Lake County Forest Preserve District – Carbon Planting Project Validation Report

Year 4

Document Prepared by City Forest Credits

September 16, 2025

PROJECT OVERVIEW

Project Name	Lake County Forest Preserve District – Carbon Planting Project
Project Registry Number	020
Project Type	Tree Planting
City Forest Credits Protocol Version	Version 9, February 7, 2021
Project Start Date	October 29, 2021
Project Location	Lake County, Illinois
Project Operator	Lake County Forest Preserve District

SUMMARY

State what stage of crediting this Validation Report applies to (i.e. after planting, Year 4, 6, 14, or 26). Provide a few sentences about the overall project. Include the Planting Design and Quantification Method.

The Project Operator, Lake County Forest Preserve District, planted 2,960 trees over three years from 2019-2021. Originally, LCFPD used the single tree method for quantification but when assessing the project for additional credits in year 4, each tree did not have an individual GPS coordinate, making it impossible to sample for survival rates. CFC advised LCFPD to move to the clustered method, analyzing existing canopy at time of planting and at year 4. Due to this change, the new total of trees planted is 2,121 across 62 acres.

For the Year 4 credit issuance, the Project Operator used high-resolution aerial imagery to assess canopy establishment across the Project Area.

ELIGIBILITY

Additionality (Section 4)

Criteria
The City Forest Credits Standard and Tree Planting Protocol 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.

Issue Validated

Project Operator has signed an Attestation of Additionality on July 25, 2025 that confirms that the trees were not planted due to an enacted ordinance or law, as well as stating that Project Operator used the Registry's performance standard baseline in adherence with the WRI GHG Protocol, that the Project

Operator signed a Project Implementation Agreement with the Registry for a 26-year Project Duration, that the 26-year Project Duration is in addition to and longer than any commitment the Project Operator makes to non-carbon project tree plantings, and that trees were not planted on sites that were forested and then cleared of trees within the prior 10 years.

DATA COLLECTION AND CARBON QUANTIFICATION

Carbon Quantification (Section 10 and Appendix A)

Criteria
Project Operator must follow the data collection and quantification methods outlined in Appendix A of the Protocol.

Issue Validated
Project Operator used the clustered quantification method, per Protocol criteria in Appendix A.

Project Operator used random point sampling of high-resolution aerial imagery to assess tree canopy establishment at Year 4, described in further detail below:

- To be consistent with current Registry requirements, Project Operator calculated canopy cover at both baseline and Year 4 timepoints.
- High-resolution aerial imagery at the appropriate leaf-on timepoints for baseline and Year 4 were accessed through County level imagery. However, these images could not be used directly on i-Tree Canopy.
- Instead, the Project Operator followed methods consistent with i-Tree Canopy's methodology to recreate an i-Tree Canopy assessment on ArcGIS Pro. For each site, on baseline and Year 4 images:
    - Random points were sampled until standard error was below 5%.
    - Sampling consisted of manual assignments to "Tree" or "Non-Tree" class.
    - Based on sampling, tree canopy was calculated per formulas provided in the i-Tree Canopy documentation.
    - Canopy at baseline and Year 4 was summarized for all sites.

To be consistent with current Registry practice, the credit issuance was adjusted down by the amount of existing baseline determined at Year 0. As such, the credit issuance decreased by 5.91%, the amount of canopy assessed at Year 0.

The Carbon Quantification Summary is as follows:

	Initial Crediting	Year 4
Total number of trees planted	2,960	2,121
Project area (acres), if applicable	445	62
Total number of trees per acre, if applicable	NA	NA
Credits attributed to the project (tCO2e)	8,097	5,459

Credits after mortality deduction (20% or insert observed mortality, if greater)	6,478	4,367
Credits after Year 0 existing canopy deduction	Not measured	4,109
Contribution to Registry Reversal Pool Account (5%) (tCO2e)	324	205
Total credits to be issued to the Project Operator (tCO2e)	6,154	3,904
Total credits requested to be issued in Year 4 (40% of above)		1,561 (1,337 to be issued in year 4 to account for initial crediting discrepancy)

GHG Assertion: Project Operator asserts that the Project results in GHG emissions mitigation of 3,904 tons CO_2e over the 26-year Project Duration. Project Operator asserts that per Protocol guidelines, 40% of Project GHG emissions mitigation is issued at Year 4, or 1,337 tons CO_2e.

Due to the change from single-tree methodology and quantification to the clustered methodology, the total credits issued to the project has been reduced to 3,904.

Co-Benefits Quantification (Section 12 and Appendix A)

Criteria
Project Operator must follow the co-benefit quantification methods for rainfall interception, air quality, and energy savings.

Issue Validated
Project Operator has followed the co-benefits quantification method using the templates provided by City Forest Credits. The following table documents the quantified ecosystem services in resource units and avoided costs per year when Project Trees reach 25 years old.

Ecosystem Services	***Resource Units***	***Value***
Rainfall Interception (m3/yr)	10,240	$73,310
Air Quality (t/yr)	0.3171	$1,484
Energy: Cooling – Electricity (kWh/yr)	310,504	$23,567
Energy: Heating – Natural Gas (kBtu/yr)	4,632,949	$45,101
Grand Total ($/yr)		$143,462

VERIFICATION REPORT

CFC reviewed the Verification Report dated September 15, 2025 by Brian Goodall to ensure it accurately reflects the documentation contained in the Year 4 Project Design Document Amendment and supporting documents.

VALIDATION CONCLUSION

I attest that all the information provided in this validation report is free of material misstatement, to the best of my knowledge. The project complies with the validation criteria outlined in the City Forest Credits Standard and Tree Planting Protocol Version 9.

Approved by City Forest Credits on September 16, 2025.