

# **Verification Report**

## **Bainbridge Forest Preservation Project**

CFC Project Number 011

June 2, 2021

Ecofor LLC

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# 1 INTRODUCTION

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City Forest Credits engaged Ecofor LLC (Ecofor) to verify the project named “Bainbridge Forest Preservation Project”, with the project operated by the Western Reserve Land Conservancy (WRLC), for the reporting period April 30, 2021 through April 29, 2024. 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 preserves forest on lands within the urban growth boundary of Cleveland, OH and prevents future conversion to non-forest cover. The project encompasses 27.25 acres within a 33.6 acre legal property parcel within Bainbridge Township, OH, bordering Chillicothe Road, parcel number 02-729448, formerly known as parcel number 02-209600. WRLC acquired the land in January 2020 and initiated the project with the City Forest Credits program the same year. The WRLC established a conservation easement on the land on April 30, 2021.

The project start date, also known as the credit commencement date, is April 30, 2021. The project life is 40 years.

## 1.2 CONTACT INFORMATION

### Project Operator

Western Reserve Land Conservancy  
3850 Chagrin River Road  
Moreland Hills, OH 44022  
Contact: Alex Czayka

### Verification Body

Ecofor LLC  
16011 36<sup>th</sup> Ave NE  
Lake Forest Park, WA 98155

## 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 CFC Protocol, and that the Project is in compliance with all CFC requirements relating to eligibility, accounting and documentation.

## 2 VERIFICATION CRITERIA

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### 2.1 PROTOCOL

The verification was conducted to the City Forest Credits Tree Preservation Protocol – 40 years, version 9.40, September 6, 2020 (CFC Protocol).

### 2.2 LEVEL OF ASSURANCE

This verification was conducted to a reasonable level of assurance.

## 3 SCOPE OF VERIFICATION

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- The Project is entirely located within the US Census Bureau 2010 urban boundary shown on the “Urbanize Area Reference Map: Cleveland, OH” meeting the project location requirement in Section 1.3 of the CFC Protocol.
- The Project Operator submitted an application to create the project with the CFC within one year of the date that the property was donated to WRLC.
- The project area has more than the minimum level of forest canopy required for eligibility under Section 1.4 of the CFC Protocol.
- The Project avoids emission of CO<sub>2</sub> from trees by avoiding conversion of forest to non-forest land cover and avoids emission of CO<sub>2</sub> from soil resulting from the conversion of forest to impervious surface.
- Reporting Period is April 30, 2021 through April 29, 2024.
- 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 age); examination of relevant zoning codes, checking each step of offset calculations for accuracy and conformance with the Protocol.

## 4 VERIFICATION PROCESS

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### 4.1 VERIFICATION ACTIVITIES

The verification process consisted of the following activities:

- Ecofor independently verified that the project area is within the Cleveland OH urbanized area boundary.
- Ecofor independently verified that the project area is zoned R-3A, which allows development with a minimum lot size of three acres.
- Ecofor determined that the project area meets the protocol's criteria for being at risk of development because more than 30% of the boundary of the project parcel is in developed use.
- Ecofor reviewed the conservation covenant and confirmed that it prohibits tree removal except for limited safety conditions or maintaining trails.
- Ecofor obtained recent aerial imagery of the project area and verified that the area is essentially completely tree covered. Ecofor mapped the sample points the project used to calculate canopy coverage onto recent aerial imagery. Ecofor selected a subsample of points and classified vegetation and tree or non-tree, and checked the Project's classification of these points. If there are gaps in the upper tree canopy they are so small that shadow in the aerial imagery prevent discrimination as to whether the gaps are filled with smaller trees or with nontree cover. Even if all the potential gaps are actually gaps, canopy cover would be greater than 97%.
- Ecofor independently estimated the biomass carbon stock present within the project area and compared the Ecofor estimate to the amount claimed by the project.
- Ecofor checked the Bainbridge Township zoning code and verified that Chapter 139.03 Part b allows a minimum lot size of three acres. Following the rules in the zoning code, the property could be divided into a maximum of nine lots with one dwelling unit per lot. The CFC Protocol calculates that with nine lots on 27.25 acres, 69.4% could be credited as avoided clearing.
- With nine lots on 27.25 acres, the CFC protocol calculates the maximum allowed impervious area across all nine lots is 2.42 acres.
- CFC provided the project an Excel spreadsheet for calculating credits. Ecofor worked with CFC to make correct calculations of credits.
- Ecofor checked all requirements in the Protocol, and 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.
- Ecofor submitted to CFC and the Project Operator requests for clarifications and corrections, as issues came to light, and reviewed revised and corrected documents and calculations.

## 4.2 CFC TREE PRESERVATION PROTOCOL REQUIREMENTS

### 4.2.1 Eligibility

The project area is entirely within the Cleveland, OH, US Census Bureau Urban Area. Ecofor reviewed the Project against all CFC Tree Preservation Protocol requirements and confirmed the following:

- The Project Area is zoned to allow residential housing development and more than 30% of the project perimeter is in developed use.
- The Project Area currently is currently 97-100% tree canopy cover, which is greater than minimum required 80% tree canopy cover.
- Prior to the conservation covenant established by the project, trees within the Project Area were not protected from removal.
- There is a clear title to carbon credits through WRLC's recorded ownership of the land and the Project Operator has legal authority to create and dispose of greenhouse gas offsets generated on the project lands.
- The Project Operator has committed to meeting the permanence requirements of CFC.
- The project commencement date is after November 1, 2017.

### 4.2.2 Additionality

Project lands met the requirements of the Protocol:

- Prior to the Project, lands were not protected from conversion by easement, zoning, or other legal mechanism.
- Zoning allows removal of existing trees.
- GIS quantification of the project area border length shows more than 30% of the perimeter is in developed uses.

### 4.2.3 Permanence

The landowner has established and recorded a permanent covenant on the land protecting the Project Trees.

### 4.2.4 Accounting

Examination of historic aerial imagery from 1952 shows the property to be substantially tree covered at that time, with more than 10% of the project area covered by trees with canopies greater than 20 feet in diameter. The timber inventory reports 187,000 board feet (Doyle rule, trees 12" DBH and greater) on the 22.8 acres of the 27.25 acre project area that is fully covered by large trees. The inventory focuses on trees with commercial value and notes that the un-inventoried area is covered by smaller trees and scattered larger trees. Ecofor used the timber inventory to estimate the carbon stock on the inventoried area, using the species, average measured diameter, and trees per acre reported in the inventory, plus an assumed distribution of tree sizes around the average diameters, and an estimate of the number and size of trees less than 12" DBH based on photos in the inventory report. Ecofor estimates that the carbon stock on inventoried acres is 57.5 metric tons of carbon per acre in live trees, which corresponds to age 95 in table B2 of GRT NE-343. Because the project uses the table to estimate carbon stock, the project has a 20%

deduction from the carbon stock reported in the table, which will more than account for the lower carbon stocks expected to be present on the acres with smaller and more scattered trees. Based on these pieces of information, the estimated stand age of 90 years is accepted as reasonable and likely conservative.

#### 4.2.5 Leakage

The project follows the CFC protocol and accounts for displacement of development, both in loss of biomass and displacement of impervious surfaces to other locations. Deductions for this expected displacement of development are made to the carbon stocks on site when calculating credits for avoided emissions.

## 5 VERIFICATION FINDINGS

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All issues raised by Ecofor were clarified or corrected by the Project Operator and CFC and all issues were closed.

Ecofor recommends that CFC continue to monitor tree cover across the project area.

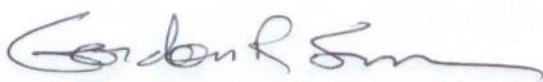
## 6 VERIFICATION RESULTS AND CONCLUSION

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This verification of the Bainbridge property of the Western Reserve Land Conservancy for the reporting period April 30, 2021 through April 29, 2024 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.

Tract	Issuance Year	GHG Reductions and Removals (mtCO <sub>2</sub> e)	Risk Buffer (mtCO <sub>2</sub> e)	Emission Reductions to be Issued to Project (mtCO <sub>2</sub> e)
WRLC Bainbridge	2021	4,599	460	4,139
WRLC Bainbridge	Cumulative	4,599	460	4,139

**Lead Verifier Signature**



**Gordon Smith**