

Lanark County – Wetlands

Lanark County has one of the last largest concentrations of intact wetlands left in Southern Ontario. Our wetlands store significant amounts of carbon, protect us from floods and provide habitat to enhance our biodiversity. Quite simply stated, wetlands are some of the most effective of nature's climate control mechanisms and are among the most biologically productive ecosystems on Earth and we need to protect what we have left in Lanark County.

So, why is this important?

Wetlands:

- Serve as habitats for fish, amphibians, reptiles, bird and mammals, including many threatened and endangered species. Wetlands also act as nurseries for recreationally important fish.
- Can be considered “biological supermarkets” due to the great volumes of food that attract many species.
- Stabilize shorelines and streams and help to reduce erosion and sedimentation downstream.
- Act as natural water purifiers, filtering sediment, nutrients and pollutants from surface water before it reaches rivers, lakes or our groundwater. Wetlands are often referred to as “nature’s kidneys” because of this unique characteristic.
- Have the ability to retain water and slowly release it which helps to prevent flooding during heavy rainfalls. One single acre of wetland can soak up as much as 5.6 million litres of floodwater – enough to cover a football field in more than 1.2m of water. This “super power” protects nearby communities from destructive flooding, safeguarding lives and our property.
- Help to maintain streamflow during dry periods.
- Contribute to the reduction of carbon emissions by storing significant amounts of carbon in soils and plant vegetation. This helps mitigate greenhouse gas emissions.
- Provide natural products like wild rice (Manomin), cranberries and medicinal plants that are harvested for food, creams and teas.
- Provide opportunities to enhance our tourism industry. Canoeing, kayaking, birdwatching, hiking and taking photographs in our wetland areas can contribute significantly to our local economy. But beyond that, the intrinsic value of nature cannot be overstated; it allows individuals and families to reconnect with nature, fostering an appreciation for the environment. And it is this connection that is essential for promoting environmental stewardship, as people who engage with their natural

surroundings are more likely to advocate for their protection and sustainable management.

So, we have the opportunity in Lanark County to be stewards of one of the last great areas of wetland coverage in southern Ontario. It is both a privilege and responsibility to protect and conserve these wetlands.

Questions That Can Be Asked

1. Do you believe wetland conservation has a role in addressing climate change challenges?
2. Do you support the acquisition and the restoration of wetlands as an environmental priority?
3. What will you do to enhance protections for all wetlands in our municipality, regardless if they are evaluated or unevaluated?
4. Will you commit to providing funding to protect our remaining wetlands in our municipality?
5. What will you do to protect our remaining wetlands in Lanark County and Smith Falls?

Natural Heritage System Strategy

Lanark County is developing a Natural Heritage System (NHS) Strategy to identify and map natural areas, habitats and ecological connections that support biodiversity and environmental health.

The NHS Strategy will combine scientific analysis and local knowledge to identify and map important natural areas and wildlife habitats, understand how they are connected across the landscape and provide guidance to help manage Lanark County's natural heritage system. The NHS Strategy will guide any future Official Plan reviews.

The NHS Strategy consists of several phases which will be guided by the NHS Working Group, made up by county councillors, local sector representatives and staff. The project includes gathering information and producing a map of core natural heritage features and the corridors linking them together. It will also include the identification of knowledge gaps and risks, and the development of a monitoring plan and methods to support environmental protection and management. North-South Environmental Inc. (NSE) has been hired to support the work.

Data collection and the public mapping survey are planned for the summer, with mapping, a technical report, and public consultation taking place this fall. The project is expected to culminate with the strategy development, public consultation and stakeholder engagement in Fall 2027.

Questions That Can Be Asked

1. How will you support the development and implementation of the Natural Heritage Systems Strategy for Lanark County?
2. Does our municipality have its own NHS Strategy and if not, what will you do to ensure that one is created?
3. How will you support the County's NHS Strategy within your own municipality?

Nature-based Climate Solutions

The UN has defined nature-based solutions as “actions aimed at protecting, conserving, restoring, and sustainably managing natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefit”. In a nutshell, nature-based climate solutions use natural ecosystems to mitigate climate change and environmental challenges.

These solutions are multifunctional, offering several benefits concurrently. A single intervention can provide flood control, improve water quality, enrich biodiversity and sequester carbon, making them a cost-effective and efficient way to tackle climate, environmental and social issues.

Examples of nature-based solutions include:

- Afforestation and reforestation to restore forests and increase carbon sequestration
- Wetland restoration to improve water quality, enhance biodiversity and mitigate flooding
- Soil management practices to enhance soil health and carbon storage (cover cropping and reduced tillage, for example)
- Agroforestry to integrate trees into agricultural landscapes to improve productivity and biodiversity
- Green infrastructure that creates parks, green roofs, permeable pavements to manage stormwater and improve air quality
- Sustainable agriculture practices that enhance food security while preserving ecosystems such as organic farming and permaculture
- Biodiversity conservation to protect and restore habitats that have diverse species and ecosystems
- Natural water management using natural processes to manage water resources such as restoring riverbanks and floodplains

These solutions are like nature’s secret agents, working behind the scenes to tackle our biggest challenges in ways that are ingenious and sustainable. Simply stated, these solutions harness the inherent power of nature to solve problems and promote sustainability.

Nature-based solutions do and will continue to help reverse the drastic impacts of climate change and provide a way for leading sustainable lives. Without these solutions sustainable living is close to zero.

Questions That Can Be Asked

1. Do you believe that nature-based climate solutions have a role in addressing climate change challenges?
2. What specific nature-based climate solutions do you feel will have the greatest benefit in our community in terms of sequestering carbon and reducing greenhouse gas emissions?
3. How will you increase the tree canopy in our municipality?
4. What will you do to ensure that our watersheds are protected?
5. How will you integrate green infrastructure into our community?
6. How do you propose to promote sustainable agricultural practices in our municipality?