

KULSHAN CARBON TRUST

Impact Report



2022-2023

Introduction

Bellingham, WA is home to the Kulshan Carbon Trust (KCT), founded in early 2021 as a new type of trust and a vehicle for community engagement. Our mission is to conserve and sequester carbon through collaborative natural climate solutions in Northwest Washington.

We promote the adoption of collaborative natural climate solutions (NCS) that reduce greenhouse gas (GHG) emissions, regenerate ecosystems, sequester carbon, and revitalize rural communities. As a positive response to climate change, we endeavor to grow and protect carbon reserves by systematically reducing carbon emissions attributable to agriculture and forestry. We selected these sectors because farms and forests are essential to our local economy and, overall, these land uses are responsible for one-quarter of GHG emissions.

Rather than waiting for a top-down policy response, we are developing an adaptive, community-based, and incentive-driven approach to stimulate regenerative NCS. These down-to-earth actions all harness life-giving physical and biochemical processes such as photosynthesis and soil microbial activity that cause ecosystems to thrive and grow carbon reserves.

KCT's role is to convene and facilitate stakeholder groups with complementary interests. We intend to organize at a meaningful scale the types of regenerative NCS projects that enable participants to earn a living and landscapes to thrive. We also want to help fund NCS projects by tapping traditional and regenerative financing. Our strategy involves propagating know-how, advancing a proper legal framework, and developing economic incentives for people interested in applying NCS to create a better future for themselves and their children. Considering threats related to climate change and the benefits of early action, KCT has identified the following nature-based solutions as appropriate for our service territory:

- **Ecological Forestry**
- **Agroforestry**
- **Biochar**
- **Regenerative Agriculture**
- **Blue Carbon**

We will work with diverse stakeholders to encourage land stewardship methods that stockpile carbon and promote vital ecosystem services. We focus on building resilience to help communities prepare for and respond to climate disruption. Our non-profit aims to make forests and fields within our NW Washington service territory a living laboratory for regeneration.

Message from a Co-Founder



"KCT is evolving into an organization designed for community engagement that inspires problem-solving, reciprocity, and collective action. Our workgroups comprise students, community leaders, business managers, professionals, practitioners, and landholders working to develop and scale NCS projects. Team members gather data, consult thought leaders, and evaluate indigenous, conventional, and innovative land management methods to revitalize ecosystems and optimize carbon conservation. We aim to make our service territory around the Salish Sea a proving ground for natural climate solutions that can decarbonize the economy and help its communities adapt to impending climate disruption at the landscape level. Our ultimate goal for the Kulshan Carbon Trust is to successfully demonstrate a flexible, scalable, and replicable model for a widespread carbon conservation trust (CCT) network that we will call The Carbon Conservancy™."

Howard Sharfstein,
Co-founder & President



Natural Climate Solutions

Our Program

Using grant funds and tax-exempt donations, Kulshan Carbon Trust is supporting the adoption and implementation of natural climate solutions (e.g., regenerative agriculture, sustainable biochar production, agroforestry, and ecological forestry) that protect existing carbon reserves and rebuild carbon stockpiles in soils and plants in northwestern Washington. The program includes the following elements:

- Landholder education & engagement
- Technical support
- Collaborative supply chain development
- Market-based incentives supporting landholders that implement climate-friendly practices

Our Trajectory

To incentivize the uptake of NCS in our bioregion, KCT is exploring different regenerative financing methods. We have developed a methodology for awarding biochar eco-credits through the Regen Registry and are allocating carbon credits to stakeholders involved in biochar projects. We see Washington's new Climate Commitment Act as an excellent opportunity to award credits to appropriate natural climate solutions under the state program that represent real carbon emissions reductions with meaningful co-benefits.

Natural Climate Solutions

include...



Ecological Forestry promotes biodiversity, resilience & carbon sequestration



Agroforestry with reliable measurement of carbon capture and sequestration



Biochar Supply converts biomass waste into carbon stockpiles with many co-benefits



Regenerative Agriculture polyculture practices that build soil carbon



Blue Carbon reserves that safeguard rich organic matter in marine environments

Biochar Pilot Project

In 2022, Kulshan Carbon Trust convened 14 stakeholders to implement three collaborative biochar pilot projects in Whatcom, Skagit, and Island Counties, Washington. We designed these projects to explore multiple biochar production and application techniques relevant to our communities. In addition, KCT convened and facilitated a workgroup to help *valorize* the resulting biochar with appropriate protocols to measure, report, and verify marketable carbon credits.

As a result of this collaboration, we diverted 207 tons of waste, sequestered an estimated 115 tons of carbon dioxide, developed an open-source carbon accounting methodology, and laid the groundwork for establishing a local biochar supply chain. We envision local biochar production and application fostering a marketplace that incentivizes sustainable land use practices, sequesters carbon, builds healthier soils, diverts biomass waste streams, and mitigates wildfire risk.

METHODS	DETAILS	OUTCOME
Quench burning slash piles to produce biochar	Reimagine forestry residue practices to conserve carbon	<ul style="list-style-type: none">• 9.79 tons biochar produced• 24.05 tons CO₂eq sequestered
Pyrolysis of clean construction & demolition waste	Create a valuable soil amendment using a portable kiln	<ul style="list-style-type: none">• 1.7 tons biochar produced• 4.18 tons CO₂eq sequestered
Conservation burns for landscape-level fuel reduction	Reduce wildfire risk while sequestering carbon	<ul style="list-style-type: none">• 29 tons of biochar produced• 87 tons CO₂eq sequestered

Key 2022 Metrics

115+

Tons CO₂e_q
Sequestered

22

Stakeholders
Engaged

25+

Hrs Technical
Support Provided

6

Undergraduate
Internships

3

New Board
Members

3

Project Grants
Received/Awarded

3

Pilot Projects
Completed

Our 2023 Goals

1

Facilitate a local supply chain that enables landowners to produce and apply biochar and bring verified carbon credits to market.

We will provide biochar education, technical assistance, and carbon market access to landowners in our region through workshops and work to develop a model carbon cooperative. In addition, we will conduct a collaborative business planning process to define biochar market opportunities and support needs.

2

Conduct one or more collaborative pilot projects that yield carbon credits and establish proof of concept for the role of carbon trusts in developing and scaling NCS.

We will convene stakeholders, build alliances, consult experts, and facilitate collaborative project development for KCT's second pilot project to demonstrate agroforestry or another NCS, including durable legal protection within the project agreements.

3

Build KCT's reputation as a trustworthy and capable non-profit that effectively enables collaborative NCS projects.

We will establish an accessible online presence to provide NCS support services throughout our service territory, develop a process for engaging volunteers, and implement a targeted communication strategy for focused conversations and outreach with selected project partners and key stakeholders.

4

Refine our organizational design and enhance our financial procedures to strengthen KCT's capacity to fulfill its mission.

We will establish clear roles within an effective organizational framework to build a culture of accountability, capability, and excellence. We will employ intuitive communication technologies, robust financial processes, and equitable agreements that build trust among stakeholders to establish working alliances for implementation of collaborative NCS.

We thank you for your ongoing support of our organization

Acknowledgments

Our co-founders Steve Hollenhorst, Howard Sharfstein, and Jessa Clark were pivotal to our success in 2022. We would also like to acknowledge the hard work of our NCS program coordinator Gabe Travis, graduate fellow Ava Stone, interns, and board members Martin Mehalchin (Secretary), Sarah Parker, Erika McPhee-Shaw, Andrew Shelton, and Stefanie Cilinceon.

Key 2022 Partnerships:

- Regen Foundation
- Regen Network
- Janicki Logging & Construction
- Lautenbach Recycling
- Skagit Soils
- US Rake Force
- Whatcom, Skagit, and Island County Conservation Districts

2022 Funders:

- Sustainable Path Foundation
- Wander Brewing
- Fairhaven Stones Throw Brewery

We acknowledge the land of the Coast Salish Peoples in which our service territory resides. The Coast Salish Peoples have lived in the Salish Sea basin, throughout the San Juan Islands and the North Cascades watershed, from time immemorial. This acknowledgement does not take the place of authentic relationships with Indigenous communities, but serves as a first step in honoring Coast Salish Peoples and their homelands.



Kulshan Carbon Trust

1515 Larrabee Avenue
Bellingham, WA 98225
kulshancarbontrust.org
contact@kulshancarbontrust.org