



# **Hambden Hills Validation Report**

Document Prepared by City Forest Credits

January 30<sup>th</sup>, 2026

## PROJECT OVERVIEW

|   |                                       |
|---|---------------------------------------|
| <i>Project Name</i>                         | Hambden Hills                         |
| <i>Project Registry Number</i>              | 068                                   |
| <i>Project Type</i>                         | Tree Preservation                     |
| <i>City Forest Credits Protocol Version</i> | Version 13, February 29, 2024         |
| <i>Project Start Date</i>                   | November 7 <sup>th</sup> , 2025       |
| <i>Project Location</i>                     | Hambden Township, Geauga County, Ohio |
| <i>Project Operator</i>                     | Western Reserve Land Conservancy      |

## SUMMARY

The Project Operator, Western Reserve Land Conservancy, is partnering with the landowner, Geauga Park District, to preserve 55.38 acres of threatened forest to protect wildlife habitat and provide carbon sequestration. The project will contribute to the greater goal of preserving mature trees with a long term investment in their future. The project’s forest stands are a mix of red and sugar maple, bittersweet hickory, and black cherry trees. Originally zoned for residential land use, the carbon crediting of this project will legally protect the trees so that no tree harvest is allowed. The original deed restriction (from 2023) will be amended to reflect this new level of protection, strengthening the preservation commitment of the project. There will also be annual monitoring to maintain the property and health of the trees, securing the carbon within the ecosystem and providing critical wildlife habitat for native species including several endangered bat species. This carbon credit project maximizes the intrinsic value of the property for the benefit of the surrounding ecosystem and communities.

## 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*

To demonstrate that they are an entity organized under the laws of their jurisdiction, the Project Operator, Western Reserve Land Conservancy, provided documentation in the form of a letter from the IRS attesting to their tax-exempt status to City Forest Credits.

### **Project Submittal Dates (Section 2.1, 2.3, 6)**

*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.

If the landowner is a land trust or other entity with a conservation mission, the Project lands must have been acquired within two years of the date of the application.

*Issue Validated*

Project Operator submitted the application on March 28<sup>th</sup>, 2025. The Preservation Commitment effective date is November 7<sup>th</sup>, 2025. CFC provided an extension to the Project Operator, to accommodate parties involved in the project.

The Project property (or properties) were acquired in September 2023 which is within two years of the application date.

**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 May 15<sup>th</sup>, 2025 for the Hambden Hills project (Project Registry Number 068). The project has a 40-year duration under City Forest Credits Tree Preservation Protocol Version 13.40.

**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. 660 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, Zachary Boerman.

**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 1.3 A to D, or within criterion E. 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 within a planning area for a metropolitan planning agency or entity, Northeast Ohio Areawide Coordinating Agency (NOACA) which meets protocol criteria Section 1.3 D. The Project Operator has provided maps as supporting evidence, including geospatial location, regional-scale, and project area maps.

The 55.38 acre Project Area includes portions of contiguous parcel numbers: 15-045300 and 15-045400.

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 Eco report to demonstrate the percentage of canopy cover for the Project Area is about 80.0%.

**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*

Geauga Park District is the landowner for the Hambden Hills project, meeting protocol criteria Section 1.5 C. The Project Operator provided a signed Agreement to Transfer Potential Credits, signed October 6, 2025, between them and the Geauga Park District 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*

An original Declaration of Restrictions was recorded on the property on September 29<sup>th</sup>, 2023, but this declaration did not explicitly protect the trees from being cut down and harvested. Western Reserve Land Conservancy updated the declaration of restrictions for Hambden Hills via an amendment recorded on November 7<sup>th</sup>, 2025 which prohibits the cutting of the trees within the project area and aligns with the goals and objectives set forth in the CFC Preservation Protocol.

Specific language protecting the trees in the amended declaration of restrictions includes:

“Improvements made to the Property will first be approved by OPWC and will have no more than a negligible or de minimis impact on biomass and carbon stock.”

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 excludes relevant critical areas. 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*

Project Operator has signed an Attestation of Additionality on August 29th, 2025, 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.

The Project Area is zoned as Residential which allows for development and tree removal. To demonstrate Threat of Loss, the Project Operator provided a map demonstrating that the Project Area property perimeter is bordered on over 30% by improved uses, meeting Protocol Section 4.4A

## **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 29<sup>th</sup>, 2025, 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 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 Preservation Commitment, the trees in the project area cannot be protected via easement or recorded encumbrance or in a protected zoning status that preserves the trees.
- Prior to the Preservation Commitment, the zoning in the project area allowed for a non-forest use.
- Prior to the Preservation Commitment, the trees in the project area passed one of three tests to show 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 that attests to the above, as well as provides information on the impact of carbon revenues to project success.

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 29th, 2025.

#### *Issue Validated*

Project Operator has demonstrated that prior to the Preservation Commitment, the trees were not protected, the zoning allowed for a non-forest use, and the trees were 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 29<sup>th</sup>, 2025. The Land Conservancy has been working with City Forest Credits on several projects since 2021. Consequently, they informed Geauga Park District of this opportunity for critical maintenance revenue and carbon sequestration benefits via carbon crediting after they acquired the property in September 2023. The declaration of restrictions on the property has been amended to further restrict any cutting of the trees in the Project Area for 40 years so that the carbon sequestration quantification can remain accurate.

### **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 completed on-site sampling to determine accounting stock, per protocol criteria Section 11.1B. The tree canopy percentage was measured using i-Tree Eco.

To quantify carbon, the Land Conservancy completed an on-site plot sample inventory to determine carbon stock. The Land Conservancy conducted a sample forest assessment to the standards set in CFC Tree Preservation Protocol Section 11.1.B. The sample established 20 plots sized 1/10th-acre. Within each plot, each live tree was inventoried that was at least 5 inches in diameter. Species, diameter, and overall tree condition were recorded for each tree. The Land Conservancy used i-Tree Eco to input the sample data to determine carbon storage. The CFC Carbon Calculator was used for quantification for subsequent steps 11.2, 11.4, and 11.5.

Forest composition from the plot-sample inventory was provided as supporting documentation, but forest age was not necessary for carbon quantification for this project.

Per Protocol Section 11.2A and 11.2B, 68.5% of Accounting Stock is at risk of conversion. The fraction of biomass at risk is based on minimum acre size per unit for Residential zoning. According to Geauga County Township Zoning, lot sizes can be developed at a minimum of 3 acres per lot. Depending on configuration, the 55.38 acres of the Project Area zoned residential could accommodate approximately 18 residential lots with the addition of public roads and necessary infrastructure, further risking biomass removal and increasing the percentage of impervious surface.

Project Operator quantified the avoidance of emissions from soil carbon caused by conversion of soils to impervious surfaces under Protocol Section 11.3. The Project Area is zoned for residential development. According to the Hambden Township Zoning Resolution, the maximum lot coverage is 10%. This means 10% of the Project Area is avoided conversion to impervious surfaces.

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)   | 55.38        |
| Does carbon quantification use stratification (yes or no)  | no           |
| Percent tree canopy cover within Project Area  | 80%          |
| Accounting Stock (tCO <sub>2</sub> e)  | 10,963       |
| On-site avoided biomass emissions (tCO <sub>2</sub> e)   | 7,510        |
| On-site avoided soil carbon emissions (tCO <sub>2</sub> e)   | 665          |
| Deduction for displaced biomass emissions (tCO <sub>2</sub> e)   | 1,374        |
| Deduction for displaced soil emissions (tCO <sub>2</sub> e)  | 201          |
| Credits from avoided biomass emissions (tCO <sub>2</sub> e)  | 6,136        |
| Credits from avoided soil emissions (tCO <sub>2</sub> e)   | 463          |
| Total credits from avoided biomass and soil emissions (tCO <sub>2</sub> e)                                       | 6,599        |
| Credits attributed to the project (tCO <sub>2</sub> e), excluding future growth                                  | 6,599        |
| Contribution to Registry Reversal Pool Account   | 660          |
| <b>Total credits to be issued to the Project Operator (tCO<sub>2</sub>e)</b><br><i>(excluding future growth)</i> | <b>5,939</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 80% percent deciduous, and 0% percent coniferous for the 55.38 acre Project Area. 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 (m3/yr)   | 22,659.1              | \$47,892.46         |
| Air Quality (t/yr)              | 1.5633                | \$3,853.78          |
| Cooling – Electricity (kWh/yr)  | 68,804                | \$9,639.50          |
| Heating – Natural Gas (kBtu/yr) | 2,848,151             | \$39,835.07         |
| <b>Grand Total (\$/yr)</b>      |                       | <b>\$101,220.81</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.

**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 13.40.

Approved by City Forest Credits on January 30<sup>th</sup> in 2026.