

Wildlife

An environmental assessment is a process to identify, predict, and evaluate the potential environmental effects of a proposed project and can only be done in late spring/summer.

It is possible that we can ask the developer to front the cost for an environmental assessment as a condition of sale. It will likely have to be done by the buyer before they would commence development regardless. Some relevant information is included in the Jack Pine development environmental assessment, which abuts our property to the northeast.

According to Ontario Nature, the species identified on part of our property from 2002 to present include the following:

- Blanding's Turtle*
- Midland Painted Turtle*
- Snapping Turtle*
- Eastern Garter Snake
- Gray Treefrog
- Green Frog
- Northern Leopard Frog
- Spring Peeper
- Wood Frog
- American Toad
- Blue-spotted Salamander
- Northern Two-lined Salamander
- Spotted Salamander

*Blanding's Turtle = Threatened, Midland Painted Turtle and Snapping Turtle = Special Concern according to Species at Risk in Ontario (SARO) and the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

Local Vegetation and Woodlands

In southwestern Ontario, forested areas are typically deciduous, with beech, maple, black walnut, hickory, and oak trees. More detailed information from the neighbouring property to the northeast indicates that vegetation in the area represents a mosaic of immature to semi-mature mixed hardwood forests, swamps, and cultural meadows.

Vegetation communities within the property are consistent with regional forests descriptions provided in the Shields Creek Subwatershed Study in that forests are generally between 40 to 60 years in age and are represented by mixed forests of aspen, ash, and maple, with occasional pockets of cedar dominated coniferous stands within larger deciduous or mixed forest stands.

Generally, the term woodland is used to refer to groupings of self-seeded trees, growing under natural forest conditions. It is likely that there are significant woodlands present within the back half of the property, based on the following attributes we know to exist on the property: large woodland size, interior habitat, and proximity and linkage to other natural heritage features¹. An Environmental Impact Study (EIS) would need to confirm whether provincially significant woodlands are present on the property.

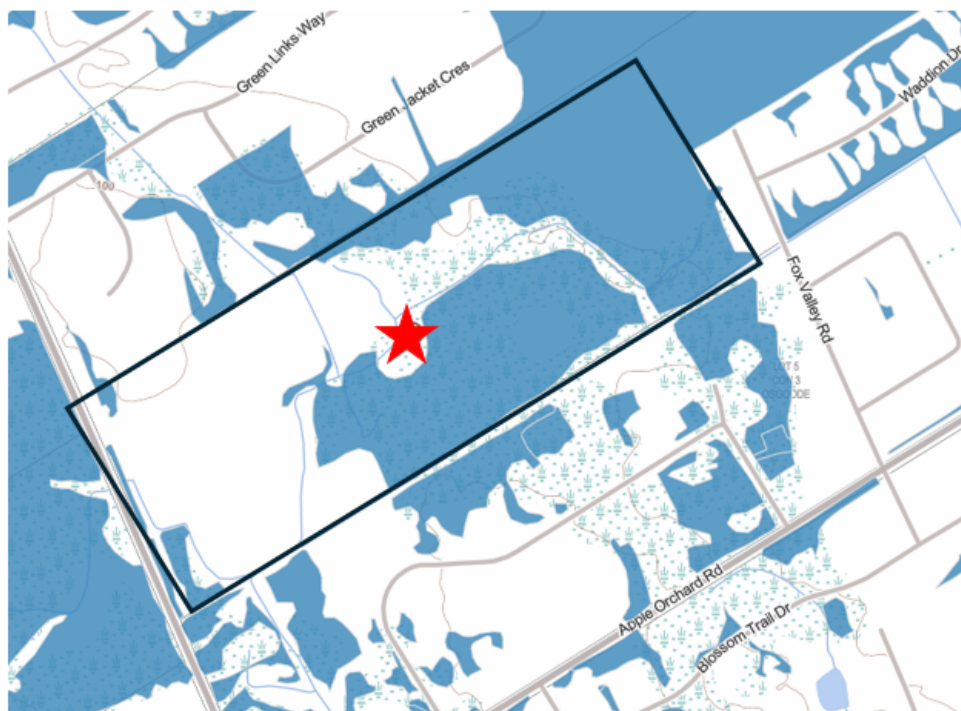


Figure 1. Capture from geoOttawa showing 1295 Manotick Station Road with woodland overlay² (blue = wooded area, black = approximate property boundaries, red star = marks OCUA land).

Wetlands

Wetlands are land types that are commonly referred to as swamps, fens, mires, marshes, bogs, sloughs, and peatlands. They occur intermittently across the landscape along lakes, rivers, and streams, and in other areas where the water table is close to the surface.

A portion of the undeveloped, unused 70 acres at the back of the property is considered swamp wetlands, as per the Ontario Ministry of Natural Resources and Forestry³. Swamp wetlands are dominated by trees or shrubs. An EIS would need to confirm whether provincially significant wetlands are present on the property.

¹ [Significant Woodlands - Guidelines for Identification, Evaluation, and Impact Assessment](#)

² [Wooded Area - Ontario Geohub](#)

³ [Wetland - Ontario Geohub](#)

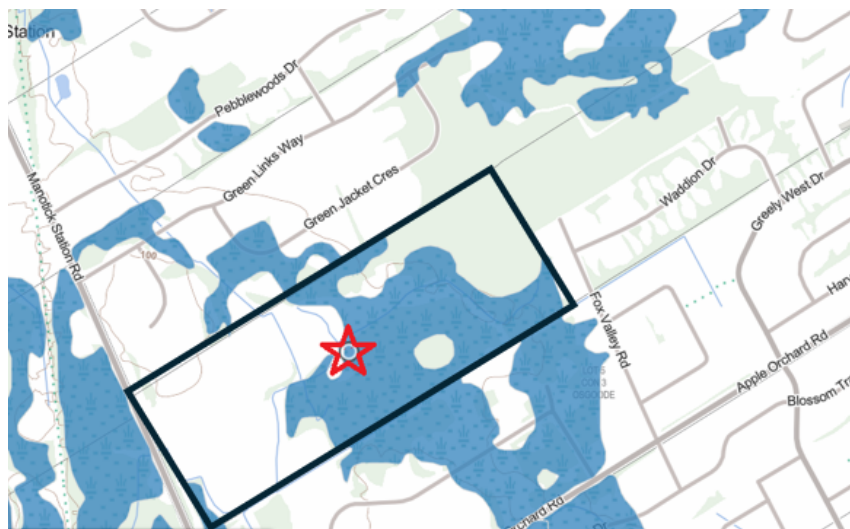


Figure 2. Capture from geoOttawa showing 1295 Manotick Station Road with wetland overlay (blue = wetland (swamp) area, black = approximate property boundaries, red star = marks OCUA land).

As areas where land and water come together, wetlands provide unique and specialized habitat for a great variety of species that can live nowhere else. The survival of wetlands helps to preserve ecological processes and functions that secure and protect the quality of the biosphere in which humans and other organisms together must dwell.

Carbon Offsets

A forest is a carbon source if it releases more carbon than it absorbs. A forest is a carbon sink if it absorbs more carbon from the atmosphere than it releases. Forests change over time as they evolve, for a number of reasons (age, type of tree, disturbance due to natural disaster, etc). For example, younger and older forests are typically carbon sources, while middle aged forests are usually carbon sinks. A forest similar to the one on our property typically takes up more carbon each year than it releases; that makes it a **carbon sink**.

Estimating Carbon Offsets

If it is assumed that all trees on the lot are deciduous, and deciduous trees sequester an average of **40.87 kg of CO₂ annually⁴**, and there are **400 trees per acre at minimum** on our property, then we sequester 16,348 kg per acre, per year. In this context, sequestering simply means absorbing and storing carbon long-term, which helps counteract how much CO₂ ends up warming the planet.

To put this in context regarding the average size of property, see below:

⁴ [Carbon sequestered in the trees on a university campus: a case study](#)

Size of Parcel	Amount of CO2 in tonnes / year
10 acres = 163,480 kg of CO2 sequestering	163.48 tonnes per year
50 acres = 817,400 kg of CO2 sequestering	817.40 tonnes per year
68 acres = 1,111,664 kg of CO2 sequestering	1,111.66 tonnes per year

Trees start becoming carbon sources as they age and the number of tonnes of CO2 will vary over time. Please note that this is a preliminary, rough estimate, and would need to be verified by an expert to guarantee accuracy.

In 2023, the average CO2 emitted was 14.0 tonnes per person per year. For example, the 10 acre parcel would cover the carbon emissions of 11 people per year, for 50 acres, 58 people; for 68 acres, 79 people.
