

Thompson Road Oak Woods Validation Report

Document Prepared by City Forest Credits

January 11, 2023

PROJECT OVERVIEW

Project Name	Thompson Road Oak Woods	
Project Registry Number	032	
Project Type	Tree Preservation	
City Forest Credits Protocol Version	Version 11.40, February 7, 2022	
Project Start Date	November 7, 2022	
Project Location	Village of Bull Valley, McHenry County, Illinois	
Project Operator	The Land Conservancy of McHenry County	

SUMMARY

Provide a few sentences about the overall project

The Land Conservancy of McHenry County preserved 35.1-acres known as Thompson Road Oak Woods (the "Project") in Bull Valley in McHenry County, IL. Thompson Road Oak Woods is part of a larger conservation effort to preserve a 275-acre property with five miles of existing trails. This ambitious conservation effort was undertaken by The Land Conservancy of McHenry County in partnership with the Village of Bull Valley to preserve an important headwaters area of the Boone Creek watershed and to prevent future development of these important lands. This project is part of the Chicago Region Carbon Credit Program and complements other tree planting and preservation projects in the seven-metro counties supervised by the Chicago Region Trees Initiative. Davey Resource Group completed on-site quantification for the project area.

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 Land Conservancy of McHenry County is the project operator. To document that it is an entity organized and licensed under the laws of its jurisdiction, The Land Conservancy of McHenry provided City Forest Credits with their organization bylaws.

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 Land Conservancy of McHenry County and City Forest Credits signed a Project Implementation Agreement on November 9, 2022 for the Thompson Road Oak Woods (Project Registry Number 32). The project has a 40-year duration under City Forest Credits Tree Preservation Protocol Version 11.40.

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. 766 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 incorporated Village of Bull Valley, which meets protocol criteria Section 1.3 B. The Project Operator has provided maps as supporting evidence, including geospatial location, regional-scale, and project area maps.

The 35.1 acre Project Area includes portions of contiguous parcel numbers:

Jurisdiction / Location	Parcel Number	Description / Notes
Village of Bull Valley, McHenry County	08-35-200-012	Project area included in part of parcel – 12.1 acres
Village of Bull Valley, McHenry County	08-35-400-001	Project area included in part of parcel – 23 acres
		Total 35.1 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 i-Tree canopy report to demonstrate the percentage of canopy cover for the Project Area and shows that it has a 90% canopy cover.

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 Land Conservancy of McHenry County is the landowner for the Thompson Road Oak Woods, meeting protocol criteria Section 1.5 A. The Project Operator provided the Deed (4 Thompson Road Oaks Recorded Deed) as supporting documentation.

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 meets criteria 4.4 A, which is over 30% of the Project Area is bordered by non-forest, developed or improved uses. The Project Area's perimeter is surrounded by 35% farm use and 35% residential estate use, totaling 70% of perimeter is adjacent to a developed or improved use.

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 approved a Declaration of Development Restrictions on November 7, 2022 which protects the forest in the Project Area for 40-years. As included in the Declaration of Development Restrictions, the declarants preserve the trees on the property for a period of no less than 40 years. It prohibits cutting down, destroying, ore removing trees located on the Property, except as necessary to control or prevent hazard, disease or fire or to improve forest health. Recreational, non-motor-use trails have negligible or de minimis impacts on biomass and carbon stock are permissible. The project meets protocol criteria Section 4.1.

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 July 6th, 2022. The Preservation Commitment effective date is November 7, 2022, which meets protocol criteria Section 2.1 and 2.3.

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 hired an independent consultant, Davey Resource Group (DRG), to conduct an on-site assessment of the carbon stock, per protocol criteria Section 11.1.B. DRG conducted a sample forest assessment adhering to the standards set in CFC Tree Preservation Protocol Section 11.1.B. The sample established 28 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 the ground, where the height above the 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. The tree canopy percentage was measured using i-Tree Canopy.

Forest composition was provided as supporting documentation, but forest age was not necessary for carbon quantification for this project.

Per Protocol Section 11.2.A, 90% of Accounting Stock is at risk of conversion. Thompson Road Oak Woods is zoned as A-1 Agriculture. 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 agricultural lands. Attachment 6 provided by the project operator captures the relevant sections of the zoning regulations that are applicable.

Project Operator quantified the avoidance of emissions from soil carbon caused by conversion of soils to impervious surfaces under Protocol Section 11.4. The project area is zoned as A-1 Agriculture and the applicable zoning and development rules do not limit impervious area. Section 11.4 in CFC's Tree Preservation Protocol allows for 90% of the Project Area in agricultural zoning (where annual crops and plowing are common practices in that region) to be eligible for conversion to impervious surface.

A deduction of 18.3% for displaced development was included in carbon quantification, per Protocol Section 11.5.

The Carbon Quantification Summary is as follows:

Project Area (acres)	35.1
Does carbon quantification use stratification (yes or no)	No
Accounting Stock (tCO₂e)	6,829
On-site avoided biomass emissions (tCO ₂ e)	6,146
On-site avoided soil carbon emissions (tCO₂e)	3,791
Deduction for displaced biomass emissions (tCO ₂ e)	1,125
Deduction for displaced soil emissions (tCO₂e)	1,149
Credits from avoided biomass emissions (tCO ₂ e)	5,021
Credits from avoided soil emissions (tCO₂e)	2,642
Total credits from avoided biomass and soil emissions (tCO₂e)	7,663
Credits attributed to the project (tCO ₂ e), excluding future growth	7,663
Contribution to Registry Reversal Pool Account	766
Total credits to be issued to the Project Operator (tCO₂e)	6,897
(excluding future growth)	

Project Operator asserts that the Project results in GHG emissions mitigation of 6,897 tons CO₂e issued to the project.

Co-Benefits Quantification (Section 11.6)

Criteria

Project Operator follows co-benefit quantification for rainfall interception, air quality, and energy savings, per protocol criteria Section 11.6.

Issue Validated

Project Operator has followed the co-benefits quantification method using the templates provided by City Forest Credits. Project Operator included 31.59 acres or 90.00 percent deciduous, and 0.00 percent coniferous for 35.1 acre Project Area. The following table documents the quantified ecosystem services in resource units and avoided costs.

Ecosystem Services	Resource Units	Value
Rainfall Interception (m3/yr)	8,545.4	\$61,183.65
Air Quality (t/yr)	0.3576	\$538.51
Cooling – Electricity (kWh/yr)	67,269	\$5,105.70
Heating – Natural Gas (kBtu/yr)	1,257,810	\$12,244.50
Grand Total (\$/yr)		\$79,072.36

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 November 4, 2022.

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.

Issue Validated

Project Operator has submitted a signed Attestation of No Double Counting and No Net Harm on November 4, 2022, and the Registry sees no evidence of net harm from this project. The Registry has reviewed the records of prior projects to confirm that the Project Area for this project has not already received credits under the CFC standard.

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

The Land Conservancy of McHenry County, as a Nationally Accredited Land Trust through the Land Trust Alliance, has a requirement to monitor every property it owns or holds an easement on every year. The Project Area described herein will be included in that monitoring program. The Land Conservancy of McHenry County will submit triennial monitoring reports for the project duration as specified in the protocol. 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 11.40.

Approved by City Forest Credits on January 11, 2022.