

# Verification Report

## **City of Des Moines Urban Tree Planting Project 2023**

City Forest Credits Project Number 051

March 21, 2024

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# 1 INTRODUCTION

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Brian Goodall (a Validation and Verification Body (VVB) acting as a third-party verifier) was engaged to verify the City of Des Moines Urban Tree Planting 2023 (Project) Des Moines, Iowa, for the period of April 1, 2023, to November 30, 2023. The goal of the verification is to ensure that the GHG assertion is materially correct, and that the assertions made by the project are well documented.

## 1.1 PROJECT BACKGROUND

This project includes 1,951 trees that were planted throughout the City of Des Moines in spring and fall 2023. Tree planting locations are a mix of street tree plantings on city-owned rights-of-way and city-owned parks, but with the major focus on street tree plantings. The main species planted include flowering crabapple, lilac, tulip tree, redbud and greenspire linden species.

Trees Forever plants trees on behalf of the City of Des Moines and works closely with the City on all aspects of the planting including identifying sites to plant, communication with area citizens, and general promotion of the work. As the Project Operator, Trees Forever signed an agreement with the City to develop carbon credits for trees planted for this project. The main project goals are to increase tree equity across the city by targeting trees to under-resourced neighborhoods, work with Trees Forever's Growing Futures teen employees and area volunteers to plant trees, and to complete major street corridor plantings.

Throughout 2023, Trees Forever will plant and care for trees through the Growing Futures program, a youth-centered worker program, to address critical social, economic, and environmental needs in Des Moines. Growing Futures uses a thoughtfully designed and hands-on approach to give Iowa's young people needed workplace skills and open doors for them to green careers all while planting trees.

## 1.2 CONTACT INFORMATION

### Project Operator

Trees Forever  
80 W. 8<sup>th</sup> Ave  
Marion, Iowa 52302  
Contact: Megan Schneider, Director of Programs  
Phone: 515-776-0335  
Email: mschneider@treesforever.org

### Verifier

Brian Goodall  
6756 Degood Rd  
Ostrander, Ohio 43061  
Phone: 614-701-6839  
Email: goodallarborist@gmail.com

### 1.3 OBJECTIVE

The goal of this GHG emission removal verification is to ensure that the GHG assertion made by the Project is materially correct, that the assertions and assumptions used in the offset calculations are appropriate, that the offset calculations conform to the City Forest Credits (CFC) Protocol, and that the Project is in compliance with all CFC requirements relating to eligibility, accounting, and documentation.

## 2 VERIFICATION CRITERIA

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### 2.1 GENERAL

The Registry will accredit VVBs to act as third-party verifiers who meet the Registry's qualifications and complete training. Those accredited VVBs can then act to verify compliance with this Afforestation and Reforestation Protocol per International Standards Organization 14064-3. Specifically, the Registry adopts and utilizes the following standards from ISO 14064-3:

- Upon receiving a Project Design Document with data on eligibility, quantification of carbon and co-benefits, and a request for credits, the Registry will conduct a validation. If it validates the project at that stage, the Registry will retain a VVB to act as third-party verifier to verify compliance with this Protocol.
- The Registry requires a reasonable level of assurance in the accuracy of the asserted GHG removals to a reasonable level.
- The verification items identified in Tables 1 and 2 are all material elements, and any asserted GHG removals must be free of errors, misstatements, or omissions regarding those elements.
- The Registry will record, store, and track all quantification and verification data and either display it for public review or make it available for public review upon request.

### 2.2 PROTOCOL

The verification was conducted to the City Forest Credits Afforestation and Reforestation Protocol, version 11, February 24, 2023. The protocol here matches the version in the PIA.

### 2.3 LEVEL OF ASSURANCE

This verification was conducted to a reasonable level of assurance. The Verification Report accurately reflects the documentation contained in the Project Design Document and supporting documents.

## 3 SCOPE OF VERIFICATION

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- The Project is located in the limits of the City of Des Moines, an incorporated city, specifically described in the Project Design Document.

- Period is April 1, 2023 to November 30, 2023
- The verification includes review of documents, data, imagery, and other evidence provided by the Project Operator; independent checking of selected data; checking of calculations for accuracy and conformance with the Protocol.

## 4 VERIFICATION PROCESS

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### 4.1 VERIFICATION ACTIVITIES

The verification process consisted of the following activities:

- Verifier checked all requirements in the Protocol, confirmed that documentation satisfies the requirements of the Protocol, and that values extracted from the documents and conclusions drawn from the document are accurate and appropriate
- Verifier checked project maps, the shapefiles of tree planting locations and attributes, invoices, tree data, imaging, and attestations, attesting to requirements identified in the protocol.
- Verifier reviewed the accuracy of the carbon quantification and City Forest Carbon Forward Removal Credit calculations. Verifier reviewed the Project Operator's assertion that the Project results in total GHG emissions mitigation of 3490 tons CO<sub>2</sub>e over the 26-year Project Duration. Verifier reviewed the Project Operator's assertion that, per Protocol guidelines, 10% of the Project GHG emissions mitigation is issued after initial tree planting, or 349 tons CO<sub>2</sub>e.

### 4.2 CITY FOREST CREDITS AFFORESTATION AND REFORESTATION PROTOCOL REQUIREMENTS

Verifier reviewed the Project against all CFC Afforestation and Reforestation Protocol requirements and confirmed the following:

- Project Operator Identity (Section 1.1): Verifier confirmed identity by reviewing Project Operator website <https://treesforever.org/>, and its 501c3 IRS Tax Letter dated January 20, 1995.
- Project Design Document (Section 3): Verifier reviewed and confirmed Project Design Document is complete and accurate.
- Project Implementation Agreement (Section 1.3, 3, and 4): Verifier confirmed fully executed Project Implementation Agreement on file.
- Location (Section 1.4): Verifier reviewed mapping and location data by importing Project Operator's shapefile into ArcPro and confirmed the spatial data as a series of latitudes and longitudes and physical address locations for each tree along with attributes (species and dbh). The attachments met protocol criteria by illustrating the location with geospatial locations and regional maps with required titles and markers.

- Land Ownership or Right to Receive Credits (Section 1.7): Verifier confirmed Agreement to Transfer Credits.
- Commencement (Section 2.4, 3): Verifier reviewed Approval of Application Letter. Verifier reviewed the Attestation of Planting and confirmed the date the last project tree was planted.
- Project Documentation (Section 3 and Appendix A): Verifier confirmed all required project documentation present.
- Additionality (Section 4): Verifier reviewed for additionality as follows:
  - Legal requirements test (Section 1.8) – no law or ordinance for Project Operator to plant trees.
  - Performance Standards Baseline (CFC Standard, Section 4.9) – per the program wide performance standard baseline showing net tree loss, these trees are additional. The performance standard baseline is attached to the Project Design Document.
  - The Project did not plant trees on sites that were forested and then cleared of healthy trees (Section 1.9)
  - Project Operator signed a Project Implementation Agreement with City Forest Credits for 26 years.
  - The 26-year Project Duration commitment is additional to and longer than any commitment the Project Operator makes to non-carbon project tree plantings.
  - Project Operator completed and signed the Attestation of Additionality (Section 4).
- Permanence (Section 1.3, 2.2, and 8): Verifier confirmed Project Implementation Agreement imposes a legal obligation to Project Operator to conduct this project for 26 years, including a reversal obligation.
- Quantification (Section 10 and Appendix A):
  - Verifier confirmed Project Operator utilized the single-tree planting design CFC quantification methodology described in Appendix A.
  - Verifier reviewed the accuracy of the data integrity in the quantification methodology.
  - Verifier reviewed spreadsheets with tree data for carbon quantification, tree data which included species, tree ID, latitude/longitude coordinates, and a shapefile with the same data listed as the tree data but viewed in Geographic Information Systems (GIS) software to verify all locations within the city’s boundary.
  - Verifier reviewed the completed and signed Attestation of Planting and Attestation of Planting Affirmation.
- Co-Benefits (Appendix A): Verifier confirmed the calculation of ecosystem co-benefits as set forth in the City Forest Credits quantification tool.
- Attestation of No Double Counting of Credits and No Net Harm (Section 5)
  - Verifier reviewed the completed and signed Attestation of No Double Counting of Credits and No Net Harm.
  - Verifier compared the Project geospatial data to the registered urban forest carbon afforestation and reforestation projects geospatial database using the intersect tool on ArcGIS and determined no overlap was present.

## 5 VERIFICATION FINDINGS

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The Project documents and data were reviewed, and the Verifier found that the emission reductions claimed are reasonable and in accordance with the Preservation Protocol. The Verifier makes no further recommendations.

## 6 VERIFICATION RESULTS AND CONCLUSION

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This verification of the City of Des Moines Urban Tree Planting 2023 for the period April 1, 2023 to November 30, 2023 was completed in a manner consistent with ISO 14064-3 and in conformance with relevant CFC standards and guidelines.

The table below is a summary of the verified GHG emissions removals for the Project for initial credit issuance. These City Forest Carbon Forward Removal Credits are ex-ante credits based on forecasted removals and subject to multiple safeguards, including sampling, and which convert to ex-post at Year 26.

**Table 1. Project GHG Removals**

<b>Project Name</b>	<b>GHG Removals Attributed to the Project (mtCO<sub>2</sub>e)</b>	<b>GHG Removals After Deductions for Mortality (20%) (mtCO<sub>2</sub>e)</b>	<b>GHG Removals After Deductions for Reversal Pool Account (5%) (mtCO<sub>2</sub>e)</b>	<b>City Forest Carbon Forward Removal Credits to be Issued to Project (mtCO<sub>2</sub>e)</b>
City of Des Moines Urban Tree Planting 2023	4,592	3,674	3,490	349
Cumulative	4,592	3,674	3,490	349

**Table 2. Ecosystem Co-Benefits Per Year After 25 Years**

<b><i>Ecosystem Services</i></b>	<b><i>Resource Units</i></b>	<b><i>Value</i></b>
Rainfall Interception (m <sup>3</sup> /yr)	8,483.43	\$60,733.39
Air Quality (t/yr)	0.2713	\$1,208.95
Cooling – Electricity (kWh/yr)	282,150.29	\$21,415.21
Heating – Natural Gas (kBtu/yr)	4,076,932.66	\$39,687.85
<b>Grand Total (\$/yr)</b>		<b>\$123,045.39</b>

**Verifier Signature**

*Brian Goodall*

**Brian Goodall**