

*This guide was developed as a final student assignment for the Planning for Agricultural Conservation course, co-delivered by the University of Guelph and the Ontario Farmland Trust. While it is informed by academic research and case studies, it does not represent the official views or recommendations of OFT.*

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SCHOOL OF  
ENVIRONMENTAL DESIGN  
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ONTARIO FARMLAND TRUST  
PROTECTING FARMLAND FOREVER



# Municipal Toolkit: **A Step-by-Step Guide to Farmland Preservation Through Parks**

**RPD 6290: Planning for Farmland Conservation**

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Thank you to all who have contributed their experience, time, and passion to educating our class and in turn, informing this project. We hope to contribute to a future where thoughtful planning bridges conservation, community, and cultural respect.

## Land Acknowledgement

We acknowledge that the University of Guelph is located within the Dish with One Spoon wampum and the Between Lakes Purchase, and is on the treaty lands and traditional territories of the Mississaugas of the Credit First Nation (Michi Saagiig Nishnaabeg). We acknowledge other Indigenous communities, including the Anishinaabeg, Haudenosaunee, and Attawandaron people, whose ancestral lands, treaties, and histories continue to inform our present and guide our future.

We recognize as future Planners that every planning decision has the potential to honour the deep connection Indigenous peoples have with the land. It is our responsibility to incorporate Indigenous perspectives, embrace sustainable stewardship, and work collaboratively towards reconciliation, upholding the Seventh Generation Principle and embracing Two-Eyed Seeing to ensure the preservation and equitable use of land for generations to come.



# 1.0 Introduction

## 1.1 Purpose of This Guide

This Municipal Toolkit is designed to serve as a comprehensive, step-by-step resource for municipalities, farmland preservation organizations, and other collaborators, contributors, and community members alike seeking to integrate farmland preservation within park systems. This guide aims to synthesize academic research, policy analysis, and case study evaluations to provide municipalities with a robust, practical, and implementation-focused recommendations for preserving farmland within public park borders. In doing so, this guide will act as a how-to framework, with actionable steps to creating sustained protected agricultural lands in the urban landscape.

Farmland preservation has emerged as an increasingly complex priority within the urban context amidst rapid urbanization, unprecedented environmental degradation, and the need to sustain local food systems. Local municipal planners lie at the intersection of these competing goals, aiming to sustain healthy urban growth while maintaining agricultural lands. Farmland preservation is not solely an environmental imperative but also a socio-economic necessity that sustains local food systems, food sovereignty, and cultural heritage. Overall, this guide seeks to empower local municipalities and other allied stakeholders to make informed, strategic, and effective decisions that manage urban growth alongside farmland preservation.

## 1.2 Why Farmland Preservation Through Parks?

Farmland preservation through parks ensures the continuity of agricultural productivity, environmental health, and cultural heritage. Integrating working farmland into park systems has been shown to support sustainable food systems by maintaining local food production, which enhances regional food security, promotes circular economies, builds social capital and reduces reliance on imported products (Gulyas, 2021). Urban agriculture integrated within multifunctional landscapes also contributes to creating a more resilient local economy, crucial for cities within Canada and beyond facing unpredictable global supply chains (Lovell, 2010).



Beyond its contribution to creating sustainable local food systems, this approach also advances environmental conservation. Farmland and the use of regenerative agricultural practices has many benefits beyond food production, including increased biodiversity outcomes, improved soil health and fertility, and greater ecological resilience to natural disasters and the climate crisis (Sher et al., 2024). Maintaining working farms within urban parks can be considered a nature-based solution, which aids in soil carbon sequestration and mitigates the urban heat island effect, while also acting as natural corridors to enhance wildlife connectivity, alleviating some challenges associated with habitat fragmentation (Hayes et al., 2022; Mitchell, 2015; Sorensen & Hunter, 2020). Integrating farmland into parks creates microclimates that support plant, animal, and human life, which is essential for long-term urban sustainability, particularly with increasing environmental unpredictability due to climate change.

Additionally, farmland preservation through parks serves as an important aspect for cultural and heritage preservation. It honours rural Canadian traditions and protects the historical legacy of agricultural communities by retaining the landscapes and practices that have defined regional identities for generations. This strategy prevents the erasure of cultural narratives linked to farming, while also providing urban residents with connections and recreational exposure to the land's historical and social roots. Successful models, such as the Rouge National Urban Park in Ontario demonstrate how innovative land use arrangements, such as long-term agricultural leases to support continuous farming within protected urban areas, can effectively counteract the pressures of urban sprawl while preserving cultural landscapes (Parks Canada, 2019).

Integrating farmland into urban parks also improves urban livability, providing residents with recreational, educational, and community engagement opportunities, creating public appreciation, understanding, and respect for sustainable land use and farming practices. Policy initiatives, such as Ontario's Greenbelt Plan, demonstrate that targeted and thoughtfully designed land use policies can diminish sprawled urban development and secure valuable finite agricultural lands for the benefit of future generations (Government of Ontario, 2017). Literature and practical examples show that farmland preservation through parks reflects a sound, coherent, and powerful planning strategy that integrates environmental, cultural, and economic considerations for holistic and sustainable development outcomes.

## Key Benefits of Farmland Preservation Through Parks



**Sustainable  
Food Systems**



**Environmental  
Conservation**



**Cultural  
Preservation**



**Urban  
Livability**

## 1.3 Who Should Use This Guide?

This guide is intended to provide useful and practical information for individuals who care about sustainable urban agricultural landscapes, meaningful and prosperous agricultural protection policies, and ultimately, how to leverage innovation to effectively preserve farmland through parks. If you play a role in shaping the built environment and preserving agricultural heritage, this Municipal Toolkit is for you!

Municipal Planners and local government officials will benefit from gaining an understanding of applicable policies, regulatory frameworks, and strategies that fit the need for their region and landscape.

Farmland preservation organizations and environmental advocates will find research analysis and practical models to guide, promote, and support their initiatives and drive policy reform.

Community groups, local residents, and grassroots organizations can utilize this resource as a foundation for collaborative planning methods to protect local food systems and cultural heritage.

Academic researchers and students in planning, environmental policy, and agricultural economics will also benefit from this comprehensive guide, which includes assessing the need for farmland preservation in your municipality, choosing the right preservation model, securing land, developing a management plan, engaging the community and farmers, balancing conservation with public access, ensuring financial sustainability, and monitoring, evaluating, and adapting initiatives. This guide aims to create an outline for integrating farmland into parks for sustainable and resilient urban development.



### GOAL 1

**Provide decision-makers with research-based strategies to integrate farmland into urban park planning**



### GOAL 2

**Translate academic research into evidence-based practical policy solutions for agricultural land preservation**



### GOAL 3

**Support local food security and environmental resilience through farmland protection**



### GOAL 4

**Educate on cultural, historical, and ecological significance of farmland to inspire informed advocacy and policy reform**

## 2.0 Assessing the Need for Farmland Preservation in Your Municipality

Oftentimes, when we consider farmland, we envision the open country, the wide expanse of crops, and the farmers who labor to foster them. However, such places are being developed at a rapid rate, and such precious spaces are vanishing. Farmland protection is about conserving open space and ensuring sufficient farmland to feed the population, supporting the local economy, and keeping the environment healthy for future generations. This section will discuss three steps that can be used to help determine the need for farmland preservation: assessing the current agricultural land use, defining the threats, and engaging stakeholders in the process as early as possible.

### 2.1 Evaluate Current Agricultural Land Use

To protect farmland, it is necessary to know what is on the farmland. This means looking a little closer at the farmland use today, the owners of the land, and the productivity of the land.

**Map Existing Farmland Within or Near Parklands:** The first step is to determine where the farmland is. Is there a big acreage near urban centers, or does the majority of the farmland lie in the countryside? Some tools like Geographic Information Systems (GIS) can be used to develop more detailed maps that can determine the exact location of the farmland. For instance, in the Greater Toronto Area (GTA), Rouge National Urban Park (RNUP) conserves more than 7,000 hectares of farmland and will be discussed later in this Municipal Toolkit.

**Assess Agricultural Productivity:** Not all farmland is created equal. Some regions are very productive and can grow foods like fruits, vegetables, and grains that are important in our diet. Other regions may have farmland that is less productive but still valuable for their biodiversity or cultural significance. By looking at what is being planted and how much is being planted, we can tell which places need the most protection.

**Review of Land Ownership and Protection:** Who owns the farmland? What is the size of the operation, and how has it been managed over time? This information helps us to learn who to work with to preserve the land. It is also necessary to determine if any legal or policy barriers may prevent conservation efforts. For example, some municipalities have zoning by-laws that keep farmland from being converted to residential or commercial use.



## 2.2 Identify Threats to Farmland

Once we have mapped the farmland, the next step is to identify what is putting it at risk. To design adequate conservation plans, it is necessary to understand which threats are present.

**Urban Sprawl and Development Pressures:** As cities expand, there is a tendency to pull in the surrounding rural areas. This is especially the case in fast-growing regions like the GTA, where urban sprawl is now threatening agricultural land (Parks Canada, 2023b). When a residential or commercial development is proposed on farmland, it is lost, and when farmland is removed, it is gone forever.

**Land Speculation and Rising Property Values:** Some investors do not have any intention to use the farmland for existing uses, but rather will purchase and hold these lands until they can sell it at a profit. This speculation raises land prices, which can make it difficult for other farmers to afford the purchase of, or retention of lands. At times, the farmers are left with no choice but to sell their land because they cannot afford to fight for it with developers who offer very attractive prices.

**Zoning Policies that Allow Conversion:** Not all zoning by-laws are created equal when it comes to the preservation of farmland. Some municipalities use a 'general agricultural' or 'rural lands designation' which could allow for easier conversion of agricultural land to an industrial park or a neighborhood. When farmland is not given strong legislative protections; it can disappear quickly.

### Primary Threats to Farmland



**Urbanization  
and Sprawl**



**Farmland  
Affordability**



**Land Use  
Conversion**





## 2.3 Engage Stakeholders Early

Effective farmland conservation requires the engagement of many external stakeholders, including but not limited to farmers, conservationists, and Indigenous peoples. A single farmer or municipality cannot preserve farmland alone.

**Farmers:** Farmers are the most important stakeholders within any farmland preservation initiative. Begin with them, find out what they need, what they worry about, and what they would be willing to do for preservation programs. There are farmers who desire to keep their land for agricultural production but are financially troubled. You can help by providing incentives like tax incentives or grant incentives.

**Conservation Organizations:** Environmental organizations can be very useful in farmland preservation efforts. They are familiar with the protection of natural habitats and can thus assist in ensuring that farmland preservation is in line with other conservation objectives. For instance, in RNUP, conservation associations have assisted in the conservation of both farmland and biodiversity (Parks Canada, 2023c).

**Indigenous Communities:** Indigenous peoples are closely connected to the land and have traditional, valuable knowledge of sustainable land management. This knowledge should be integrated into preservation efforts throughout the planning process, ensuring that their perspectives are respected.

It is important to understand the goal of farmland preservation in order to come up with a good preservation plan. This in turn allows municipalities to effectively protect this vital resource by understanding the current use of farmland, the threats to it, and by involving stakeholders at an early stage. It is not a question of saving land, but of providing a sustainable future for everyone, for farmland preservation.

## Key Stakeholders for Farmland Conservation



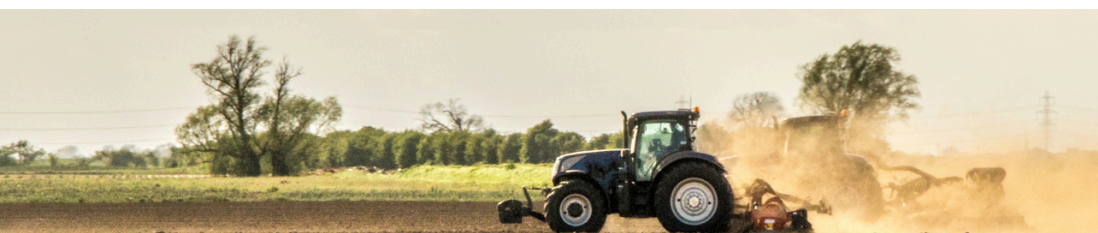
**Farmers and  
Agricultural Workers**



**Conservation  
Organizations**



**Indigenous  
Communities**



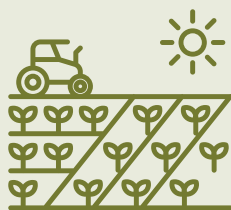
## 3.0 Choosing the Right Preservation Model

### 3.1 Public Ownership with Agricultural Leasing

The Ministry of Natural Resources (MNR) under the *Public Lands Act, 1990* is responsible for the management, sale, and disposition of Ontario's public lands through issuance of leases, easements and land use permits (MNR, 2024). Additionally, at the local government level, Section 270(1) of the *Municipal Act, 2001* ensures that municipalities adopt and maintain policies with respect to the sale and other disposition of land (Government of Ontario, 2001). More commonly, the provincial government typically leases farmland for the purpose of protection and use. Leasing farmland ensures that land is being used for agricultural production, provides food security, and support new farmers (OMAFRA, 2017)

One example of a public ownership model with agricultural leases is RNUP. RNUP is located within the GTA and accounts for approximately 7910 hectares of park land (Parks Canada, 2012). This park demonstrates the power of public consultation and different levels of government coming together for a common goal. RNUP serves as a strong example of the influence that can be had when farmland is leased to farmers for the purpose of use and preservation. The *Rouge National Urban Park Act* was introduced in 2016 to prioritize ecological features as well as set increases to the lease terms from one-year to thirty-years for park farmers (Parks Canada, 2015). This is intended to provide benefits to farmers by delivering stability to their livelihoods and operations long-term (Zhang et al., 2021). This practise also ensures that the lands are getting used and maintained to enrich the designated prime soils that exist (Zhang et al., 2021; Zou et al., 2020). As a result, the RNUP represents the largest urban protected farmland in Canada which is a significant start to success within the context of agricultural preservation (Parks Canada, 2015). The RNUP will be examine further as a case study later in this Municipal Toolkit.

#### Key Benefits of Agricultural Leasing



**Utilizing Prime  
Farmlands**



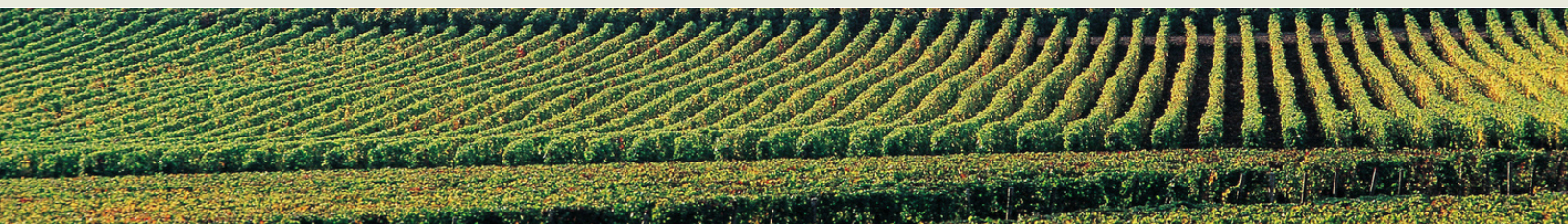
**Meaningful  
Consultation**



**Prioritize Ecological  
Features**



**Stability to Farmers  
Livelihood**



## 3.2 Conservation Easements Within Parklands

The *Ontario Conservation Land Act, 1990*, enables land trusts and other qualified organizations to protect land without owning it through Conservation Easement Agreements (CEA). CEAs are enforceable legal agreements between the current landowner and the land trust that protect lands by limiting the use of property for the purpose of conservation (Ontario Land Trust Alliance, 2024). The Ontario Farmland Trust (OFT) serves as a strong organizational example which aims to protect and preserve Ontario's farmlands for future generations. The OFT works with farmers and municipalities to help them protect farmland through CEAs. The OFT's work has been immense as they have protected 2700 acres of farmland working diligently with farmers, researchers, policy makers, politicians and conservationists (Ontario Farmland Trust, n.d.).

## 3.3 Agricultural Parks Model

The Agricultural Parks Model integrates agricultural practices within public park areas. This creates a space for farmers to coexist with recreational public activities. This partnership allows farming to be put on display and for the community to develop a deeper understanding of local food production and environmental sustainability (Hosseinpour et al., 2022). A strong example of the Agricultural Parks Model is the Cuyahoga Valley in Peninsula, Ohio which has a farming program within the park boundary that leases land to farmers to help preserve the park's landscape (CCVNP, n.d.). The Cuyahoga Valley Environmental Education Center, located within the park, allows students to learn about food, farming, agriculture, climate change and gardening (CCVNP, n.d.). This program was made possible by strong partnerships with non-profit Spice Hospitality Group and Spring Field Kitchen (CCVNP, n.d.). Additionally, the park has over 250 community gardens where the community dedicates their time and care to maintain for Cleveland residents (OSUE, n.d.). The park partnered with unique stakeholders with special expertise to model a farm-to-table approach, keeping the parks agricultural efforts at the forefront.



## 4.0 Securing Land for Farmland Preservation

### 4.1 Municipal Land Acquisition Strategies

Enabled through the *Municipal Act, 2001*, municipalities may purchase farmland adjacent to or within parks through direct purchase, through allocated funds determined in the fiscal years budget (Government of Ontario, 2001). This would be acquired through means of property tax, incentive initiatives, and partnership with conservation authorities and non-profits to co-own or manage lands (i.e. lease agreements or conservation easement).

Regarding the acquisition of parkland, as per the *Planning Act, 1990*, Section 42 and 51.1 states that when development or redevelopment occurs, dedication land for parkland purposes may be requested by the municipality (Government of Ontario, 1990). Should the municipality not see fit dedication of lands on the subject property (as per secondary plans, such as a Parks Plan), cash-in-lieu of parkland in form of payment can be accepted (Government of Ontario, 1990). Additionally, should the municipality accept a conveyance of land as parkland that does not equate to the appropriate amount of dedication required, both parkland conveyance and cash-in-lieu of parkland payment may be accepted (Government of Ontario, 1990).

Parkland dedication or cash-in-lieu of parkland is calculated in accordance with the *Planning Act, 1990*, alongside a municipal parkland conveyance by-law, where it exists. Parkland conveyance occurs through the development of land under plan of subdivision, zoning by-law amendment with holding provisions, or consent to sever applications (land division). As per the *Planning Act*, 2% of land shall be conveyed to the municipality for parkland purposes associated with commercial or industrial development, and 5% for all other development. Should a municipality not have a parkland conveyance by-law, it shall comply with the capped rate of parkland dedication (Government of Ontario, 1990). The alternative rate of 10% land conveyance for lands five hectares or less, and 15% for lands greater than five hectares applies when a parkland conveyance by-law exists (Government of Ontario, 1990).



## 4.2 Leveraging Provincial and Federal Support

To promote the security of farmland protection, municipalities can encourage the owners of agricultural lands to preserve farmland by offering incentives such as tax benefits for land donations. The Government of Ontario offers programs such as the Farm Property Class Tax Rate Program, which lowers property tax for eligible farmland parcels. Lands within the property that are used for residential purposes are taxed at the municipal residential tax rate, and farmland purposed lands taxed no greater than 25% of the residential tax rate (Government of Ontario, 2021). This incentive offers collaboration between the province, the municipality and land owner to ensure the long-term protection of local farmland. Section 8 provides a detailed approach regarding federal and provincial financial aids.

Additional ways to secure farmland include conveyance of lands to municipalities through means of donation in return of tax incentives to land owners. Formal lease or easement agreements between a farmland owner and municipality for the continued use of farmland is to be incorporated as a condition, offering long-term farmland establishment.

Collaboration with Parks Canada can align policies on farmland protection within parks. One idea for potential farmland preservation would be for the municipality to acquire parkland through provincial mandate (conveyance or cash-in-lieu direct purchase), and in collaboration with the Parks Canada, dedicate the lands for the creation a national park. This would achieve the highest level of long-term protection of farmland through parks.

### Key Strategies for Provincial and Federal Support



**Municipal Donation and Lease Agreements**



**Tax Benefits for Land Donations**



**Collaboration with Parks Canada**



## 4.3 Zoning and Land-Use Policies

Under the *Planning Act, 1990*, Section 16, municipalities are required to designate lands, and Section 34, further provide detailed zoning outlining permitted uses and prohibitions of land (Government of Ontario, 1990). This enables municipalities to designate lands for agricultural and farmland purposes, prohibiting development and long-term protection of farmland. Municipalities can achieve farmland protection by designating farmland within parks as protected agriculture zones to prevent future conversion. It also allows for municipalities to outline policies in their official plans for the protection, preservation and enhancement of farmland.

As per the *Provincial Planning Statement (PPS)* “*planning authorities are required to use an agricultural system approach, based on provincial guidance, to maintain and enhance a geographically continuous agricultural land base and support and foster the long-term economic prosperity and productive capacity of the agri-food network*” (MMAH, 2024). Additionally, “*prime agricultural areas, including specialty crops areas, shall be designated and protected for long-term use for agriculture*” (MMAH, 2024). Under the *Planning Act, 1990* (Section 3.5.b), municipalities must conform to provincial policy statements. If a zoning by-law were to provision the use of farmland within parks, as per the PPS, no development were be permitted within the designated agricultural lands.

Official plans and zoning by-laws can also regulate urban growth, establish boundary lines, and prohibit harmful activity to parkland and farmland (i.e. urban sprawl). Regulating land use allows for the establishment of urban growth boundaries, prohibiting expansion into prime agricultural lands, as well as parkland designations (should policy be identified in official plans). Creating policy allowing for the use of farmland within parkland would establish frameworks enabling municipalities with more tools for the acquisition and creation of parkland with farmland features.



# 5.0 Developing a Farmland Management Plan

Developing a successful and achievable farmland management plan starts with defining clear land use goals, using these goals to enact sustainable farming practices, and protecting the lands for long-term use.

## 5.1 Define Clear Land Use Goals

A Farmland Management Plan should focus on three key components: environmental, economic, and social benefit (Leader et al., 2024). These components support a sustainability framework, balancing land use impacts.

Environmental land use policies within the park system should mitigate the impacts of farming operations on water quality, biodiversity, and soil health, all through a lens of conservation and sustainability (Kirechev, 2021). The policy framework should focus on key elements such as:

- Designate buffer zones and habitat corridors to preserve biodiversity within the park (Leader et al., 2024)
- Regenerative farming techniques to maintain and enhance soil health (Kirechev, 2021)
- Water conservation

Economic sustainability should also be considered as part of farmland management within park to support long-term viability of farming operations (Kirechev, 2021). These policies should address:

- **Permitted Farming Operations:** Defining the types of farming allowed, such as cash crops or livestock.
- **Infrastructure and Logistics:** Ensuring adequate transportation access, road networks, and shipping logistics.

Social integration is the third component of farmland management within park landscape. This includes (Barthel et al., 2015):

- **Public Access and Conservation:** Balancing farming activities with recreational access to ensure community engagement.

Through the integration of environmental, economic, and social principles a comprehensive farmland management strategy can be developed. This allows the successful support of sustainable farming, while fostering conservation and sustainability within the park.



## 5.2 Sustainable Farming

To achieve sustainable farming methods within the park system, priority should be placed on balancing conservation efforts and farming operations. The adoption of regenerative and organic farming practices is critical in supporting these objectives. Additionally, these practices would support soil and water conservation, foster sustainability, and enhancing biodiversity (Leader et al., 2024; Schreefel et al., 2022).

Regenerative practice primarily focuses on soil health and management with the primary objectives of promoting economic prosperity, improving nutrient cycles, enhancing water quality, and fostering biodiversity and habitat provisions (Schreefel et al., 2022).

Regenerative agriculture supports the economic sustainability of farming operations by improving productivity by increasing the soil's ability to supply nutrients and water for plant production. This is essential for food production and increase yield which supports economic sustainability (Sandén et al., 2019; Schreefel et al., 2022).

Enhancing the nutrient cycle through regenerative practices, such as crop rotation or no-till farming, ensures that soils can absorb, retain and supply nutrients effectively. The increase in nutrients supports crop growth, leading to increased yield and long-term soil quality (Schröder et al., 2016; Schreefel et al., 2022).

Regenerative agriculture aids in the improving water quality and supply, through improving the soil's ability to filter contaminants, store water, and effective distribution for plant use. This supports farming operations due to improvements in the overall quality and availability of water (Wall et al., 2020; Schreefel et al., 2022).

Organic farming aims to maintain long-term soil fertility by fostering conditions that support biological activity, sustaining biodiversity, and maximizing the recycling of materials and resources (Canadian General Standards Board, 2006; Halberg, 2012). This is typically accomplished by limiting the use of fertilizers and pesticides, which helps enhance food nutrition and safety while reducing the environmental impact of conventional farming practices (Chen et al., 2020).

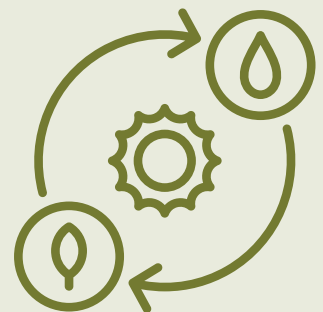
By implementing these methods, active farming operations within the park system can mitigate negative impacts on soil and water quality, support environmental conservation, and increase yields to support the economic viability of farming operations (Halberg, 2012).



**Economic  
Prosperity**



**Improved Nutrient  
Cycles**



**Enhanced Water  
Quality**



**Increased  
Biodiversity**



## 5.3 Long-Term Governance

The preservation of farmland within the park system requires the collaboration of various public and Non-Government Organizations (NGOs) to effectively manage the parks diverse operational needs for the long-term (Boulton et al., 2023).

**Governance Structures:** Local planning authorities provide the legislative framework necessary to administer and enforce zoning bylaws, development limits, and conservation policies. This critical role is required to ensure that appropriate policies and procedures are in place to balance the various land uses within the park, including recreation, environmental conservation, and farming operations (Boulton et al., 2023). Local planning authorities should allocate a dedicated staff or establish a committee to oversee park regulations. They should also provide support to NGOs, farmers, and businesses operating within the park.

NGOs like the OFT, can assist in implementing conservation easements for farms seeking to preserve their farmland (Ontario, 2011). Additionally, they can serve as advisory members for public outreach initiatives and provide essential guidance to local jurisdictions on developing and implementing local regulations and policies. Local community members can contribute to park operations through volunteer efforts, such as conservation and restoration efforts. Business members, including active farming operations within the park, play a vital role in supporting park's economic capacity. This provides economic stability within the park which is necessary for the long-term support of farmland preservation (Halberg, 2012).



# 6.0 Engaging the Community and Farmers

## 6.1 Farmer Outreach and Recruitment

The success of farmland conservation is directly related to the ability of a planning authority to recruit and maintain relationships with local farmers. To form a diverse agri-food network in Ontario, it is critical to choose a variety of farm types and sizes. Without suitable farmers, lands may get abandoned, and farmland preservation goals will be difficult to achieve.

Three steps to recruit and maintain farmer relationships include:

### Step 1: Identify Potential Farmers

- An agricultural parcel may only be suitable for particular farming techniques, which could depend upon its soil quality and the climate conditions. Therefore it is important to identify potential farmers who can maximize the lands productivity (ALRRC, 2018).

### Step 2: Create an Outreach Strategy

- Organizing webinars, town hall meetings and other events to spread awareness can help to meet and inform farmers of the park preservation initiative.
- Various communication mediums should be used such as newspapers, radio channels and social media, to spread the word regarding the farmland preservation.
- Indigenous community farmers or stakeholders can be involved to create trust among the local community, which will help in strengthening relationships (ALRRC, 2018).

### Step 3: Providing Incentives and Infrastructure

- Supporting the farmers by providing them long-term leases at discounted rates can economically help farmers.
- Offering tax reductions and grants helps supporting new and existing farmers.
- Infrastructure should be improved, such as water services and storage facilities, which are essential for retaining farmers (ALRRC, 2018).



## 6.2 Community Engagement and Education

Community engagement plays a crucial role in the success of farmland conservation through parks, as it allows external stakeholders to be involved in the decision making process and improves relationships (ALRRC, 2018). Through educating the community, policy adoption could be made easier, therefore reducing conflicts. Engaging local people and farmers can also support the long-term strategies for farmland conservation.

Three steps to achieve community engagement and encourage education include:

### Step 1: Land Assessment

- **Engaging Stakeholders** - It is important to identify which farmlands are selected for preservation and to engage any stakeholders early (i.e. during land assessment).
- **Define the Purpose** - It is essential to define the goals and objectives of the selected lands, such as whether they will be used for ecotourism or agriculture.
- **Checking with Zoning Plans** - It is important to check the relevant legislation, including the municipal zoning by-laws.

### Step 2: Community Engagement

- **Conducting Workshops** - Farmers and community can be educated by organizing educational workshops and seminars. These help with gathering and conveying information amongst stakeholders and the public.
- **Organizing Interviews** - Conducting surveys and interviews helps in gathering information, perspectives, and concerns from the local people and the farmers.
- **Offering Tax Benefits and Incentives** - Municipalities can offer tax reliefs, grants and initiate revenue sharing for landowners and/or land lessee's (ALRRC, 2018).

### Step 3: Designing the Farmlands

- **Segregating Areas** - Areas should be appropriately designated early on, to ensure that there are no land use incompatibility concerns between neighbouring properties. This includes parks that are open to the public and farms that are exclusive for learning purposes.
- **Induce Design Elements** - While designing and planning, it is important to provide signage, accessible pathways for visitors, and amenities like washroom facilities.



## 6.3 Indigenous Community Engagement in Farmland Preservation

Engaging Indigenous community in farmland conservation requires a collaborative approach. Indigenous communities have historical knowledge of agricultural lands, as they have been present and managing lands on Turtle Island since time immemorial. Indigenous communities also have expansive knowledge about traditional farming techniques that can preserve native crops (Owiny et al., 2014).

To support traditional food practices, combining three crops (corns, beans and squash) is a very popular practice, and can help maintain soil health. Indigenous farmers involvement encourages Traditional Ecological Knowledge (TEK), which further helps in water conservation and helps preserve sustainable farming practices (Owiny et al., 2014).

The following five steps should be following to build Indigenous community relationships and engagement in farmland preservation:

### **Step 1: Engaging Indigenous Leaders at an Early Stage**

- Consulting with elders within the early stages of farmland assessments can help in developing long-term sustainable farmland management plans (Scherl et al., 2021).
- Organizing cultural gatherings where indigenous people can freely express their views and concerns, can give planning authorities insights of the issues these communities face (Scherl et al., 2021).

### **Step 2: Incorporating Indigenous Land Use Practices**

- Allowing for traditional farming techniques in the parks design can be one of the step for parks preservations (American Farmland Trust, 2025).
- Encouraging Indigenous land managements models where Indigenous community member can lead the park governance (American Farmland Trust, 2025).



### Step 3: Designing Areas for Cultural Activities

- Areas within the park could be reserved for traditional activities such as story telling, traditional ceremonies and gatherings, or for more permanent structures like healing gardens.
- Agricultural tourism can be initiated where tourists have the opportunity to participate in indigenous heritage educational events (ALRRC, 2018).

### Step 4: Funding for Indigenous Community-led Farms

- Funding and grants for indigenous-led farming practices should be initiated for promoting farming conservation.

### Step 5: Knowledge Exchange Programs

- Various events can be organized like cultural gatherings, food festivals and other cultural activities celebrating the Indigenous cultural food systems.
- Policies can be refined by Indigenous community evaluations and suggestions.
- Youth can be encouraged to join farming activities, which can be done by creating more job opportunities in farmland conservation (ALRRC, 2018).

## Key Components of Meaningful Indigenous Engagement



**Early  
Engagement**



**Relationship  
Building**



**Cultural Respect  
and Sensitivity**



**Holistically Integrated  
Perspectives**



# 7.0 Balancing Conservation and the Environment

The following subsections will provide an overview of how planning authorities can balance environmental conservation with the protection of farmland within their communities. It will outline how planning authorities can consolidate priorities in order to effectively manage and protect features, and at the same time, meeting provincial goals outlined in the *Provincial Planning Statement* (MMAH, 2024).

Ontario has set the ambitious goal of building 1.5 million homes by the year 2031, but where will these homes go? The PPS (MMAH, 2024) has outlined that “*growth and development will be prioritized within urban and rural settlements that will, in turn, support and protect the long-term viability of rural areas*” and that “*resources, including natural areas, water, aggregates and agricultural lands will be protected*”.

Another provincial priority is the creation of healthy, active, and inclusive communities (MMAH, 2024). This includes the planning and provision of publicly accessible natural settings that are available for recreation and includes trails and linkages.

In much of our province, agricultural areas and natural features are contiguous on the landscape. Farmers pride themselves on their continued land stewardship, and their willingness to implement new conservation practices. These practices are often rooted in environmental stewardship, and include the protection of natural features, the protection of species at risk and their habitats, managing invasive species and pests, protecting aquatic features and fish, and reducing the impacts of climate change.



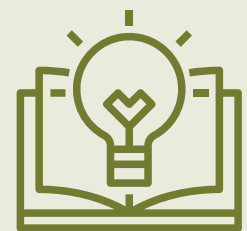
**Protecting Natural Features**



**Protecting Species at Risk**



**Enhancing Public Access**



**Creating Opportunities for Learning**

# 7.1 Protecting Natural Heritage Features

To meet the goal of protecting natural resources, including natural areas, water, aggregates and agricultural areas, Chapter 4 of the PPS (MMAH, 2024) provides policies for the wise use and management of resources within the province. This includes Natural Heritage Features in Section 4.1, Water in Section 4.2, and Agriculture in Section 4.3. Between these three sections, there are many similarities, some of which are included in Table 1 below. A notable difference, is that the natural heritage policies outlined in the PPS do not apply to agricultural uses (Section 4.1.9).

Table 1. Similarities between Section 4.1 and Section 4.3 of the Provincial Planning Statement (MMAH, 2024)

Section 4.3 Agriculture	Section 4.1 Natural Heritage
<p><i>“maintain and enhance a geographically continuous agricultural land base”</i></p>	<p><i>“The diversity and connectivity of natural features in an area ... should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas”</i></p>
<p>“prime agricultural areas, including specialty crop areas, shall be designated and protected for long-term use for agriculture”</p>	<p>“Natural features and areas shall be protected for the long term”</p>
<p>“Impacts from any new or expanding non-agricultural uses on the agricultural system are to be avoided, or where avoidance is not possible, minimized and mitigated...”</p>	<p>“Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas ... unless the ecological function of the adjacent lands has been evaluated, and it has been demonstrated that there will be no negative impacts...”</p>

In Ontario, Natural Heritage Features consist of the following features and their adjacent lands (MMAH, 2024):

- Natural Heritage Systems
- Wetlands
- Woodlands
- Valleylands
- Fish Habitat
- Significant Wildlife Habitat
- Habitat of Endangered and Threatened Species



## 7.2 Protecting Species at Risk

Within Ontario, there are currently 126 species listed as endangered, 68 listed as threatened, and another 62 listed as special concern under Ontario Regulation 230/08. Species at Risk, those listed as either Endangered or Threatened under the *Endangered Species Act, 2007*, are afforded both individual and habitat protections.

Of the species at risk in Ontario, a number of them require managed farmland including:

- Eastern Meadowlark (*Sturnella magna*) and Bobolink (*Dolichonyx oryzivorus*), each listed as threatened in Ontario, nest within tall grasses, predominantly wheat (MECP, 2016a-b)
- Loggerhead Shrike (*Lanius ludovicianus*) listed as endangered in Ontario, nest within frequently grazed grasslands. Loggerhead shrikes also use sharp objects, such as fence posts and barbed wire, to impale and store large prey (OMNRF, 2016).
- Terrestrial species, such as the Blanding's Turtle (*Emydoidea blandingii*), listed as endangered in Ontario, farmland isn't considered part of their habitat, but it does not pose as a significant barrier to movement, like residential or industrial uses would. Blanding's are often found travelling long distances (>2 km) through actively farmed areas (MECP, 2017).
- Aerial insectivores, like most of the species at risk bats in Ontario (including the Little Brown Bat (*Myotis lucifugus*), they utilize open fields with nearby light sources which allow for the congregation of prey insects (Humphrey and Fotherby, 2019)

A number of significant wildlife habitats are also present within or adjacent to farmland (OMNRF, 2015) including:

- Waterfowl stopover, staging, and nesting areas
- Turtle nesting areas
- Seeps and springs
- Amphibian movement corridors

## Species at Risk



**Bobolink**  
(*Dolichonyx oryzivorus*)



**Loggerhead Shrike**  
(*Lanius ludovicianus*)



**Blanding's Turtle**  
(*Emydoidea blandingii*)



**Little Brown Bat**  
(*Myotis lucifugus*)



Aquatic species at risk are especially sensitive to the upland uses. Subtle changes in water temperature, or sediment, contamination, or nutrient loading can cause drastic impacts downstream. Within farmland and rural lands, these impacts are often caused due to poor environmental practices, such as leaving open soils available for erosion, dredging of watercourses, or poor nutrient management.

Two aquatic species at risk that are found within agricultural areas include:

- Redside Dace (*Clinostomus elongatus*), listed as endangered in Ontario, is found in coldwater streams, and is especially sensitive to both sedimentation and warming waters (Redside Dace Recovery Team, 2010).
- Wavy-rayed Lampmussel (*Lampsilis fasciola*), listed as endangered in Ontario, are especially sensitive to sedimentation and water quality, including contaminants and nutrients (Morris, 2011).

## 7.3 Invasive Species and Pests

Farmers play an active role in our communities when it comes to the management of invasive species and pests. These species can travel and multiply quickly, resulting in detrimental impacts to both the quality and quantity of agricultural production.

Farmers have a close relationship with their lands, often noticing infestations early, which can allow for the introduction of targeted control methods. This is called Integrated Pest Management or IPM (OMAFRA, n.d.).

IPM includes a number of different practices that can be utilized including:

- Crop rotation or inter-cropping
- Physical barriers
- Nutrient or water management
- Pruning and manipulation
- Encouraging natural enemies or predators
- Sanitation
- Resistant or tolerant cultivars

## Aquatic Species at Risk

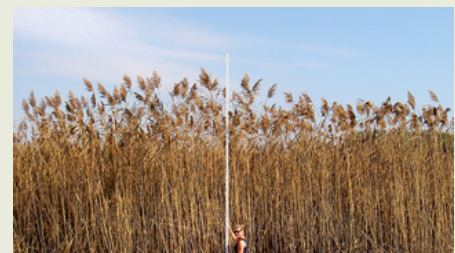


**Redside Dace**  
(*Clinostomus elongatus*)



**Wavy-rayed Lampmussel**  
(*Lampsilis fasciola*)

## Invasive Species



**Common Reed**  
(*Phragmites australis*)



**Asian Lady Beetle**  
(*Harmonia axyridis*)

## 7.4 Climate Change and the Environment

Lastly, as stewards of their lands, farmers are fundamentally connected to the environment and climate. Both farmland and natural heritage features rely heavily on the number of growing days and the hydrologic conditions such as ground water and surface water availability. As such, a changing climate has the potential to impact both features in a similar manner.

Many farmers already incorporate best management practices, 'green farming' practices, or sustainable agriculture. Sustainable agriculture (AAFC, 2025) focuses on adaptation, resilience, biodiversity, climate change mitigation, soil health, and water. This section will highlight a few of these 'green farming' practices that are already used in Ontario.

**1. Management of Nutrients and Water:** Eutrophication, which occurs when excess nutrients are washed into nearby waterways, can result in the overgrowth of bacteria such as blue-green algae, depicted in the photo below (Image 1). Farmers can mitigate this impact by following the manufacturers directions for application techniques and concentrations on their crops.

**2. Management of Soil Loss:** The loss of top soil can result in sedimentation or erosion of watercourses, ultimately resulting in the destruction of fish habitat, and the death of fish or other aquatic organisms, depicted in the photo below (image 2). Farmers can mitigate this impact by using cover crops, which are often available through grant programs.

**3. Protection of Headwater Drainage Features:** The management of agricultural drainage through swales, ditches, and tile drains can impact the flow regime of an area, as depicted in the photo below (Image 3). Relatively new guidelines (TRCA & CVC, 2014) for the protection and mitigation of headwater drainage features have been released. These guidelines can provide both landowners and regulators additional support on which features should be conserved and maintained.



Image 1

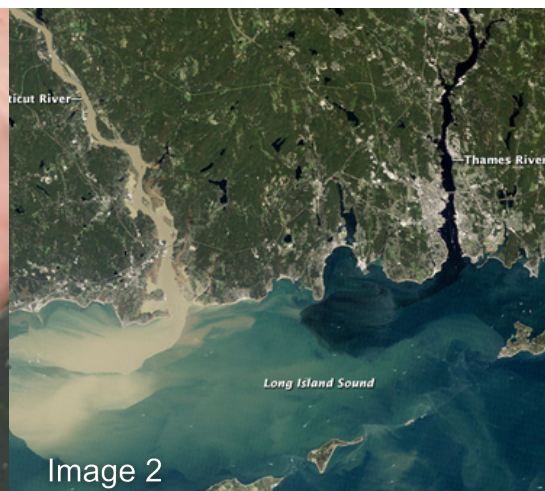


Image 2



Image 3

## 8.0 Funding and Financial Sustainability

Farmers seeking to expand their operations and those wishing to establish new ones within RNUP may not need to rely entirely on their own financial resources. There exist a variety of funding opportunities available based on the operation and desired goal. Most of these funding opportunities are not designed for long term conservation; however, while food production is the primary aspect of farming, funding opportunities are also available for achieving sustainability goals such as wetland restoration and soil improvement, which benefit farming practices particularly within the RNUP. Although gaining access to the information may prove difficult to find for an individual, many organizations offer help and guidance to their respective members when navigating access to available funding since some of these programs overlap between various levels of government.

### 8.1 Federal Funding Opportunities

Canada 



As part of its commitment to the Departmental Sustainable Development Strategy's goal to "support a healthier and more sustainable food system." (AAFC, 2024d). The federal government has implemented initiatives like the Sustainable Canadian Agricultural Partnership (Sustainable CAP) to help Canadian farms adopt practices and technologies that improve the environment and maintain productivity (AAFC, 2024d). Through the Sustainable CAP website, farmers can access a variety of funding sources.

The ideal place to begin with is Agriculture and Agri-Food Canada, which promotes innovation, managing risks, and ensuring long-term growth and sustainability (AAFC, 2024d). Through the use of the AgPal Program Service Finder tool designed to guide farmers to available funding resources (Government of Canada, n.d.). Some of the most notable services are outlined on the next page.



The *Canadian Agricultural Loans Act, 1985*, program allows farmers to secure loans of up to \$500,000 (for individuals) or \$3 Million (for co-operatives) (AAFC, 2022). This is intended for the purchasing land, equipment, and constructing or upgrades of farm buildings, with the government guaranteeing a portion of the loan to reduce lender risk (AAFC, 2022). This program supports both new and existing farmers by improving access to credit and encouraging growth in the agricultural sector.

The Local Food Infrastructure Fund (LFIF) supports food security for communities by funding infrastructure and equipment to improve access to local culturally appropriate food, prioritizing projects aiming to serve equity-deserving groups, especially Indigenous and Black communities (AAFC, 2024d). LFIF provides funding of up to \$100,000 for small-scale projects and up to \$500,000 for large-scale projects (AAFC, 2024a).

The Indigenous Pathfinder Service is an initiative developed specifically to guide and connect First Nations, Métis, and Inuit peoples and organizations with relevant funding opportunities to help them advance their practices (AAFC, 2024a).



## Key Resources for Federal Funding



**AgPal Program  
Service Finder**



**Sustainable Canadian  
Agricultural Partnership**  
Competitive. Innovative. Resilient.

**Canadian Agricultural  
Loans Act**



**Local Food  
Infrastructure  
Fund**  
—  
\$50M

**Local Food  
Infrastructure Fund**



**Indigenous  
Pathfinder Service**

## 8.2 Provincial Funding Opportunities

### Ontario

The province of Ontario has stated a commitment to strengthening Ontario's agricultural sector, ensuring farmers can continue producing high-quality food while navigating economic uncertainties (Government of Ontario, 2025). Part of this commitment includes the Grow Ontario Strategy, which is designed to strengthen the province's food supply chain and manage existing weaknesses by focusing on research and implementing new technologies and practices that improve competitiveness, as well as supporting the labour market (Government of Ontario, 2022a).

A good starting point is the Ontario Business Grants platform, which provides helpful information regarding government programs and grants available to various businesses in Ontario. Farmers especially can make use of the platform to find industry-specific grants (Maurice, 2023). This is not an exhaustive list, and additional information can be accessed through other programs.

The Resilient Agricultural Landscape Program is a federal initiative implemented through the provincial government that provides funding to farmers wishing to implement beneficial management practices that enhance environmental sustainability, soil health, and climate resilience (AAFC, 2024b). Funding amounts vary based on the specific project undertaken, such as grassland establishment, reduced tillage, or tree and shrub planting, among others (AAFC, 2024b).

The Strategic Agri-Food Processing Fund program supports investments in expanding and modernizing food processing facilities that increase processing capacity in Ontario (Government of Ontario, 2022b). These strategic investments aim to enhance sector competitiveness, help retain existing markets, and open access to new markets in the agri-food industry (Government of Ontario, 2022b).

## Key Resources for Provincial Funding



**Ontario Business Grants Platform**



**Resilient Agriculture Landscape Program**



**Strategic Agri-Food Processing Fund**

## 8.3 Revenue Generating Opportunities

Partnership organizations are a key component of farmland conservation; they may not provide direct funding for farmers but can serve as a resource to identify and access some of the funding opportunities available. Additionally, by bridging a connection between farmers and consumers, some of these organizations provide opportunities for farmers to access or expand their business into new revenue-generating opportunities.

The Ontario Agri-Food Innovation Alliance is a partnership between OMAFRA and the University of Guelph (University of Guelph, n.d.). It supports projects that enhance agricultural productivity, sustainability, and resilience through funding, research collaborations, and innovation-driven initiatives. The Alliance provides access to funding to strengthen Ontario's agri-food industry and rural communities (University of Guelph, n.d.).

Farmers' Markets Ontario is a nonprofit organization whose mandate is "to provide services to member markets, including management, government relations, marketing, professional development, and liability insurance, while promoting farmers, farmers' markets and the benefits of shopping local to Ontario consumers" (Farmers' Markets Ontario, n.d.). Their goal is to provide a dependable connection between consumers and locally produced foods across Ontario (Farmers' Markets Ontario, n.d.).

Agritourism Ontario is a nonprofit organization dedicated to supporting and promoting agritourism in the province (Agritourism Ontario, n.d.). Its mission is to provide knowledge and leadership so farmers continually build up the farm-fresh experience for consumers. Agritourism Ontario focuses on motivating and educating members to ensure the advancement of agritourism in Ontario (Agritourism Ontario, n.d.).

Securing financial stability in the agricultural sector requires a planned approach to accessing available federal, provincial, and organizational funding opportunities. Programs such as the Sustainable Canadian Agricultural Partnership, the AgriStability Program, and the Local Food Infrastructure Fund are designed to enable farmers to access some of the resources necessary to expand their operations, adopt sustainable practices, and navigate economic challenges. Additionally, provincial initiatives like the Grow Ontario Strategy provide guidance for programs like the Resilient Agricultural Landscape Program that offer vital support to enhance productivity and resilience. Beyond direct funding, partnerships with organizations such as Farmers' Markets Ontario and Agritourism Ontario help generate revenue and strengthen connections between farmers and consumers (Agritourism Ontario, n.d.). By leveraging these financial resources and support systems, farmers can employ these tools to contribute to a more sustainable, innovative, and economically reliable agricultural industry.



# 9.0 Monitoring, Adapting and Evaluating

Effective farmland preservation within a park system requires a structured approach to monitoring, evaluation, and adaptation. By establishing measurable goals, land managers and policymakers can ensure that agricultural lands within parks remain productive and sustainable while balancing conservation efforts.

## 9.1 Set Measurable Goals and Benchmarks

To ensure the success of farmland preservation, clear and quantifiable goals must be established. These benchmarks provide a foundation for assessing the effectiveness of conservation strategies and making data-driven decisions.

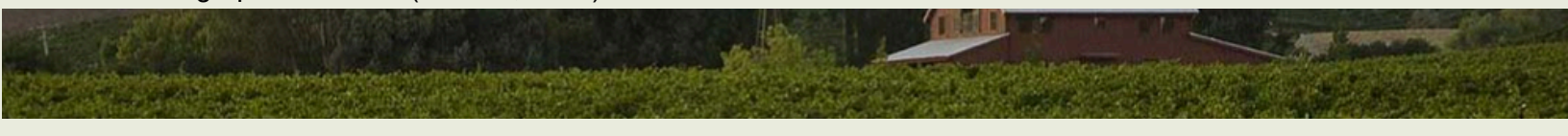
**Land Protection Metrics:** One key measure of success in farmland preservation is the monitoring of land use of protected farmland within park boundaries. Tracking land-use changes yearly over time helps to determine whether conservation efforts are effective or if policy adjustments are necessary (Bretagnolle et al., 2018). Establishing a baseline inventory of agricultural lands is also essential. By regularly updating this inventory, land managers can monitor trends and identify emerging challenges.

**Economic Indicators:** The economic viability of preserved farmland is a crucial consideration. Assessing the revenue generated from agricultural activities, employment rates in farming-related sectors, and the growth of agritourism can provide valuable insights into the economic benefits of farmland conservation.

### Case Study Example: The Napa Valley Agricultural Preserve

The Napa Valley Agricultural Preserve, established in 1968, was the first land-use planning project in the United States of America focused on agricultural preservation. At its inception, the preserve covered 23,000 acres of agricultural land and implemented zoning regulations that set a minimum parcel size of 20 acres to prevent excessive subdivision and development of agricultural land. The area was later expanded to 32,000 acres, and the minimum parcel size requirement was further increased to 40 acres (Daniels, 2019). This preservation effort not only successfully prevented urban sprawl but also greatly promoted the development of the local wine industry. The number of wineries has grown from 25 in 1968 to over 450 today, and the acreage planted with grapes has increased from 12,000 acres to 45,000 acres (Franson, n.d.).

Agricultural preservation in Napa Valley relies on laws and policies, while leveraging data monitoring and environmental management for sustainable development. GIS is used to monitor land-use changes, ensuring that agricultural land is not illegally developed (Franson, n.d.). Additionally, a database has been established to record and monitor the per-acre yield and the labor force, ensuring the continued protection and sustainability of Napa Valley's agriculture, primarily focused on grape cultivation (Daniels, 2019).



## 9.2 Regular Policy Review and Updates

Given the dynamic nature of environmental and economic factors, farmland preservation policies must be regularly reviewed and updated. This ensures that zoning by-laws and conservation strategies remain relevant and effective.

**Land-Use Policy Evaluation:** Comprehensive land-use policy reviews should be conducted regularly to reassess zoning by-laws and to ensure alignment with regional development trends. This iterative process allows policymakers to address challenges such as land fragmentation, urban encroachment, and shifting agricultural demands.

### Case Study Example: Rouge National Urban Park

The 2017 amendment to the *Rouge National Urban Park Act, 2015*, involved an adjustment to land lease policies, shifting from short-term leases to long-term leases of up to 30 years (Parks Canada, 2023a). This change stemmed from longstanding demands within the agricultural community, as farmers believed that short-term leases restricted their ability to make long-term investments and adopt sustainable agricultural practices, while the government's control over land use created uncertainty for agricultural development. In the original 2015 version of the Act, agricultural land leases typically ranged from 1 to 5 years, making it difficult for farmers to engage in long-term planning, such as crop rotation, soil conservation, and infrastructure development (Parks Canada, 2023a).

The 2017 amendment allowed farmers to obtain long-term leases, thereby enhancing agricultural stability (Parks Canada, 2023a). At the same time, the government incorporated lease provisions requiring farmers to adopt sustainable agricultural practices to align with the ecological conservation goals of RNUP (Parks Canada, 2023a). Long-term leases encourage agricultural investment, improve production efficiency, and help stabilize regional food supply while also alleviating farmers' concerns and opposition caused by short-term lease arrangements.

The amendment to the *Rouge National Urban Park Act, 2015*, shows the importance of policy review and updates in the process of farmland protection. Regular assessment and adjustments to policies not only address the needs of various stakeholders but also ensure the long-term conservation of farmland resources while promoting the coexistence of agriculture and ecological systems.





## 9.3 Encourage Knowledge Sharing

A coordinated approach to farmland preservation requires effective collaboration between municipalities, conservation organizations, and agricultural stakeholders. By sharing best practices and resources, the effectiveness of farmland conservation efforts can be enhanced.

**Municipal Collaboration Mechanisms:** Resource sharing between municipalities is crucial for farmland protection. For example, establishing cross-municipal agricultural protection plans can ensure policy consistency and reduce development pressure. Additionally, resource sharing and data integration can enable intelligent and scientific monitoring of farmland protection. This can be achieved by jointly creating an agricultural land database, standardizing evaluation metrics, regularly updating and maintaining data, and sharing information across municipalities. Moreover, municipalities can collaboratively publish land assessments and agricultural impact assessment reports on a regular basis, influencing decision-making from the ground up.

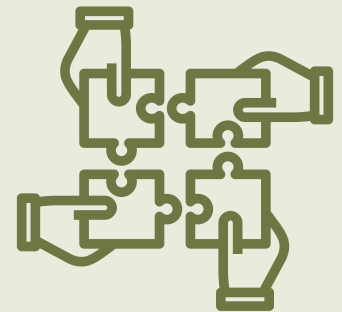
**Capacity-Building Programs:** Annual policy forums and workshops provide an opportunity for municipal planners, conservationists, and farmers to exchange knowledge and discuss strategies for farmland preservation. Offering training grants to local governments can further support the development and enforcement of farmland-friendly policies.

**Public and Stakeholder Engagement:** Public participation plays a critical role in the success of farmland preservation efforts. Establishing citizen advisory panels allows farmers and local residents to provide input on policy decisions, ensuring that preservation strategies align with community needs. Additionally, launching public awareness campaigns can help highlight the benefits of integrating agriculture into protected park spaces.

## Key Opportunities for Knowledge Sharing



**Municipal Collaboration Mechanisms**



**Capacity-Building Programs**



**Public and Stakeholder Engagement**



# 10.0 Conclusion and Next Steps

## 10.1 Key Takeaways

This guide has been formulated to deliver a structured analysis promoting resources for municipalities, farmland preservation organizations, and outside members and local authorities, allowing for the assessment of farmland preservation within open agricultural spaces. The academic research is designed to incorporate policy evaluation and case study recommendations to aid municipalities with vigorous and significant data to preserve farmland within parklands. The integration of agriculture into parklands has excellent significance for the promotion of environmental sustainability, the preservation of cultural heritage, the support of food security, and the development of resilient urban growth.

## 10.2 How to Get Started

As urbanization pressures the significance of agricultural lands, it is necessary to take proactive steps to safeguard and administer these vital spaces. Key initiatives requiring a thorough land assessment to establish preservation grounds and opportunities. Engaging stakeholders consists of farmers conservationists and forming partnerships with indigenous people to build a strong community and policy support. For farmland conservation to be sustainable, zoning permits and management plans are developed and assessed. These stages ensure long-term success through funding strategies and land trust conservation agents that negotiate legal agreements that implement how land can be created, prioritizing agriculture conservation while remaining privately owned or government owned. Through these actions, local communities, planners, conservationists, and municipalities construct a comprehensive approach that protects farming within parklands, improves the sustainability of the environment, and establishes unique ecological landscapes for the future.



## References

- Agritourism Ontario. (n.d.). *About*. Agritourism Ontario. <https://agritourismontario.com/about/>
- Agriculture and Agri-Food Canada (AAFC). (2025, January). *Sustainable Agriculture Strategy*. <https://agriculture.canada.ca/en/environment/sustainable-agriculture-strategy>
- Agriculture and Agri-Food Canada (AAFC). (2024a). *Local Food Infrastructure Fund – Small Scale Projects*. Government of Canada. <https://agriculture.canada.ca/en/programs/local-food-infrastructure-fund-small>
- Agriculture and Agri-Food Canada (AAFC). (2024b). *Resilient Agricultural Landscape Program (RALP)*. Government of Canada. <https://www.canada.ca/en/agriculture-agri-food/news/2024/07/resilient-agricultural-landscape-program-ralp.html>
- Agriculture and Agri-Food Canada (AAFC). (2024c). *What we do*. Government of Canada. <https://agriculture.canada.ca/en/department/what-we-do>
- Agriculture and Agri-Food Canada (AAFC). (2024d). *2023 to 2024 Departmental Sustainable Development Strategy report*. Government of Canada. <https://agriculture.canada.ca/en/department/initiatives/federal-sustainable-development-strategy/2023-2024-departmental-sustainable-development-strategy-report>
- Agriculture and Agri-Food Canada (AAFC). (2022). *Canadian Agricultural Loans Act Program*. Government of Canada. <https://agriculture.canada.ca/en/programs/canadian-agricultural-loans-act>
- Agricultural Land Reserve Revitalization Committee (ALRRC). (2018, December 4). *Final committee report to the Minister of Agriculture: Recommendations for revitalization. Government of British Columbia*. [https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agricultural-land-and-environment/agriculture-land-reserve/final-committee-report-to-the-minister-of-agriculture-recommendations-for-revitalization-december-4-2018\\_optimized.pdf](https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/agriculture-and-seafood/agricultural-land-and-environment/agriculture-land-reserve/final-committee-report-to-the-minister-of-agriculture-recommendations-for-revitalization-december-4-2018_optimized.pdf)
- American Farmland Trust. (n.d.). *Keeping farmers on the land*. American Farmland Trust. <https://farmland.org/keeping-farmers-on-the-land-read-more/>

- Barthel, S., Parker, J., & Ernstson, H. (2015). Food and Green Space in Cities: A Resilience Lens on Gardens and Urban Environmental Movements. *Urban Studies (Edinburgh, Scotland)*, 52(7), 1321–1338. <https://doi.org/10.1177/0042098012472744>
- Boulton, C., Dedekorkut-Howes, A., Holden, M., & Byrne, J. (2023). How Leadership Influences Urban Greenspace Provision: The Case of Surrey, Canada. *Urban Affairs Review (Thousand Oaks, Calif.)*, 59(5), 1352–1384. <https://doi.org/10.1177/10780874221101393>
- Bretagnolle, V., Berthet, E., Gross, N., Gauffre, B., Plumejeaud, C., Houte, S., Badenhauer, I., Monceau, K., Allier, F., Monestiez, P., & Gaba, S. (2018). Towards sustainable and multifunctional agriculture in farmland landscapes: Lessons from the integrative approach of a French LTSER platform. *Science of The Total Environment*, 627, 822–834. <https://doi.org/10.1016/j.scitotenv.2018.01.142>
- Canadian General Standards Board. (2006). Standards Council of Canada. Organic production systems general principles and management standards. ICS 670.040. CAN/CGSB-32.310 2006.
- Conservancy for Cuyahoga Valley National Park (CCVNP). (n.d.). *Revitalization of learning garden and hoop house*. Conservancy for Cuyahoga Valley National Park. <https://www.conservancyforecnp.org/revitalization-of-learning-garden-and-hoop-house/>
- Chen, B., Saghaian, S., & Tyler, M. (2020). Substitute or complementary: Relationship between U.S. farmers' adoption of organic farming and direct marketing. *British Food Journal (1966)*, 122(2), 531–546. <https://doi.org/10.1108/BFJ-01-2019-0016>
- Daniels, T. (2019). The Napa County Agricultural Preserve: Fifty Years as a Foundation of America's Premier Wine Region. *Journal of Planning History*, 18(2), 102–115. <https://doi.org/10.1177/1538513218769042>
- Farmers' Markets Ontario. (n.d.). *About Farmers' Markets Ontario*. Farmers' Markets Ontario. <https://www.farmersmarketsontario.com/>
- Franson, P. (n.d.). *How 40 years of agricultural preservation transformed Napa Valley*. Napa Local Agency Formation Commission. [https://napa.lafco.ca.gov/files/5f1f5976a/Ag\\_Preserve\\_Essay.pdf](https://napa.lafco.ca.gov/files/5f1f5976a/Ag_Preserve_Essay.pdf)
- Government of Canada. (n.d.). *AgPal Program and Service Finder*. <https://agpal.ca/en/home>
- Government of Ontario. Conservation Land Act, R.S.O. 1990, c. C.28. <https://www.ontario.ca/laws/statute/90c28>

- Government of Ontario. (1990). *Planning Act*, R.S.O. 1990, c. P.13. Ontario.ca. <https://www.ontario.ca/laws/statute/90p13>
- Government of Ontario. (2007). *Endangered Species Act, 2007*, S.O. 2007, c.6. Last Amended 2020, July 21. <https://www.ontario.ca/laws/statute/07e06>
- Government of Ontario. (2008). *Ontario Regulation 230/08: Species at Risk in Ontario List*. Last Amended 2025, January. <https://www.ontario.ca/laws/regulation/080230>
- Government of Ontario, *Municipal Act, 2001*, S.O. 2001, c. 25. <https://www.ontario.ca/laws/statute/01m25>
- Government of Ontario. (2011). Conservation Easements for Agricultural Land Use. [11-027 v2](#)
- Government of Ontario. (2017). *Greenbelt Plan*. Ministry of Municipal Affairs. <https://files.ontario.ca/greenbelt-plan-2017-en.pdf>
- Government of Ontario. (2022a). *Grow Ontario: A provincial agri-food strategy*. <https://www.ontario.ca/page/grow-ontario-provincial-agri-food-strategy>
- Government of Ontario. (2022b). *Strategic Agri-Food Processing Fund*. <https://www.ontario.ca/page/strategic-agri-food-processing-fund>
- Government of Ontario. (2025, March 12). *Ontario increasing support for farmers*. <https://news.ontario.ca/en/release/1005662/ontario-increasing-support-for-farmers>
- Gulyas, B. Z., & Edmondson, J. L. (2021). Increasing city resilience through urban agriculture: Challenges and solutions in the Global North. *Sustainability*, 13(3), 1465. <https://doi.org/10.3390/su13031465>.
- Halberg, N. (2012). Assessment of the environmental sustainability of organic farming: Definitions, indicators and the major challenges. *Canadian Journal of Plant Science*, 92(6), 981–996. <https://doi.org/10.4141/cjps2012-035>
- Hayes, A. T., Jandaghian, Z., Lacasse, M. A., Gaur, A., Lu, H., Laouadi, A., Ge, H., & Wang, L. (2022). Nature-based solutions (NBSs) to mitigate urban heat island (UHI) effects in Canadian cities. *Buildings*, 12(7), 925. <https://doi.org/10.3390/buildings12070925>.

- Hosseinpour, N., Kazemi, F., & Mahdizadeh, H. (2022). A cost-benefit analysis of applying urban agriculture in sustainable park design. *Land Use Policy*, 112, 105834-. <https://doi.org/10.1016/j.landusepol.2021.105834>
- Humphrey, Christy and Heather Fotherby. (2019). Recovery Strategy for the Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*) and Tri-colored Bat (*Perimyotis subflavus*) in Ontario. Ontario Recovery Strategy Series. Prepared by the Ministry of the Environment, Conservation and Parks, Peterborough, Ontario. vii + 35 pp. + Appendix. <https://www.ontario.ca/page/little-brown-myotis-northern-myotis-and-tri-colored-bat-recovery-strategy>
- Kirechev, D. (2021). AGRI-ENVIRONMENTAL PRACTICES FOR LAND USE AS a PREREQUISITE FOR BUILDING a SUSTAINABLE AGRI-FOOD SYSTEM. *Trakia Journal of Sciences*, 19(Suppl.1), 207–215. <https://doi.org/10.15547/tjs.2021.s.01.031>
- Leader, A., Kinsella, J., & O'Brien, R. (2024). Making sense of farmland biodiversity management: an evaluation of a farmland biodiversity management communication strategy with farmers: Making sense of farmland biodiversity management: an evaluation of a farmland biodiversity management communication strategy with farmers. *Agriculture and Human Values*, 41(4), 1647–1665. <https://doi.org/10.1007/s10460-024-10573-4>
- Lovell, S. T. (2010). Multifunctional urban agriculture for sustainable land use planning in the United States. *Sustainability*, 2(8), 2499-2522. <https://doi.org/10.3390/su2082499>.
- Maurice. (2023, April 2). *Farm Grants Ontario: Do You Know These 57 Ontario Farming Grants & Loans?* -. <https://ontariobusinessgrants.com/by-audience/farm-grants/>
- Ministry of the Environment, Conservation and Parks (MECP). (2016a, November 14). Eastern Meadowlark General Habitat Description. Updated July 09, 2021. <https://www.ontario.ca/page/eastern-meadowlark-general-habitat-description#:~:text=and%20%20habitat.-,Suitable%20habitat%20for%20this%20species%20includes%20but%20is%20not%20limited,2013>
- Ministry of the Environment, Conservation and Parks (MECP). (2016b, November 14). Eastern Bobolink General Habitat Description. Updated July 09, 2021. <https://www.ontario.ca/page/bobolink-general-habitat-description>

Ministry of the Environment, Conservation and Parks. (MECP) (2017, July 11). Blanding's Turtle General Habitat Description. Updated July 9, 2021. <https://www.ontario.ca/page/blandings-turtle-general-habitat-description>

Ministry of Municipal Affairs and Housing (MMAH). (2024). *Provincial Planning Statement*.

Ministry of Natural Resources (MNR). (2024). *Crown land rental policy*. Government of Ontario. <https://www.ontario.ca/page/crown-land-rental-policy#:~:text=The%20Ministry%20manages%20Crown%20land,rates%20or%20discountinue%20existing%20ones>

Mitchell, R. (2015). *How might the evolution of urban agriculture advance sustainable agriculture in the future?* [Master's Major Research Paper]. OCAD University. [https://openresearch.ocadu.ca/id/eprint/259/1/Mitchell\\_Robert\\_2015\\_MDes\\_SFIM\\_MRP.pdf](https://openresearch.ocadu.ca/id/eprint/259/1/Mitchell_Robert_2015_MDes_SFIM_MRP.pdf).

Morris, T. J. (2011). Recovery Strategy for the Wavy-rayed Lampmussel (*Lampsilis fasciola*) in Ontario. Ontario Recovery Strategy Series. Prepared for the Ontario Ministry of Natural Resources, Peterborough, Ontario. ii + 4 pp.+ Appendix viii + 41 pp.+ Appendix. <https://www.ontario.ca/page/wavy-rayed-lampmussel-recovery-strategy>

Ohio State University Extension, Cuyahoga County (OSUE) (n.d.). *Community gardening*. The Ohio State University <https://cuyahoga.osu.edu/program-areas/agriculture-and-natural-resources/community-gardening>

Ontario. (n.d.). *Farm property class tax rate program*. Government of Ontario. <https://www.ontario.ca/page/farm-property-class-tax-rate-program>

Ontario Farmland Trust. (n.d.). *About*. Ontario Farmland Trust. <https://ontariofarmlandtrust.ca/about/>

Ontario Land Trust Alliance. (2024). *Conservation easement agreements: A guide, sample, and notes for Ontario land trusts, landowners, and advisors* (2nd ed.). Ontario Land Trust Alliance. <https://olta.ca/wp-content/uploads/2024/11/OLTA-Conservation-Easement-Agreements-A-guide-sample-and-notes-for-Ontario-Land-Trusts-Landowners-and-Advisors-2.pdf>

Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). (2017). *Renting your land sustainably*. Government of Ontario. <https://www.ontario.ca/page/renting-your-land-sustainably>

Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). (n.d.) Crop Protection Hub. Pest Management Tools. <https://cropprotectionhub.omafra.gov.on.ca/supporting-information/general/pest-management-tools>

Ontario Ministry of Natural Resources and Forestry (OMNRF). (2015). Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E. <https://www.ontario.ca/files/2025-02/schedule-7e-jan-2015-access-vers-final-s.pdf>

Ontario Ministry of Agriculture, Food and Rural Affairs (OMNRF). (2016). Recovery Strategy for the Loggerhead Shrike (*Lanius ludovicianus*) in Ontario. Ontario Recovery Strategy Series. Prepared by the Ontario Ministry of Natural Resources and Forestry, Peterborough, Ontario. v + 9 pp. + Appendix vii + 35 pp. <https://www.ontario.ca/page/recovery-strategy-loggerhead-shrike>

Owiny, S. A., Mehta, K., & Marezki, A. N. (2014). The use of social media technologies to create, preserve, and disseminate Indigenous knowledge and skills to communities in East Africa. *International Journal of Communication*, 8, 234–247. <http://ijoc.org>

Parks Canada. (2012, June). *Rouge National Urban Park: Concept*. Parks Canada. [https://parks.canada.ca/progs/np-pn/cnnp-cnnp/rouge/~media/progs/np-pn/cnnp-cnnp/rouge/pdf/concept\\_rouge\\_national\\_urban\\_park.ashx](https://parks.canada.ca/progs/np-pn/cnnp-cnnp/rouge/~media/progs/np-pn/cnnp-cnnp/rouge/pdf/concept_rouge_national_urban_park.ashx).

Parks Canada. (2015, November 11). *It takes a community to create a national urban park*. Government of Canada. <https://parks.canada.ca/np-np/on/rouge/info/establishment/jalons-milestones>.

Parks Canada. (2019). *Rouge National Urban Park management plan*. Government of Canada. <https://parks.canada.ca/np-np/on/rouge/info/gestion-management/gestion-management-2019>.

Parks Canada. (2023a). *Rouge National Urban Park: Protecting Farmland and Nature*. <https://www.pc.gc.ca/en/pn-np/on/rouge>

Parks Canada. (2023b). *Threats to Farmland in Urban Areas*. <https://www.pc.gc.ca/en/pn-np/on/rouge>

Parks Canada. (2023c). *Stakeholder Engagement in RNUP*. <https://www.pc.gc.ca/en/pn-np/on/rouge>

Redside Dace Recovery Team. (2010). Recovery Strategy for Redside Dace (*Clinostomus elongatus*) in Ontario. Ontario Recovery Strategy Series. Prepared for the Ontario



- Ministry of Natural Resources, Peterborough, Ontario. vi + 29 pp.  
<https://www.ontario.ca/page/redside-dace-recovery-strategy>
- Report of the Standing Committee on Agriculture and Agri-Food. 2023, November. Stewards of the Land: Examining Canadian Agriculture's Environmental Contribution. Presented by Kody Blois, Chair at the November 2023, 44th Parliament, 1st Session.  
<https://www.ourcommons.ca/documentviewer/en/44-1/AGRI/report-13/page-5>
- Rouge National Urban Park Act, S.C. 2015, c. 10. <https://laws-lois.justice.gc.ca/eng/acts/R-8.55/>
- Sanden, T., Trajanov, A., Spiegel, H., Kuzmanovski, V., (2019). Development of an agricultural primary productivity decision support model: a case study in. *Front. Environ. Sci.* 7, 1–13. <https://doi.org/10.3389/fenvs.2019.00058>.
- Scherl, L. M., Phan, H. P., Zafra-Calvo, N., Lavey, W. G., Byakagaba, P., Idrobo, C. J., Chenet, A., Bennett, N. J., Mansourian, S., & Rosado-May, F. J. (2021). The role of Indigenous peoples and local communities in effective and equitable conservation. *Ecology and Society*, 26(3), 19. <https://doi.org/10.5751/ES-12625-260319>
- Schreefel, L., de Boer, I. J. M., Timler, C. J., Groot, J. C. J., Zwetsloot, M. J., Creamer, R. E., Schrijver, A. P., van Zanten, H. H. E., & Schulte, R. P. O. (2022). How to make regenerative practices work on the farm: A modelling framework. *Agricultural Systems*, 198, 103371-. <https://doi.org/10.1016/j.agsy.2022.103371>
- Schroder, J., Schulte, R.P., Creamer, R., Delgado, A., van Leeuwen, J., Lehtinen, T., Rutgers, M., Spiegel, H., Staes, J., Tóth, G., Wall, D.P., (2016). The elusive role of soil quality in nutrient cycling: a review. *Soil Use Manag.* 32, 476–486. <https://doi.org/10.1111/sum.12288>.
- Sher, A., Li, H., Hamid, Y., Nasir, B., & Zhang, J. (2024). Importance of regenerative agriculture: climate, soil health, biodiversity and its socioecological impact. *Discover Sustainability*, 5(1), 1-23. <https://doi.org/10.1007/s43621-024-00662-z>.
- Sorensen, A. A. & Hunter, M. C. (2020, August). *Wildlife on the working landscape: Charting a way for biodiversity and agricultural production to thrive together*. American Farmland Trust. [https://farmlandinfo.org/wp-content/uploads/sites/2/2020/08/AFT\\_FUT\\_Wildlife\\_Working\\_Landscape.pdf](https://farmlandinfo.org/wp-content/uploads/sites/2/2020/08/AFT_FUT_Wildlife_Working_Landscape.pdf).
- Toronto and Region Conservation Authority and Credit Valley Conservation (TRCA &CVC). (2014). Evaluation, Classification and Management of Headwater Drainage Features

Guidelines. [https://trcaca.s3.ca-central-1.amazonaws.com/app/uploads/2021/08/31112457/HDF-EVALUATION-CLASSIFICATION-MANAGEMENT\\_2014.pdf](https://trcaca.s3.ca-central-1.amazonaws.com/app/uploads/2021/08/31112457/HDF-EVALUATION-CLASSIFICATION-MANAGEMENT_2014.pdf)

University of Guelph. (n.d.). *Access to research centres and personnel (Tier 2, 4)*. Ontario Agri-Food Innovation Alliance. <https://www.uoguelph.ca/alliance/research-programs/access-research-centres-and-personnel>

Wall, D.P., Delgado, A., O’Sullivan, L., Creamer, R.E., Trajanov, A., Kuzmanovski, V., Bugge Henriksen, C., Debeljak, M., (2020). A decision support model for assessing the water regulation and purification potential of agricultural soils across Europe. *Front. Sustain. Food Syst.* 4 <https://doi.org/10.3389/fsufs.2020.00115>.

Zhang, W., Liang, H., Chen, Z., & Zhang, J. (2021). The Rural Labor Transfer with Respect to the Development of Farmland Leasing Market: Evidence from Rural China. *Man and the Economy*, 8(1), 99–128. <https://doi.org/10.1515/me-2020-0002>.

Zou, B., Mishra, A. K., & Luo, B. (2020). Do Chinese farmers benefit from farmland leasing choices? Evidence from a nationwide survey. *The Australian Journal of Agricultural and Resource Economics*, 64(2), 322–346. <https://doi.org/10.1111/1467-8489.12354>.