Feasibility Planning for Pacific Northwest Blue Carbon Finance Projects

Project Location

Pacific Northwest

Project Duration

September 1, 2018 to August 31, 2019

Project Lead

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Project Type

Catalyst – Targeted investment for advancing collaborative science

Project Collaborators

- Cool Effect
- Environmental Services Inc.
- Institute for Applied Ecology
- Oregon State University
- Padilla Bay National Estuarine Research Reserve, Washington
- Portland State University
- Puget Sound Partnership
- Restore America's Estuaries
- Silvestrum Climate Associates, LLC
- South Slough National Estuarine Research Reserve, Oregon
- Terracarbon, LLC
- The Climate Trust
- Verified Carbon Standard
- Washington Department of Natural Resources
- Western Washington University

Overview

Tidal wetlands play an important role in carbon sequestration by capturing a substantial amount of carbon—termed "blue carbon"—and storing it below ground. Since the Verified Carbon Standard first released a draft "Methodology for Tidal Wetland and Seagrass Restoration" in 2013, members of the Pacific Northwest Coastal Blue Carbon Working Group have been working to fill blue carbon data gaps to facilitate the application of this methodology to the conservation and restoration of Pacific Northwest tidal wetlands. This includes data collection and database development efforts, such as the Pacific Northwest blue carbon stocks and database project supported by the Science Collaborative.

This catalyst project takes the next step by demonstrating the feasibility of including carbon finance in funding strategies that support the conservation and restoration of tidal wetlands, eelgrasses, and coastal lowland sea level rise buffer areas in the Pacific Northwest. By evaluating the viability of blue carbon projects at two sites in Washington (Snohomish and Skagit Estuaries) and one in Oregon (Coos Estuary), the project team is advancing local stakeholders' understanding of next steps for blue carbon management and financing opportunities for land management actions in coastal communities.

Anticipated Benefits

- Increased engagement among landowners, land managers, policy makers, and local stakeholders about the role of blue carbon financing in the development of tidal wetland conservation and restoration projects.
- Guidance to the National Estuarine Research Reserve System, the larger science community, and funding agencies about additional blue carbon data needs.
- Increased understanding among project end users and local stakeholders of the potential viability of blue carbon investments in the Pacific Northwest.
- Supporting information provided to the State of Washington legislature, which is considering a carbon tax as a finance mechanism for management of blue carbon ecosystems.
- Advanced understanding for carbon market investors to consider investing in PNW blue carbon projects.

Project Approach

Feasibility assessments help inform the decision to pursue carbon project development and registration with the Verified Carbon Standard. This project is conducting blue carbon feasibility assessments in three estuaries—the Snohomish and Skagit Estuaries (near Padilla Bay Reserve) and Coos Estuary (near South Slough Reserve). These assessments focus on local tidal wetland restoration and conservation sites and evaluate the technical and financial aspects of landscape-scale blue carbon project development.

The technical analysis involves mapping "baseline" land uses considering likely land use change and sea level rise scenarios (50 and 100 years) and then evaluating the potential climate mitigation benefits of specific conservation and restoration project scenarios at key sites. Using these analyses, the team will explore the carbon finance potential for the project as a whole. After completing the feasibility assessments, the project team will work with end users to select one site for which they will develop the outline for a project document which would need to be prepared if carbon project development and registration is pursued.

End users are engaged in the assessments at their respective sites, largely through participation in workshops. At project kickoff workshops, end users will help the project team scope and scale the feasibility assessments according to their priority needs and availability of data. End users will then reconvene at a final workshop to present assessment results and discuss implications for the design, funding, and implementation of the projects. Participants at each site will receive a roadmap that outlines future steps to take and information gaps to fill toward establishing a blue carbon project.

Targeted End Users and Anticipated Products

The project engages a wide range of stakeholders and end users, including members of the Pacific Northwest Blue Carbon Working Group; local restoration partners and advocates like the Tulalip Tribes, Snohomish County, EarthCorps, City of Everett, and the Coos Watershed Association; and the Padilla Bay and South Slough Reserves. The feasibility assessments will also help two potential carbon offset buyers—the Climate Trust and Cool Effect—determine whether to expand investment to the wetland sector of the carbon market beyond their work in other sectors.

About the Science Collaborative

The National Estuarine Research Reserve System's Science Collaborative supports collaborative research that addresses coastal management problems important to the reserves. The Science Collaborative is managed by the University of Michigan's Water Center through a cooperative agreement with the National Oceanic and Atmospheric Administration (NOAA). Funding for the research reserves and this program comes from NOAA. Learn more at coast.noaa.gov/nerrs or graham.umich.edu/water/nerrs.