



# Shelter Hill Forest Validation Report

Document Prepared by City Forest Credits

January 15, 2024

## PROJECT OVERVIEW

<i>Project Name</i>	Shelter Hill Forest
<i>Project Registry Number</i>	043
<i>Project Type</i>	Tree Preservation
<i>City Forest Credits Protocol Version</i>	Version 12.40, February 22, 2023
<i>Project Start Date</i>	September 9, 2022
<i>Project Location</i>	Village of Hunting Valley, OH
<i>Project Operator</i>	Western Reserve Land Conservancy

## SUMMARY

*Provide a few sentences about the overall project*

Western Reserve Land Conservancy is preserving 35.7 acres of forest as part of a carbon project in the Village of Hunting Valley, OH. The forest, which consists largely of 75-year-old maples, oaks, and beech, lies across two properties with a total area of 87.6 acres within Hunting Valley, an eastern suburb of Cleveland, OH. Protecting the forest with a conservation easement will preserve important habitat, protect watershed quality, and expand recreation opportunities for the community.

## ELIGIBILITY

### **Project Operator Identity (Section 1.1)**

#### *Criteria*

A Project requires at least one Project Operator (“PO”), an entity organized and licensed under the laws of its jurisdiction, or a governmental body, which undertakes a Project, registers it with the registry of City Forest Credits (the “Registry”), and is ultimately responsible for all aspects of the project and its reporting.

#### *Issue Validated*

The Project Operator is Western Reserve Land Conservancy. The Land Conservancy provided documentation, including a copy of its IRS 501c3 letter, to City Forest Credits, to demonstrate that it is an entity organized under the laws of its jurisdiction.

### **Project Submittal Dates (Section 2.1, 2.3)**

#### *Criteria*

Project must submit applications to the Registry within two years of the date of the Preservation Commitment. The Preservation Commitment must be recorded no later than 6 months after Registry Approval of the Project Application. Projects whose Preservation Commitment dates from prior to November 1, 2017 are not eligible.

#### *Issue Validated*

Project Operator submitted the application and the project was approved on May 24, 2023. The Preservation Commitment recordation date is September 9, 2022, which meets protocol criteria Section 2.1 and 2.3.

## **Permanence – Project Duration and Reversals**

### **A. Project Duration (Section 1.2 and 2.2)**

#### *Criteria*

Project Operator must sign a Project Implementation Agreement with the Registry setting forth the Project Operator’s obligation to comply with the protocol. Project Operator must monitor and report for 40 years.

#### *Issue Validated*

Western Reserve Land Conservancy and City Forest Credits signed a Project Implementation Agreement on June 12, 2023 for the Shelter Hill Forest Preservation Project (Project Registry Number 043). The project has a 40-year duration under City Forest Credits Tree Preservation Protocol Version 12.40.

### **B. Reversals (Section 9)**

#### *Criteria*

A “Reversal” is loss of stored carbon such that the remaining stored carbon within the Project Area is less than the amount of stored carbon for which Registry credits have been issued. The Registry will retain in a Reversal Pool account 10% of all credits issued to preservation projects. This Reversal Pool account shall be used to compensate for Unavoidable Reversals.

#### *Issue Validated*

The Project Design Document and request for credits based on GHG mitigation includes a 10% deduction for the Reversal Pool of credits. 346 credits were contributed from this Project to the Registry Reversal Pool. The carbon quantification and Reversal Pool deduction were verified by the Validation and Verification Body, Todd Douglass.

### **Project Location (Section 1.3 and 1.4)**

#### *Criteria*

Project Area must be located in parcels within or along the boundary of at least one of the urban area criteria. The Project Operator must specify the Project Area and provide an electronic map of the Project area with geospatial location.

#### *Issue Validated*

The Project is located in the Village of Hunting Valley, Cuyahoga County, OH, within the planning boundary of the Northeast Ohio Areawide Coordinating Agency, which meets protocol criteria Section 1.3D. The Project Operator has provided maps as supporting evidence, including geospatial location, regional-scale, and project area maps.

The 35.7-acre Project Area includes portions of contiguous parcel numbers: 88119003 (8.3 acres) and 88120009 (27.4 acres).

The Project Area is in a location that receives more than 20 inches of precipitation per year and has more than 80% tree canopy, meeting protocol criteria Section 1.4 C. The Project Operator has provided an iTree report to demonstrate the percentage of canopy cover for the Project Area showing canopy cover of 91% over the Project Area.

**Ownership or Eligibility to Receive Potential Credits (Section 1.5)**

*Criteria*

Project Operator must demonstrate ownership of potential credits or eligibility to receive potential credits.

*Issue Validated*

The Project Area consists of two parcels.

Parcel 88119003: WHL Hunting Valley, LLC is the landowner for the parcel. The parcel was previously owned by LCRW LLC, a supporting entity of the Project Operator, who reserved the rights to the carbon credits in the deed of transfer between LCRW LLC and WHL Hunting Valley. LCRW LLC and the Project Operator signed and recorded an Agreement to Transfer Credits, meeting protocol criteria Section 1.5C. WHL Hunting Valley also signed an Agreement to Transfer Credits with the Project Operator, documenting that they understand the credit rights were transferred in the deed. The Project Operator provided a copy of the deed and both Agreements to Transfer Credits as supporting documentation.

Parcel 88120009: Western Reserve Land Conservancy, the Project Operator, is the landowner for the parcel, meeting protocol criteria Section 1.5A. The Project Operator provided a copy of the deed as supporting documentation.

**Tree Preservation Commitment (Section 4.1)**

*Criteria*

Project Operator must demonstrate that trees in the Project Area are preserved for at least 40 years.

*Issue Validated*

Project Operator, through its supporting entity Natural Areas Land Conservancy, has recorded conservation easements on both parcels recorded September 9, 2022, to preserve the Project Area in perpetuity.

Specific language protecting the trees, with added emphasis in bold:

Parcel 88119003	88120009
Section 1(d): "Grantor reserves the right to remove (i) from anywhere on the Protected Property dead, diseased or materially damaged trees and trees that pose a danger to human life or neighboring properties, and (ii) trees from areas within which existing trails are being widened or new trails	Section 1(d): Grantor reserves the right to remove (i) from anywhere on the Protected Property dead, significantly diseased or materially damaged trees and trees that pose a danger to human life or neighboring properties, and (ii) trees from areas within which existing trails are being widened or new trails created (as

created (as provided in subparagraph 4(c); <b>provided, however, that any such removal does not impair significant conservation interests as described in the IRC and has no more than a negligible or de minimis impact on biomass and carbon stock.</b>	provided in subparagraph 4(c)); <b>provided, however, that any such removal does not impair significant conservation interests as described in the IRC and has no more than a negligible or de minimis impact on biomass and carbon stock.</b>
Section 4(f): “Except as otherwise permitted in this Grant [forest management actions, restoration purposes, for the protection of human health and safety, or trail creation], <b>Grantor shall not cut down, remove or destroy native trees or other plants</b> ”	Section 4(f): “Except as otherwise permitted in this Grant [forest management actions, restoration purposes, for the protection of human health and safety, or trail creation], <b>Grantor shall not cut down, remove or destroy trees or other vegetation</b> ”

The two easements each set aside 2-acres for Reserved Recreation Areas where recreation-related development is permitted; these set-asides were excluded from the Project Area.

The easement for parcel number 88120009 reserves the right to engage in forestry management on the forty-second anniversary of the date of recording (September 9, 2022), thus after the 40-year carbon project period. Despite the reserved right, the Project Operator has expressed intent to preserve the Project Area in perpetuity and credit additional growth on the property.

The project meets protocol criteria Section 4.1.

**Demonstration of Threat of Loss (Section 4.2, 4.3, 4.4)**

*Criteria*

Project Operator must demonstrate that prior to the Preservation Commitment, the project trees were not preserved from removal. The Project Area must be in a land use designation that allows for at least one non-forest use and is not in an overlay zone that prohibits all development. The Project Area must also meet one of three conditions that demonstrate threat of loss as described in Section 4.4 A, B, or C such as surrounding developed or improved uses, per acre value, or fair market value.

*Issue Validated*

The Project Operator signed an Attestation of Additionality on August 11, 2023 stating that prior to the start of the Project, the trees in the Project Area were not protected by easement, recorded encumbrance, or protected zoning status. Sections of the property that had steep slopes, wetlands, and/or rivers or streams were excluded from the Project Area.

Both parcels comprising the Project Area are zoned U1-Single Family Use, where single-family residential development with a minimum lot size of 5 acres is a permitted use. Agricultural uses are also permitted.

The Project Area is surrounded by developed uses along 68.3% of its perimeter, meeting Section 4.4A of the Protocol.

**No Double Counting of Credits and No Net Harm (Section 5)**

*Criteria*

The City Forest Credits Standard describes safeguards and the “No Net Harm” Principle in Section 5. Project activities shall not cause net harm to the environment or urban communities. Project Operator must sign an Attestation of No Net Harm.

The City Forest Credits Standard describes prevention of double-counting in Section 5. Project Operator must sign an Attestation of No Double Counting of Credits. Per Section 5.2 of the Tree Preservation Protocol, the Project Operator must submit documentation showing no overlap of Project Area with any other registered urban forest carbon project. As part of Validation, the Registry shall use the appropriate tool on GIS software (such as the Intersect tool on ArcGIS) to independently investigate whether there is any overlap between the Project Area and other registered urban forest carbon projects.

#### *Issue Validated*

Project Operator has submitted a signed Attestation of No Double Counting and No Net Harm on August 11, 2023, and the Registry sees no evidence of net harm from this project. The Registry has analyzed geospatial data of the Project Area against that of all other registered urban forest carbon preservation projects using ArcGIS Pro and the Intersect Tool to confirm that the Project Area for this project has not already received credits under the CFC standard.

### **Additionality (Section 6)**

#### *Criteria*

The City Forest Credits Standard and Tree Preservation Protocol (Section 6) ensure additionality for every carbon project. A project activity is additional if it can be demonstrated that the activity results in emission reductions or removals that are in excess of what would be achieved under a “business as usual” scenario and the activity would not have occurred in the absence of the incentive period provided by the carbon markets.

Projects must demonstrate the following:

- Prior to the start of the project, the trees in the project area cannot be protected via easement or recorded encumbrance or in a protected zoning status that preserves the trees.
- The zoning in the project area must currently allow for a non-forest use.
- The trees in the project area face some risk of removal or conversion out of forest.

The Tree Preservation Protocol sets out three tests to determine whether the trees or forest in a project area face a threat or risk of tree removal or conversion out of a forested use, as described in Section 4.4. Taken together, these elements allow crediting only for unprotected trees, at risk of removal, which are then protected by a project action of preservation, providing additional avoided GHG emissions.

Additionality is embedded also in the quantification methodology. Projects cannot receive credits for trees that would have remained had development occurred, nor can they receive soil carbon credits for soil that would have been undisturbed had development occurred.

Project Operator must sign an Attestation of Additionality.

#### *Issue Validated*

Project Operator has demonstrated that prior to the start of the project the trees were not protected, the zoning allows for a non-forest use, and the trees are at risk of removal or conversion out of forest.

Project Operator has followed the carbon quantification methodology to demonstrate how the number of credits to be issued. Project Operator signed the Attestation of Additionality on August 11, 2023.

**Carbon Quantification (Section 11)**

*Criteria*

Project Operator must follow the carbon stock and soil carbon quantification methods outlined in Section 11 of the Protocol.

*Issue Validated*

Project Operator used the US Forest Service General Technical Report table B2 Maple Beech Birch to determine accounting stock, per protocol criteria Section 11.1.A. The tree canopy percentage was measured using i-Tree Canopy.

Historical imagery was provided as supporting documentation to establish forest age and composition.

Per Protocol Section 11.2.B ii, 45.29% of Accounting Stock is at risk of conversion. The properties are zoned U1 – Single Family Use, and the Avoided Biomass Emissions were calculated in compliance with the formula in 11.2.B.ii and considering the 5-acre minimum lot size established in the Village of Hunting Valley Zoning Ordinance.

Project Operator quantified the avoidance of emissions from soil carbon caused by conversion of soils to impervious surfaces under Protocol Section 11.3. Applicable zoning ordinance for U1 Single Family Use does not limit impervious surface (unlike the U-3 Institutional District and U-4 Conservation Development District). Minimum yard setback sizes were used to calculate the impervious surface avoided at 36.48%.

A deduction of 18.3% for displaced development was included in carbon quantification, per Protocol Section 11.4.

The Carbon Quantification Summary is as follows:

Project Area (acres)	<b>35.7</b>
Does carbon quantification use stratification (yes or no)	<b>No</b>
Percent tree canopy cover within Project Area	<b>91%</b>
Project stock (tCO <sub>2</sub> e)	<b>8,009</b>
Accounting Stock (tCO <sub>2</sub> e)	<b>6,407</b>
On-site avoided biomass emissions (tCO <sub>2</sub> e)	<b>2,902</b>
On-site avoided soil carbon emissions (tCO <sub>2</sub> e)	<b>1,563</b>
Deduction for displaced biomass emissions (tCO <sub>2</sub> e)	<b>531</b>
Deduction for displaced soil emissions (tCO <sub>2</sub> e)	<b>474</b>
Credits from avoided biomass emissions (tCO <sub>2</sub> e)	<b>2,371</b>
Credits from avoided soil emissions (tCO <sub>2</sub> e)	<b>1,089</b>
Total credits from avoided biomass and soil emissions (tCO <sub>2</sub> e)	<b>3,460</b>
Credits attributed to the project (tCO <sub>2</sub> e), excluding future growth	<b>3,460</b>
Contribution to Registry Reversal Pool Account	<b>346</b>
<b>Total credits to be issued to the Project Operator (tCO<sub>2</sub>e)</b> <i>(excluding future growth)</i>	<b>3,114</b>

### Co-Benefits Quantification (Section 11.5)

#### Criteria

Project Operator follows co-benefit quantification for rainfall interception, air quality, and energy savings, per protocol criteria Section 11.5.

#### Issue Validated

Project Operator has followed the co-benefits quantification method using the templates provided by City Forest Credits. Project Operator included 90% deciduous, and 1% coniferous for the 35.7-acre Project Area, with estimates based on the Forest Composition Report. The following table documents the quantified ecosystem services in resource units and avoided costs.

<b>Ecosystem Services</b>	<b>Resource Units</b>	<b>Value</b>
Rainfall Interception (m <sup>3</sup> /yr)	16,745.5	\$35,393.31
Air Quality (t/yr)	1.1613	\$2,865.46
Cooling – Electricity (kWh/yr)	50,587	\$7,087.30
Heating – Natural Gas (kBtu/yr)	2,090,187	\$29,233.97
<b>Grand Total (\$/yr)</b>		<b>\$74,580.03</b>

### Monitoring and Reporting (Section 8)

#### Criteria

Project Operator must report on tree conditions across the Project Area for the Project Duration. Reports must be submitted no less frequently than on the triennial anniversary of the date of the first Verification Report.

#### Issue Validated

Project Operator has agreed to submit written reports every three years using the template provided by City Forest Credits. As an accredited land trust under the Land Trust Alliance, the Project Operator has a robust stewardship and monitoring program.

### Social Impacts (Section 12)

#### Criteria

Project Operator shall use the Carbon Project Social Impact template to evaluate the SDGs to determine how a Project provides social impacts that contribute towards achievement of the global goals, as described in Section 12.

#### Issue Validated

Project Operator has submitted a completed Carbon Project Social Impact document. The project meets protocol criteria Section 12.



## VERIFICATION REPORT

CFC reviewed the Verification Report to ensure it accurately reflects the documentation contained in the Project Design Document and supporting documents.

## VALIDATION CONCLUSION

All the information provided in this validation report is free of material misstatement, to the best of our knowledge. The project complies with the validation criteria outlined in the City Forest Credits Standard and Tree Preservation Protocol Version 12.40.

Approved by City Forest Credits on January 15 in 2024.