

More information = more informed decisions: A Natural Capital Inventory in Muskoka

This article is part of the Ripple Article Series. Every other week, an article will be posted on the Engage Muskoka website that dives deeper into one of the twelve technical projects in the **Making Waves: Integrated Watershed Management initiative.**

The District Municipality of Muskoka has initiated a series of technical projects termed "Making Waves" to help us better understand the Muskoka River Watershed. This information will inform a future Integrated Watershed Management Plan for the Muskoka River Watershed to manage social, environmental, and economic factors together on a watershed basis to tackle issues like flooding and water quality. Many watersheds, including the Muskoka River Watershed, span numerous municipalities.

Integrated Watershed Management brings a scientific perspective to environmental and land-use management by establishing shared goals across all governments within the watershed to coordinate long-term management of the land and water and the resources they provide.

One of the projects currently underway is the development of a Natural Capital Inventory for the Muskoka River Watershed. The Watershed is rich in natural capital, which includes forests, lakes, rivers, wetlands, rock barrens, and the diversity of species that call these ecosystems home. This inventory will be a critical component when drafting the Integrated Watershed Management Plan because it will provide a foundation for the assessment and classification of ecosystem types and species in the Watershed. It will include a digital map of critical natural features such as woodlands, wetlands, watercourse, and valley lands.

The inventory results can be used to support natural heritage planning and conservation which aims to maintain and enhance the health and functionality of ecosystems and important or sensitive natural and geological features. For example, if mapping identifies a significant feature (e.g., lake, river, etc.) that crosses municipal boundaries, through Integrated Watershed Management, these municipalities can work together to develop policies to ensure that the feature and surrounding ecosystem are protected. Stay tuned for the next article to learn more about the Land Use Policy Review project.

Developing a natural capital inventory for the Muskoka River Watershed is no easy task considering that the watershed is 5,100 square kilometers in size. In addition, the terrain can be rocky, wet, and covered in thick vegetation; covering the entire watershed on foot would take an enormous amount of time. For this reason, the inventory work will be completed using remote sensing and targeted site visits and will build on existing data.

There are several existing data sets that include land cover, forest resources, and provincially significant wetlands. This information, however, varies in quality and accuracy and does not cover the entirety of the Muskoka River Watershed. As such, the first step in the project is to compile these data sets and identify gaps. Then, remote sensing can be used to fill these gaps before select areas are reviewed on site to ensure the mapping is as accurate as possible.

The inventory will be completed by Fall 2022; results will be published on the Engage Muskoka website.

There are 12 technical projects in the Making Waves initiative. Developing a natural capital inventory of the Muskoka River Watershed to work towards Integrated Watershed Management is just one of the projects. To learn more about Integrated Watershed Management and the other projects under Making Waves, be sure to check out the Engage Muskoka page for project updates.



The views expressed in this article are the views of the District and do not necessarily reflect those of the Province of Ontario.