Quinte Forestry Project

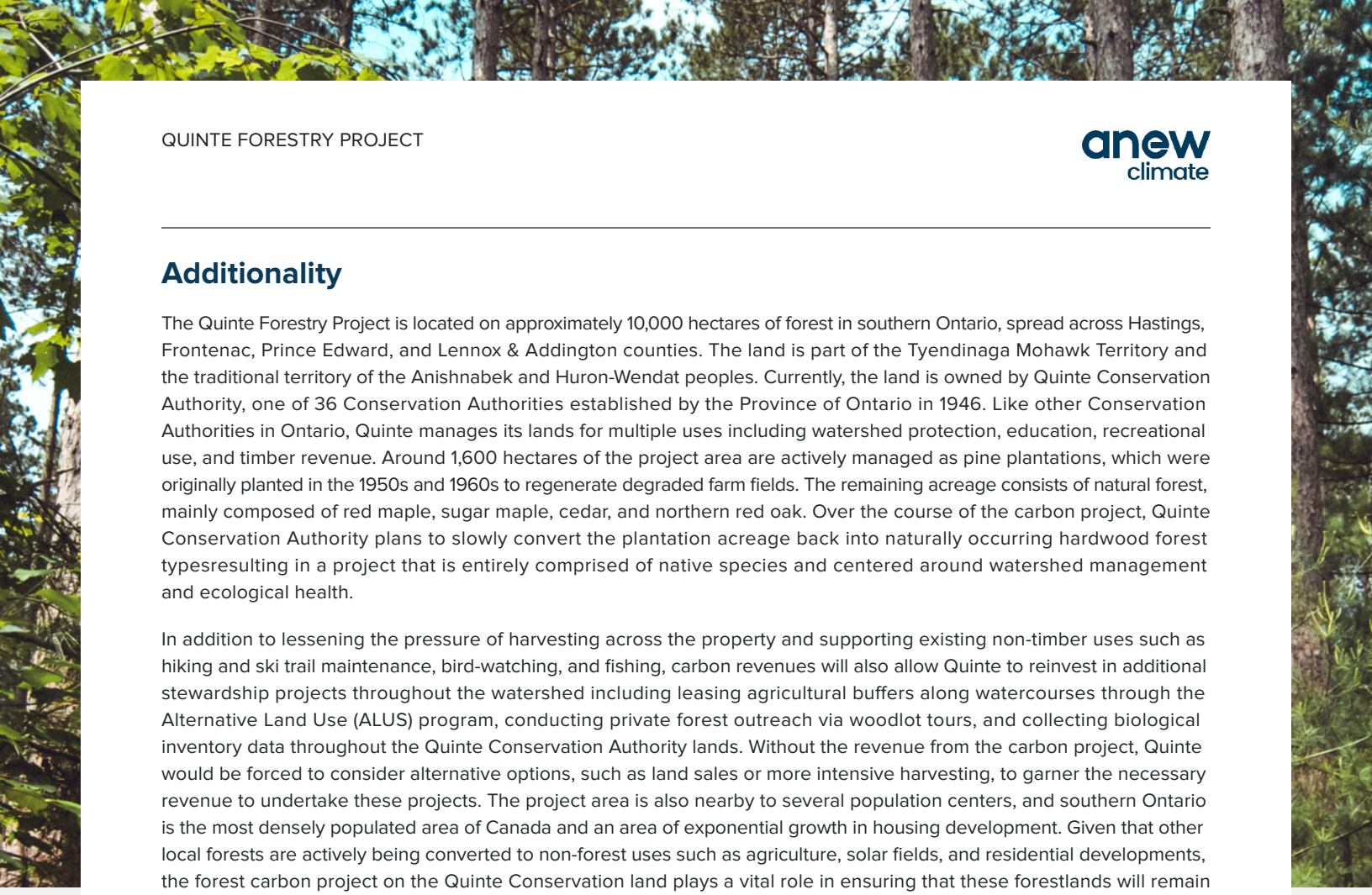
10K+
Forested acres

997K+
mtCO2 emissions reductions over the project's first 20 years

LOCATION
Southern Ontario

PROJECT TYPE
Improved Forest Management

REGISTRY/PROTOCOL
American Carbon Registry



Additionality

The Quinte Forestry Project is located on approximately 10,000 hectares of forest in southern Ontario, spread across Hastings, Frontenac, Prince Edward, and Lennox & Addington counties. The land is part of the Tyendinaga Mohawk Territory and the traditional territory of the Anishnabek and Huron-Wendat peoples. Currently, the land is owned by Quinte Conservation Authority, one of 36 Conservation Authorities established by the Province of Ontario in 1946. Like other Conservation Authorities in Ontario, Quinte manages its lands for multiple uses including watershed protection, education, recreational use, and timber revenue. Around 1,600 hectares of the project area are actively managed as pine plantations, which were originally planted in the 1950s and 1960s to regenerate degraded farm fields. The remaining acreage consists of natural forest, mainly composed of red maple, sugar maple, cedar, and northern red oak. Over the course of the carbon project, Quinte Conservation Authority plans to slowly convert the plantation acreage back into naturally occurring hardwood forest typesresulting in a project that is entirely comprised of native species and centered around watershed management and ecological health.

In addition to lessening the pressure of harvesting across the property and supporting existing non-timber uses such as hiking and ski trail maintenance, bird-watching, and fishing, carbon revenues will also allow Quinte to reinvest in additional stewardship projects throughout the watershed including leasing agricultural buffers along watercourses through the Alternative Land Use (ALUS) program, conducting private forest outreach via woodlot tours, and collecting biological inventory data throughout the Quinte Conservation Authority lands. Without the revenue from the carbon project, Quinte would be forced to consider alternative options, such as land sales or more intensive harvesting, to garner the necessary revenue to undertake these projects. The project area is also nearby to several population centers, and southern Ontario is the most densely populated area of Canada and an area of exponential growth in housing development. Given that other local forests are actively being converted to non-forest uses such as agriculture, solar fields, and residential developments, the forest carbon project on the Quinte Conservation land plays a vital role in ensuring that these forestlands will remain intact and positively contributing to the sensitive aquatic resources of the region.

Baseline Description

Given Quinte's management objectives, the project's baseline only constitutes an annual harvest of less than 2% of the project area per year, which is highly comparable to the activities of nearby Conservation Authorities. With the strong regional marketplace which supports a variety of wood product types, this baseline wood product generation would be easily absorbed by the nearby mill infrastructure and could be considered highly likely, especially because without the revenue from a carbon project, Quinte Conservation Authority would need to find alternative sources of funding to pay property taxes and other operational expenses. The baseline incorporates harvest restrictions around all waterbodies and watercourses in a manner that is consistent with what is currently implemented on Crown land. This baseline considers riparian management zones (RMZs), in which harvests would be limited to protect sensitive slope areas and to retain higher amounts of crown cover that Quinte is not legally required to consider in their harvest practices.

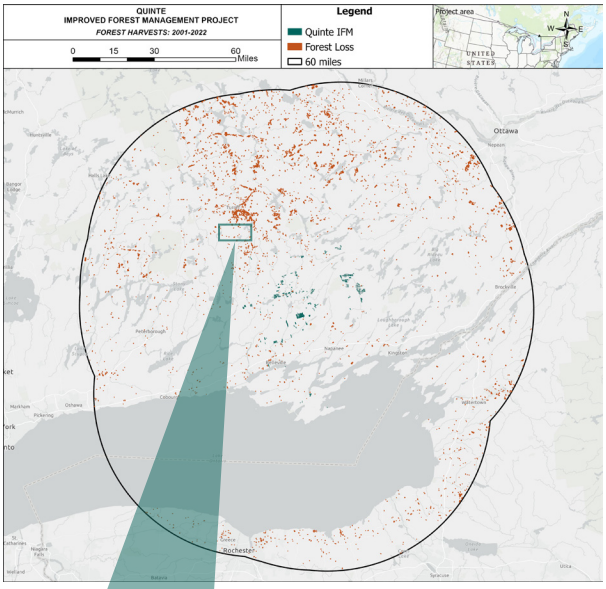
How does IFM generate both removals and conservation credits?

Conservation Credits
Conservation credits account for climate benefit coming from the protection of the project area. Emissions that would have been released if the land was instead harvested in the absence of the project are quantified. Many of the co-benefits associated with forestry projects are inherently linked to the preservation of existing forest stands.

Removal Credits
As the newly protected trees grow, carbon is pulled from the atmosphere and sequestered in the trees' wood material through the most proven direct air capture technology on the planet, photosynthesis.

Regional Harvest Activities

A conservative baseline scenario considers not only what a landowner could do, but what a landowner plausibly would do in the absence of the harvest limitations associated with a carbon project. In the below map, Anew demonstrates actual recent harvests in the project area's region. This data speaks to the strength of local timber markets and common management practices on forested properties of comparable size and ownership type—an integral piece in informing the accuracy and viability of assumptions in the baseline scenario.



Harvest Comparison

All harvests/forest losses larger than 5 acres that happened between 2001 and 2022 within a 60 mile radius from the project area are depicted in orange, showing the very real pressures on forests in the area. The carbon project ensures sustainable management on the project area for 40 years, twice as long as the period depicted above.

Actual high-resolution satellite imagery of harvest events within the project region. Before (A) and after (B)

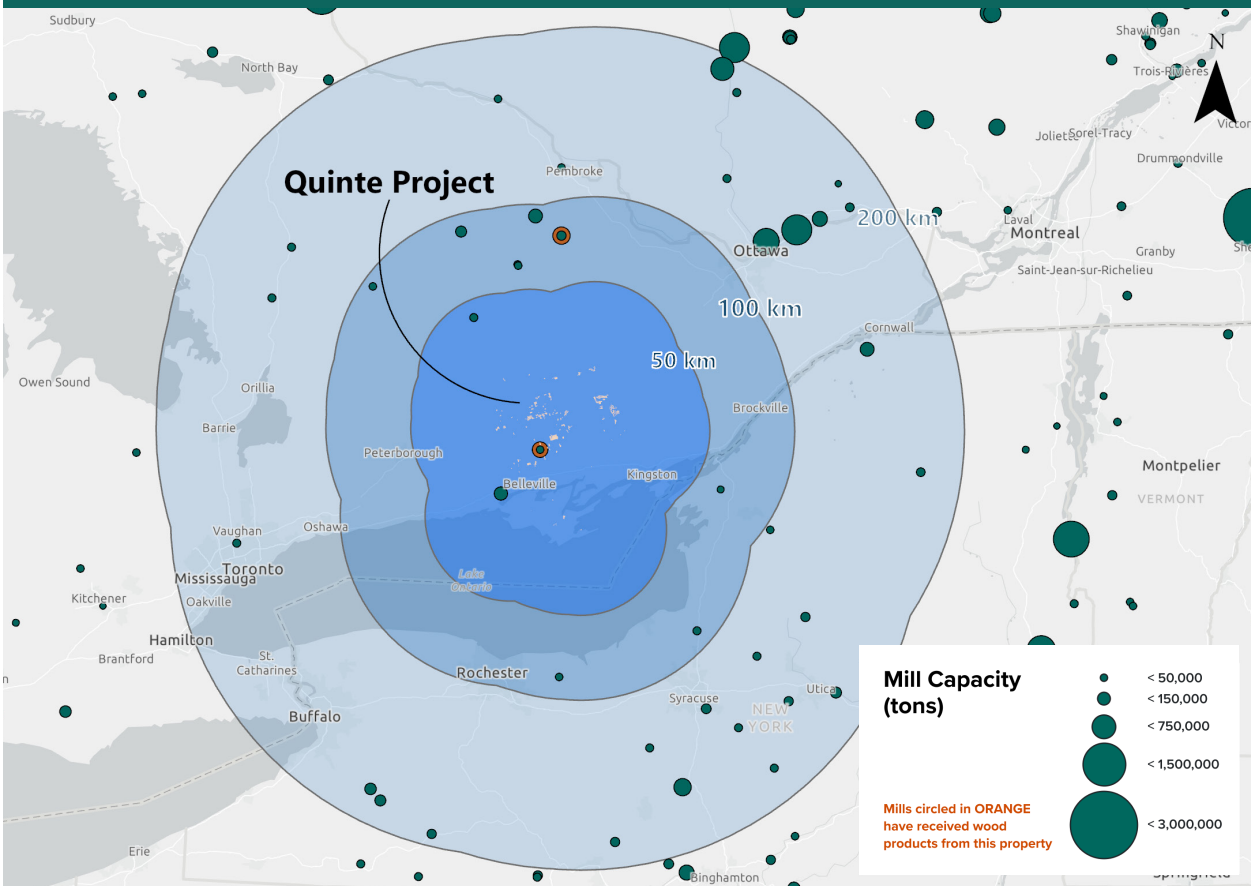
Hansen, M. C et al. "High-Resolution Global Maps of 21st-Century Forest Cover Change." Science 342 (15 November 2013 & updates): 850–53. https://glad.earthengine.app/view/global-forest-change

Regional Mill Map

A strong understanding of local forest products infrastructure is key to building a realistic and conservative baseline scenario. To carry out harvests modeled in the baseline, a forest property must be within a feasible travel distance to active processing facilities. This map presents mills that are drivable from the project area along with their relative processing capacity, delineating a framework for a current or future landowner to move timber in the absence of the carbon project, thereby providing a critical piece of direct evidence to the credibility and additionality of the carbon credits resulting from the project's activities.

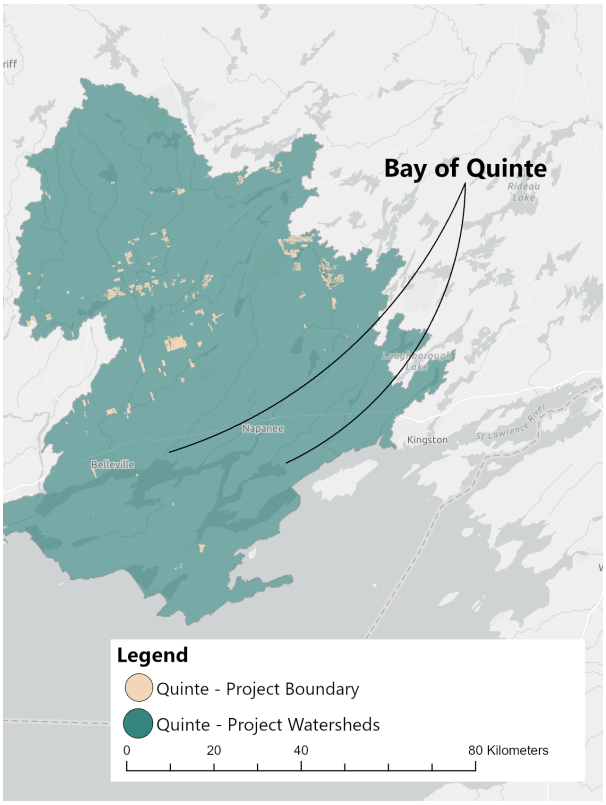
Area Regional Mill Capacity

The calculated mill capacity is 6.20 million green tons within 200 kilometers of the project boundary, and the baseline harvest is 5,294 green tons per year in the first ten years of the project. This equates to 0.09% of the 200-kilometer mill capacity that is represented by the Quinte baseline.



Ecological Highlight

The Quinte Project lies within several important watersheds that drain into the Bay of Quinte, as well as some waterfront to the bay itself. The Bay of Quinte is an Area of Concern within the Great Lakes, on the northeastern end of Lake Ontario. This means that the overall environmental health and water quality of the Bay is severely degraded–both from urban/stormwater discharges as well as land use changes such as agricultural runoff and development. By entering its lands into a forest carbon project, Quinte Conservation not only ensures that its forestland will be managed in a sustainable manner, but also that it will be safeguarded from development or conversion into these alternative uses. This is especially noteworthy given that agriculture and urban expansion are constant pressures in this area, less than two hours away from Canada's largest city, Toronto. The security afforded by the Quinte Forest Carbon Project increases the ecological fidelity of these sensitive watersheds, maintaining the Bay of Quinte as a high-quality resource for wildlife, recreation, and tourism.



Sustainable Development Goals Alignment

Goal 4: Quality Education

Quinte Conservation provides access to recreational lands to establish an environmental ethic among the community. This includes maintained access trails within 'Conservation Areas' that provide the public with large, natural open spaces and extensive opportunities for passive recreation such as hiking, birdwatching, botany, canoe/kayaking, fishing, and sightseeing. These public areas often highlight rare ecotypes, provide interpretive signage, and are the sites of environmental education programs. In addition, Quinte Conservation regularly partners with various organizations, including local schools, First Nations, and environmental not-for-profit groups, such as Ducks Unlimited, to support educational opportunities.

Goal 6: Clean Water and Sanitation

The overall mission of Quinte Conservation is to preserve and protect watershed health. Quinte Conservation protects forest resources to improve erosion control and groundwater health through tree planting and restoration of native tree cover via natural regeneration. The property contains portions of Provincially dentified wetlands and miles of frontage on waterbodies which flow into the Bay of Quinte, a unique portion of Lake Ontario identified as an "area of concern." Sustainable management supported by the carbon project reduces erosion and development pressures to support the long-term health of the water supply.

Goal 13: Climate Action

In committing to sustainable forest management practices, the goal of the landowner is to protect existing carbon stocks, continually sequester carbon, and to prevent intensive forest management. This results in making the forest more resilient to the effects of climate change.

Goal 15: Life on Land

Aside from watershed protection, Quinte Conservation's goals are to implement management practices that significantly improve the conservation value of the property, ensuring long-term forest ecosystem health and high-quality wildlife habitat. Maintaining forest cover on this property contributes to a larger landscape of conserved areas within densely populated southern Ontario, and in turn, to the protection of rare ecotypes and at-risk species. Reduced logging will further protect local flora and fauna, including the wood turtle, a priority species for conservation in Ontario.

About Anew Climate

Anew Climate is a global leader of diverse climate solutions built on the principles of transparency and accountability. We bring innovative products and services to the public and private sectors to help reduce or offset their carbon footprint, restore the environment, and ensure our clients' investments create economic value as well as durable climate impact.

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