



CASE STUDY

CITY OF ISSAQUAH, WA

HARVEY MANNING PARK
EXPANSION PRESERVATION
PROJECT

EXECUTIVE SUMMARY

The City of Issaquah leveraged verified carbon credits for over \$200,000 in funding for forest conservation and stewardship in Issaquah, WA.

Background

The City of Issaquah is in western Washington and home to about 40,000 residents. With its unique location – nestled amongst forested hillsides at the foot of the Cascade mountain range – environmental stewardship has long been a goal of the City.

About the Harvey Manning Park Expansion Project

The Harvey Manning Forest is situated within the Issaquah city limits and the Greater Seattle urban growth area. The 100-year-old mixed evergreen-deciduous forest was threatened by conversion to a 57-lot residential development.

By protecting this forest, the City is expanding a large forested corridor on Cougar Mountain, with benefits for both people and the environment. The expanded park increases recreational opportunities for residents, creates contiguous wildlife habitat, and protects waterways that feed into salmon-bearing streams.

Carbon Credit Opportunity

A new funding source

With carbon crediting as a supporting revenue source, the City was able preserve and steward an urban forestland under threat of development. In addition to generating goodwill from the community, protecting this area, in part through carbon crediting, aligns with the City's recently launched Climate Action Plan.



AT A GLANCE

Year Registered: 2021

Size: 15 acres

Location: Issaquah, WA

Project Credits: 6,409 tons CO₂

Staff Time: 60 hours

Issaquah Credits Sold (2022):
6,409 tons CO₂

Issaquah Gross Revenue (2022):
\$218,000

Average Price per Credit: \$34

Registry Fees: \$22,000

"Carbon crediting for urban areas is a new revenue source to invest right back into protecting and stewarding our forests."

**- Jeff Watling, Parks and Community Services Director,
City of Issaquah**

INTRODUCTION

Urban growth is projected to add close to 100 million acres of urban land to the United States by 2060, an area roughly equivalent to the size of Montana. Trees and forests in cities have acquired greater significance as “green infrastructure,” providing services such as stormwater reduction, carbon storage, energy savings, public health benefits, and air quality improvements.

City Forest Credits (CFC) is a national nonprofit carbon registry that serves one sector of carbon – the carbon stored in forests and trees in metropolitan areas in the United States. Through third-party verified carbon crediting, CFC is providing a new way for private-sector dollars to finance conservation projects that contribute to the health and well-being of people and the environment. CFC’s 40 and 100-year Tree Preservation Protocol protects urban forests that are at risk of conversion to non-forest use such as residential or commercial use.

Municipalities can leverage urban forest carbon credits as a finance tool to protect land. The City of Issaquah, WA employed carbon crediting to expand recreation opportunities, preserve critical habitat on Cougar Mountain, promote the City’s canopy goals, and provide stormwater and air quality benefits for residents.

BACKGROUND

The City of Issaquah is in western Washington and home to about 40,000 residents. With its unique location – nestled amongst forested hillsides at the foot of the Cascades – environmental stewardship has long been a goal of the City. The City currently owns and manages about 1500 acres of forestland and partners with other public agencies such as the state and county to align on acquisition goals.

CHALLENGES

The City strives to balance the community’s interests in preservation and conservation with a strategic view of development and stewardship. As in most other cities, the price of land in Issaquah is rapidly increasing. Acquiring and protecting forestland on flat, developable areas within the city is extremely expensive. Funds must be available not just to purchase the property, but also for long-term maintenance and stewardship – and with climate change putting increasing stress on the forests, stewardship costs are increasing.



OPPORTUNITY

In 2017, the City received a development application for a 57-lot residential subdivision on a 46-acre site on Cougar Mountain. In response to community opposition to the planned development and support for the opportunity to protect the forest that connects trails and habitat throughout the Issaquah Alps, the City began exploring acquisition of the property. In addition to state and county grant funding, carbon crediting was a key part of the City's finance plan to protect the land and forest from development. The City acquired 33.5 acres of the property, 15 acres of which were eligible for carbon crediting under City Forest Credits' 40-year Tree Preservation Protocol. King County acquired the remaining 12.5 acres.



CITY FUNDING SOURCES FOR ACQUISITION

In general, the City's approach is to acquire forestland in fee to permanently protect it, with dynamic funding strategies that can include state or county grants and City general funds or capital budget. For the Harvey Manning acquisition, carbon crediting revenue and a bridge loan from the Trust for Public Land were other important sources.

BENEFITS

A new source of conservation revenue

For the City of Issaquah, carbon crediting was a new revenue source to support the preservation and stewardship of urban forestland under threat of development. Revenue from the credit sales will be used to support stewardship activities such as the Green Issaquah Program, which promotes forest health by removing invasive plants and restoring understory.

Alignment with the City Climate Action Plan

In protecting this site, the City took a regional leadership role, generating a great deal of goodwill from both the community and partner agencies. Protecting this area, in part through carbon crediting, was also a celebration of, and in alignment with, the City's recently launched Climate Action Plan.



PROJECT SNAPSHOT

Forest Details

The Project includes 15 acres of forest on a 33.5-acre property. The 100-year-old forest consists of a mixture of coniferous and deciduous trees, including Douglas Firs and Big Leaf Maples, with riparian and wetland habitat supporting wildlife corridors on Cougar Mountain.

Urban Location

The Project is within the limits of the City of Issaquah, WA, and the greater Seattle urban growth boundary.

Preservation Commitment

The City recorded a Declaration of Development Restriction to protect the trees from removal. The forest will be protected in perpetuity, exceeding the 40 years required by the 40-year Tree Preservation Protocol.

Threat of Loss

At the time of the acquisition, the Project was zoned residential for single family and estate lots. The property sold for \$317,463 per acre, far exceeding the threshold of \$8,000/acre for bare land required by the Tree Preservation Protocol (Section 4.3C) to demonstrate the development pressures.

Effort and Due Diligence

Significant time was spent during early conversations with CFC to scope out a project that would be a good fit for carbon crediting. Once the Harvey Manning property was identified as a promising candidate, about 60 hours of staff time were spent completing the crediting documentation for the project.

There was significant complexity in determining the exact Project Area size. Of the 33.5 acres acquired by the City, 15 acres were eligible for crediting. Critical areas, steep slopes, and wetlands were excluded because they couldn't be developed nor allow trees to be harvested.



Timeline

- Fall 2018** Initial discussions with CFC
- October 2021** Application submitted to CFC
- December 2021** Preservation Commitment recorded
Crediting documents submitted to CFC
Third-party verification completed
- January 2022** Credits issued and sold

Monitoring and Reporting


The City is stewarding the Project site to ensure forest health and will submit monitoring reports to CFC every three years. Should a loss of trees occur due to neglect or willful harm, the City will be responsible for compensating or returning the reversed credits. Per the Protocol, the City may request credits for additional carbon sequestered in new growth.

Approvals and Decision-Making Process

Multiple conversations with the City Council were required to introduce the Council to the idea of carbon crediting as a means of generating revenue for forest protection and stewardship and to get their approval.

Because the conversations were happening in parallel with the Climate Action Plan, there was increased momentum and interest.

The City also obtained state approval to credit trees on the property, as a portion of acquisition funding was a state grant from the WA Recreation and Conservation Office.






Credit Issuance (tons CO₂)

Credits Attributed to the Project	7,121
10% Registry Reversal Pool	712
Total Credits Issued to Project	6,409

Co-Benefits

Well-designed and managed urban forests make significant contributions to the environmental sustainability, economic viability and livability of cities. Carbon projects like the Harvey Manning Park Expansion provide social, human health, and equity impacts that contribute towards the achievement of global targets such as the UN Sustainable Development Goals.

2021 Project Quantified Co-Benefits & Sustainable Development Goals			
Rain interception	3,084 m ³ /yr	\$22,600/yr	
Air Quality Improvements	O ₂ : 0.11 t/yr NO _x : 0.04 t/yr PM ₁₀ : 0.05	\$104.21/yr	
Energy Savings	8,464 kWh/yr 31,865 kBtu/yr	\$800/yr	
			<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>3 GOOD HEALTH AND WELL-BEING</p> <p>Expand recreation opportunities</p> </div> <div style="text-align: center;">  <p>13 CLIMATE ACTION</p> <p>Deliver local climate action</p> </div> <div style="text-align: center;">  <p>15 LIFE ON LAND</p> <p>Protect contiguous wildlife corridors</p> </div> </div>

THE OUTCOME

Credit Sale

In 2021, 13 urban forest carbon projects pooled 31,000 credits into a national sale to a single buyer. The City participated in the national sale to lighten the administrative and organizational burden of finding a buyer and negotiating a sale, while still selling the credits at a competitive price. Through the national sale, the City sold 6,409 credits at \$34/credit to Regen Network.

Commitment to the Property

The CFC Tree Preservation Protocol requires at least a 40-year preservation commitment. The City is protecting the site in perpetuity through a conservation easement and Deed of Right. The City has also rezoned the parcels to Open Space to further protect it from development. The City will use the property for both conservation and for passive recreation to connect visitors to other public lands and trails on Cougar Mountain, and is supported by local non-profits.



"The property was on a really critical location on the mountain. Protecting it meant listening to the voices of the community, their passion to preserve the forested hillside, and meeting a key goal of the City's Comprehensive Plan. "

**Jennifer Fink, Park
Planner & Project
Administrator, City of
Issaquah, WA**

TIPS FROM THE CITY OF ISSAQUAH

- **Not every property is a good fit for carbon crediting.** Evaluate each potential project carefully to ensure that it's of sufficient scale to make economic sense, given the monitoring and documentation required for a carbon project.
- **There is a learning process to scoping out a project.** Spend time on the front end understanding the protocols and eligibility criteria. Once a property has been identified, there can also be additional complexity when drawing the project area boundaries to exclude portions that are in steep slopes, wetlands, or other sensitive/protected areas. Be sure to build that into your staff time estimates.
- **Be transparent with funders.** Ensure that funding sources are open to carbon crediting on properties whose acquisition they're supporting.

