCO2e, or 45.75%, of the accounting stock is at risk of tree removal for the area zoned R-5.

The Verifier confirmed that the weighted average across the project area (90% of 30.55 acres + 45.75% of 176.22 acres) results in 52.29% of the accounting stock at risk of tree removal.

The Verifier confirmed that the R-1 zoning regulations stipulate a 40,000 sqft minimum lot size. Regulations also specify minimum front, rear and side yard setbacks equaling 23,250 sqft per unit. With all setbacks accounted for, 41.88% of the 30.55 acres zoned R-1 can be claimed as avoided impervious surface.

The Verifier confirmed that the R-5 zoning regulations stipulate a 217,800 sqft minimum lot size. Regulations also specify minimum front, rear and side yard setbacks equaling 112,150 sqft per unit. With all setbacks accounted for, 48.51% of the 176.22 acres zoned R-5 can be claimed as avoided impervious surface.

The Verifier confirmed that with 12.79 acres (or 41.88% of 30.55 acres) in R-1 zoning and 85.48 acres (or 48.51% of 176.22 acres) in R-5 zoning to be claimed as avoided impervious surface, the total acreage eligible to be claimed as avoided impervious surface is 98.28 acres. This equates to 47.53% of the total Project area.

The Verifier also confirmed that with 98.28 acres of avoided impervious surface in the Project area, the Project accounts for 11,782 tCO2e of avoided soil carbon emissions. This calculation was made in line

with section 11.3 of the Protocol, which allows the Project to claim 120 metric tonnes of carbon dioxide equivalent of avoided soil carbon emissions per acre of net avoided impervious surface.

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 11.4 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 (2,899 tCO2e) is correct.

The Verifier also confirmed that the Project Operator accurately followed Protocol Section 11.4 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 (11,782 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 Triangle Land Conservancy (TLC).

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 Big Woods Forest Preservation Project for the reporting period July 25, 2025 through July 24, 2028 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 ($mtCO_2e$)
Big Woods Forest Preservation Project	2025 (after verification)	5,116	512	4,604
Big Woods Forest Preservation Project	July 25, 2026 (anniversary of preservation commitment recordation)	5,116	512	4,604
Big Woods Forest Preservation Project	July 25, 2027 (anniversary of preservation commitment recordation)	5,116	512	4,604
Big Woods Forest	July 25, 2028 (anniversary of preservation	5,116	512	4,604

Preservation Project	commitment recordation)			
Big Woods Forest Preservation Project	July 25, 2029 (anniversary of preservation commitment recordation)	693	68	625
Cumulative		21,156	2,116	19,041

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)	55,742.6	145,799.76
Air Quality (t/yr)	5.4697	11,908.99
Cooling – Electricity (kWh/yr)	328,001	24,895.24
Heating – Natural Gas (kBtu/yr)	131,215	1,363.37
Grand Total ($/yr)		**183,967.35**

Because the Project area is greater than 200 acres, credits will be issued in equal amounts over the course of 5 years.

Verifier Signature

Zachary Boerman