

THE BAXTER



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FLEMING COLLEGE - GIS APPLIED RESEARCH COLLABORATIVE PROJECT

Happy Spring! This month we are kicking off our community based watershed study through a Geomatics capstone project in the School of Environmental & Natural Resource Sciences at Fleming College. BCWA was awarded with the **Collaborative Project** last month.

Two full-time students will be working with BCWA in implementing the **Baxter Creek Watershed Hub**. This multi-phase research project will start by assembling baseline data and characterizing the watershed. Our hope is this research will contribute to broader watershed planning. One of the community products from this study will be a thematic map series and other mapping tools for the community.

Visit the Resources section of our website over the next few months to monitor our progress!

NEWSLETTER OF THE BAXTER CREEK WATERSHED ALLIANCE

In the News...

One. We have been busy! **Board members** for both the parent organization the **Baxter Creek Watershed Alliance** and the sub-group the **Old Millbrook Jail Lands Association** were elected during January and February. You can find the biographies of these members on the www.baxtercreekwatershed.org website:

Baxter Creek Watershed Alliance:

- Ron Awde (Chair)
- Chris Grayson (Vice Chair)
- Craig Onafrychuk (Secretary)
- Jane Zednik (Treasurer)
- George Raab
- Graham Whitelaw
- Noel Kerin
- Dave Webster
- Barb Heidenreich

Old Millbrook Jail Lands Association:

- Ron Awde (Chair)
- George Raab (Vice Chair)
- Gillian di Petta (Secretary)
- Jane Zednik (Treasurer)
- Chris Grayson
- Mark Davidson
- Barb Heidenreich
- Mike Howard
- Steve Horner

Two. In order to sustain the work of BCWA as well as future programs and initiatives we are in need of a flow of funds and/or assistance in kind. To support this strategy BCWA has filed an **application for charitable status**. When approved, BCWA will be able to issue receipts for income tax purposes for your generous donations!

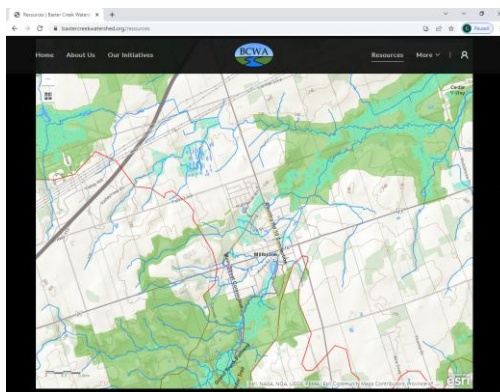
Three. As highlighted on this page, this year we're starting on our **Baxter Creek Watershed Hub Collaborative Project** through **Fleming College**. This will be the first step in our long-term *watershed research strategy*. We'll work on establishing critical baseline data (e.g., identification and protection of significant ecological and hydrologic features) and watershed characterization. Subsequent steps will include developing an integrated environmental monitoring plan, environmental best management practices, land use concepts, and proposing targets for the protection and restoration of riparian and other natural heritage areas. These are the essential building blocks in the *subwatershed planning* process. We look forward to inviting local community members to engage as citizen scientists in collecting data to support our research and future studies.

Just what is a 'watershed' and why it is so very important?

Each human being is comprised of about 70% water and water covers about 71% of the Earth's surface. So, water plays a big part in our lives.

"Water is the driving force of all nature." –

Leonardo da Vinci

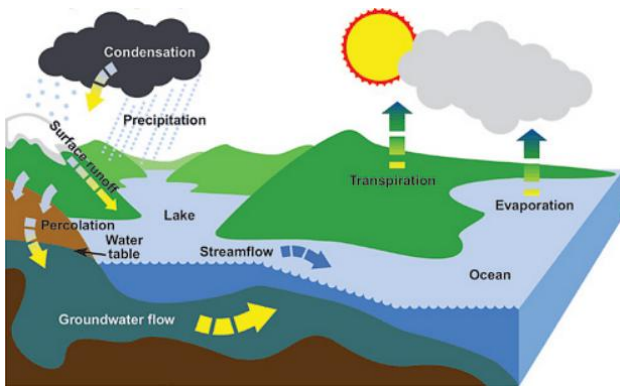


The landing page for the Baxter Creek Watershed Hub. The Resources page on the www.baxtercreekwatershed.org website will be your gateway to locally-based community watershed maps.

EVERYONE LIVES IN A WATERSHED

A watershed, also sometimes known as a 'drainage basin', is the area of land that catches rain and snow that drains or seeps into a central point which can be a stream, river, or lake. When rain sweeps over a surface, it will eventually make its way to that central point. The speed water drains to the central point depends on various factors such as the type of soil, how much plant life exists, and the steepness of the terrain. The boundary of a watershed is drawn by the natural landscape, such as hills like the Oak Ridges Moraine (more on the Moraine and its importance in an upcoming newsletter). The highest points of land, such as the Oak Ridges Moraine, form the divide between two or more watersheds.

The main process in a watershed is what is known as the 'hydrologic cycle'. This cycle includes the movement of water through the air, land, surface water and groundwater. This process governs the physical, chemical, and biological characteristics of water ecosystems in a watershed.



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watershed is technically a subwatershed as it is a stream that is part of the larger Otonabee River watershed. The Otonabee drainage basin covers 806 square kilometres. In turn, this large watershed is a small part of the Lake Ontario Watershed which is also a part of the Great Lakes Watershed, and in turn a part of the Atlantic Ocean Watershed.

Three Conservation Authorities monitor watersheds that traverse the Township of Cavan Monaghan:

- [Otonabee Region Conservation Authority \(ORCA\)](#)
- [Kawartha Region Conservation Authority \(KRCA\)](#)
- [Ganaraska Region Conservation Authority \(GRCA\)](#)

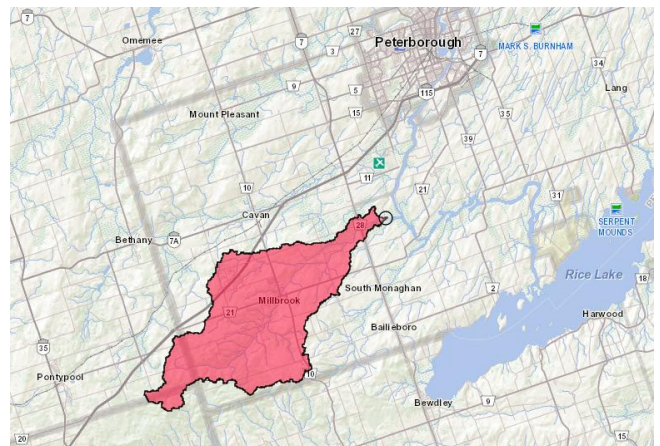
This link provides a very good simple video explanation how the hydrologic cycle works within a watershed:

[What is a Watershed? - YouTube](#)

WATERSHEDS COME IN ALL SHAPES AND SIZES.

The Baxter Creek watershed is almost entirely within the Township of Cavan Monaghan. A section of the Cavan Creek watershed can also be found in the northwest corner of the municipality and part of the Squirrel Creek watershed to the east - covering an area of 283 square kilometers.

Watersheds are also nested inside each other as subwatersheds. The Baxter Creek



© Queen's Printer for Ontario, 2022. The Baxter Creek watershed in context of the Township of Cavan Monaghan.

Produced using the Ontario Flow Assessment Tool, Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry.

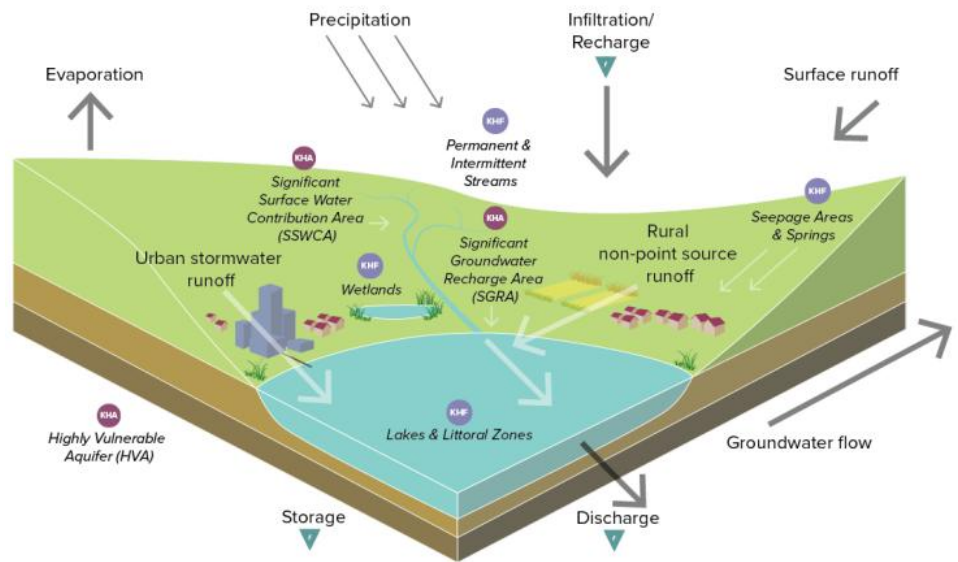
“We forget that the water cycle and the life cycle are one.”

— Jacques Yves Cousteau

WHY IS A WATERSHED SO IMPORTANT AND WHY IS IT SO IMPORTANT TO PROTECT?

For us humans – a healthy watershed provides safe drinking water. It can also provide food sources from native flora and fauna. A healthy watershed cools the air and absorbs greenhouse gas emissions. It also provides natural areas for people to enjoy as well as maintain a healthy and active lifestyle. Protecting and conserving a healthy watershed contributes to economic benefits such as tourism, agriculture and other related industries such as forestry and fishing.

A healthy watershed supports streams, rivers, lakes, and groundwater sources by conserving water and promoting streamflow. A healthy watershed produces healthy soil for crops and livestock, as well as providing habitat for wildlife and plants. Forests and wetlands help to prevent flooding and can ameliorate the impact of drought.



© Queen's Printer for Ontario, 2022. Source: Ontario Ministry of the Environment, Conservation and Parks, Subwatershed Planning Guide, Draft, January 2022.

As noted, we all live within a watershed. A watershed treated badly will result in serious negative consequences and threats to human sustainability and human existence. A sick watershed also will negatively impact the quality of vital ecosystems and wildlife that are dependent upon and support watershed health.

Healthy watersheds sustain healthier people! As part of a watershed community, we all have the opportunity and responsibility to recognize and manage our impacts.

So... how do we protect a watershed? More on actions that can be taken and enacted in the next newsletter. Meanwhile if you have any questions, comments or information (text and/or photos) you would like to contribute, please send them to:

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www.baxtercreekwatershed.org