Supporting Commercial Agriculture Uses in Winnipeg

Winnipeg Food Council

7/13/2018

Winnipeg is located within Treaty No. 1 Territory, the traditional lands of the Anishinabe (Ojibway), Ininew (Cree), Oji-Cree, Dene, and Dakota, and is the Birthplace of the Métis Nation and the Heart of the Métis Nation Homeland.

In consultation with the Winnipeg Public Service, the Winnipeg Food Council has examined the Winnipeg regulatory context, existing considerations related to urban agriculture, and both local and national precedents related to how best to accommodate commercial agriculture uses in Winnipeg.

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Supporting Commercial Agriculture in Winnipeg

1 Executive Summary

On December 6, 2017, Executive Policy Council (EPC) concurred in recommendations from the Riel Community Committee, and directed the Food Council to report back on where to allow commercial agricultural uses within the City.

The Winnipeg Food Council has consulted with the Winnipeg Public Service and urban growers; researched the Winnipeg regulatory context; and examined both local and national precedents related to growing food for resale throughout the city. Research produced three considerations, which are also anticipated policy outcomes:

1. **Growing produce as a permitted principal use**. Personal gardens are currently not permitted as a principal use, although community gardens are. Underutilized spaces throughout Winnipeg could (with the owners' permission) be converted into growing spaces for either short or long-term use.
2. **Commercial sale of produce**. If food produced in residential areas was sold on site, day-to-day activities in residential neighbourhoods could be impacted. The city, as land use regulator, must consider how to simultaneously preserve the character of residential neighbourhoods and support local food production.
3. **Use of public lands to grow produce**. Community groups and individuals currently grow food on City-owned lands. Demand for land to grow produce is increasing, creating the opportunity for further guidelines, processes and reporting mechanisms to clarify how public lands may be used for food production, and how groups may benefit from sales of items grown on public lands.

This report provides jurisdictional responses to the above three considerations, and recommends that Executive Policy Council:

1. direct the Public Service to, in consultation with the Winnipeg Food Council, prepare amendments to Winnipeg Zoning By-law 200/2006 and Downtown Winnipeg Zoning By-law 100/2004, to address and implement the three policy outcomes (growing produce as a permitted principal use, commercial sale of produce, and use of public land to grow produce) noted in the report; and
2. endorse the Province of Manitoba's online fact sheet about gardening and soil contaminants, which also includes resources for producers and consumers on safe gardening practices, soil testing, and other methods (such as raised garden beds) to ensure food safety.

2 Introduction

2.1 Purpose of this report

On December 6, 2017, EPC concurred in recommendations from the Riel Community Committee, and directed the Food Council to report back on where to allow commercial agricultural uses within the City.

In consultation with the Winnipeg Public Service, the Winnipeg Food Council has spoken with urban growers; examined the Winnipeg regulatory context; developed existing considerations (policy outcomes) related to urban agriculture; and researched both local and national precedents related to these policy outcomes. The Food Council is now reporting back to EPC with recommendations on how best to accommodate commercial agriculture uses in Winnipeg.

2.2 Background

Commercial Agriculture is generally associated with large-scale production of crops and farm animals for sale, usually with the use of modern technology (Cambridge English Dictionary). This report, however, is based on a more global definition of commercial agriculture, which is "farming meant to provide a farmer with food and money" (Drylands Development Programme). This definition involves growing and harvesting agricultural products for resale, and includes both larger and smaller scale operations.

Agriculture has traditionally been considered a rural activity, interrupted briefly by urban "Victory Gardens" made popular during World Wars I and II. During this time, growing produce in front yards, vacant urban lots, public places and former flower gardens were encouraged to allow more food, soldiers and munitions to be shipped overseas (the Canadian Encyclopedia).

Although only a few urban victory garden spaces (in Minneapolis and Boston) have retained their original function, growing food in urban areas and public spaces can increase access to local food and help promote healthy lifestyles. This is exemplified in former First Lady Michelle Obama's 2009 White House garden; the first since Eleanor Roosevelt's wartime garden in 1943.

Michigan State University references how urban agriculture can reconnect communities with healthy food, while supporting economic opportunities and innovative ways to use land. Research also argues that urban agriculture increases social capital, community well-being, and civic engagement within the food system.

OurWinnipeg, the City's development plan, recognizes that local food production is part of a vital and healthy neighbourhood (*OurWinnipeg* Section 03-2). This plan directs the City to respond to food needs by working through community partnerships, and includes the following enabling strategies:

- *Pursue opportunities to support local food production;*
- *Develop planning tools to manage the sustainability of existing community gardens and to enable the creation of new permanent or temporary gardens; and*
- *Maintain an inventory of city properties suitable for food production* (*OurWinnipeg* p 82).

The City of Winnipeg has responded to the above policy directions by establishing the Winnipeg Food Council in February 2017, with mandate to advise the mayor and council, support community work, and

initiate the development of an Agricultural and Food Strategy. Additionally, in 2017, City Council passed a by-law permitting city-wide beekeeping. The City also supports community gardening through a Community Garden Policy "intended to foster a positive climate for community gardening" and a set of implementation strategies (2008 Community / Allotment Garden Report). The City has not yet assembled an inventory of city properties suitable for food production, but recommendations in this report would complement this action.

Supporting commercial agriculture on underutilized land throughout Winnipeg is another way to respond to food needs while supporting local entrepreneurs interested in either supplementing existing incomes, or using innovative methods to grow high-value crops full-time.

3 Local Context

Commercial agriculture has already been supported-in-principle through recent City decisions. On December 13, 2018 the Board of Adjustment concurred in the recommendation of the Urban Planning and Design Division, and approved a temporary use variance to allow for agricultural cultivation on a vacant lot zoned R1-S (Single-family residential – Small). Per the *City of Winnipeg Charter Act*, this change in use is temporary, and must not exceed five (5) years.

The December 2017 motion to explore where to allow commercial agricultural uses within Winnipeg drew attention to potential agricultural production in the front and back yards of residential areas (as well as vacant lots), noting that "gardening and urban agriculture is an economically productive, efficient, and aesthetically pleasing use of residential land", which can help reduce greenhouse gas emissions and allow for further expansion of cooperatives, farmers markets, and other initiatives to support small enterprises. In addition, recent international political issues and trade concerns have brought more attention to the possibility of innovative, smaller scale agricultural production and local consumption.

A number of individuals and groups already participate in urban agriculture operations in Winnipeg. These groups would benefit from clarified policies related to selling food produced in gardens and agricultural plots across Winnipeg:

- The South Osborne Permaculture Commons is a network of community garden spaces and food-related sustainability programs and events in Winnipeg's Lord Roberts and Riverview neighbourhoods. This longstanding group is the steward of six growing spaces totaling approximately one acre of City-owned land. Group members have indicated that the ability to sell food produced on the land would enable them to use profits to support improvements, and potentially to support a part-time staff person to assist with volunteer coordination and other coordination tasks.
- The Landless Farmers Collective began farming in garden plots by the PanAm Pool. Their proposal to offer Community Shared Agriculture (CSA) shares to interested citizens was accepted as a pilot project, and the City and the Landless Farmers Collective entered into an allotment garden contract. The Landless Farmers Collective has now ceased operations, and the gardens at Pan Am Pool are currently underutilized.
- There are likely other small-scale businesses that use micro-farming techniques to grow food for resale in underutilized spaces like backyards, empty lots, or even indoor spaces. These entrepreneurs would benefit from enabling smaller-scale commercial agriculture uses in more spaces throughout Winnipeg.
- In Winnipeg, demand for allotment gardens has been growing; in 2012, the City of Winnipeg had 161 plots with 87% occupancy. As of June 2018, the number had grown to 234 plots with 100% occupancy. During this same time, Winnipeg has also had a growing number of community groups working towards establishing more community orchards within the City.

3.1 Existing Regulatory Framework

From a planning and land use perspective, growing plants in a yard is considered "landscaping", and as such can be regulated largely through the *Neighbourhood Liveability By-law 1/2008* and *Winnipeg Zoning By-law 200/2006*. The *Neighbourhood Liveability By-law* states that property owners have a general obligation to maintain their properties, which includes ensuring proper drainage (5.7(2)),

trimming plants and vegetation in yards (5.8(1)), and controlling noxious weeds (5.8(2)). If anything planted in the front yard acts as a fence (e.g. a row of corn planted along the property's edge), it should not exceed the height restrictions outlined in *Zoning By-law 200/2006* (generally four (4) feet in front yards and 6.5 feet in rear yards).

The *Neighbourhood Liveability By-law* also regulates the height of vegetation grown on boulevards (to preserve sight lines in the right of way), and requires a permit to grow edible plants on City-owned boulevards (Section 89(3)(f))**.**

3.1.1 Zoning By-law 200/2006

Zoning By-law 200/2006 currently includes two definitions related to growing food in Winnipeg. These definitions include:

- **Agricultural cultivation** – *the raising for consumption or commercial sale of agricultural vegetation, including vegetables, grains, fruits, plants, sod, trees and other similar products*; and
- **Community gardens** – *a public use of land for the cultivation of fruits, flowers, vegetables, or ornamental plants by more than one person or family.*

The above definitions address principal uses, meaning the allowable principal (or major) uses of any zoning lot. Establishing a garden on one's personal property is currently allowed as an accessory to a principal use (such as a house or any other principal use allowed in Zoning By-law 200/2006).

Currently, "Agricultural Cultivation" is only permitted as a principal use in "A" - Agricultural and "RR5" - Rural Residential 5 zoning districts. This definition allows growing food for resale, and allows for other uses like tree nurseries and sod production, which (due to the larger scale) may not be appropriate in urban areas.

Community gardens are permitted principal uses in all residential districts, all parks and recreation districts, as well as "C1" – Commercial Neighbourhood and "C2" – Commercial Community zoning districts. The above definition allows for public use of land by more than one person or group for cultivation.

3.1.2 Provincial laws and considerations

Although food safety issues may be a concern to municipalities, the Province has jurisdiction over food safety-related issues. According to the Province, risks associated with selling fresh, unprocessed produce are minimal.

The Provincial Farmers Market Guidelines state that raw uncut vegetables and fruit are considered to be non-potentially hazardous, and are therefore exempt from packaging requirements for farmers' markets. From the provincial perspective, vegetables and fruit can be sold directly to the public either at farmers' markets or at a roadside stand. The one requirement is that the fruit or vegetables not be processed in any way other than cutting off the stems and washing the dirt off.

Soil in some communities or neighbourhoods in urban areas can contain contaminants, which are most often the result of industrial activities, traffic, or products used around the home in the past (such as lead paint from older houses). A Provincial fact sheet states there is a very small risk of exposure to contaminants from eating vegetables grown in contaminated soil, provided the risks are mitigated by washing dust/dirt deposits off vegetables before consumption. This fact sheet also includes resources

for producers and consumers on safe gardening practices, soil testing, and other methods (such as raised garden beds) to ensure food safety.

Municipal responses to food safety issues and potential soil contaminants have generally been limited. Food safety is not a land use or zoning issue, but both producers and consumers should be aware of food safety issues. To address this, Vancouver has partnered with the local health authority to produce a guide to reduce health risks. In its document outlining guidelines for boulevard gardening, Saskatoon includes a clause stating potential health risks, and noting that eating food grown on City boulevards is done so at the consumer's own risk.

3.2 Community Influence and Support

According to the Manitoba Cooperator, demand for local food has recently "exploded". In a report by Food Matters Manitoba, *Growing for the Future – Building a local, sustainable food economy in Manitoba*, farmers and processors spoke of increased demand, while distributors said that their customers were asking them more regularly for local products (p.34). Demand can also be reflected in the number of farmers' markets; the 2017 Manitoba Local Produce lists 18 Winnipeg farmers' markets (compared with 11 in 2012).

The design community has also responded to demands for local food. In 2018, Garden Manitoba and Storefront Manitoba launched the GrowRoom design competition, to increase public awareness of garden spaces and design and encourage ways to produce greater yields.

While Manitoba's local food economy may appear small, according to research conducted by the Canadian Co-operative Association, Manitoba has a significant number of "local food initiatives" per capita. In 2009, Manitoba had 125 local food initiatives per million people, ranking it third in the country behind only Prince Edward Island and Nova Scotia. Manitoba also had the second highest number of farmers' markets per capita (36 per million) and the third highest number of Community Supported Agriculture (CSA) farms (13 per million) (Ibid. p.34).

In response to ongoing food consultations, in 2015, Food Matters Manitoba produced Winnipeg Food Security Priorities, a short document summarizing and updating priorities from a public consultation for the SpeakUpWinnipeg process in 2009. This report includes many priorities, but mentions the need to consider updating by-laws and regulations to support (among other things) edible landscapes, [community] gardens, [edible produce on] boulevards, urban agriculture, and farmers' markets.

Urban growers consulted in the preparation of this report noted the following advantages of expanding areas where food produced could be sold:

1. **Supporting Innovation**. Allowing food to be produced and sold in more areas than those zoned "A" and "RR5" provides entrepreneurs with the opportunity to showcase what is possible, and encourage growth of small and medium enterprises. Growing food indoors, growing food without soil, and experimenting with vertical gardens are all examples of innovative growing methods that could flourish in the right regulatory environment. Entrepreneurship involves risk-taking and the City has the opportunity to articulate its support for innovation and experimentation with innovative growing methods.
2. **Placemaking and enriching the community experience**. Urban growers noted how public spaces can benefit (and have benefitted) from fruit and vegetable production. All or part of

underutilized properties could be converted to garden spaces that provide opportunities for citizens to gather, beautify communities, and add to neighbourhood pride.

3. **Increasing access to local food**. Small community garden plots provide social and therapeutic benefit to growers. However, due to the smaller scale of these plots, an individual's level of food security generally remains unaffected. Making more land (private and public) available to growers may help meet demand for locally produced foods and world crops (not conventionally grown in Manitoba but in increasing demand from newcomers and others);provide additional sources of income to maintain the garden and purchase other foods. Higher volumes of food produced may also help reduce fears of loss through unsolicited 'gleaning'.
4. **Increasing biodiversity**. Adding a variety of plants and flowers to an area can positively contribute to biodiversity. For example, honey bees consume pollen and nectar from flowers. Adding a variety of plants to an area largely occupied by grass and trees would benefit local bee populations as well as the plants they pollinate.
5. **Providing opportunities for citizens and community groups to enhance City landscaping.** Growing spaces are tended by community members and are often coordinated by community groups, who may choose to spend time and creative energies enhancing existing landscaping. Individuals and groups tending the community garden area (in compliance with City guidelines and standards) may also help reduce annual costs for City landscaping.
6. **Supporting micro-businesses, small enterprises and medium enterprises.** Small and medium enterprises are the economic engine of Canada. In 2015, 97.9% of employer businesses in Canada were small businesses with 50 employees or less (Statistics Canada). SMEs are also said to be responsible for driving innovation and competition in many economic sectors.

4 Policy outcomes, Jurisdictional Scan and Potential Responses

The following section outlines existing policy outcomes that could enhance food production in Winnipeg; provides examples of how other jurisdictions have addressed these policy outcomes; and recommends responses tailored to the Winnipeg municipal context.

4.1 Policy outcome #1: Growing produce as a permitted principal use

Zoning By-law 200/2006 permits personal gardens as accessory uses, under the heading "Accessory use, not listed" (Table 4-2, p. 77). Personal gardens are currently not permitted as a principal use, although community gardens are.

The "Community Garden" definition in Zoning By-law 200/2006 describes use of land by more than one group. This use is permitted in a majority of zoning districts throughout Winnipeg, but the definition excludes individuals who want to grow food on an empty lot. The "Agricultural Cultivation" definition allows for food production as a principal use in Agricultural and large-lot residential zones, but is geared toward larger-scale operations that could include trees and sod.

Although a property owner could apply for a variance to allow for agricultural cultivation on a vacant lot, section 247(4) of the *City of Winnipeg Charter* restricts the temporary change of use through a variance to a maximum of five (5) years. This variance would allow food production on an empty lot, but this use would be considered temporary, and would expire (with no chance to re-apply) after 5 years.

4.1.1 Jurisdictional Scan

Jurisdictions across Canada are encouraging urban agriculture as principal uses. In Kelowna, BC, Urban Agriculture is a permitted principal use in all single-family residential zones. Vancouver also permits agriculture in residential zones, to a maximum plot size of 325 m^2 (approx. 3500 ft^2).

The City of Saskatoon has taken a different approach, and allows for gardening on private vacant lots as an interim use. Through this incentive program, the City offers an annual grant to the property owner equal to 50% of municipal land tax, for up to five years. Written proof of landowner consent is required. Saskatoon also maintains a comprehensive inventory of undeveloped land, which also includes surface parking lots. All land that falls into the "undeveloped" category is considered vacant.

Starting in the 2018 growing season, Edmonton is piloting a program where vacant City-owned lots are available for cultivation. The cost is $100 to participate, and lots are offered in "as is" condition. Citizens must provide their own liability insurance, and can either import clean soil, or test and remediate existing soil at their own cost.

4.1.2 Recommended Winnipeg Response

To allow for smaller-scale food production by individuals, the Food Council recommends that the Public Service propose amendments to Winnipeg Zoning By-law 200/2006 and Downtown Winnipeg Zoning By-law 100/2004, for Council approval. Proposed amendments would allow for food production by individuals on vacant lots (with permission of the owner) in specific zones throughout the City.

To help ensure food safety, the Food Council also recommends that the City endorse information found on the Province of Manitoba's online fact sheet about gardening and soil contaminants.

4.2 Policy Outcome #2: Commercial sale of produce

Some producers growing food on underutilized land may want to sell produce from their homes, and function as a home-based business. Land use concerns could arise if day-to-day activities in residential neighbourhoods were impacted by selling produce in one's front yard (which could be considered "farm gate", as permitted through Provincial legislation). Although the scale of such operations is naturally small, other Canadian jurisdictions have taken steps to ensure that retail sales do not impact the residential character of a neighbourhood.

4.2.1 Jurisdictional Scan

Most jurisdictions researched do not officially allow produce to be sold in residential neighbourhoods. In its Urban Farming Guidelines, Vancouver does not permit sales from its Class A farms (farms in residential districts with an area of less than 325 m^2 (approximately 3,500 ft^2), unless the use is institutional (like a school or place of worship). Vancouver guidelines also state that farmers must have a business licence ($10 for Class A farms and $136 for Class B farms, up to 7,000 m^2 or about 1.7 acres).

In Kelowna, produce sales are limited to Agricultural areas (where larger scale farms are located), as well as at open air markets, public markets, or other types of permitted markets.

As stated previously, the City of Saskatoon has developed an incentive program for gardens on vacant lots. The policy indicates that sales of garden produce are only permitted on-site from residential districts if they are sold by non-profit organizations in accordance with garage sale regulations. On-site sales are permitted in all non-residential districts. Apart from these exceptions, local farmers' markets are the only places where commercial sales are permitted.

4.2.2 Recommended Winnipeg Response

The Food Council recommends that commercial sales of produce be addressed through amendments to Winnipeg Zoning By-law 200/2006 and Downtown Winnipeg Zoning By-law 100/2004.

4.3 Policy Outcome #3: Use of public lands to grow local produce

As outlined above, community groups and individuals currently grow food on City-owned lands. This use is deemed to be for the 'public good', as growing food can help reduce poverty, increase biodiversity, foster community connections, beautify neighbourhoods, and increase access to food. Demand for land is increasing, and organizations may adopt 'social enterprise' business models to assist with program funding. This creates the opportunity for further guidelines and processes to clarify how growing spaces on public lands may be used.

4.3.1 Jurisdictional scan

Other jurisdictions have allowed businesses or individuals to benefit from use of public lands and facilities. For example, the Province currently operates its Agricultural Lands Leasing Program for individuals interested in using crown lands for grazing, haying, and other purposes. In a similar way, it is not uncommon for private fitness instructors to rent space at City of Winnipeg facilities, or use public parks to run their classes.

Outside Manitoba, the City of Vancouver established a policy related to food production on public lands, which lists ways in which the park board will support the development of urban agriculture in the Vancouver park system. This policy not only commits to helping interested groups to find growing space on public land, but also states that the City will help connect project proponents to private landowners and other government agencies. This policy lists parameters around the proponents' intention (community benefit, skill building, benefitting pollinators, etc.), requires the group to operate at no cost to the Park Board, and requires the group to conduct public consultation prior to approval. Generally, items grown are not allowed to be sold, but exceptions can be made upon discussion with Park Board staff.

Halifax also allows small-scale sites on City land to be operated by non-profit societies for specific purposes, one of which is to generate revenue to be reinvested in the site.

Parkland is not the only City-owned land that may be suitable for food production; Saskatoon has identified City-owned boulevards as potential growing spaces, and has developed guidelines outlining parameters for use.

4.3.2 Recommended Winnipeg Response

The Food Council recommends that guidelines around use of public lands to grow produce be addressed through amendments to Winnipeg Zoning By-law 200/2006 and Downtown Winnipeg Zoning By-law 100/2004.

In the future, EPC could also consider directing the Winnipeg Food Council and the Public Service to create draft guidelines outlining how and when public land could be used for food production, and what circumstances would allow food produced on public land to be sold.

EPC could also consider removing the permit requirement associated with growing edible produce on City-owned boulevards adjacent to individuals' properties or, like Saskatoon, produce guidelines and information for those interested in gardening on the boulevards by their properties.

5 Conclusion

5.1 Future considerations

This report focused on where in the city to allow commercial agricultural uses. However, additional changes to existing regulations could be explored to further promote urban agriculture. These include:

- **Encouraging boulevard gardening and growing produce on City-owned vacant lots**. As noted in sections 3.1.1 and 3.2.1, The City could create programs like Saskatoon (which encourages boulevard gardens and provides guidelines to facilitate this practice) or Edmonton, which has developed a program where people can use City-owned land (as-is condition) to grow food. Such programs may include guidelines for proper upkeep, potential recourse if guidelines are not followed, and dispute resolution mechanisms if applicable. The City could also consider removing the permit requirement for growing edible plants on boulevards, and provide more gardening resources for citizens.
- **Creating policy, guidelines and reporting requirements related to use of public lands for commercial food production.** This would clarify processes and requirements for both growers and City administrators, and create parameters for use as demand for growing spaces increases.
- **Creating a database inventory of all City properties suitable for food production.** This action is listed as an enabling strategy in *OurWinnipeg*. Maintaining a database would provide up-to-date information, and would further help the Public Service connect people interested in food production with growing spaces in a timely manner.
- **Supporting fragmentation of Agricultural land under certain circumstances.** Section 8 of *Complete Communities* recognizes the benefits of having specialized agricultural operations within City limits. Specialized Agriculture can be defined as commercial agricultural operations typically producing high value, lower volume, intensively managed agricultural products that may need smaller parcels of land to support their business, like greenhouse production or u-pick berry farms (Province of Manitoba). The City could (like the Province has done) support specialized agricultural operations by allowing land fragmentation into parcels of less than 40 acres in size when needed for Specialized Agricultural uses.
- **Distinguishing between agricultural lands that are suitable and unsuitable for future development**. As stated in the 2015 report "Protecting the Interests of Winnipeg's Agricultural Community", not all Rural and Agricultural land within City limits is suitable for urban development due to constraints such as flood prone land, and proximity to a sewage treatment plant or landfill site. The City could designate these areas specifically for agricultural uses, and adopt customized policies and/or plans supporting 'specialized agricultural' uses and the creation of parcels smaller than 40 acres in size.
- **Explore innovative ways to ensure garden sites are adequately watered.** Water provision at community garden sites is an ongoing issue. In some circumstances, garden users may be able to haul their own water, use water from nearby buildings, use water tanks or other water retention systems, or use innovative water-saving gardening techniques. This may not be possible at some sites, or may be cost-prohibitive for some community groups. Exploring ways in which the City could assist community gardens (like expanding programs to provide a discount for the sewer portion of water and waste charges) would benefit garden users.
- **Encouraging conversion of underutilized parking spaces to growing spaces.** Surface parking, particularly in privately owned lots, is often underutilized. To enable access to local food,

community connection, and increase water retention, the City could consider ways to enable the conversion underutilized parking spaces to growing spaces. In certain cities, this temporary gardening use has been extended to the public right-of-way, with a "placemaking" effect similar to that of extending restaurant patios into public roads.

- **Explore ways to further encourage food-related innovation**. Activities like growing food indoors, growing food without soil, aquaculture (fish farming), and aquaponics (combining aquaculture and hydroponics) can increase access to local food and contribute positively to Winnipeg's economy. Although these activities may already be allowed in specific areas, the City has the opportunity to articulate its support for food-related innovation.
- **Developing citizen resources related to growing produce in Winnipeg**. On its website, Saskatoon offers information about planting boulevard gardens, community gardens, and other general how-to information for people curious about growing their own food. Similarly, Kelowna has a dedicated web page sharing relevant urban agriculture information.
- **Creating standards or incentive programs to encourage green roofs for both new and retrofit buildings.** In 2012, Toronto passed a by-law requiring green roofs on new industrial buildings. The City also has incentive grants available to support the installation of green roofs (that you can garden on) and cool roofs (that reflect the sun's rays) According to the Environmental Protection Agency, green roofs can help combat the "urban heat island effect", as their surface area can be a few degrees cooler than the outside air temperature. A study done by the University of Toronto showed that green roofs can capture an average of 70% of rainfall, relieving underground stormwater systems and preventing overflow onto city streets during extreme weather events

5.2 Summary of Recommendations

The Food Council, in partnership with the Public Service, recommends that Executive Policy Council:

1. direct the Public Service, in consultation with the Winnipeg Food Council, to prepare amendments to Winnipeg Zoning By-law 200/2006 and Downtown Winnipeg Zoning By-law 100/2004, to address and implement the three policy outcomes (growing produce as a permitted principal use, commercial sale of produce, and use of public land to grow produce) noted in this report; and
2. endorse the Province of Manitoba's online fact sheet about gardening and soil contaminants, which also includes resources for producers and consumers on safe gardening practices, soil testing, and other methods (such as raised garden beds) to ensure food safety.

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