

## **Verification Report**

### **Pierce Conservation District Reforestation Carbon Program 2020 Projects**

CFC Project Number 007

Revised: September 21, 2021

Dr. Qingfu Xiao

4216 Vistosa St

Davis, CA 95618

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# 1 INTRODUCTION

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Dr. Qingfu Xiao (Verifier) was engaged to verify the Pierce Conservation District Reforestation Carbon Program 2020 Projects (Project) in Puyallup, WA and South Prairie, WA, for the period March 25, 2020 to March 8, 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

### **Site #1: Peck Riparian Planting – Puyallup, WA**

Pierce Conservation District (PCD) works with cities and towns across Pierce County to improve riparian habitat and water quality through streamside plantings with native trees and shrubs. PCD is working with the City of Puyallup to remove invasive species and replant forested buffers on City-owned property, and currently manages nearly 40 acres of open space across the city. The Peck Riparian Planting Project is located on a 3.75 acre parcel along Clarks Creek in Puyallup, Washington. Clarks Creek is a salmon bearing stream supporting chinook, coho, and chum salmon, steelhead, and cutthroat trout that is impaired for many parameters, including temperature and dissolved oxygen. The recommendation in many Clarks Creek management plans is to vegetate the streamside to provide shade that will decrease temperature and increase dissolved oxygen.

The planting project area includes 1.5 acres of the site. Prior to planting in Fall 2020, PCD will need to remove invasive plants including reed canary grass and blackberry. PCD will plant 655 trees, including western red cedar, douglas fir, big leaf maple, sitka spruce, alder, cottonwood, and Oregon ash. The City of Puyallup will fund a professional crew to work on this site through establishment, which is typically 3 years. At that time PCD will install shrubs to complement the trees and will continue to look over the site to ensure success.

### **Site #2: South Prairie Creek Preserve – Interior Floodplain Planting – South Prairie, WA**

This riparian planting project will restore native vegetation to an estimated 7.65 acres of floodplain habitat along South Prairie Creek, a tributary to the Carbon River in the Puyallup-White River watershed. Planting will take place in an area owned by Pierce Conservation District and Pierce County that lies between a newly constructed, half-mile long side channel and the right bank of South Prairie Creek.

This planting is part of a larger project to improve salmon habitat and restore floodplain processes. The project site had been utilized as pasture for many decades and is characterized by a mix of mostly non-native grasses and invasive weeds. Ultimately, a total of approximately 40 acres will be planted. Prior to excavation and in-stream construction, 9.8 acres were planted Fall 2017-Spring 2020, and the remainder of the site will be planted over the course of two planting seasons. This application represents the planting scheduled to occur in the 2020-2021 season. The remainder of the site expected to be planted 2021-2022 will be submitted in the 2021 application and documentation.

## 1.2 CONTACT INFORMATION

### Project Operator

Pierce Conservation District

P.O. Box 1057

Puyallup, WA 98371

Contact: Ryan Bird, Habitat Improvement Coordinator, 253-845-9770 ext. 133, [ryanb@pierced.org](mailto:ryanb@pierced.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 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 PROTOCOL

The verification was conducted to the City Forest Credits Tree Planting Protocol, version 6, August 11, 2018.

## 2.2 LEVEL OF ASSURANCE

This verification was conducted to a reasonable level of assurance.

# 3 SCOPE OF VERIFICATION

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- The Project encompasses land in Puyallup, WA and South Prairie, WA, specifically described in the Project Design Document.
- Period is March 25, 2020 to March 8, 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

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### 4.1 VERIFICATION ACTIVITIES

The verification process consisted of the following activities:

- Verifier reviewed the credit calculations
- Verifier checked all requirements in the Protocol, and confirmed that documentation satisfies the requirements of the protocol, and that values extracted from the documents and conclusions drawn from the documents 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
  - Verifier confirmed identity by reviewing Project Operator website or state/local records
- Project Design Document
  - Verifier reviewed and confirmed Project Design Document is complete and accurate
- Project Implementation Agreement
  - Verifier confirmed fully executed PIA on file
- Location
  - Verifier reviewed mapping and location data
- Right to Receive Credits
  - Verifier confirmed either a signed Declaration of Land Ownership or Agreement to Transfer Credits
- Commencement
  - Verifier reviewed Approval of Application Letter
- Project Documentation
  - Verifier confirmed all required project documentation present
- Additionality
  - Verifier reviewed for additionality as follows:

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

**Summary of Peck and SPCP**

Ecosystem Services	Units Totals	Res Unit/site	Total \$	\$/site
Rain Interception (m3/yr)	19,413.73	10.89	\$142,522.88	\$79.963
CO2 Avoided (t, \$20/t/yr)	185.19	0.10	\$3,703.84	\$2.052
Air Quality (t/yr)				
O3	0.5854	0.0003	\$1,213.17	\$0.678
NOx	0.1893	0.0001	\$392.19	\$0.219
PM10	0.3250	0.0002	\$1,196.51	\$0.677
Net VOCs	-1.8017	-0.0011	-\$1,390.22	-\$0.830
Air Quality Total	-0.7020	-0.0005	\$1,411.65	\$0.74
Energy (kWh/yr & kBtu/yr)				
Cooling - Elec.	40,447.86	22.41	\$3,643.22	\$3.55
Heating - Nat. Gas	125,341.13	68.22	\$2,463.20	\$2.36
Energy Total (\$/yr)			\$6,106.42	\$5.91
Grand Total (\$/yr)			\$153,744.79	\$88.67

## 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 Pierce Conservation District.

## 6 VERIFICATION RESULTS AND CONCLUSION

This verification of the Pierce Conservation District Reforestation Carbon Program 2020 Projects for the period March 25, 2020 to March 8, 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 GHG removals, Carbon+ Credits to be issued, and ecosystem co-benefits verified.

Site(s)	GHG Removals (mtCO <sub>2</sub> e)	GHG Removals After Deductions for Mortality (20%) and Risk Buffer (5%) (mtCO <sub>2</sub> e)	CFC Carbon+ Credits to be Issued to Project (mtCO <sub>2</sub> e)
Peck	1,091	829	83
South Prairie Creek Preserve	4,945	3,758	376
Cumulative	6,036	4,587	459

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Lead Verifier Signature



Dr. Qingfu Xiao