

Verification Report

Reforestation Des Moines, Iowa - 2021

City Forest Credits Project Number 016

December 2, 2021

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1 INTRODUCTION

Dr. Qingfu Xiao (Verifier) was engaged to verify the Reforesting Des Moines, Iowa - 2021 (Project) Des Moines, IA, for the period May 19, 2020 to November 11, 2021. 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

Tree planting for this project occurred throughout the City of Des Moines. Trees were planted along streets and in parks, but with the majority along streets. 1,799 trees were planted throughout 2020 and 2021 in the spring and fall, which is the primary planting season for Iowa's Midwest climate.

Trees Forever is under contract with the City of Des Moines to plant the city's trees as part of a carbon credit program and works with the forestry department to target tree plantings where they are needed most. Trees Forever worked closely with the City of Des Moines on all aspects of the planting including identifying sites to plant, communication with area citizens, and general promotion of the work. 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 2020 and 2021, Trees Forever continued to 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. In the spring and fall, Growing Futures teen employees planted trees. Then, throughout the summer, the teens provided weekly watering to all the newly planted trees. All trees planted go into a two-year watering rotation to help ensure better survivability.

1.2 CONTACT INFORMATION

Project Operator

Trees Forever

80 West 8th Avenue

Des Moines, IA 52302

Contact: Leslie Berckes, 515-681-2295, lberckes@treesforever.org

Verification Body

Dr. Qingfu Xiao

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1.3 OBJECTIVE

The goal of this GHG emission reduction 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

2.1 GENERAL

The Registry will accredit third-party verifiers who will verify compliance with this Tree Planting Protocol per International Standards Organization 14064-3. Specifically, the Registry adopts and utilizes the following standards from ISO 14064-3:

- Upon receiving a Project Report with updated data on eligibility, quantification of carbon and co-benefits, and a request for credits, the Registry or the Project Operator will retain a third-party verifier to verify compliance with this Protocol.
- The Registry requires a reasonable level of assurance in the accuracy the asserted GHG removals to a reasonable level.
- The verification items identified in Tables C.1 and C.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 Tree Planting Protocol, version 9, February 7, 2021.

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

- The Project encompasses land in Des Moines, IA, specifically described in the Project Design Document.
- Period is May 19, 2020 to November 11, 2021.

- 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

4.1 VERIFICATION ACTIVITIES

The verification process consisted of the following activities:

- CFC and Verifier jointly responded to questions from the Project Operator, regarding how to interpret the Protocol
- Verifier reviewed and commented on draft versions of the credit calculations
- 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 independently checked mapping and at least selected data or calculated values in each stage of calculations
- Verifier submitted to the Project Operator requests for clarifications and corrections, as issues came to light, and reviewed revised and corrected documents and calculations

4.2 CFC TREE PLANTING PROTOCOL REQUIREMENTS

Verifier reviewed the Project against all CFC Tree Planting Protocol requirements and confirmed the following:

- Project Operator Identify (Section 1.1): Verifier confirmed identity by reviewing Project Operator website or state/local records.
- Project Design Document (Section 8): Verifier reviewed and confirmed Project Design Document is complete and accurate.
- Project Implementation Agreement (Section 1.2): Verifier confirmed fully executed Project Implementation Agreement on file.
- Location (Section 1.3 and Appendix C): Verifier reviewed mapping and location data.
- Right to Receive Credits (Section 2 and Appendix C): Verifier confirmed either a signed Declaration of Land Ownership or Agreement to Transfer Credits.
- Commencement (Section 5 and Appendix C): Verifier reviewed Approval of Application Letter.
- Project Documentation (Section 6 and Appendix C): Verifier confirmed all required project documentation present.
- Additionality (Section 4 and Appendix C): Verifier reviewed for additionality as follows:

- o Legal requirements test – no law or ordinance for Project Operator to plant trees.
- o Performance Standards Baseline (Appendix D) – per the program wide performance standard baseline showing net tree loss, these trees are additional.
- Permanence (Appendix D): Verifier confirmed Project Implementation Agreement imposes a legal obligation to Project Operator to conduct this project for 25 years, including a reversal obligation.
- Quantification (Appendix B):
 - o Verifier confirmed Project Operator utilized the CFC quantification methodology described in Appendix B.
 - o Verifier reviewed the accuracy of the data integrity in the quantification methodology.
 - o Verifier reviewed geocoded photos and imaging.
 - o Verifier reviewed the Declaration of Planting and Declaration of Planting Affirmation.
- Co-Benefits (Appendix B): Verifier also confirmed the calculation of ecosystem co-benefits as set forth in the CFC-developed quantification tool below:

5 VERIFICATION FINDINGS

All issues raised by Verifier were clarified or corrected by the Project Operator and all issues were closed by appropriate responses by Trees Forever.

6 VERIFICATION RESULTS AND CONCLUSION

This verification of the Reforesting Des Moines, Iowa - 2021 for the period May 19, 2020 to November 11, 2021 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 emission reduction or removals.

Site(s)	GHG Removals (tCO ₂ e)	GHG Removals After Deductions for Mortality (20%) and Risk Buffer (5%) (tCO ₂ e)	CFC Carbon+ Credits to be Issued to Project (tCO ₂ e)
Reforesting Des Moines - 2021	5,786.1	4,397.5	439.75
Cumulative	5,786.1	4,397.5	439.75

Co-Benefits per year after 25 years (all live trees, includes tree losses)				
Ecosystem Services	Resource Units Totals	Resource Unit/site	Total \$	\$/site
Rainfall Interception (m3/yr)	11,138.02	6.19	\$79,737.79	\$44.323
CO₂ Avoided (t, \$20/t/yr)	251.01	0.14	\$5,020.25	\$2.791
Air Quality (t/yr)				
O₃	0.1470	0.0001	\$491.00	\$0.273
NO_x	0.0239	0.0000	\$79.68	\$0.044
PM₁₀	0.0771	0.0000	\$219.04	\$0.122
Net VOCs	0.0873	0.0000	\$721.83	\$0.401
Air Quality Total	0.3353	0.0002	\$1,511.54	\$0.84
Energy (kWh/yr & kBtu/yr)				
Cooling - Electricity	329,913.61	183.39	\$25,040.44	\$13.92
Heating - Natural Gas	4,710,988.41	2,618.67	\$45,860.21	\$25.49
Energy Total (\$/yr)			\$70,900.65	\$39.41
Grand Total (\$/yr)			\$157,170.23	\$87.37

Lead Verifier Signature



Dr. Qingfu Xiao