

Urban Agriculture

Peel 2041 Discussion Paper

November 2019



This policy discussion paper (including any attachments) has been prepared using information current to the report date. It provides an assessment of provincial policy conformity requirements, recognizing that Provincial plans and policies were under review and are potentially subject to change. The proposed direction contained in this discussion paper will be reviewed to ensure that any implementing amendments to the Regional Official Plan will conform or be consistent with the most recent in-effect provincial policy statement, plans and legislation. Additional changes will not be made to the contents of this discussion paper.

Table of Contents

Section	Page
EXECUTIVE SUMMARY	1
1. INTRODUCTION	1
1.1 Environment Themed Regional Official Plan Amendment (ROPA).....	1
1.2 Discussion Paper Purpose	1
1.3 Urban Agriculture.....	2
2. URBAN AGRICULTURE ANALYSIS	3
2.1 Health Impacts	3
2.2 Community Benefits.....	4
2.3 Sustainable Food Systems.....	4
3. CREATING SUPPORTIVE ENVIRONMENTS IN PEEL.....	7
4. POLICY CONTEXT.....	9
4.1 Federal.....	9
4.2 Provincial.....	9
4.3 Regional.....	10
4.3.1 Region of Peel Strategic Plan.....	10
4.3.2 Regional Official Plan Amendment (ROPA) 27	10
4.3.3 Peel Food Charter and Peel Food Action Council.....	11
4.4 Local	11
4.4.1 City of Brampton	11
4.4.2 City of Mississauga	11
4.4.3 Town of Caledon.....	12
5. LOCAL PROGRAMMING.....	13
6. REGIONAL OFFICIAL PLAN	15
7. CONCLUSIONS	17

List of Tables

Table 6.1: Existing Regional Official Plan policies related to Urban Agriculture	15
---	----

Appendix A: Guide for Soil Testing in Urban Gardens

Appendix B: City of Mississauga Official Plan Provisions Related to Urban Agriculture

- THIS PAGE IS INTENTIONALLY BLANK -

Executive Summary

The environments in which we live can have a profound impact on our individual behaviours. In Peel, less healthy food retail outlets outnumber healthier food retail outlets by a ratio of at least five to one, which can make it challenging to eat a healthy diet. Urban agriculture supports the creation of supportive food environments by improving access to and availability of vegetables and fruit at the community level. This may encourage better eating habits within the population.

Urban agriculture is the growing of crops, including nursery and horticultural crops, within an urban or rural settlement area. It can take many forms, including urban farms, community gardens, rooftop gardens, or gardens on private lots. The practice has demonstrated health benefits, complements activities and processes of the broader food system and offers community-wide benefits, including beautification and public safety. Harvests are almost exclusively consumed by residents, which may increase food choice and may assist in preserving food culture in ethnically diverse communities.

Urban agriculture is supported by policies at the federal, provincial and municipal levels. Policy alignment demonstrates an interest in working towards shared outcomes, including the development of sustainable food systems and increasing access to local, nutritious food. At the provincial level, the Provincial Policy Statement (2014) Policy 1.1.1 recognizes that healthy, livable and safe communities are sustained by avoiding development and land use patterns which may cause public health concerns, while Policy 1.7.1 indicates that long-term economic prosperity should be supported by providing opportunities to support local food. The Growth Plan for the Greater Golden Horseshoe (2019) Policy 4.2.5.2 encourages municipalities to include opportunities for urban agriculture and rooftop gardens within public open space.

A review of the Regional Official Plan indicates that there are existing policies supportive of urban agriculture. However, urban agriculture is not positioned within the broader food system, nor are measures outlined to foster the practice locally. As a result, existing policy gaps may be limiting policy implementation at the local level.

Peel 2041: Regional Official Plan Review provides an opportunity to strengthen the policy framework for urban agriculture to highlight the practice and lend support to local municipalities as they further develop and advance local-level urban agriculture strategies. This could increase local growing opportunities and may further encourage the establishment of retail outlets selling fresh foods in Peel, including farmers' markets, and pop-up vegetable and fruit stands and mobile fresh markets.

- THIS PAGE IS INTENTIONALLY BLANK -

1. Introduction

1.1 Environment Themed Regional Official Plan Amendment (ROPA)

The Region of Peel's Regional Official Plan (ROP) is the long-term policy framework for land use planning decision-making. It sets the Regional context for detailed planning by protecting the environment, managing resources, directing growth and setting the basis for providing Regional services in an efficient and effective manner. The *Planning Act* requires municipalities to update their Official Plan every five years to ensure that the policies remain current and are consistent with Provincial plans and policies. The review of the current Regional Official Plan, referred to as *Peel 2041: Regional Official Plan Review*, is being undertaken with the intent to plan for growth to the year 2041.

Peel 2041 includes a review of thirteen focus areas to ensure conformity with recent updates to Provincial plans and policies including the *Provincial Policy Statement, 2014*, *A Place to Grow: Growth Plan for the Greater Golden Horseshoe* (2019), the *Greenbelt Plan* (2017), the *Oak Ridges Moraine Conservation Plan* (2017) and the *Niagara Escarpment Plan* (2017) which provide Provincial direction for land use planning and the protection of the local environment and resources.



This Urban Agriculture review and Discussion Paper represents a component of the Agriculture focus area and part of a larger environmental themed review which interconnects related focus areas including Climate Change, Water Resources, the Provincial Greenbelt Plans, Greenlands System, and Aggregates policy areas.

1.2 Discussion Paper Purpose

The purpose of this Discussion Paper is to provide background information and identify potential policy options for the Regional Official Plan as part of the *Peel 2041: Regional Official Plan Review* process.

This background paper will provide the following:

- An analysis of urban agriculture and its impacts and benefits;
- An overview of the federal, provincial, regional and local policy contexts;
- An analysis of the existing Regional Official Plan and recommended updates; and,
- Conclusions and next steps.

This Discussion Paper is meant to inform and engage the Region of Peel's stakeholders, local municipalities and the public. It will identify policy gaps and opportunities as well as identify what must be updated to ensure conformity with provincial plans, policies and guidelines.

1.3 Urban Agriculture

Communities that prioritize travel by personal vehicle promote sedentary behaviour, physical inactivity, limited social connection and poor diets (Public Health Agency of Canada, 2017). At the community level, less nutritious foods are often more available and accessible than nutritious foods, which can make it challenging to eat a healthy diet. Poor eating habits are a risk factor for developing chronic diseases, including type 2 diabetes (Health Canada, 2019). In Peel, the prevalence of diabetes has more than doubled between 1996 and 2015, with over 160,000 diagnoses as of 2015 (Peel Public Health, 2017). Food environments are settings where individuals are exposed to food and they influence the choices people make. Urban agriculture supports the creation of supportive food environments by improving access to and availability of vegetables and fruit at the community level. This may encourage better eating habits within the population.

Urban agriculture is broadly defined as the growing of crops, including nursery and horticultural crops, within an urban or rural settlement area. It can take many forms, including urban farms, community gardens, rooftop gardens, or gardens on private lots. Supporting structures such as hoop-houses, raised beds and cold-frames may improve production or extend the growing season. The practice may also include aquaculture and the raising of livestock or animals (Region of Peel, 2019).

Urban agriculture has the capacity to deliver high yield produce for local consumption. Community gardens can yield two times more produce per square metre compared to commercial vegetable farms, but the practice is also intensive, requiring more inputs to achieve high yields (McDougall, Kristiansen, & Rader, 2019). Urban agriculture harvests are almost exclusively consumed by residents of the urban area in which the growing initiative is located. This makes it an effective means to produce highly perishable crops, such as leafy greens and heirloom vegetables (RUAF Foundation, n.d.).

The policy framework for urban agriculture can be strengthened in Peel's Regional Official Plan, and this will support local municipalities in developing and advancing urban agriculture strategies tailored to their local needs. The purpose of this discussion paper is to provide an overview of urban agriculture, its contribution to supportive food environments, its position within the broader policy context, and propose policy options for the Regional Official Plan as part of Peel 2041: Regional Official Plan Review.

2. Urban Agriculture Analysis

Urban agriculture offers benefits to participants, communities, and regions in which the practice is supported and fostered. Public health is supportive of urban agriculture because it promotes health protective behaviours and improves access to and availability of vegetables and fruit. Where soil contamination poses a potential risk to human health, mitigation strategies can assist in reducing the inequitable distribution of soil risk that is common in urban areas. Urban agriculture brings individuals to underutilized spaces, which in turn becomes a form of natural surveillance. This may help improve community safety, a benefit to individuals even if they are not participating in urban agriculture. Finally, urban agriculture and its impacts on the urban food system complement a region's broader food system and may assist in the development of a sustainable local food culture.

2.1 Health Impacts

Public health considers the health status of a whole population and aims to prevent illness and promote health (Peel Public Health, 2009). The Region of Peel - Public Health completed a research review to identify health benefits, risks and unintended consequences associated with garden-based urban agriculture (i.e., the growing of vegetables, herbs, fruit and grains) among the general population (Peel Public Health, 2019). Based on the research review, urban agriculture is associated with several health benefits, including increased access to, and consumption of, vegetables and fruit, improved quality of life and general well-being, and increased physical activity (Peel Public Health, 2019). Urban agriculture's contributions to supportive food environments may also decrease health inequities by increasing access to vegetables and fruit among lower socioeconomic populations (McGill et al., 2015). Increased access to, and consumption of, vegetables and fruit extends beyond the individual participating in urban agriculture to members of their household. Growing food can offset household food costs, which may be especially beneficial for lower socioeconomic households. The association between urban agriculture and improved quality of life and general well-being may be particularly valuable for individuals who are in poorer health, since urban agriculture reduces stress and is a form of light physical activity. While the literature did not quantify the associations between urban agriculture and health outcomes, the benefits are health promoting and are aligned with public health goals (Peel Public Health, 2019).

While soil contamination is generally not a threat across the urban landscape, learning about the past uses of an urban agriculture site can help identify a site's level of concern and determine the appropriate mitigation strategies to reduce potential risks to human health (Toronto Public Health, 2011). If past uses indicate a possibility of contamination, soil testing can be completed. Toronto Public Health developed a list of contaminants of concern for urban gardening and associated soil screening values (SSVs) for soil analysis (Toronto Public Health, 2011; Toronto Public Health, 2013). The contaminants of concern include a variety of metals and polycyclic aromatic hydrocarbons (PAHs). Lead is the most common contaminant of concern in urban gardens (Toronto Public Health, 2011), since it was commonly found in house paint until the early 1990s (Toronto Public Health, 2013). Vegetables grown in soil with high lead concentrations may have negative health implications (Peel Public Health, 2019). Appendix A describes Toronto Public Health's three-step process to assess urban soil safety and risk mitigation strategies for urban agriculture sites based on their level of concern (low, medium or high). Because lower socioeconomic neighbourhoods are at a greater risk for soil, water and air

pollution, employing risk mitigation strategies can assist in reducing the inequitable distribution of soil risk that is common in urban areas (Peel Public Health, 2019).

2.2 Community Benefits

Urban agriculture may offer spillover benefits to the wider community in which it is located. Vacant or underutilized lands in neighbourhoods often become informal dumping grounds or collection sites for litter. If a community group takes ownership of the land by turning it into a productive greenspace, it benefits the wider community by contributing to neighbourhood beautification. Including benches or walking paths in the site's communal areas may encourage community members to use the space, even if they are not urban agriculture participants (RUAF Foundation, n.d.).

Urban agriculture may also contribute to community safety. This may improve residents' sense of community pride or quality of life, even if they are not urban agriculture participants (Horst, McClintock, & Hoey, 2017). For example, establishing a community garden in an underutilized space will strategically generate activity and could contribute to the space's natural surveillance (CPTED Ontario, n.d.). Similarly, placing a safe activity, such as a community garden, in an unsafe or vulnerable area is a strategy to improve neighbourhood safety. This was observed in Kitchener, Ontario, when the number of reported police incidents declined following the establishment of a community garden in the Victoria Hills neighbourhood (Hahn, 2013).

2.3 Sustainable Food Systems

The food system is a complex set of interconnected processes and activities involved in providing food to people. Typically, consumers' main points of contact with the food system are limited to the areas of food retail and food consumption (Roberts, 2016). Urban agriculture allows consumers to more easily interact with broader food system processes and activities. For example, while urban agriculture participants tend to their crops over many months, the larger community may assist in the harvesting, preservation and processing of food. Participating in the production, preservation and processing of food may enhance individuals' connection to food, the land and to other people, and may foster social capital within a community.

Food systems become sustainable when processes and activities are integrated to enhance the environmental, economic, social and nutritional well-being of a region and its residents today, and for generations to come. As a complement to the broader food system, urban agriculture provides a community with the flexibility to grow unique produce varieties. This may increase food choice and may assist in preserving food culture in ethnically diverse communities. As a result, a resilient and thriving local food culture can develop (Roberts, 2016).

The food system operates within and is influenced by social, political, economic and natural environments. Municipalities that prioritize sustainable food systems recognize that a focus on food not only represents an opportunity to enhance citizens' quality of life, but also acts as a lever for achieving other goals and objectives (Roberts, 2016). The following are examples of sustainable food system initiatives that also support other municipal goals:

- Urban agriculture can assist in the creation of complete communities by increasing social interaction and neighbourhood access to nutritious foods.
- Rooftop gardens can support urban food production and provide the co-benefit of reducing urban heat island effects (City of Toronto, 2009).
- Market-oriented urban agriculture (i.e. where urban growers sell their produce through enterprises including pop-up vegetable and fruit stands or mobile fresh markets), can contribute to urban economic diversification by growing a new sector of the urban economy (RUAF Foundation, n.d.).



- THIS PAGE IS INTENTIONALLY BLANK -

3. Creating Supportive Environments in Peel

The social and physical environments, including the built and food environments, that residents encounter in their daily lives can have a profound influence on their physical activity levels and food choices. Creating supportive social and physical environments where residents live, work and play can make it easier for them to engage in health protective behaviours, including being physically active and eating well (Public Health Agency of Canada, 2014). For example, policies that encourage the creation of supportive environments, such as supporting the development of healthy, complete communities, can have a greater impact on population health than targeting individual behaviours. Complete communities meet people's needs for daily living throughout an entire lifetime and provide convenient access to amenities, including local services and food options, a full range of housing, access to public transportation and safe options for active transportation (Ministry of Municipal Affairs and Housing, 2019). Complete communities encourage residents to build physical activity and healthy food choices into their daily lives.

The food environment plays an important role in determining the food choices individuals make. Food environments are the settings where individuals are exposed and have access to food as part of their daily lives, including food stores, restaurants, workplaces, child care centres and schools. Individuals are exposed to an abundance of highly processed foods every day (Health Canada, 2019), which promote dietary patterns associated with poor health (Minaker et al., 2016). Individuals without access to a vehicle or reliable public transportation are disproportionately affected by the foods that are available in their neighbourhood (Lytle, 2009), since they are more likely to access food sources close to home.

Food swamps predominate in Peel. These are areas with high concentrations of unhealthy food sources compared to healthy food sources (Chen & Gregg, 2017). The Peel Diabetes Atlas (2014) identified that less healthy food retail outlets (i.e., convenience stores, fast food and take-out restaurants) outnumber healthier food retail outlets (i.e., supermarkets and grocery stores) by a ratio of at least five to one (Glazier et al., 2014). Additionally, research that included populations from Brampton and Mississauga demonstrated that urban-dwelling adults with five or more fast food outlets as the main restaurant type within walking distance of their residence have 2.5 times greater odds of being obese (Polsky et al., 2016).

Land use planning and zoning policies have been identified as an international best practice for improving the food environment (Swinburn & Vandevijvere, 2017). While these policies can be used to discourage or limit the number of less healthy retail outlets, the short-term effects may be limited due to industry pushback and inability to impact established locations. However, long term impacts of land use planning and zoning can shape how our communities evolve and change. Strengthening the policy framework for urban agriculture through land use planning and zoning could increase local growing opportunities and may further encourage the establishment of retail outlets selling fresh foods in Peel, including farmers' markets, pop-up vegetable and fruit stands and mobile fresh markets.

- THIS PAGE IS INTENTIONALLY BLANK -

4. Policy Context

Urban agriculture is supported by policies at the federal, provincial and municipal levels. The provincial land use planning framework specifically identifies urban agriculture and it is also supported by local municipal official plans and zoning by-laws, conforming with provincial policy direction. Food system policies that are supportive of urban agriculture are emerging in the Canadian context, as evidenced by *A Food Policy for Canada* and the Peel Food Charter. While urban agriculture policy approaches may differ, policy alignment demonstrates interest in working towards shared outcomes, including the development of sustainable food systems and increasing access to local, nutritious food. The following section details urban agriculture supportive policy at the federal, provincial and local levels and shows how the proposed Regional Official Plan policies contribute to the policy context.

4.1 Federal

The 2019 Federal Budget earmarked funds for *A Food Policy for Canada*. The national food policy outlines four areas for near-term action, one of which is to help Canadian communities access healthy food (Agriculture and Agri-Food Canada, 2019). This includes \$50 million over five years to support infrastructure for local food projects, which could be used to support community-driven projects, including urban agriculture (Department of Finance Canada, 2019).

4.2 Provincial

The Provincial Policy Statement (PPS) provides overall policy direction on land use planning and development within the province (Ministry of Municipal Affairs and Housing, 2014). *A Place to Grow: Growth Plan for the Greater Horseshoe*, the Growth Plan for the Greater Golden Horseshoe, builds upon the PPS and works closely with the other provincial land use plans to manage growth, build communities, curb sprawl and protect the natural environment (Ministry of Municipal Affairs and Housing, 2019). Provincial land use policies and plans are nested, meaning the PPS informs the Provincial Plans, including the Growth Plan, which in turn inform local official plans (Ministry of Municipal Affairs and Housing, 2018). The Planning Act requires that municipal official plans and planning decisions must be consistent with the PPS and in conformity with Provincial Plans.

The PPS (Policy 1.1.1) recognizes that healthy, livable and safe communities are sustained by avoiding development and land use patterns which may cause public health concerns. Policy 1.7.1 indicates that long-term economic prosperity should be supported by providing opportunities to support local food, and promoting the sustainability of agri-food and agri-product businesses by protecting agricultural resources, and minimizing land use conflicts (Ministry of Municipal Affairs and Housing, 2014).

A Place to Grow states that the policies of that Plan are to be applied to support the achievement of complete communities that expand convenient access to healthy, local and affordable food options, including through urban agriculture. Policy 4.2.5.2 further supports complete communities by encouraging municipalities to include opportunities for urban agriculture and rooftop gardens within public open space. Urban agriculture and local food are stated in two additional sections of the Plan, supporting the achievement of sustainable food systems. Policy 4.2.6.7 encourages municipalities to

support access to healthy, local and affordable food, urban and near-urban agriculture and food system planning as one way to ensure long-term economic prosperity and viability of the local agri-food sector, while policy 4.2.10 promotes local food and food security as one way to protect the environment and address climate change adaptation goals (Ministry of Municipal Affairs and Housing, 2019).

4.3 Regional

4.3.1 Region of Peel Strategic Plan

The Region of Peel 2015-2035 Strategic Plan's vision is to achieve a 'Community for Life'. To achieve the vision, three areas of focus were identified: Living, Thriving and Leading. The Living area of focus aims to ensure that people's lives are improved in their time of need. This includes the 20-year outcome that residents of Peel will have access to local, nutritious food sources. The Thriving area of focus envisions communities that are integrated, safe and complete. This includes the 20-year outcome that residents of Peel will live in communities where the built environment promotes healthy living (Region of Peel, 2015). Urban agriculture supports the Living and Thriving areas of focus because it can improve a community's food environment and individuals' access to local, nutritious food.

4.3.2 Regional Official Plan Amendment (ROPA) 27

The Regional Official Plan Amendment (ROPA) 27 – Health and the Built Environment, Age-Friendly Planning and Technical and Administrative Updates, was endorsed by Regional Council in February 2017 and approved by the province on September 1, 2017. ROPA 27 policies ensure that health impacts are considered in planning proposals by requiring the completion of a health assessment as part of a complete application for planning and development proposals. Consistent application of health assessment tools can promote the creation of walkable, complete communities that are close to amenities, programs and services where residents can live, work, play and age in place.

To operationalize ROPA 27 policies, local and context-specific tools that assess the health promoting potential of proposed developments, known as the Healthy Development Framework (HDF), are used to evaluate and pre-emptively mitigate potential health impacts associated with a development proposal. The HDF includes the Region's Healthy Development Assessment (HDA) tool that is used to assess Regional developments and developments in the Town of Caledon, and health assessment tools developed by the local municipalities to address their specific development contexts. These tools include Brampton's Sustainable Assessment Tool (SAT) and Mississauga's Healthy by Design Questionnaire.

The Region of Peel developed the HDA tool to consistently assess the health impacts of land use development proposals, and completion of the HDA generates a score that communicates the achievement of essential design standards for the creation of healthy and complete communities (Region of Peel, 2017). Access to urban agriculture could be assessed in the HDA and local municipal tools in the HDF to further support the creation of supportive food environments. Regional Official Plan policies could encourage municipalities to include standards in HDF tools that require development applications to incorporate opportunities to facilitate access to healthy foods and locally grown food in

neighbourhoods. For example, the standards in the Regional and local health assessment tools may request that urban agriculture (e.g., community gardens) be situated within a 10-minute walking distance from the majority of dwelling units in a proposed development.

4.3.3 Peel Food Charter and Peel Food Action Council

The Peel Food Charter was endorsed by Regional Council in 2017. Its vision is for a just, sustainable and secure food system for now and the future. Upon Regional endorsement of the Charter, a resolution was passed to support the development of a food council, the Peel Food Action Council, whose mandate is to action the themes outlined in the charter. While the charter's six themes do not explicitly mention urban agriculture, they do reference growing food and accessing healthy food (Peel Food Security Taskforce, 2017).

4.4 Local

Two of the three local municipal official plans contain policies supportive of urban agriculture. All three local municipalities support urban agriculture or community gardening within their environmental master plans. The City of Mississauga commissioned a report on urban agriculture to assist decision-makers and planners with future policy directions, while the City of Brampton and the Town of Caledon have amended their animal control by-laws to allow urban hens.

4.4.1 City of Brampton

The City of Brampton's Official Plan supports "compatible, small scale urban agriculture [...] within existing agricultural areas of the Open Space system and adjacent lands" (4.6.6.11) and encourages community gardens where appropriate (4.7.1.18) (City of Brampton, 2015).

Brampton Grow Green Environmental Master Plan (2014) defines urban agriculture and describes it as an element of sustainable urban development. Action areas specific to urban agriculture are also outlined, including updating policies and procedures for community gardens on public land, developing policies to encourage community gardens on private property, including institutional property, and working with partners to develop a food strategy supportive of urban agriculture (City of Brampton, 2014).

The City of Brampton's revised Animal Control By-Law 261-93¹ allows urban hens. Persons can license two hens on a lot size less than one acre, and no person shall be licensed to keep more than 10 hens. The by-law further outlines regulations related to keeping urban hens.

4.4.2 City of Mississauga

The City of Mississauga's Official Plan references urban agriculture or community gardening in several chapters as outlined in Appendix B, demonstrating urban agriculture's alignment with different

¹ City of Brampton, revised by-law no. 261-93, Animal control by-law s 14.1

objectives of the plan. In addition, urban agriculture is permitted in all land use designations except for the Greenlands and Parkway Belt West, and in all residential designations (City of Mississauga, 2016). This may assist in creating an enabling policy environment for urban agriculture.

The City of Mississauga's environmental sustainability action plan, the Living Green Master Plan (2012) references community gardens in Action 30: "Support the development of community gardens and ensure that every neighbourhood has access to at least one community garden" (p.33). This action area acknowledges the need to work in partnership with community-based environmental groups, such as Ecosource, who have been championing community garden efforts within the city (City of Mississauga, 2012). The 2015 progress report indicates that the ongoing partnership between the city and Ecosource is leading to an expansion of community gardens (City of Mississauga, 2015).

The City has received inquiries to establish urban agriculture initiatives in retrofitted industrial buildings and other settings. This led the City to commission the report, Urban Agriculture City of Mississauga (2017), to assist decision makers and planners with future policy directions, with a focus on commercial food production (Milligan et al., 2017).

4.4.3 Town of Caledon

While the Town of Caledon does not include policies specific to urban agriculture in its Official Plan (Town of Caledon, 2015), it does include community gardens within its Environmental Progress Action Plan update, 2014-2019. Food and Agriculture is listed as a key action area, and the Town has been funding outdoor education gardens through its community and school green fund. Community gardens are also listed as an upcoming action area. This includes supporting the development of community gardens and exploring a community garden policy (Town of Caledon, 2014).

The Town of Caledon Animal Control By-Law no. 2013-130² allows residential backyard hens. A maximum of four hens shall be permitted per residentially zoned lot. The by-law outlines further requirements for the keeping of hens, including requirements for hen coops and hen runs.

² Town of Caledon, revised by-law no. 2013-130, Animal control by-law s 36-55

5. Local Programming

Urban agriculture initiatives, resources and support exist in Peel, demonstrating local interest in the practice. There are approximately 20 urban growing initiatives run by local organizations in Peel (Ecosource, n.d.b.; Toronto and Region Conservation Authority, n.d.), and likely many informal initiatives organized by places of worship, apartment buildings and schools. Gardening workshops and hands-on education programs are also offered in Peel, catering to children, youth and adults (Ecosource, n.d.a.; Toronto and Region Conservation authority, n.d.). These assets could be leveraged as urban agriculture expands.



Additional considerations should be explored as municipalities further develop and advance urban agriculture strategies. These include the ability to access land for urban agriculture, training and technical advice for urban growers, and ensuring that risk mitigation strategies are applied. Strengthening the policy framework for urban agriculture in the Regional Official Plan lends further support to the practice and may help foster new programming in Peel.

- THIS PAGE IS INTENTIONALLY BLANK -

6. Regional Official Plan

6.1 Policy Scan and Analysis

A review of the Regional Official Plan (ROP) identified policies supportive of urban agriculture, as outlined in Table 1 (Region of Peel, 2016). Greenlands Systems policies, inclusive of 2.3.2.17, will be under review separately and are beyond the scope of this analysis. Policy 3.2.2.21 does not currently position urban agriculture within the broader food system or outline measures to foster the practice locally. As a result, existing policy gaps may be limiting policy implementation at the local level. Strengthening the policy framework for urban agriculture through the ROP will highlight the practice and lend further support to local municipalities.

Healthy communities are currently defined within the ROP glossary. While the current definition outlines that meeting basic needs, including food, is a component of a healthy community, it does not specify that individuals should have access to nutritious foods or acknowledge the influence of food environments on individuals' food choices. Strengthening the food and supportive environments language within the healthy communities definition would justify monitoring and assessing supportive food environments and food access in land use development proposals. This will further support the application of Healthy Development Framework (HDF) tools and the achievement of healthy communities, as outlined in ROP Policies 7.4.2.5 and 7.10.2.9.

Table 6.1: Existing Regional Official Plan policies related to Urban Agriculture

Section	Policy
2.3.2. Policies – Greenlands System in Peel	17. In addition to development and site alteration permitted in accordance with Section 2.3.2.6., permit the following within Core valley and stream corridors unless an area municipal official plan is more restrictive than the Regional Official Plan: [...] c. compatible small scale urban agricultural, agricultural-related and secondary uses, buildings and structures within the Urban System as shown on Schedule D.
3.2.2. Policies – Agricultural Resources	21. Support urban agricultural uses and practices that are appropriate and compatible with adjacent urban land uses.

6.2 Proposed Amendments

The current policies can be strengthened by:

- Defining urban agriculture within the ROP glossary. Including a broad-based definition will support the provision of an enabling policy environment and will give each local municipality the flexibility to narrow the definition's scope to regulate the practice within its jurisdiction.
- Positioning urban agriculture within the broader food system. This will demonstrate that urban agriculture can have an impact on creating a sustainable food system in Peel.

- Supporting policies that permit urban agriculture in all land-use designations, other than those within the Regional Greenlands System, and on rooftops. Encouraging the use of vacant or underutilized lands for urban agriculture may add vibrancy to a community and discourage individuals from blighting those parcels of land, while rooftop gardens may reduce urban heat island effects.
- Permitting pop-up vegetable and fruit stands and mobile fresh markets, particularly in areas where access to healthy food and locally grown foods are limited. This will increase access to local and healthy foods in underserved neighbourhoods.
- Requiring that development and redevelopment, and mobility systems be planned and designed to facilitate convenient access to healthy food and locally grown food in neighbourhoods and surrounding areas. This will assist in creation of supportive food environments.
- Revising the healthy communities definition within the ROP glossary to emphasize the importance of supportive built, social, economic, food and natural environments in strengthening residents' physical, mental and social well-being throughout all ages and stages of life.
- Encouraging local municipalities to develop policies that require the completion of a soil assessment and application of appropriate risk mitigation strategies if an urban agriculture site is suspected to be contaminated. This will reduce the risk of exposure to harmful soil contaminants.



7. Conclusions

The Peel 2041: Regional Official Plan Review provides an opportunity to strengthen the policy framework for urban agriculture to highlight the practice locally and lend support to municipalities as they further develop and advance local-level urban agriculture strategies. Creating supportive food environments through actions such as urban agriculture will positively impact the health of the population. Overall, urban agriculture has demonstrated health benefits, complements activities and processes within the broader food system and offers community-wide benefits, including beautification and public safety.

References

- Agriculture and Agri-Food Canada. (2019). Food policy for Canada: Everyone at the table. Government of Canada. Retrieved from: <https://www.canada.ca/en/campaign/food-policy/thefoodpolicy.html>
- Chen, T., Gregg, E. (2017). Food deserts and food swamps: A primer. National Collaborating Centre for Environmental Health. Retrieved from: <http://www.nccch.ca/documents/evidence-review/food-deserts-and-food-swamps-primer>
- City of Brampton. (2014). Brampton grow green environmental master plan: Implementation action plan. Retrieved from: <http://www.brampton.ca/en/Business/planning-development/projects-studies/Pages/Environmental-Master-Plan.aspx>
- City of Brampton. (2015). City of Brampton Official Plan, Office Consolidation September 2015. Retrieved from: http://www.brampton.ca/EN/Business/planning-development/policies-master-plans/Documents/Sept2015_Consolidated_OP.pdf
- City of Brampton, revised by-law no. 261-93, Animal control by-law s 14.1. Office consolidation. Retrieved from: <http://www.brampton.ca/EN/City-Hall/Bylaws/All%20Bylaws/Animal%20Control.pdf>
- City of Mississauga. (2012). Living green master plan. Ontario. Retrieved from: <http://www.mississauga.ca/portal/residents/living-green-master-plan>
- City of Mississauga. (2015). Living green master plan, 2015 progress report. Ontario. Retrieved from: <http://www.mississauga.ca/portal/residents/living-green-master-plan>
- City of Mississauga. (2016). City of Mississauga Official Plan, Office Consolidation July 2016. Retrieved from: <http://www.mississauga.ca/portal/residents/mississaugaofficialplanconsolidationversions>
- City of Toronto. (2009, March 27). Staff report: By-law to require and govern the construction of green roofs in Toronto. Retrieved from: <https://www.toronto.ca/legdocs/mmis/2009/pg/bgrd/backgroundfile-20562.pdf>
- CPTED Ontario. (n.d.). CPTED Ontario Principles. Retrieved from: <https://www.cptedontario.com/three-principles>
- Department of Finance Canada. (2019 March). Chapter 4: Delivering real change. Part 1: Health and well-being, in Investing in the Middle Class, Budget 2019. Government of Canada. Retrieved from: <https://www.budget.gc.ca/2019/docs/plan/toc-tdm-en.html>
- Ecosource. (n.d.a.). Garden workshops and training programs. Retrieved from: <https://ecosource.ca/getgrowing/>

- Ecosource. (n.d.b). Map of Peel community gardens. Retrieved from: <https://ecosource.ca/mississauga-community-gardens-map/>
- Glazier, R.H., Booth, G. L., Dunn, J. R., Polsky, J. Y., Weyman, J. T., Tynan, A. M., ... Gozdyra, P. (Eds.). (2014). Diabetes Atlas for the Region of Peel Public Health. Mississauga, ON.
- Hahn, K. (2013 March 8). Community gardens can be anti-crime agents. Michigan State University Extension. Retrieved from: https://www.canr.msu.edu/news/community_gardens_can_be_anti-crime_agents
- Health Canada. (2019). Canada's dietary guidelines: For health professionals and policy makers. Government of Canada. Retrieved from: <https://food-guide.canada.ca/en/guidelines/what-are-canadas-dietary-guidelines/>
- Horst, M., McClintock, N., Hoey, L. (2017). The intersection of planning, urban agriculture and food justice: A review of the literature. *Journal of the American Planning Association*, 83(3): 277-295.
- Lytle, L.A. (2009). Measuring the food environment: State of the science. *American Journal of Preventative Medicine*, 36(4S): S134-s144.
- McDougall, R., Kristiansen, P., Rader, R. (2019). Small-scale urban agriculture results in high yields but requires judicious management of inputs to achieve sustainability. *PNAS*, 116(1): 129-134
- McGill, R., Anwar, E., Orton, L., Bromley, H., Lloyd-Williams, F., O'Flaherty, M., ... Capwell, S. (2015). Are interventions to promote healthy eating equally effective for all? Systematic review of socioeconomic inequalities in impact. *BMC Public Health*, 15: 457.
- Milligan, Z., Oviedo, M., Ruck, G., Thompson, A., Antonel, O., Aljibain, A. (2017). Urban agriculture City of Mississauga. Aortam Group.
- Minaker, L., Shuh, A., Olstad, D.L., Engler-Stringer, R., Black, J.L., Mah, C.L. (2016). Retail food environments research in Canada: A scoping review. *Canadian Journal of Public Health*, 107(Suppl 1): eS4-eS13.
- Ministry of Municipal Affairs and Housing. (2014). Provincial Policy Statement. Queen's Printer for Ontario. Retrieved from: <https://www.ontario.ca/document/provincial-policy-statement-2014>
- Ministry of Municipal Affairs and Housing. (2018). The Ontario municipal councillor's guide 2018. Chapter 10, Land use planning. Queen's Printer of Ontario. Retrieved from: <https://www.ontario.ca/document/ontario-municipal-councillors-guide-2018/10-land-use-planning>

Ministry of Municipal Affairs and Housing. (2019). A Place to Grow: Growth Plan for the Greater Golden Horseshoe. Queen's Printer for Ontario. Retrieved from:

<https://www.ontario.ca/document/place-grow-growth-plan-greater-golden-horseshoe>

Peel Food Security Taskforce. (2017). Peel food charter. Retrieved from:

<http://www.povertyinpeel.ca/peel-food-charter.htm>

Peel Public Health, Population Health Assessment. (2017 June 28). Diabetes [Internet] from Ontario Diabetes Database 1996-2015, Institute for Clinical Evaluative Sciences (ICES) [Data provided by special request October 2016]. Mississauga, ON. Retrieved from:

<http://www.peelregion.ca/health/statusdata/ChronicDiseases/diabetes.asp> [cited 2019 May 16]

Peel Public Health. (2009). Staying ahead of the curve: The public health 10-year strategic plan. Chapter II: The public health way. Region of Peel: Mississauga, ON. Retrieved from:

<http://www.peelregion.ca/health/health-status-report/stay-ahead-curve/pdfs/ph-way.pdf>

Peel Public Health. (2019). Health benefits and potential risks of urban agriculture: A focused practice question. Region of Peel. Mississauga, ON.

Polsky, J.Y., Moineddin, R., Dunn, J.R., Glazier, R.H., Booth, G.L. (2016). Absolute and relative densities of fast-food versus other restaurants in relation to weight status: Does restaurant mix matter? Preventative Medicine, 82: 28-34.

Public Health Agency of Canada. (2014). Supportive environments for physical activity: How the built environment affects our health. Government of Canada. Retrieved from:

<https://www.canada.ca/en/public-health/services/health-promotion/healthy-living/supportive-environments-physical-activity-built-environment-affects-health.html>

Public Health Agency of Canada. (2017). Designing healthy living: The Chief Public Health Officer's report on the state of public health in Canada. Government of Canada. Retrieved from:

<https://www.canada.ca/en/public-health/services/publications/chief-public-health-officer-reports-state-public-health-canada/2017-designing-healthy-living.html>

Region of Peel. (n.d.). 2018-2022 Term of council priorities. Retrieved from:

<http://www.peelregion.ca/strategicplan/term-of-council-priorities/>

Region of Peel. (2015). 2015-2035 Strategic Plan. Retrieved from:

<https://www.peelregion.ca/strategicplan/>

Region of Peel. (2016). Region of Peel Official Plan, Office Consolidation December 2016. Retrieved from: [peelregion.ca/planning/officialplan](http://www.peelregion.ca/planning/officialplan)

- Region of Peel. (2017, February 15). Peel 2041 Regional Official Plan Review – ROPA 27 adoption, Health and the Built Environment, Age-Friendly Planning, and Technical and Administrative Updates. Regional Council Report. Retrieved from:
<https://www.peelregion.ca/planning/officialplan/pdfs/ropa27/ROPA-27-council-report.pdf>
- Region of Peel. (2019 April). Agricultural system and rural system policies: Draft. Peel 2041: Regional Official Plan Review. Brampton, ON.
- Rideout, K., Mah, C.L., Minaker, L. (2015). Food environments: An introduction for public health practice. National Collaborating Centre for Environmental Health. Retrieved from:
<http://www.nccch.ca/documents/evidence-review/food-environments-introduction-public-health-practice>
- Roberts, M. (2016). Food system background reading: Summary. Region of Peel. Mississauga, ON.
- RUAF Foundation. (n.d.). Urban agriculture: What and why? Retrieved from:
<https://www.ruaf.org/urban-agriculture-what-and-why>
- Swinburn, P. B., & Vandevijvere, S. (2017). INFORMAS Protocol: Public Sector Module - Healthy Food Environment Policy Index (Food-EPI) (Version 1). Retrieved from:
<https://www.informas.org/modules/public-sector/>
- Toronto and Region Conservation Authority. (n.d.). Sustainable local food: Urban agriculture. Retrieved from: <https://trca.ca/conservation/urban-agriculture/>
- Toronto Public Health. (2011). Assessing urban impacted soil for urban gardening: Decision support tool technical report and rationale. Toronto, ON.
- Toronto Public Health. (2013). From the ground up: Guide for soil testing in urban gardens. Toronto, ON. Retrieved from:
https://foodsecurecanada.org/sites/foodsecurecanada.org/files/guide_for_soil_testing_2013.pdf
- Town of Caledon. (2014). Caledon environmental progress action plan update, 2014-2019. Retrieved from: <https://www.caledon.ca/en/live/environment.asp>
- Town of Caledon. (2015). Town of Caledon official plan, office consolidation November 2015. Available: Retrieved from: [caledon.ca/en/townhall/resources/Official_Plan_Master_Copy_-_complete.pdf](https://www.caledon.ca/en/townhall/resources/Official_Plan_Master_Copy_-_complete.pdf)
- Town of Caledon, revised by-law no. 2013-130, Animal control by-law s.36-55. Office consolidation. Retrieved from: https://www.caledon.ca/uploads/5/Doc_636492912788515316.pdf

Appendix A: Guide for Soil Testing in Urban Gardens

Toronto Public Health developed a practical guide for people interested in starting an urban garden and wanting to learn about soil safety. The guide outlines a three-step process to assess and mitigate concerns related to soil contamination. The three steps are briefly described below. The complete guide can be accessed online at:

https://foodsecurecanada.org/sites/foodsecurecanada.org/files/guide_for_soil_testing_2013.pdf

Step 1: Establish a level of concern

There are low, medium, and high concern sites. See Table 1 for examples of sites and how their history of use determines the level of concern.

Step 2: Assess the soil

In some cases, the guide recommends that gardeners test their soil. Soil testing is recommended for large gardens [measuring more than 16 m² (170 ft²) or 4 X 4 m (13X13 ft)] located on medium or high concern sites.

Step 3: Take actions to reduce risks

The guide recommends specific actions gardeners may take to mitigate the potential health risks associated with soil contaminants. Recommended actions in Table 1, based on a site's level of concern.

Table 1: Recommended actions for gardeners, based on level of concern

Level of concern	Site examples	Recommended actions
Low	Site was previously residential, parkland, farmland or a school	<ul style="list-style-type: none"> - Wash hands after gardening and always before eating, wash produce with soap and water
Medium	Site was previously an orchard, hydro corridor, or is located 30m from a rail line or arterial road	<ul style="list-style-type: none"> - Lower concentration of contaminants by adding clean soil and organic matter to existing soil - Reduce dust by covering bare soil with ground cover or mulch. - Peel root vegetables before you eat or cook them - Avoid growing the types of produce that accumulate soil contaminants (See list in the complete guide)
High	Site was once a gas station, dry cleaner, autobody shop, print shop or industrial land	<ul style="list-style-type: none"> - Build raised bed gardens (add a minimum of 40cm of clean soil on top of garden fabric) or grow food in containers - Reduce dust by covering bare soil with ground cover or mulch. - Add clean soil and organic matter annually (compost and manure) to the raised bed or containers, or grow only nut and fruit trees (not any other types of produce)

Sites and recommended actions listed in Table 1 are not exhaustive. See the complete guide for more information.

Reprinted with the Permission of Toronto Public Health

Appendix B: City of Mississauga Official Plan Provisions Related to Urban Agriculture

Chapter	Policy
6: Value the environment	<p>6.2. Living Green (preamble): Individual sites and portions of the public realm can contribute to the health of the environment by incorporating measures such as: [...] supporting urban agriculture</p> <p>6.3. Green System: Parks and Open Spaces: Parks and open spaces within the green system include: Public Open Space: [...] urban agriculture; Private Open Space: [...] urban agriculture</p>
7: Complete communities	<p>7.7. Urban agriculture (preamble): Mississauga, like other cities around the world, is dependent on the importation of food to sustain its population. While this dependency is expected to continue, Mississauga supports a variety of urban agricultural practices that all its residents access to freshly grown local produce, supports the surrounding agricultural community, enhances local food security, reduces the energy costs associated with transporting food great distances and achieves a more sustainable community.</p> <p>7.7.1. Mississauga supports the following urban agricultural practices:</p> <ol style="list-style-type: none"> a. urban gardening; b. community gardening; and c. the creation of rooftop gardens.
9: Build a desirable urban form	<p>9.3.5.3. Natural features, parks and open spaces will contribute to a desirable urban form by: [...]</p> <ol style="list-style-type: none"> f. appropriately sizing parks and open spaces to meet the needs of a community and ensuring they are able to accommodate [...] community gardens, where possible.
11: Land use designations	<p>11.2.1.1. The following uses will be permitted in all land use designations, except Greenlands and Parkway Belt West unless specifically allowed: [...]</p> <ol style="list-style-type: none"> b. community gardening <p>11.2.5.2. In addition to the Uses Permitted in all Designations, residential designations will also permit the following uses: [...]</p> <ol style="list-style-type: none"> e. urban gardening
13: Major Nodes	<p>13.3.5.1.1. To achieve a sustainable community, development will be designed to include sustainable measures such as [...] supporting urban agriculture.</p>

City of Mississauga. (2016). City of Mississauga Official Plan, Office Consolidation July 2016. Retrieved from: mississauga.ca/portal/residents/mississaugaofficialplanconsolidationversions