

Verification Report

Shelter Hill Forest

City Forest Credits Project Number 043

January 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 Shelter Hill Forest (Project), in Hunting Valley Ohio , for the reporting period of September 9, 2022 through September 8, 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 Project will preserve 35.7 acres of mixed mature and mid-successional hardwood forest situated in the suburban village of Hunting Valley, Ohio, between Cleveland to the west and the more sparsely populated suburban and rural landscape of northeastern Ohio to the east. The Project area is a portion of a greater 87.6 acre preserve spanning across two parcels, and includes forested wetland, sloping drains, and three streams that feed to the nearby Chagrin River. The preserve is located in a residential zoning district and bound by residential neighbors on close to 70 percent of the property boundaries. The Project area is predominately composed of one stand type; mature upland hardwoods that have been growing unmanaged for at least 75 years. This forest is dominated by large mature maples, American beech, and oak species. The main forest type is flanked by smaller stands of mature lowland hardwoods to the east and young early to mid-successional hardwoods to the west. Although the entirety of the 87.6 acres are being preserved, the 35.7 acre Project area does not include forested wetland, streams and 120-foot buffers, 4.4 acres of future recreational building sites, and steeply sloped areas in the carbon quantification.

1.2 CONTACT INFORMATION

Project Operator

Western Reserve Land Conservancy

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Moreland Hills, OH 44022

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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 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 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 village of Hunting Valley, in Cuyahoga County, Ohio , specifically described in the Project Design Document. The Project area includes portions of land within two tax parcels (88120009 and 88119003). The project area falls under the ownership of two separate entities. WHL Hunting Valley, LLC, owns the smaller 16.2-acre northern parcel (88119003), and the Project Operator, WRLC, owns the larger 71.4-acre southern parcel (88120009).
- The Project area is protected under conservation easements held through the Natural Areas Land Conservancy (NALC), a supporting agency of the Project Operator. Both parcels granted conservation easements with the NALC that were signed on September 9th, 2022. WHL Hunting Valley agreed to transfer the rights to carbon project development and transfer of potential credits to LCRW LLC, a supporting entity of the Project Operator, in the deed of transfer for parcel 88119003. An Agreement to Transfer Credits was signed between LCRW LLC and the Project Operator on December 11, 2023. The easements protecting both parcels in the project area require that the, “grantor shall not cut down, remove or destroy native trees or other plants.” (WHL easement page 8, and WRLC easement page 12)
- 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 9, 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 analysis of aerial imagery to confirm vegetation typing (and reviewing historical imagery to estimate stand ages); checking of calculations for accuracy and conformance with the Protocol.

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 3,114 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 identity by reviewing Project Operator website (www.wrlandconservancy.org) and reviewing copy of tax letter from the IRS addressed to WRLC.
- 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 and location data. The verifier confirmed the project is located within the incorporated Village of Hunting Valley, in Cuyahoga County, Ohio.
- Defining the Project Area (Section 1.4): Verifier confirmed the Project Area meets forest canopy cover requirements. Canopy coverage on the project area is over 90%, as verified with the i-Tree canopy tool, and current and historic aerial imagery. Small areas within the project area without closed canopy include small openings, mowed areas, and roads.
- 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. Both Project Area parcels fall under the Village of Hunting Valley’s residential U-1 single family use zoning district. The ordinances for U-1 zoning permit the land use including development into single-family dwellings, or municipal buildings, and farming or grazing on minimum lot size of 5 acres. The Hunting Valley codified ordinance chapter 1331 prohibits clear-cutting on any parcel of land, “except to the extent necessary to clear a building site, yard, driveway and right of way providing access...” Because threat of loss on these parcels is due to residential use, tree removal would be permitted.
 - Verifier confirmed that trees within the Project Area are now preserved from removal by recorded Conservation Easements.

- 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 4.4A and 4.4B. the Project area is bordered on greater than 30% of its perimeter by non-forest use, in this case residential. The parcels have also recently sold for a value well above \$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 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. The Project Operator removed acreage within projects area's parcels that prohibited development. Hunting Valley ordinances restrict residential building on slopes greater than 30%, so steep slopes were removed from consideration. The Project Operator also conservatively removed 120-foot buffers around the streams on the property to comply with guidelines suggested by the Cuyahoga County Soil and Water Conservation District, as the Village of Hunting Valley's code only requires a 25-foot buffer for building within streams with drainages less than 0.5 square miles.
- Zoning allows development including removal of existing trees. Zoning ordinances permit the removal of trees for residential development.
- The trees in the Project Area face some risk of removal or conversion out of forest, demonstrated by close to 70% of the Project area perimeter being adjacent to non-forest land use.
- Project Operator signed an Attestation of Additionality on August 11, 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 at least 40 years. The conservation easements protecting the Project Trees and lands are permanent, however, the area within parcel 88120009 is permitted to engage in forest management in September of 2064. This forest management will begin after the 40 year duration of this project has ended.

4.2.4 Accounting

The Project documents forest type, age and cover, and uses required factors in carbon stock and offset calculations according to Protocol method 11.1A.

The Project Operator accounted for stored carbon stock according to CFC Protocol Section 11.1A. This method involved the use of the afforestation table in Appendix B of the US Forest Service GTR NE-343 to determine estimated carbon stock as a factor of forest type and forest age. The USFS forest type was observed, documented, and photographed by the project operator during over twelve site visits between 2019 and 2023. The forest is made up of three separate stands that vary in age and species composition, yet they all fall under the USFS forest type classification of maple-beech-birch (GTR NE-343 Table B2), due to their large component of maple and beech. The verifier confirmed this classification is consistent with provide photographs and composition description, and is appropriate for the region. The Project Operator estimated Stand 2 and Stand 3's forest age to be at least 75 years old due to the presence of a forested canopy in imagery dating as far back 1952. Stand 1's age was estimated at 25 years of age. The verifier confirms these estimates to be appropriate and conservative given the established forested condition present in the 1952 and 1994 aerial photographs, and consistent with the current appearance of the forest.

The Project Operator estimated the canopy cover over the Project area using the i-Tree Canopy tool, which produced an estimate of 91% canopy coverage. The verifier confirmed this assessment to be accurate.

The Project Operator calculated avoided biomass emissions, and avoided soil carbon emissions, and accounted for deductions according to Protocol Section 11. Fraction at risk of tree removal was accounted for on this project due to residential lot sizes of larger than 2.25 acres. With estimated clearing of 2 acres per 5-acre residential lot, the fraction at risk of tree removal for this Project area is 45.29%. Verifier confirmed that zoning regulations or easements do not limit impervious surfaces in the Project area, however, building setbacks in the Hunting Valley zoning code would limit the extent of impervious surfaces on building lots. Considering building setbacks, the threat of impervious surfaces that will be avoided from this project is calculated at 36.48% according to protocol section 11.3.

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 from CFC.

The project documents and data were reviewed and the verifier found that the emission reductions claimed are reasonable and in accordance to the preservation protocol. The verifier makes no further recommendations.

6 VERIFICATION RESULTS AND CONCLUSION

This verification of the Shelter Hill Forest for the reporting period of September 9, 2022 through September 8, 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)
Shelter Hill Forest	2023	3,460	346	3,114
Cumulative		3,460	346	3,114

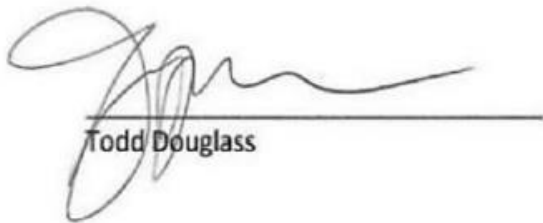
The Project Operator calculated ecosystem co-benefits using the CFC tool to determine dollar values of other ecosystem services provided by the forested project area. The verifier corroborated the CFC tool inputs and outputs to produce the values below. The verifier does not make an assessment to the 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)	16,745.5	\$35,393.31
Air Quality (t/yr)	1.1613	\$2,865.46
Cooling – Electricity (kWh/yr)	50,587	\$7,087.3
Heating – Natural Gas (kBtu/yr)	2,090,187	\$29,233.97
Grand Total (\$/yr)		\$74,580.03

Because the Project area is less than 50 acres, all credits are issued in the first year. See Table 1.

Verifier Signature



Todd Douglass