Verification Report

Ballinger Open Space Restoration Project

City Forest Credits Project Number 003

November 19, 2021

Dr. Qingfu Xiao

4216 Vistosa St

Davis, CA 95618

Table of Contents

1	INT	RODUCTION	. 3
	1.1	PROJECT BACKGROUND	
	1.2	CONTACT INFORMATION	. 3
	1.3	OBJECTIVE	. 4
2	VEF	RIFICATION CRITERIA	. 4
	2.1	GENERAL	. 4
	2.2	PROTOCOL	. 4
	2.3	LEVEL OF ASSURANCE	. 4
3	SCC	DPE OF VERIFICATION	. 4
4	VEF	RIFICATION PROCESS	. 5
	4.1	VERIFICATION ACTIVITIES	. 5
	4.2	CFC TREE PLANTING PROTOCOL REQUIREMENTS	. 5
5	VEF	RIFICATION FINDINGS	. е
6	VEF	RIFICATION RESULTS AND CONCLUSION	. 7

1 Introduction

Dr. Qingfu Xiao (Verifier) was engaged to verify the Ballinger Open Space Restoration Project (Project) Shoreline, WA, for the period December 1, 2018 to March 9, 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

The Mountains to Sound Greenway Trust (Greenway Trust) is partnering with the City of Shoreline to undertake ecological restoration at the 2.7-acre Ballinger Open Space in Shoreline, WA. Project funding has been secured through several grant programs, including funds from American Forests and Bank of America, The Nature Conservancy, King County Flood Control District, and King County Wastewater Treatment Division. The City of Shoreline has provided match through staff time (e.g., hazardous tree removal and trash removal) and project materials (e.g., wood chips). Tree planting occurred between December of 2018 and March of 2021. Over that period, 2,045 trees and shrubs were planted. However, some of those shrubs and small trees are not creditable, and CFC also required sampling in October 2021 to confirm the number of creditable trees planted and live. To date, 1,917 creditable trees have been planted at Ballinger Open Space.

Ballinger Open Space is in the Ballinger neighborhood of Shoreline, WA, surrounded by mixed income housing that shares the open space as a "back yard". Ballinger Creek, which ultimately flows into Lake Washington, passes through the property and exits through an undersized culvert that periodically backs up and causes flooding around the adjacent apartments. The open space has been neglected for decades and is overrun with invasive plants (Himalayan blackberry, English ivy, and several others) and currently has minimal tree canopy. Project work has included control of invasive weeds across Ballinger Open Space and installation of over 1,900 native trees (as well as several hundred native shrubs not being credited). Restoring healthy forest conditions at Ballinger Open Space will not only help with carbon sequestration, but should also improve water quality, minimize flood impacts, increase biodiversity and forest resilience, and improve both access and aesthetics for the neighbors of Ballinger Open Space.

1.2 CONTACT INFORMATION

Project Operator

Mountains to Sound Greenway Trust

First and Cedar Building, 2701 1st Ave #240, Seattle, WA 98121

Contact: Dan Hintz, Restoration Projects Manager, 206-735-1027, dan.hintz@mtsgreenway.org

Verification Body

Dr. Qingfu Xiao 4216 Vistosa St Davis, CA 95618

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 cobenefits, 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 5, April 18, 2018.

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 Shoreline, WA, specifically described in the Project Design Document.
- Period is December 1, 2018 to March 9, 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:

- <u>Project Operator Identify (Section 1.1):</u> Verifier confirmed identity by reviewing Project Operator website or state/local records.
- <u>Project Design Document (Section 8):</u> Verifier reviewed and confirmed Project Design Document is complete and accurate.
- <u>Project Implementation Agreement (Section 1.2):</u> 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.
- <u>Commencement (Section 5 and Appendix C):</u> Verifier reviewed Approval of Application Letter.
- <u>Project Documentation (Section 6 and Appendix C):</u> 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.
- <u>Permanence (Appendix D):</u> 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.
- <u>Co-Benefits (Appendix B):</u> Verifier also confirmed the calculation of ecosystem co-benefits as set forth in the CFC-developed quantification tool below:

Co-Benefits PER YEAR after 25 years (all live trees, includes tree losses)

	Resource Units	Resource		
Ecosystem Services	Totals	Unit/site	Total \$	\$/site
Rainfall Interception (m3/yr)	9,701.52	5.06	\$71,222.22	\$37.153
CO ₂ Avoided (t, \$20/t/yr)	91.96	0.05	\$1,839.13	\$0.959
Air Quality (t/yr)				
O3	0.2939	0.0002	\$608.97	\$0.318
NOx	0.0948	0.0000	\$196.40	\$0.102
PM10	0.1665	0.0001	\$613.13	\$0.320
Net VOCs	-1.2178	-0.0006	-\$939.68	-\$0.490
Air Quality Total	-0.6626	-0.0003	\$478.82	\$0.25
Energy (kWh/yr & kBtu/yr)				
Cooling - Electricity	100,421.12	52.38	\$5,141.56	\$2.68
Heating - Natural Gas	298,479.20	155.70	\$3,397.79	\$1.77
Energy Total (\$/yr)			\$8,539.35	\$4.45
Grand Total (\$/yr)			\$82,079.52	\$42.82

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 Mountains to Sound Greenway Trust.

6 VERIFICATION RESULTS AND CONCLUSION

This verification of the Ballinger Open Space Restoration Project for the period December 1, 2018 to March 9, 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 (tCO₂e)	GHG Removals After Deductions for Mortality (20%) and Risk Buffer (5%) (tCO₂e)	CFC Carbon+ Credits to be Issued to Project (tCO₂e)
Ballinger Open Space	2,847.0	2,163.71	216.37
Cumulative	2,847.0	2,163.71	216.37

Co-Benefits PER YEAR after 25 years (all live trees, includes tree losses)

	Resource Units	Resource		
Ecosystem Services	Totals	Unit/site	Total \$	\$/site
Rainfall Interception (m3/yr)	9,701.52	5.06	\$71,222.22	\$37.153
CO ₂ Avoided (t, \$20/t/yr)	91.96	0.05	\$1,839.13	\$0.959
Air Quality (t/yr)				
О3	0.2939	0.0002	\$608.97	\$0.318
NOx	0.0948	0.0000	\$196.40	\$0.102
PM10	0.1665	0.0001	\$613.13	\$0.320
Net VOCs	-1.2178	-0.0006	-\$939.68	-\$0.490
Air Quality Total	-0.6626	-0.0003	\$478.82	\$0.25
Energy (kWh/yr & kBtu/yr)				
Cooling - Electricity	100,421.12	52.38	\$5,141.56	\$2.68
Heating - Natural Gas	298,479.20	155.70	\$3,397.79	\$1.77
Energy Total (\$/yr)			\$8,539.35	\$4.45
Grand Total (\$/yr)			\$82,079.52	\$42.82

Lead Verifier Signature

fu Vins

Dr. Qingfu Xiao