

Verification Report

Lake Charlotte Nature Preserve Carbon Credit Project (LCNPCCP)

City Forest Credits Project Number 28

April 4, 2023

Zachary Boerman

182 Raleigh St

Rochester, NY 14620

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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 City of Atlanta Lake Charlotte Nature Preserve Carbon Credit Project (Project), Atlanta, GA, for the reporting period January 18, 2023 through January 17, 2026. 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

In June of 2020, the Atlanta City Council approved the City's acquisition of the Lake Charlotte Nature Preserve property from the Conservation Fund, a nonprofit that helps local governments protect and preserve land. Prior to the acquisition, the Lake Charlotte property "was in danger of imminent destruction for development," per Tim Keane, the City of Atlanta's former Commissioner of City Planning.

The City's intention is to allocate Carbon credit revenue from the preservation Project to help fund maintenance and stewardship of this property and promote forest health. The Project area is 196.27 acres with 98.4% forest cover and provides a rare and valuable environmental and social asset to the residents of Atlanta.

1.2 CONTACT INFORMATION

Project Operator

City of Atlanta Mayor's Office of Sustainability and Resilience
55 Trinity Ave SW
Atlanta, GA 30303
Contact: John R Seydel
Jrseydel@atlantaga.gov
(470) 421-6160

Verification Body

Zachary Boerman
182 Raleigh St. Rochester, NY 14620
zmboerma@gmail.com
(585) 794-7584

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 Planting 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 11.40, February 7, 2022.

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 within parcels 14-0003-LL-017-3, 14-0004-LL-049-5, and 14-0004-LL-053-7 as well as the entirety of parcel 14-0002-LL-024-0, specifically described in the Project Design Document.
- The city of Atlanta purchased the Lake Charlotte Nature Preserve on August 20, 2020, and within the 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 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 January 18, 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 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 stand delineation and forest composition reports 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 36,265 tons CO₂e.

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 identity of the Project operator by visiting their website at www.atlantaga.gov. 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.

- Project Location (Section 1.3): Verifier reviewed mapping information and confirmed the property is located within the limits of the City of Atlanta. This satisfies section 1.3 B of the Protocol because the Project falls within the boundary of an incorporated city created under the law of Georgia.
- Defining the Project Area (Section 1.4): Verifier confirmed that 98.4% of the Project Area is covered by tree canopy after reviewing the provided i-Tree Canopy Cover Assessment and Tree Benefits Report. This satisfies Protocol section 1.4C which states that 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. Previously, trees in the Project Area were subject to I-1C (light industrial) and R-4 (single family residential) zoning. These zoning regulations allowed at least one non-forest use including the development of manufacturing warehouses and residential homes.
 - Verifier confirmed that trees within the Project Area are now preserved from removal by a recorded declaration of development 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. The threat of conversion was verified in accordance with Protocol section 4.4A and 4.4B. With the use of the Department of City Planning's web zoning map, it was determined that 100% of the total border of Lake Charlotte Nature Preserve has been developed or is directly adjacent to a roadway, which satisfies Protocol 4.4A. The threat of conversion is further reflected in the purchase agreement for the property, which sold for \$24,550.73 per acre. This far exceeds the \$8,000 average price per acre of bare land outlined in Protocol section 4.4B.
- No Double Counting and No Net Harm (Section 5): Verifier confirmed that Attestation of No Double Counting and No Net Harm is on file.
- 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 as evidenced by 100% of the perimeter being adjacent to developed uses or adjacent to roadways.
- Project Operator signed an Attestation of Additionality on February 24, 2023.

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 Operator elected to follow Protocol Section 11.1A to quantify the carbon stock present within the Project Area. The Project documents include a comprehensive Forest Composition Report provided by Trees Atlanta, which allowed the Project Operator to employ the following afforestation tables in their calculations: B39 Loblolly Shortleaf Pine, B43 Oak Gum Cypress and B44 Oak Hickory from the US Forest Service General Technical Report (GTR) NE-343 document.

It is noted in the Project Design Document that the maple and beech composition for stand 2 differs from the species assigned from the GTR table (oak gum cypress). This is a result of consultation with a Forest Carbon Scientist with the Registry as the biomass present is equivalent to that outlined in the GTR table for oak gum cypress.

Upon independent review of the provided aerial imagery, the Verifier confirmed that stand 3 was clearcut in 2006 and is the youngest of the three stands at just 16 years while stands 1 and 2 are at least 72 years old based on available imagery dating back to 1950. The Verifier also confirmed the presence of the canopy gaps in stand 1 based on the photos provided by Trees Atlanta.

Stand composition was further verified by reviewing the additional stand photos provided by Trees Atlanta.

The Verifier confirmed that the Project Operator correctly measured percent canopy cover (with standard error below 10%) in accordance with Protocol Section 11.A. The percent canopy cover was then correctly applied to the total Project Stock calculation.

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 per stand/Project Area acres) where metric tons of carbon per stand is calculated using the appropriate reference GTR tables for total nonsoil tonnes of carbon per acre for each stand and then extrapolating that value out to each stands acreage.

Following the Protocol outlined in 11.2 A, the Verifier confirmed that based on the Project Areas' industrial and residential zoning, 90% of the Accounting Stock on the Project Area can be claimed as avoided biomass emissions.

The Project Operator elected to follow Protocol Section 11.4 A to claim avoidance of emissions from soil carbon caused by conversion of soils to impervious surfaces in the Project Area. The zoning and development rules applicable to the area that is zoned industrial do not limit impervious area; therefore, the Verifier agrees that 90% of the area within that zoning area can be claimed as avoided impervious surface. The other .32 acres of the Project Area that is zoned residential allows for 50% of the area to be eligible for conversion to impervious surface. This is reflected in the Projects carbon quantification calculator (89.93% avoided impervious surface).

The Verifier confirmed that with 175.515 acres of avoided impervious surface in the Project Area, and the stipulation in section 11.4 of the Protocol that allows the Project to claim 120 metric tonnes of carbon dioxide equivalent of avoided soil carbon emissions per acre of net avoided impervious surface, the Project accounts for 21,182 tCO₂e of avoided soil carbon 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 (25,530 tCO₂e) is correct.

The Verifier 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 (14,764 tCO₂e) is correct.

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 City of Atlanta Lake Charlotte Nature Preserve Carbon Credit Project for the reporting period January 18, 2023 through January 17, 2026 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 ₂ e)	Reversal Pool Account (10%) (mtCO ₂ e)	Emission Reductions to be Issued to Project (mtCO ₂ e)
City of Atlanta Lake Charlotte Nature Preserve Carbon Credit Project (LCNPCCP)	2023	10,266	1,027	9,239
City of Atlanta (LCNPCCP)	2024	10,266	1,027	9,239
City of Atlanta (LCNPCCP)	2025	10,266	1,027	9,239
City of Atlanta (LCNPCCP)	2026	9,496	948	8,548
Cumulative		40,294	4,029	36,265

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 (m ³ /yr)	26,189.2	\$68,500.04
Air Quality (t/yr)	5.1111	\$12,209.57
Cooling – Electricity (kWh/yr)	244,550	\$18,561.38
Heating – Natural Gas (kBtu/yr)	124,058	\$1,289.01
Grand Total (\$/yr)		\$100,559.99

Because the Project area is greater than 50 acres, credits will be issued attributable to the equivalent of 50 acres of the Project area annually until all credits have been issued.

Verifier Signature



Zachary Boerman