

Farm Stewardship in Peterborough County

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Prepared by **Farms at Work** for the Sustainable Peterborough Working Group on
the Future of Food and Farming

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Background

This paper has been prepared as a backgrounder for Sustainable Peterborough (SP). The Sustainable Peterborough Plan includes an Agriculture and Local Food theme area with an overall Goal and three Strategic Directions: <https://sustainablepeterborough.ca/community-plan/theme-areas/agriculture-and-local-food/>

One of the three Strategic Directions driving the mandate of the SP Working Group on the Future of Food and Farming is:

Encourage farmers to practice good environmental stewardship

Farmers in Ontario are demonstrating farm stewardship through on-farm projects undertaken on their own, and with help from many types of cost-share funding opportunities.

Best management practices are implemented by the farmers in a diverse range of projects including:

- Livestock exclusion from water
- alternate watering systems
- wetland creation or restoration
- diversion of clean water from contamination by manure
- riparian or waterside buffer plantings
- invasive plant species control
- cover crops
- equipment modification to reduce chemical and fertilizer volume
- erosion control structures
- manure storage improvements
- nutrient management and recovery

The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has, over time, written an extensive series of guidebooks on best management practices for farmers, found here: <http://www.omafra.gov.on.ca/english/environment/bmp/series.htm>

Both on and beyond the farm, these practices help provide cleaner water, improve soil health and protect habitat. They also improve soil health, improving crop yields and access to local food today and for generations to come. Increasingly there is also a focus on the impacts of these same best practices in sequestering carbon and reducing emissions of greenhouse gases.

Federal, provincial and municipal governments, Conservation Authorities and other Non-Governmental Organizations (NGOs) all invest in these projects because they see the community value of farm stewardship. Some sources of cost-share funding are available

province-wide and others are specific to a certain region, watershed or municipality. This depends on the source of funding and the priorities of the funder.

Federal and provincial governments have longstanding programs in place given their specific mandates related to agriculture and food. However, many municipalities and Conservation Authorities in Ontario also offer funding to farmers for stewardship and sustainability projects. Local examples include Kawartha Conservation, which offers the *Kawartha Lakes Landowner Stewardship Grant* program, funded through The City of Kawartha Lakes. Ganaraska Conservation's *Clean Water- Healthy Land Financial Assistance Program* was created in 2007 and has supported more than 50 farmers. Funding comes from Municipality of Clarington, Municipality of Port Hope, Township of Hamilton and the Town of Cobourg.

The completion of an **Environmental Farm Plan** is a requirement for many types of funding. Since 1993, the EFP program has provided Ontario farmers with the opportunity to voluntarily self-assess their farm for environmental strengths and weaknesses and create a plan for improvement where needed. For more information visit: <https://www.ontariosoilcrop.org/oscia-programs/workshops-webinars/environmental-farm-plan/>

Current Cost-Share Opportunities in Peterborough County

In 2019 in Peterborough County, farmers have enjoyed a variety of cost-share funding opportunities. With one exception, delivery agents for all the programs named below are members of the East Central Farm Stewardship Collaborative. The ECFSC began in Peterborough County ten years ago, and then spread throughout east central Ontario. The members have worked together to provide farmers with technical support, and access to multiple sources of funding where available. Farmers have benefitted from having a single point of contact that will direct them to all the resources in the region.

East Central Farm Stewardship Fund (ECFS Fund):

The East Central Farm Stewardship Collaborative brings together 11 regional organizations , (full list available here: <https://ecfarmstewardship.org/contact-us>) and includes Otonabee Conservation, Farms at Work, and Peterborough County Stewardship. The members have worked together for about ten years to ensure technical assistance and resources are readily available for farm businesses and farmland owners wanting to make environmental improvements on their farms. Collectively they have completed over 440 projects on 300 farms. They have also provided numerous informational workshops over the years for the farm community. In 2018, the ECFSC was the recipient of a three-year EcoAction Community Funding Program grant from Environment and Climate Change Canada. The grant money created the ECFS Fund, which provides cost-share funding specific to on-farm clean water projects, and supports the coordination and administration of the ECFS Fund by Farms at Work. For more information visit: <https://ecfarmstewardship.org/>

The Canadian Agricultural Partnership (CAP) Environmental Stewardship Cost-Share Programming: The Canadian Agricultural Partnership is a five-year federal-provincial-territorial

initiative to strengthen the agriculture, agri-food, and agri-based products sector and increase its competitiveness, prosperity and sustainability. The Ontario Soil and Crop Improvement Association delivers this cost-share funding program and is represented on the ECFSC. With a focus on improving on-farm water quality and soil health resources, the CAP stewardship program provides Ontario-wide opportunities to farmers to cost-share the adoption of on-farm stewardship best management practices. The program started April 1, 2018 and will continue through until March 31st, 2023. For more information visit:

<https://www.ontariosoilcrop.org/canadian-agricultural-partnership/>

Species at Risk Partnership on Agricultural Lands (SARPAL): SARPAL is a new Environment and Climate Change Canada initiative that is focused on working with farmers to support the recovery of species at risk on agricultural land. SARPAL funds conservation actions currently focused on 12 target Species at Risk. Eight species from this list can be found in Peterborough County - little brown bats, barn swallows, bobolinks, eastern meadowlarks, Henslow's sparrows, loggerhead shrikes, rusty patch bumblebees and monarch butterflies. Like CAP (above) this program is delivered by the Ontario Soil and Crop Improvement Association. For more information visit: <https://www.ontariosoilcrop.org/oscia-programs/sarpal/>

Ducks Unlimited Canada: Ducks Unlimited Canada partnership programs are focused on restoration and creation of wetland habitats. DUC also supports other agricultural best practices projects where wetlands are involved, including alternate watering, restriction fencing and buffer plantings. Ducks Unlimited Canada offers technical assistance and project funding towards on farm/rural land projects that have benefit for waterfowl and other wildlife. Ducks Unlimited Canada is a long-standing partner in the East Central Farm Stewardship Collaborative and has contributed to many projects in Peterborough County over the last 20 years. Conservation specialists can be contacted for details on restoration programs @ (705) 721-4444 or du_barrie@ducks.ca.

ALUS (Alternative Land Use Services) Peterborough: The ALUS program works with farmers across Canada to identify select parcels of environmentally sensitive, marginal land that could be stewarded differently to produce ecosystem services. In the Peterborough region, ALUS aims to establish and enrol acres of native prairie, pollinator habitat, multi-row shelterbelts, reforestation, enhanced and expanded riparian areas, watering systems, nesting structures and fencing around waterbodies, as well as to create, restore or enhance existing wetlands. ALUS Peterborough has received funding from a variety of sources including foundations, government granting and corporate sponsorships. For more information, visit: https://alus.ca/alus_community/alus-peterborough/

Uptake of Cost-Share Funding in Peterborough County

Cost share funding (in which some funding is provided, but the farmer also pays for part of the costs) was introduced in Ontario in the early 1990s. Over the first 15 years, the amounts available were very small. Beginning in 2005, more consistent and wide-ranging funding was offered through partnership between the federal and provincial governments. As time went by,

additional funding sources were periodically available, as discussed in the Background section, from other sources.

Farmers in Peterborough County have completed hundreds of farm stewardship projects with different types of cost-share funding. Many more have been undertaken and paid for by farmers without assistance.

From 2005 to fall 2019, about 330 farmers in the County completed an Environmental Farm Plan, signifying their willingness to voluntarily assess their on-farm risks.

From 2005 to the end of 2013, more than \$1 million was paid to local farmers for completion of projects that resulted in environmental improvements on their farms. The farmers themselves contributed additional funds, at least doubling the investments made to \$2 million. To the end of the 2018 season, another \$200,000 was invested (see Table 1). Assuming that farmers also matched those funds, this brings total investment to approximately \$2.4 million between 2005 and 2018.

Table 1: Cost-share funding for farms in Peterborough County, 2015 to 2018

	2015	2016	2017	2018	TOTAL
Federal/provincial funding delivered by OSCIA	\$5,166	\$9,951	\$10,500	\$42,412	\$68,029
SARFIP (MNRF)	\$30,053	\$3,489	\$8,699	\$7,926	\$50,167
Ducks Unlimited	\$10,500	\$6,400	\$0	\$21,400	\$38,300
Otonabee Conservation	\$0	\$0	\$20,000	\$0	\$20,000
East Central Farm Stewardship Fund	\$0	\$0	\$0	\$13,500	\$9,750
Farms at Work	\$1,200	\$0	\$0	\$0	\$1,200
Peterborough Stewardship Council	\$500	\$400	\$0	\$0	\$900
TOTAL	\$47,419	\$20,240	\$39,199	\$85,238	\$192,096

However, these numbers reflect only projects that received cost-share support. The East Central Farm Stewardship Collaborative has been able to track these numbers in our region. It is not known how many farmers have completed projects but have not requested (or not successfully received) funding support. While incentives are important, there is no doubt that farms do invest without them, and that total investment exceeds the numbers above.

The Future of Farm Stewardship in Peterborough County

While farmers in this County have been proactive in recent years and have shown themselves willing to undertake significant effort, there remains work to be done.

Unfortunately, cost-share funding comes and goes, as illustrated in Table 1. For example, the long-standing Species at Risk Farm Incentive Program (SARFIP) was cancelled in 2019 by the provincial government. It was heavily utilized by Peterborough farmers over its nine-year history.

Government policy changes and short-term grants make it hard to predict whether funding will be available from year to year. Sometimes farmers are not even aware of the options available to them as they change.

Aside from province-wide programs, non-government organizations in our region are only able to provide funding if they successfully apply for grants from foundations or other sources. For example, Farms at Work, Otonabee Conservation, and Peterborough County Stewardship have no ongoing sources of funding for farm stewardship projects. The East Central Farm Stewardship Fund (hosted by Farms at Work for the ECFS Collaborative group), is supported by a three-year grant, entering its third year. Unless further grant funding can be secured, it will come to an end.

Today, interest in stewardship on farms has moved beyond traditional clean water, soil health and habitat protection. With increasing local concern about climate change, it is becoming clear that many well-recognized best practices also sequester carbon and reduce emissions of greenhouse gases. Specifically, farmers can

- plant trees, shrubs and grasses in marginal farming areas to sequester carbon
- increase soil carbon through a variety of actions in fields and pastures
- maintain and restore on-farm wetlands, woodlots and hedgerows
- increase local sales of food, reducing miles to market
- reduce use of fossil fuels on farm, and use of products derived from fossil fuel

In Peterborough County, some if not most farms are probably carbon neutral today. Because of our local geography, they encompass on-farm woodlots and wetlands that sequester large amounts of carbon annually and more than offset current farming activities. This was empirically demonstrated in one case study by a student at Trent University, who looked at all facets of a local beef and corn producing farm. The student used a federal government program called Holos, found at <http://www.agr.gc.ca/eng/science-and-innovation/agricultural-research-results/holos-software-program>. Other programs are also available from other jurisdictions, such as this: <http://cometfarm.nrel.colostate.edu/>

Nevertheless, there is no doubt that even farms that are carbon neutral can make improvements. Recent local studies have identified agriculture as a major source of emissions and identified a need to ‘facilitate’ and ‘support’ solutions (see for example the attached excerpts from the Peterborough Climate Change Action Plan for references to food and agriculture). With education and funding support, farms can and should be part of positive climate change actions in Peterborough County. Creative local solutions are needed to ensure this promising avenue for climate change mitigation is fully explored.

Questions for follow-up

1. How can we put the Climate Change Action Plan into action, encouraging farming practices and on-farm activities that help to mitigate climate change?
2. How can local public and or private funding sources be harnessed to ensure ongoing project funding for environmental priorities on our farms?

Excerpts from Sustainable Peterborough Climate Change Action Plan, 2017 Relating to Food and Agriculture

Our Land

Where are we now?

How we use our land affects our GHG emissions and thus climate change. In turn, climate change affects our land. Through its Climate Change Action Plan and planning policy direction, the province is looking to municipalities to strengthen land use policies to better mitigate and adapt to climate change. In the GPA, an assessment of climate change risks and impacts will better help prepare for impending changes, and protecting and enhancing our natural assets in the present will help buffer against such future changes.

How are we planning to act?

Our Land	
	<ul style="list-style-type: none"> • Strengthen land use policy and the development review process to better support climate change mitigation and adaptation • Identify climate change risks and prepare for potential impacts • Protect and enhance natural assets • Facilitate best management practices for low emission farming and climate change adaptation

Strategy L4: Facilitate best management practices for low emission farming and climate change adaptation

Overview	Low emission farming and climate adaptation planning for farms is an evolving area of focus in the agricultural field. As these practices evolve, their uptake will become commonplace.
Recommended Approach	<p>To support farmers implement best management practices, the following is recommended:</p> <ul style="list-style-type: none"> • Promote usage of Agriculture and Agri-Food Canada's no-cost Holos GHG emissions modeling tool to assist farmers in assessing their GHG emissions and exploring various farm management scenarios • Support local agricultural organizations to host local agricultural forums and training sessions to engage with farmers on how to implement climate change mitigation and adaptation related best management practices • Support local agricultural organizations to promote local participation in the Canada-Ontario Environmental Farm Program to encourage farmers to increase knowledge, conduct assessments, and develop and implement Environmental Farm Plans for their farms
Timing	Ongoing
Implementers	County and townships in association with local agricultural organizations

Our Food

Where are we now?

The choices we make, such as the food we eat, all have a role to play in how we impact the climate. For example, purchasing locally produced food reduces the amount of energy needed to ship it, and thus reducing GHG emissions. Additionally, wasting less food results in less organic matter being sent to landfill and less GHG emissions resulting from decomposition.

How are we planning to act?

Our Food	
	<ul style="list-style-type: none"> • Support localization of the food system • Encourage purchasing of locally produced food • Reduce the amount of wasted food

Strategy F1: Support localization of the food system	
Primary Action	Undertake a community food system assessment to better understand local food production and movement within the GPA.
Overview	A clear understanding of the agriculture and food production system in the GPA is not fully known. A more in-depth exploration of the current food production and processing capacity of the GPA can provide a better understanding of this and explore opportunities to improve the local food production and processing capacity of the GPA.
Recommended Approach	Engaging with the local agricultural and food organizations to: <ul style="list-style-type: none"> • Identify agricultural production and local food processing in the GPA; • Document movement of food out of and into the GPA; • Explore barriers and opportunities to further processing of food locally; and • Explore sale of locally produced/processed food and barriers and opportunities to increasing local sales.
Timing	2018-19
Implementers	Collaboration between City of Peterborough and Peterborough County, including local partners

Strategy F2: Encourage purchasing of locally produced food	
Overview	Many mechanisms and efforts are already underway to encourage the purchase of local food across the GPA. Making local food a priority and encouraging and supporting further local food purchasing can be undertaken by all communities and through support of the existing initiatives and organizations.
Recommended Approach	<p>The following is the recommended approaches to encourage the purchase of local food:</p> <ul style="list-style-type: none"> • Support local organizations to promote the marketing of locally-produced food through initiatives such as the Purple Onion Festival and Local Food Month; • Expand and promote the Farmers Market Network across the Greater Peterborough Area; and • Support and encourage farm gate sale of produce.
Timing	Ongoing
Implementers	All local communities.

Strategy F3: Reduce the amount of wasted food	
Primary Action	Implement a residential awareness campaign to encourage elimination of wasted food in the home, workplaces, and schools.
Overview	Food waste from residents, businesses, and institutions is one of the major contributors to organic material being disposed of in landfill and contributing to GHG emissions. A significant proportion of food waste generated can be avoided through changes to food purchasing and preparation techniques and planning, and general awareness.
Recommended Approach	It is recommended that an awareness campaign be implemented to educate people about the amount of food that is being wasted, what it costs, and how much GHG emissions it results in. The campaign should aim to educate on ways to reduce excess food waste from the planning to eating phases, as well as alternatives to disposal of leftover food. Campaigns should be targeted and tailored to the various generators of food waste across the GPA (e.g. City residents, County residents, local businesses, schools and other institutions) with an ultimate goal of educating people and creating a culture of conservation.
Timing	County campaign in 2016; City in 2018/19
Implementers	County of Peterborough and City of Peterborough