# **Environmental Initiatives**

VitalSigns.



Environmental Initiatives highlight opportunities for future measurement and collaboration for sustainable development across Northumberland County.

#### **Spotlights:**

- Land
- Water
- Clean Energy
- Climate Action
- Climate Vulnerability
- CFCSN's Environmental Initiatives
- Northumberland Environmental Organizations & Groups
- Provincial & National Environmental Organizations

"Enhancing biodiversity and reducing pressure on ecosystems in populated, productive and humantransformed landscapes and freshwater systems is a key conservation strategy, especially in large-scale and highly transformed agricultural lands."

• <u>Publication - Making Peace with Nature A scientific blueprint to tackle the climate, biodiversity and pollution emergencies.pdf (un.org)</u>

#### **Sustainable Development Goals:**



#13 Climate Action - Take urgent action to combat climate change and its impacts.

"The world is on the brink of a climate catastrophe and current actions and plans to address the crisis are insufficient." Source – United Nations SDGs

15 LIFE ON LAND

#15 – Life On Land - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

"The world is facing a triple planetary crisis of climate change, pollution and biodiversity loss. The trend in forest loss, land degradation and the extinction of species is becoming worse, posing a severe threat to the health of the planet and people. Goal 15 will not be met without a dramatic shift in our relationship with our natural environment." Source — United Nations SDGs

Goals #13 and #15 are directly interconnected with three other goals, including #3 – Good Health and Well-Being, #7 – Affordable and Clean Energy, and #12 – Responsible Consumption and Production.

#### **Spotlight on Land**

#### **Natural Assets**

Natural Asset Mapping is an important activity for all lower tier municipalities in Northumberland County. A Natural Heritage Systems Plan for Northumberland will be published in 2024.

\_\_\_\_\_

The **Rice Lakes Plains** of Northumberland County are known for their tallgrass prairie and oak savanna habitats. These unique ecosystems thrive in dry, sandy conditions found in the Oak Ridges Moraine. The Rice Lake Plains is home to Canada's easternmost prairie and is now the focus of a multi-partner conservation and stewardship project, known as the Rice Lake Plains Partnership.

The partners have produced several publications about the plants and animals at risk in Northumberland and region:

- Species at Risk Within the Rice Lake Plains
- At-Risk Birds of the Rice Lake Plains
- At-Risk Snake of the Rice Lake Plains

For more information visit: www.ricelakeplains.ca and www.aldervillesavanna.ca

Rice Lakes Plains Joint Initiative Members

Northombrand
Canty

Ganaraska
Canty

Canty

Ontario
Parks

Nature
Conservancy

The Alderville Black Oak Savanna site supports two types of globally rare grasslands: Tallgrass Prairie and Black Oak Savanna. Less than 3% of these habitats survive today in Ontario and throughout North America.

Forest Comings is responsible for managing approximately 2.225 heateres (F. F.O.) agree) of mainly

**Forest Services** is responsible for managing approximately 2,225 hectares (5,500 acres) of mainly forested land, known as the **Northumberland County Forest**.

For more information visit <u>www.northumberland.ca/en/discovering-and-exploring/northumberland-county-forest.aspx</u>

The Nature Conservancy of Canada is Canada's leading national land conservation organization and manages the **Mary West Nature Reserve** just outside of Campbellford. Donated to the Nature Conservancy of Canada (NCC) by the estate of Mary West in 1991, the property protects an intact natural woodland in perpetuity. The reserve provides carbon storage, flood mitigation and clean drinking water to the local community.

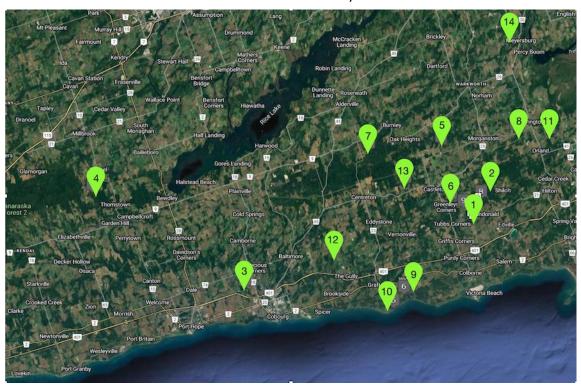
For more information visit <u>NCC: Where We Work - Ontario - Mary West Nature Reserve</u> (natureconservancy.ca)

\_\_\_\_\_\_

The **Northumberland Land Trust** is the only local, community-based organization that is dedicated to protecting nature through land conservation across Northumberland County.

Mission: Preserving the natural heritage of Northumberland County Mandate: Establish, maintain, and manage protected areas in perpetuity

A land trust seeks to protect local land, and hold those lands or conservation easements in trust for future generations. In some areas, such as southern Ontario, land trusts are increasingly necessary as urban growth destroys habitat and pushes access to nature father away from those who could benefit from it. There are 14 land reserves in Northumberland County:



- 1. Lone Pine Marsh Braham Nature Reserve Open to the Public
- 2. Wilkinson Nature Reserve Open to the Public by Reservation
- 3. Laurie Lawson Outdoor Education Centre Open to the Public
- 4. McEwen Nature Reserve Open to the Public by Reservation
- 5. Leckey Nature Reserve Closed to the Public
- 6. Kennedy Nature Reserve Closed to the Public
- 7. Pelton Nature Reserve Open to the Public by Reservation
- 8. Munn Nature Reserve Open to the Public by Reservation
- 9. Chub Point Nature Reserve Open to the Public by Reservation
- 10. Jack van Nostrand Nature Reserve Open to the Public by Reservation
- 11. McColl Nature Reserve Open to the Public by Reservation
- 12. Bonebakker Nature Reserve Open to the Public by Reservation
- 13. de Kleer Nature Reserve Open to the Public by Reservation
- 14. de Lint Nature Reserve Closed to the Public

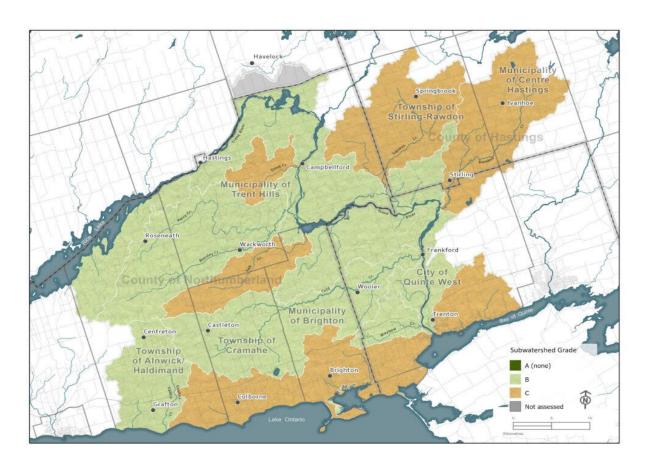
For more information visit www.nlt.ca

#### **Spotlight on Water**

The **Lower Trent Conservation** watershed region includes the furthest downstream section of the Trent River watershed. It includes the Trent River, which flows out of Rice Lake to the Bay of Quinte at Trenton, and eight main tributaries. The watershed region also includes a number of smaller watercourses that flow directly into Lake Ontario and the Bay of Quinte from Grafton to Quinte West.

Their **Watershed Report Card 2023** provides a 'CHECK UP' on the surface water quality of the Lower Trent Conservation watershed region and outlines the current state of the region's lakes, rivers, and streams resources. Watershed Report Cards measure and report on four resource categories: Surface Water Quality, Forest Conditions, Wetland Cover, and Groundwater Quality. These resource categories are used as they relate to two key Conservation Authority business functions: protecting and enhancing water quality, and preserving and managing natural areas.

Source: <u>Watershed Report Card - Lower Trent Conservation (Itc.on.ca)</u>
For more information visit <u>Welcome - Lower Trent Conservation (Itc.on.ca)</u>



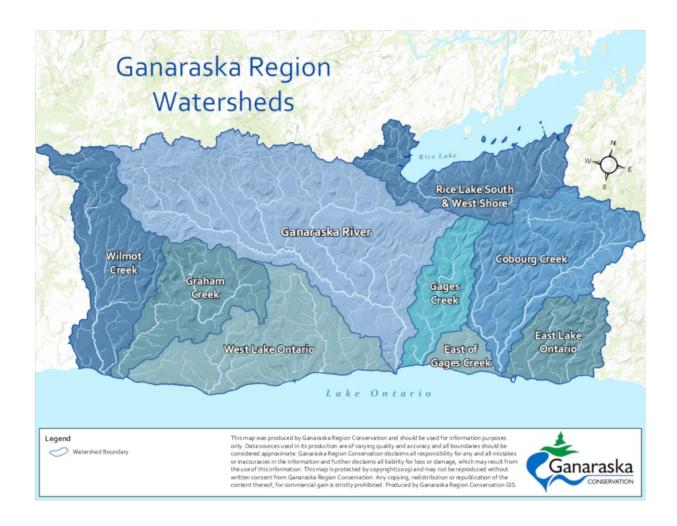
The watersheds of the **Ganaraska Region Conservation Authority** cover an area of approximately 935 square-kilometres, from Wilmot Creek in Clarington to east of Cobourg, from the south shore of Rice Lake down to Lake Ontario. This area includes seven municipalities in whole or in part: Township of Cavan Monaghan, Town of Cobourg, Township of Alnwick / Haldimand, Township of Hamilton, Municipality of Port Hope, City of Kawartha Lakes, Municipality of Clarington.

As well as watershed management, they offer a Clean Water-Healthy Land Stewardship Program tailored to homeowners, rural property owners, farmers, students and teachers, businesses and service clubs. GRCA staff can offer technical assistance regarding agricultural best management practices, tree planting, naturalization, well management and much more.

Source: Ganaraska Conservation - Stewardship Overview (grca.on.ca)

Source: Ganaraska Conservation - Watershed Management Overview (grca.on.ca)

For more information visit Ganaraska Conservation - Home (grca.on.ca)



#### **Spotlight on Clean Energy**

Access to affordable, reliable, renewable and efficient clean energy for all is Sustainable Development Goal #7. Clean energy data in Northumberland County in 2018 included 68.25 Mega Watts. This estimate excludes Micro-Fit installs (less than 10kWh).

Generation | Lakefront Utilities

Community Power Northumberland (CPN) installed three solar rooftop projects at a cost of \$3.8 million; on the Baltimore Community Centre, Cobourg arenas and on a building in the industrial area on Princess Street. The projects began in the fall of 2014 and were successfully connected to the grid in March 2015. In 2017 CPN built its fourth project the Keeler Centre in Colborne. It was designed to hold 952 solar panels and produce 325 kilowatt hours of clean electricity, enough to power 40 homes.

• HUB - Community Power Northumberland

The **Alderville First Nation** started construction of a 5.7 MW solar park in the spring of 2012. This was the first facility of its kind in Ontario to be 100% owned and operated by a First Nations community. Located on the south shore of Rice Lake, it opened in October 2013 and has 23,000 ground mounted solar panels on 45 acres of First Nation property. It is estimated to produce enough energy to power 600 homes.

• <u>Solar Farm (alderville.ca)</u>

### **Spotlight on Climate Action Planning:**

The **Tamarack Institute Climate Cohort** is a Canada-wide program training and coaching climate champions, primarily in the public sector. Through the financial support of Community Power Northumberland, a sustainability nonprofit, municipal councillors and environmental committee members from seven Northumberland municipalities participated in training from Tamarack and offered each other mutual support in organizing toward climate action in their respective municipalities. The Northumberland Climate Cohort members worked to create a foundation for future collaboration in climate action in Northumberland. As Northumberland County develops a Climate Action Plan, the members of this Cohort will be consulted as a stakeholder group, providing opportunity for their respective municipalities to collaborate with the County and with each other to achieve concrete and significant climate action.

- Municipality of Port Hope Environmental Advisory Committee <u>Boards and Committees</u> -Municipality of Port Hope
- Hamilton Township Environment and Climate Advisory Committee <u>Environment and Climate</u> <u>Terms of Reference 2022-2026 (hamiltontownship.ca)</u>
- Town of Cobourg Sustainability & Climate Change Emergency Advisory Committee https://www.cobourg.ca/en/our-government/Sustainability-Climage-Change-Committee.aspx
- Municipality of Brighton Environmental Sustainability Advisory Committee Environmental Sustainability Advisory Committee Terms of Reference (brighton.ca)
- Cobourg: Integrated sustainability plan: <a href="https://engagecobourg.ca/integrated-community-sustainability-plan">https://engagecobourg.ca/integrated-community-sustainability-plan</a>
- Port Hope and Brighton are developing Community Climate Emergency Action Plans in 2024.

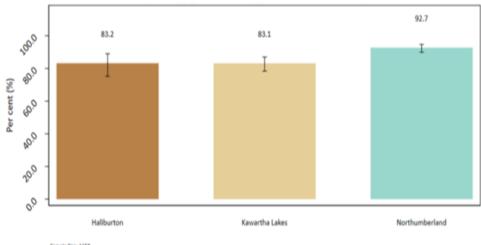
#### **Spotlight on Climate Change Vulnerability**

"Adaptation to the impacts of climate change is critical and involves both preparations for, and responses to, the impacts, with nature-based solutions playing a vital role."

Publication - Making Peace with Nature A scientific blueprint to tackle the climate, biodiversity and pollution emergencies.pdf (un.org)

Haliburton, Kawartha, Pine Ridge District Health Unit 2023 report, Climate Change Health Vulnerability Adaptation Assessment, highlights the health impacts of climate factors such as hotter days and more air pollution. In Northumberland County, extreme weather events are top of mind:

Figure 1.7 Percent of adults (18+) who think climate change is likely to cause more extreme weather locally, by municipality, HKPRDHU, 2019



92.7% of adults (18+) think climate change is likely to cause more extreme weather locally.

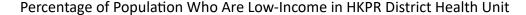
Figure 1.2 Percent of adults (18+) who are concerned about climate change, by municipality, HKPRDHU, 2019 91.9 85.2 2000 84.2 800 Per cent (%) 60,0 000 20.0 00 Haliburton Kawartha Lakes Northumberland Sample Size: 1119
"High Variability; interpret with caution
"Data not released Data Source: RRFSS (Jan-Dec, 2019), HKPRDHU and the Institute for Social Research (ISR), York University.

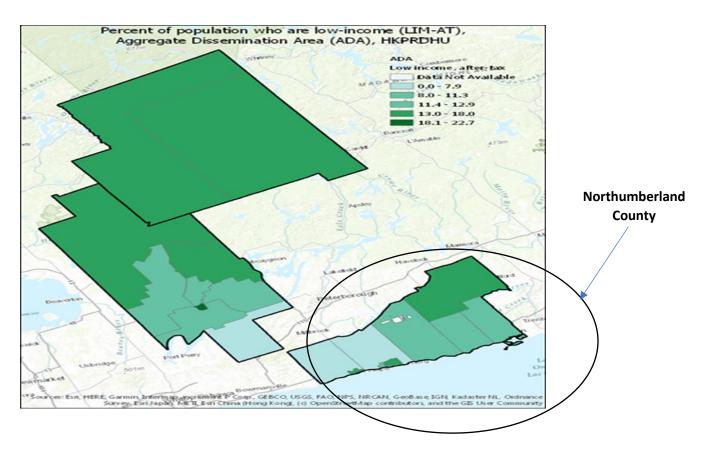
84.2% or adults (18+) are concern about climate change in Northumberland.

The report includes climate projection data that shows that we will experience more hot temperatures, a longer warm season and more extreme precipitation events, with potential increases to heat-related illnesses, worsening of chronic conditions and threats to mental health.

The report suggests to "Continue and strengthen advocacy for community design that supports mitigation such as reducing motor vehicle travel, supporting active and public transportation, increasing greenspace, improving access to local food."

According to HKPR District Health Unit, "people living on low-income experience vulnerability to climate change on several fronts. They are likely to have limited financial resources to take protective actions such as running an air conditioner, travel to public places for cooling or have a 72-hour emergency kit. This means they are more likely to experience heat-related illnesses, and greater exposure to unsafe food or water during an extreme weather event."





Source: <u>executive-summary\_climate-change-health-vulnerability-and-adaptation-assessment\_may-2023.pdf</u> (hkpr.on.ca)

For more information visit Home | HKPR District Health Unit

## **Community Foundation of Campbellford/Seymour and Northumberland Environmental Initiatives**

The Community Foundation of Campbellford/Seymour and Northumberland, has been investing in the environment and biodiversity since 2007. An Environmental Endowment Fund was created in 2007 to promote and support environmental stewardship and sustainable living in the Campbellford/Seymour area through a mini grant program. The Campbellford/Seymour Community Fund and Municipal Fund also provided more than \$389,000 in grant funding between 2004 and 2023, to support environmental projects in Campbellford Seymour. Some examples include:

- Campbellford schools: Planting shade trees on School Grounds, Litter-less Lunch Kits, Classroom Recycling Stations, Native Pollinators Gardens, Grade 8 Cooking and Gardening Classes and an Edible Classroom which included a forest food garden and hillside swales for flood control and soil erosion prevention (10-year ongoing project as part of class projects).
- **Campbellford Memorial Hospital:** Energy Management Study, Lighting retrofit and redesign and an Energy Conservation program.
- Green Spaces in Campbellford: Landscaping at the Suspension Bridge and improvements to the Rotary Trail, waterfront redevelopment in downtown Campbellford, landscaping at Picnic Island Park, and two community gardens.
- **At Seymour Conservation Area:** Benches for Interpretive Trails, Interpretive Sign for the Wetland Habitat Enhancement, and the Oak Alvar Restoration project.
- At Crowe Bridge Conservation Area: Start-up costs to re-open Crowe Bridge Park, a Rehabilitation Project, upgrades to swimming area and trail rehabilitation and enhancement.
- At Ferris Provincial Park: Renewable Energy Conference and Trade Show, and brochures for the promotion of health, nature and fitness at Ferris Park.
- **Bike Action Trent Hills:** Bicycle friendly community events and bike repair kits in the Trent Hills Public Libraries.

In 2019 the Community Foundation applied to become designated as a Bee Partner, **through Bee City Canada** – the first Community Foundation in Canada. They encouraged the Municipality of Trent Hills to become a Bee Community, and invited local schools to register as Bee Schools. The Bee City Canada program consists of three commitments - Creating Healthy Pollinator Habitat, Educating about Pollinators, and Celebrating Pollinators. <a href="https://cfcsn.ca/environmental-initiatives/bee-city-canada/">https://cfcsn.ca/environmental-initiatives/bee-city-canada/</a>

In December 2021, 33 enthusiastic members of our community came together to engage in a **conversation about the environment** to help guide the work of our community foundation. Members of our community shared their thoughts and explored scenarios for the environment and our community in a highly engaged and facilitated conversation. View the Vital Conversation report.

The Community Foundation honours volunteers who have completed terms of office on the Board of Directors by **planting a tree** for them in the community. As part of the revitalization of Kennedy Park, over 23 trees were planted; some in honour of community foundation board members and some donated by community members. In 2019 an additional six trees were planted on the south side of the tennis courts to honour long-serving board members.

Read more about the Community Foundation's Environmental Initiatives - <a href="https://cfcsn.ca/environmental-initiatives/">https://cfcsn.ca/environmental-initiatives/</a>

#### **Northumberland Environmental Organizations & Groups**

- Alderville Black Oak Savannah https://aldervillesavanna.ca/
- Cobourg Ecology Garden https://www.cobourgecologygarden.ca/
- Ganaraska Region Conservation Authority https://www.grca.on.ca/
- Lower Trent Conservation Authority https://ltc.on.ca/
- **Northumberland County Forest** <a href="https://www.northumberland.ca/en/discovering-and-exploring/northumberland-county-forest.aspx">https://www.northumberland.ca/en/discovering-and-exploring/northumberland-county-forest.aspx</a>
- Northumberland Land Trust https://nltrust.ca/
- Oak Ridges Moraine Trust <a href="https://www.oakridgesmoraine.org/about-us-oak-ridges-moraine-land-trust/">https://www.oakridgesmoraine.org/about-us-oak-ridges-moraine-land-trust/</a>
- Save Our Trees https://saveourtreesph.ca/
- Willow Beach Field Naturalists https://willowbeachfieldnaturalists.org/
- Sustainable Cobourg <a href="https://sustainablecobourg.ca/about/meet-the-team/">https://sustainablecobourg.ca/about/meet-the-team/</a>
- Blue Dot Northumberland https://www.facebook.com/bluedotnorthumberland
- Whole Learning Alliance https://www.facebook.com/profile.php?id=100086383794909
- Friends of Ferris http://friendsofferris.ca/
- Nature Conservancy of Canada (Mary West Nature Reserve) https://www.natureconservancy.ca/en/where-we-work/ontario/featured-projects/mary-west-nature-reserve.html
- Crowe Valley Conservation https://www.crowevalley.com/
- Campbellford Community Gardens https://www.facebook.com/groups/812414385529104

#### **Provincial and National Environmental Organizations**

- Parks Canada, Trent-Severn Waterway https://parks.canada.ca/lhn-nhs/on/trentsevern
- Ontario Parks <a href="https://www.ontarioparks.ca/en">https://www.ontarioparks.ca/en</a>
- Ontario Woodlot Association https://www.ontariowoodlot.com/
- **Ducks Unlimited -** https://www.ducks.ca/
- Ontario Federation of Anglers and Hunters https://www.ofah.org/
- Eastern Ontario Model Forest <a href="https://www.eomf.on.ca/">https://www.eomf.on.ca/</a>
- Forests Ontario https://forestsontario.ca/en
- Ontario Nature <a href="https://ontarionature.org/">https://ontarionature.org/</a>
- Ontario Heritage Trust https://www.heritagetrust.on.ca/
- Ontario Soil and Crop Improvement Association https://www.ontariosoilcrop.org/
- Great Lakes Waterfront Trails Association <a href="https://waterfronttrail.org/map/">https://waterfronttrail.org/map/</a>
- Tallgrass Ontario https://tallgrassontario.org/wp-site/