



# **Old Mill Forest Validation Report**

Document Prepared by City Forest Credits

January 30, 2024

## PROJECT OVERVIEW

<i>Project Name</i>	Old Mill Forest
<i>Project Registry Number</i>	44
<i>Project Type</i>	Tree Preservation
<i>City Forest Credits Protocol Version</i>	Version 12.40, February 22, 2023
<i>Project Start Date</i>	October 4, 2023
<i>Project Location</i>	Lake Forest, Illinois
<i>Project Operator</i>	Lake Forest Open Lands Association

## SUMMARY

*Provide a few sentences about the overall project*

The 102-acre natural landscape, which is prominently sited on the north side of Half Day Road at Old Mill Road, was acquired by the Project Operator, Lake Forest Open Lands Association (LFOLA), on November 15, 2021, to protect it from a proposed 265-unit mixed-use development. It is LFOLA's goal to restore the land and create a future public nature preserve for all to enjoy. By enrolling these parcels in a preservation carbon project, LFOLA will accelerate their restoration and maintenance plans for this critical piece of the Chicago River watershed. The Old Mill Forest project site along with the Illinois Nature Preserve Florsheim Park that is directly north comprises the headwaters of the Westfork with 0.6 miles of the Westfork of the Chicago River and 0.38 miles of tributary streams. Additionally, the site boasts an impressive matrix of high-quality wetland, a sedge meadow, and the Project Area which is 55.54 acres of forest with stands of old-growth oak and hickory trees.

## 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 Lake Forest Open Lands Association (LFOLA) is the Project Operator. To document that it is an entity organized and licensed under the laws of its jurisdiction, LFOLA provided their Certificate of Good Standing, dated June 2, 2023, to City Forest Credits.

### **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 on May 31, 2023. The Preservation Commitment effective date is October 4, 2023, which meets protocol criteria Section 2.1 and 2.3, and all project documents were submitted by November 6, 2023 which is less than 6 months from the application approval 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*

The Lake Forest Open Lands Association and City Forest Credits signed a Project Implementation Agreement on June 1, 2023 for the Old Mill Forest Preservation Project (Project Registry Number 44). 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. 703 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, 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. 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 Urban Area or Urban Cluster boundary (“Urban Area”), defined by the most recent publication of the United States Census Bureau, which meets protocol criteria Section 1.3 A. The Project Operator has provided maps as supporting evidence, including geospatial location, regional-scale, and project area maps.

The 55.54-acre Project Area includes portions of contiguous parcel numbers:

Municipality	Parcel Number	Notes <i>Include total acres and acres included in Project Area</i>
<i>Township of Vernon</i>	15-13-200-012	<i>Portion of parcel included – 38.4 acres out of 68.66 acres</i>
<i>Township of Vernon</i>	15-13-300-050	<i>Portion of parcel included – 13.15 acres out of 28.18 acres</i>
<i>Village of Lincolnshire</i>	15-13-300-040	<i>Portion of parcel included – 0.61 acres out of 0.89 acres</i>
<i>Township of Vernon</i>	15-13-300-067	<i>Portion of parcel included – 3.38 acres out of 4.15 acres</i>
	<b>Total Project Area</b>	55.54 acres out of 101.88 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 Eco report to demonstrate the percentage of canopy cover for the Project Area, which was determined to be 80.4% based on a plot sample inventory.

**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 Lake Forest Open Lands Association is the landowner for the Old Mill Forest, meeting protocol criteria Section 1.5 A. The Project Operator provided a recorded deed, signed and effective as of November 15, 2021 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 signed and recorded a deed restriction, declaring development restrictions and the protection of the trees, on October 4, 2023.

Under the Recitals section:

F. Declarant intends by this Declaration to preserve the trees on the Property for a period of 40 years. It understands that this Declaration will bar the clearing or removing of trees for parking lots, picnic shelters, playfields, visitor centers, or any reason other than forest health, hazard, disease, fire, and small, non-motorized recreational trails.

The deed restriction will ensure effective protection for the Project Area for 40 years, which satisfied 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 October 10, 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.

The Project parcel is zoned for at least one non-forest use:

All parcels are zoned E Estate. The intent of the E Estate District is to accommodate low-density, large-lot residential development and to ensure the protection of areas that develop in such a manner. According to the National Wetland Inventory, there are 22.4 acres of wetlands within the Project Area. Based on Federal and Lake County regulations, any proposed wetland impacts require permitting. However, if trees are removed from wetlands without disturbing the soil or in a mechanized, a permit is usually not required. This still allows the fraction at risk of tree removal to remain, based on the USACE and Lake County wetland policies/regulations.

The Project meets Tree Preservation Protocol Criteria 4.4A, as 43% of the perimeter is adjacent to a developed use. The Project Operator provided a map showing the developed uses around the Project Area perimeter as supporting documentation.

### **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 October 10, 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 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 October 10, 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 engaged an independent consultant, Davey Resource Group (DRG), to perform an on-site assessment of the carbon stock, per protocol criteria Section 11.1.B. DRG conducted a plot-sample forest assessment adhering to the standards set in CFC Tree Preservation Protocol Section 11.1.B. DRG established 30 sample plots sized at 1/10th-acre. Within every plot, each live tree was inventoried that was at least 5" in diameter at 4.5' above ground, where the height above ground is measured on the uphill side of the tree. The plot data were used as input for iTree Eco to quantify the carbon biomass across the entire Project Area.

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

Old Mill Forest is zoned as Estate which is a type of residential zoning. Section 11.2 in CFC's Tree Preservation Protocol allows for 90% of the Accounting Stock on the Project Area is the "Avoided Biomass Emissions" on residential lands.

Old Mill Forest is zoned as Estate and the applicable zoning and development rules do limit impervious area to a maximum of 30%. For the Project Area that is wetlands, 0% of that can be converted into impervious surface.

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>55.54</b>
Does carbon quantification use stratification (yes or no)	<b>No</b>
Percent tree canopy cover within Project Area	<b>80.4%</b>
Accounting Stock (tCO <sub>2</sub> e)	<b>8,436</b>
On-site avoided biomass emissions (tCO <sub>2</sub> e)	<b>7,593</b>
On-site avoided soil carbon emissions (tCO <sub>2</sub> e)	<b>1,193</b>
Deduction for displaced biomass emissions (tCO <sub>2</sub> e)	<b>1,389</b>
Deduction for displaced soil emissions (tCO <sub>2</sub> e)	<b>361</b>
Credits from avoided biomass emissions (tCO <sub>2</sub> e)	<b>6,203</b>
Credits from avoided soil emissions (tCO <sub>2</sub> e)	<b>832</b>
Total credits from avoided biomass and soil emissions (tCO <sub>2</sub> e)	<b>7,035</b>
Credits attributed to the project (tCO <sub>2</sub> e), excluding future growth	<b>7,035</b>
Contribution to Registry Reversal Pool Account	<b>703</b>
<b>Total credits to be issued to the Project Operator (tCO<sub>2</sub>e)</b> <i>(excluding future growth)</i>	<b>6,331</b>

Project Operator asserts that the Project results in GHG emissions mitigation of 6,331 tons CO<sub>2</sub>e.

### 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 80.4 percent deciduous, zero percent coniferous, and 19.6 percent non-tree for the 61.48 acre Project Area. The following table documents the quantified ecosystem services in resource units and avoided costs.

<b><i>Ecosystem Services</i></b>	<b><i>Resource Units</i></b>	<b><i>Value</i></b>
Rainfall Interception (m3/yr)	12,079.4	\$86,486.37
Air Quality (t/yr)	0.5055	\$761.21
Cooling – Electricity (kWh/yr)	95,088	\$7,217.18
Heating – Natural Gas (kBtu/yr)	1,777,981	\$17,308.25
<b>Grand Total (\$/yr)</b>		<b>\$111,773.02</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*

Staff members will visit the Old Mill Forest Preservation Project annually, walking the Project Area and property in their entirety to ensure that the tenets of the deed restriction are being upheld and to resolve any issues with encroachment or non-permitted activities on-site. LFOA will submit written monitoring reports every three years attesting to the accuracy of the reports. The reports will include imagery of leaf-on trees. LFOA will monitor for tree canopy loss and follow Protocol requirements as necessary.

**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 30 in 2024.