

Black Fork Forest Preserve Validation Report

Document Prepared by City Forest Credits

February 7, 2023

PROJECT OVERVIEW

Project Name	Black Fork Forest
Project Registry Number	027
Project Type	Tree Preservation
City Forest Credits Protocol Version	Version 11.40, February 7, 2022
Project Start Date	July 29, 2021
Project Location	Mifflin Township, Richland County, OH
Project Operator	Western Reserve Land Conservancy

SUMMARY

Provide a few sentences about the overall project

Western Reserve Land Conservancy (WRLC) is protecting in perpetuity the 94.16-acre Black Fork Forest, a mixed successional, 65-year-old forest dominated by oak, hickory, and pine. Located along a major interstate, the site lies within Richland County, OH, an area that has been experiencing increasing conversion of forests to agricultural and urban expansion. Preserving the forest will benefit wildlife habitat, improve air and water quality, and sequester carbon.

This is the fourth project in Western Reserve Land Conservancy's carbon program.

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

Western Reserve Land Conservancy is the Project Operator. To document that it is an entity organized and licensed under the laws of its jurisdiction, Western Reserve Land Conservancy provided documentation including a copy of the organization's IRS Tax Exempt Status letter to City Forest Credits.

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, 2022 for the Black Fork Forest Preservation Project (Project Registry Number 027). 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. 1,601 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 Mifflin Township, Richland County, OH, which lies within the boundary of the Richland County Regional Planning Commission, a regional metropolitan planning agency. This meets protocol criteria Section 1.3D. The Project Operator has provided maps as supporting evidence, including geospatial location, regional-scale, and project area maps.

Parcel	Jurisdiction / Location	Parcel Number	Description / Notes
1	RCRPC/Mifflin Township, Richland County, OH	021-17-030-17-000	49.07 acres of the 168.9- acre parcel is included in the Project Area
2	RCRPC/Mifflin Township, Richland	021-17-030-13-001 (parent parcel 021-17-	1.48 acres of the 78.7-acre parcel is included in the

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The 94.16-acre Pro	ject Area Includes	portions of the	ronowing parcels:

	County, OH	030-13-000)	Project Area
3	RCRPC/Mifflin Township, Richland County, OH	021-17-019-13-001	28.31 acres of the 47.4-acre parcel is included in the Project Area
4	RCRPC/Mifflin Township, Richland County, OH	021-17-030-14-003 (parent parcel 021-17- 030-14-000)	15.3 acres of the 87.8-acre parcel is included in the Project Area
		Total acreage	94.16 acres

During the purchase of the property, portions of the parent parcels 021-17-030-13-000 and 021-17-030-14-000 were acquired and received new parcel numbers as a result of the change in ownership. Supporting documentation from the title company that handled the transaction was provided to show the parcel number update.

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 that the percentage of canopy cover for the Project Area is 97% 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

Natural Areas Land Conservancy (NALC) is the landowner for the parcels containing the Project Area. NALC is a supporting non-profit wholly managed by WRLC. NALC has granted the Project Operator the right to receive potential credits, meeting protocol criteria Section 1.5C. As supporting documentation, the Project Operator provided a deed (Attachment G) and an Agreement to Transfer Credits (Attachment H), signed by NALC and WRLC on 12/6/2022.

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 December 6, 2022 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 parcels are zoned for at least one non-forest use:		
Parcel Number	Zoning	
021-17-030-13-001	R-1 Residential	
021-17-030-17-000	R-1 Residential	
021-17-019-13-001	R-1 Residential	
021-17-030-14-003	B-2 Business	

The Project parcels are zoned for at least one non-forest use:

The Project Operator provided zoning maps and copies of the relevant zoning regulations as supporting documentation.

The Project meets Tree Preservation Protocol Criteria 4.4A, as over 60% of the perimeter is surrounded by non-forest, developed, or improved uses, including residential lots and an interstate. The Project Operator provided a map showing the developed uses around the Project Area perimeter as supporting documentation.

The Project Area contains 12.63 acres of forested wetlands, which can be developed through permitting processes managed by the Ohio EPA and US Army Corps of Engineers. To be conservative, the 12.63 acres were excluded from the fraction at risk of tree removal and avoided impervious surface in the carbon quantification.

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

Natural Areas Land Conservancy entered into a covenant with Western Reserve Land Conservancy (WRLC), The Conservation Fund (TCF), and the State of Ohio Environmental Protection Agency (Ohio EPA) to protect the site in perpetuity including to protect the trees from removal. The covenant was signed July 29, 2021 and recorded on April 7, 2022.

Specific language in the environmental covenant on page 5 includes: "Except for those actions that are necessary for environmental preservation, management or restoration purposes, for the protection of human health and safety, or for the maintenance of a diversity of naturally occurring habitat types and control of exotic species of plants, there shall be no removal, destruction, cutting, trimming, or mowing of any trees or other vegetation."

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

The Preservation Commitment was signed on July 29, 2021. Project Operator submitted the application on May 23, 2022, which is within two years of the date of the Preservation Commitment, meeting 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 used the US Forest Service General Technical Report tables B2 Maple Beech Birch, B3 Oak Hickory, and B4 Oak Pine to determine accounting stock, dividing by stand age and primary composition per protocol criteria Section 11.1.A. The tree canopy percentage was measured using i-Tree Canopy.

Historical imagery spanning 1959 to 2019 was provided as supporting documentation to establish forest age at an estimated 65 years old. A forest composition report based on ten site visits was also provided to confirm the forest age, document the main species, forest health, and tree size and density, and delineate the forest stands within the Project Area.

The Project Area lies within parcels zoned B-2 Business and R-1 Residential. To determine the Accounting Stock at risk of conversion, the wetlands were first excluded from the area calculations. Then:

- R-1 Residential zoning (78.86 acres minus 12 acres of wetlands) Per Protocol Section 11.2.B.ii., the percent avoided biomass emissions in residential zones is the smaller of 90% or 2 acres per allowed dwelling unit plus 10% of the remaining project area. The Project Operator identified the number of allowed dwellings based on applicable zoning regulations and calculated the percent allowance based on that number. Since the calculated number was found to be greater than 90%, 90% of Accounting Stock in areas zoned R-1 is at risk of conversion.
- B-2 Business zoning (15.3 acres minus 0.63 acres of wetlands) Per Protocol Section 11.2.A, for commercial zones, 90% of Accounting Stock is at risk of Conversion.

The Project Operator provided relevant sections of the zoning regulations as supporting documentation.

Project Operator quantified the avoidance of emissions from soil carbon caused by conversion of soils to impervious surfaces under Protocol Section 11.4. Zoning regulations for R-1 and B-2 zoning do not limit impervious surfaces. Per 11.4.A, 90% of the Project Area (excluding the wetlands) is allowable in a

commercial zone as eligible for conversion, and per 11.4.B., 50% of the Project Area (excluding the wetlands) is allowable in a residential zone as eligible for conversion.

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)	94.16
Does carbon quantification use stratification (yes or no)	No
Percent tree canopy cover within Project Area	97%
Project stock (tCO ₂ e)	23,826
Accounting Stock (tCO ₂ e)	19,061
On-site avoided biomass emissions (tCO ₂ e)	14,821
On-site avoided soil carbon emissions (tCO ₂ e)	5,596
Deduction for displaced biomass emissions (tCO ₂ e)	2,712
Deduction for displaced soil emissions (tCO ₂ e)	1,696
Credits from avoided biomass emissions (tCO ₂ e)	12,109
Credits from avoided soil emissions (tCO ₂ e)	3,900
Total credits from avoided biomass and soil emissions (tCO ₂ e)	16,009
Credits attributed to the project (tCO ₂ e), excluding future growth	16,009
Contribution to Registry Reversal Pool Account	1,601
Total credits to be issued to the Project Operator (tCO ₂ e)	14,408
(excluding future growth)	

GHG Assertion:

Project Operator asserts that the Project results in GHG emissions mitigation of 14,408 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 92% percent deciduous, and 5% percent coniferous for the 94.16-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)	48,521.6	\$102,555.56
Air Quality (t/yr)	3.4313	\$8,495.29
Cooling – Electricity (kWh/yr)	143,714	\$20,134.34
Heating – Natural Gas (kBtu/yr)	5,895,100	\$82,450.58
Grand Total (\$/yr)		\$213,635.77

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 December 6, 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 December 6, 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

As an accredited land trust, Project Operator has a professional team dedicated to stewardship of its easements and is required to meet minimum standards for all conservation projects, including a management plan, annual monitoring, and reporting. 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 February 7 in 2023.