
Building the Future for Community Gardening in Region of Waterloo Municipalities

A proposal from the
Community Garden
Council of Waterloo
Region

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CONTENTS	<u>Page</u>
EXECUTIVE SUMMARY	1
<i>Recommendations</i>	1
1.0 THE CASE FOR A COMMUNITY GARDEN POLICY	3
2.0 THE COMMUNITY GARDEN COUNCIL	3
3.0 THE NATURE OF COMMUNITY GARDENS	4
4.0 CREATING POLICIES AND IMPLEMENTING PLANS FOR COMMUNITY GARDENS	5
5.0 COMMUNITY GARDENS IN THE REGION OF WATERLOO	6
5.1 Sponsorship	6
5.2 Organization and Size	7
5.3 Membership	8
5.4 Location	9
5.5. Social Benefits of Community Gardens	9
5.5.1 Linkages	10
5.5.2 Objectives and Activities.....	11
5.6 Other Components of the Regional Urban Food and Agriculture System	11
5.6.1 Home Residence Food Gardening.....	12
5.6.2 Allotment Gardening	12
5.6.3 Other Institutional Gardens.....	13
5.6.4 Green Roofs and Roof-top Gardens.....	13
5.6.5 Small Animal Raising	13
5.6.6 Municipal Gardens and Plantings, and Foraging	14
5.6.7 Urban-Rural Food Growing Partnerships	14
5.6.. Gardening Organizations	14
6.0 THE BASIS FOR COMMUNITY GARDEN POLICY	15
6.1 General Considerations	15
6.2 Basic Objectives for Community Garden Policy in the Region of Waterloo	16
6.3 Important Influencing Trends in Regional Urban Development.	16
6.3.1 Growth	16

6.3.2 Climate and Water.....	17
6.3.3 Demographic Change.....	17
6.3.4 Private Control of Development.....	17
6.3.5 Setting Priorities	18
7.0 SPECIFIC RECOMMENDATIONS FOR A COMPREHENSIVE COMMUNITY GARDEN POLICY	18
7.1 Soil	18
7.1.1 Soil conservation should be recognized as a priority in guiding new developments	18
7.1.2 The cities and the Region should monitor potential urban agricultural land for residual contaminants before releasing it for use in community and allotment gardening	19
7.1.3 The Region and municipalities should look at innovative management designs that recognize the linked cycles of the urban food system	19
7.2 Land and Location	19
7.2.1 Community Gardens in Future Urban Developments	20
7.2.2 Since so many community gardeners are renters or apartment dwellers, the second primary criterion for site selection should be convenience to concentrations of residents from apartment and rental developments.....	20
7.2.3 Partnerships with voluntary hosts and sponsors of community gardens should be developed, particularly in existing city areas	21
7.2.4 Planning policies for community gardens should anticipate demographic and social trends.....	21
7.2.5 The area of parcels of land designated for community gardens in new developments needs to be calculated by considering plot size, number of plots, and related features and needs.....	21
7.3 Providing for Community Gardens in Existing Urban Areas	22
7.3.1 The Region and municipalities need to conduct surveys to locate any available sites that could be prospects for future community gardens	23
7.3.2. A variety of administrative and service needs or problems must be considered	23
8.0 OTHER URBAN GARDENING AND AGRICULTURAL MODES.	24
8.1 Allotment Gardens	24
8.1.1 The Kitchener allotment garden should be kept going in the present location at the back of the Williamsburg Cemetery as long as possible.....	25
8.1.2 All cities should have allotment gardens	25
8.2 Encouraging Home Gardening	26
8.3 Parallel Urban Agricultural Activities	26
8.3.1 Additional possibilities should be permitted in cities, such as chicken and rabbit rearing	26

8.3.2. Parks and other public spaces could also be planted with food-bearing trees and shrubs.....	26
8.3.3 A variety of urban agricultural institutions could be developed to enhance cities	26
APPENDIX A	28
REFERENCES	29
FIGURES	
Figure 1 Community Garden Sponsorship in the Region of Waterloo	7
Figure 2 Number of Plots in Region of Waterloo Community Gardens	8
Figure 3. Community Garden Land Provision in the Region of Waterloo	9

EXECUTIVE SUMMARY

The 2009 Regional Official Plan directs Area Municipalities to establish policies respecting community gardening in their own official plans. (See Appendix A.) This report presents information on community gardening in the Region of Waterloo and its constituent municipalities and provides recommendations from the Community Garden Council of Waterloo Region (CGC) for integrating community gardening and related forms of urban agriculture into these policies and official plans.

The community garden movement is now flourishing in Canada. Most municipalities make some provisions for community gardens, and a growing number have official policies respecting community gardening and urban agriculture.

There are some 40 community gardens with more than 750 participants in the Region of Waterloo as well as an allotment garden in the City of Kitchener. The gardens function like cooperatives with coordinators who facilitate the smooth functioning of the gardens and represent their interests to the Community Garden Council, which is assisted by the “Diggable Communities Collaborative,” a partnership of Opportunities Waterloo Region, the Region of Waterloo Public Health and CGC, to provide administrative, material and some financial assistance for community gardening.

Most community gardens depend on churches, community centres and parks for the provision of land, almost always as an add-on unanticipated in the original plans of these organizations. These willing hosts are greatly appreciated by community gardens, and are their mainstay, but their capacity for assistance is limited. Common problems are accommodating growth, optimizing locations for gardens to serve those most in need of them, providing an assured source of water (a common and chronic problem), providing coordination and liaison, and obtaining administrative support from the municipalities and Region.

Recommendations

We feel that municipalities should now plan to make more secure provisions for community gardens so that they can flourish to their true potential. A number of recommendations are offered to assist these plans, the most important of which are:

- New urban developments should be required to dedicate parcels of land with good quality soil and guaranteed long range tenure expressly for community gardens. New kinds of zoning could be considered.
 - Priority-setting criteria should be used so that these properties are located convenient to residents with the greatest need, particularly those in rental dwellings.
 - All municipalities should also provide land for allotment gardens.
 - Inventories of existing urban areas should be conducted to locate possible sites for additional gardens.
 - Many existing gardens are hosted by faith groups, community centres and parks. These fruitful relationships should be supported and encouraged. When applications are made for new developments, such organizations should be asked to consider making provisions for the possibility of eventually hosting community gardens.
 - Social and demographic trends should be considered in planning for community gardens, particularly their inclusion in developments for seniors.
 - Municipalities should dedicate administrative or planning staff to work with community gardens and provide services, materials, start up advice, education and other needed resources.
 - Food gardening on residential properties has declined greatly. Programs should be initiated to stimulate and assist home gardening.
 - Small animal raising, including beekeeping, is easily accommodated in urban settings and should be allowed. This is common practice elsewhere and has been common in Waterloo region urban areas in the past.
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1.0 THE CASE FOR A COMMUNITY GARDEN POLICY

The Region of Waterloo, in its newly revised 2009 Regional Official Plan, stated that it favours and encourages community gardening, and directs constituent municipal governments to adopt policies to bring local food production and consumption, including community gardens, into municipal planning. (See Appendix A.)

2.0 THE COMMUNITY GARDEN COUNCIL

More than 40 community gardens are flourishing in the Region with an estimated 750-800 individuals participating. The Community Garden Council of Waterloo Region advocates for community gardens. The Council consists of 12 members of whom at least six must be active members of Regional community gardens.

The benefits of community gardens have been documented in a large number of studies. These benefits include:

- providing opportunities for growing food, outdoor exercise, and relieving stress,
- providing public amenities that improve the social and aesthetic quality of neighbourhoods and provide opportunities to nurture friendships
- providing gardening opportunities for those without land
- providing hands-on educational resources and learning opportunities
- building relationships with other food- and agriculture-related programs and activities
- forging links and partnerships with a variety of voluntary organizations and faith groups
- enhancing nearby property values
- improving public safety, reducing crime and undesirable behaviour

Recognizing these benefits, the mandate of the Community Garden Council is to support community gardens through:

- public promotion and communications
 - promotion of partnerships with stakeholders
 - active participation in community events
 - research, education and advocacy support
 - coordination of resource support
 - actively seeking funding
 - promotion of environmentally sound practices [2]
-

A survey of benefits that individual garden coordinators received from the Community Garden Council produced a lengthy list:

- organizing the provision of woodchips and compost
- providing contacts for recruiting new gardeners
- providing information of various practical sorts
- staging workshops and seed exchanges
- general support, direction and informative emails from Carol Popovic, the staff person from Region of Waterloo Public Health, whose busy case load includes assisting the Council. [3].

The Council and the community gardens were also given a great boost by Candace Wormsbecker, who was hired by the Diggable Communities Collaborative through a Trillium Foundation grant as a capacity builder for an 18 month period ending in November 2009.

3.0 THE NATURE OF COMMUNITY GARDENS

Community gardens are linked to the widespread municipal allotment gardens that arose in European cities as long as 300 years ago. In Great Britain, whose strong development of allotment gardens has most influenced developments in North America, urban residents have the right to petition their municipal governments to provide them with collective gardening space. In Canada and the U.S., community gardens are most often voluntary local initiatives independent of municipal governments (hence the term “community garden”), but which increasingly benefit from enabling frameworks developed by sympathetic municipal administrations to accommodate the growing movement. Community gardens were first formed in the Region of Waterloo some 25 years ago. A historical account of the diverse threads that have contributed to the development of the central community garden concept can be found in the research paper “Community Gardens: A Tool for Community Building.” [4]

Many European, U.S. and Canadian cities have adopted official community gardening policies. There are some variations in the concept and practice of community gardening, but they all share certain basic features. The City of Cleveland, which has integrated community gardens so thoroughly into its urban planning that it has developed a new zoning code of “urban garden district” to accommodate them, provides a good working definition of community gardening:

“Community garden” means an area of land managed and maintained by a group of individuals to grow and harvest food crops and/or non-food, ornamental crops, such as flowers for personal or group use, consumption or donation. Community

gardens may be divided into separate plots for cultivation by one or more individuals or may be farmed collectively by members of the group and may include common areas maintained and used by group members. [5]

4.0 CREATING POLICIES AND IMPLEMENTING PLANS FOR COMMUNITY GARDENS

There are numerous proposals for advancing and formulating urban agricultural policies that include some emphasis on community gardens. The common goals are usually to encourage sustainable urban food production, conserve agricultural resources, and encourage backyard and community gardens as the predominant means to advance such goals.

A common pathway to implement a comprehensive plan would follow these steps:

1. Assess zoning and land use policies to determine how they promote or discourage urban agricultural activity and protect needed resources, particularly usable land of good quality.
2. Assess lands that can be used for gardening, with special attention to vacant or unused land. Develop a set of criteria to evaluate such lands to best serve the specific garden needs of identified target populations (such as the poor, renters, densely populated areas with waiting lists for garden plots).
3. Select appropriate planning tools (e.g. conservation easements, creative zoning) to protect designated land and resources for gardening.
4. Create and develop coherent community garden policies, regulations, programs, administrative mechanisms, funding, staffing and services.
5. Create viable partnerships with public agencies, community organizations, private interests and neighbourhood groups as well as emerging community garden associations.
6. Develop and support ongoing programs and monitor their effectiveness.

Some municipalities have succeeded very well. In Seattle, regarded by many as a model, burgeoning community gardens (called p-patches) are administered under the Department of Neighborhoods through a special P-Patch Trust that builds, preserves and protects community gardens. [6] Seattle produces a quarterly “P-Patch Post” that shows the operations of its well-advanced municipal community gardening enterprise. [7]

In Canada, a valuable comprehensive study reviewing the potential of urban agriculture and how to implement it has been produced for the City of

Kamloops: “Best Practices in Urban Agriculture: a Background Report Prepared for the City of Kamloops to Support Development of an Urban Agricultural Strategy.” [8] We recommend it highly for its extensive survey of best practice in various municipalities and several countries as well as its advice for the City of Kamloops.

The planning profession has also been giving increasing attention to food planning. The American Planning Association in 2007 produced a useful study, “Policy Guide on Community and Regional Food Planning,” [9] that shows how specific projects, such as community gardens, can be placed within wide-ranging comprehensive food planning policies.

A number of individuals in the Waterloo and Guelph area have considerable experience with community gardening:

- Candace Wormsbecker, former Community Garden Capacity Builder, Opportunities Waterloo Region
- Carol Popovic, Region of Waterloo Public Health, liaison with community gardens and the Community Garden Council
- Ted Potworka, supervisor of horticulture, City of Kitchener, liaison with community gardens and the Kitchener Allotment Garden
- Anthony Scian, chair, Community Garden Council of Waterloo Region
- Karen Landman, University of Guelph, community garden researcher
- Troy Glover, University of Waterloo, community garden researcher

5.0 COMMUNITY GARDENS IN THE REGION OF WATERLOO

Information on community gardens in the Region of Waterloo and the work of the Community Garden Council can be found on the Community Garden Council website: www.together4health.ca/workgroups/waterloo-region-community-garden-council

5.1 Sponsorship

Community gardens are typically initiated by spirited individuals or voluntary organizations. In the Region of Waterloo, churches, neighbourhood associations and community centres are the predominant sponsors, as shown in Figure 1.

Figure 1 Community Garden Sponsorship in the Region of Waterloo

Type of Sponsor	Number of Gardens
Neighbourhood association or community centre	12
Churches	10
The Working Centre	3
University students	3
Region of Waterloo	2
Retirement communities or care homes	2
Housing cooperatives	2
City of Kitchener	1
Food Bank of Waterloo Region	1
Private	1
Apartment building	1

5.2 Organization and Size

Most community gardens function like cooperatives with centralized organization of varying formality, usually with an elected or volunteer coordinator, and charge nominal membership fees, commonly about \$20. Coordinators play vital roles in organizing and communicating with members, coordinating activities, determining garden needs and seeking assistance on their behalf, assisting new members, enforcing garden rules, engaging in outreach and promotion, obtaining support, and conferring with other coordinators and the Community Garden Council. An exhaustive survey of needs, opinions and suggestions that involved Region of Waterloo coordinators of 18 community gardens provides a comprehensive picture of the work, functions, needs and aspirations of garden coordinators and community gardens in the Region. [3]

Most gardens provide members with small individual plots (in the Region of Waterloo, usually 100 to 144 square feet), although a few are communal. The number of plots in a garden varies from as low as 8 to 90, while 147 large plots of 400 square feet are available in the one allotment garden in Kitchener. Plot availability is shown in Figure 2.

Figure 2 Number of Plots in Region of Waterloo Community Gardens

Number of Plots	Number of Gardens
8 -10	12
11-15	8
16-20	6
21-29	2
30-39	1
40 or more	3
Not listed	3
Communal	3

Disregarding the two gardens that are much larger than the others (the Good Earth Garden at St. John's Lutheran Church in Waterloo with 90 plots and the Kitchener allotment garden with 147 plots), the mean number of plots per garden is 15.6. The reason for the small number of plots per garden has not been thoroughly investigated. In some cases the amount of land available is the determining factor. However, the role of garden coordinator can involve much work and some gardens have limited their size so as not to overburden the coordinator. An informal survey of about 15 community gardeners showed surprisingly uniform agreement that a membership of about 20 was optimal. Some smaller gardens hold land in reserve for the possibility of future expansion.

In contrast, both plot size and the number of plots per garden are often larger elsewhere. In Montreal, with a longstanding system of gardens accommodating more than 9,000 gardens, the mean size is 84 plots. In Seattle, the mean is 28 plots per garden. [6]

5.3 Membership

In most gardens, membership is open to all applicants so long as plots are available. Most members are either tenants in town house developments, rented houses or apartments, and thus do not have the use of their own yards for gardening. Some do have the opportunity to garden on their own home lots and use the community garden plots as supplements. Experience varies from many first-time gardeners to experienced ones, and gardening styles and preferences vary greatly. The amount of food produced from the best and most intensely tended plots can be substantial despite the small size. Produce may be used by the individual gardeners, exchanged or shared, and donated to deserving causes such as food banks or charities. The gardens are not meant for commercial activity or individual monetary

profit, although surplus produce is occasionally sold at modest prices for garden fundraising ventures.

5.4 Location

In the Region of Waterloo these gardens are mostly situated on church, park, neighbourhood association or community centre properties, and occasionally on privately owned land, as shown in Figure 3.

Figure 3. Community Garden Land Provision in the Region of Waterloo

Land Owner	Number of Gardens
Community or neighbourhood centres	8
Church properties	7
City parks	7
Other municipal property	4
Private property	4
Universities	2
Retirement communities or care homes	2
Housing cooperatives	2
Apartment buildings	1
Non-profit organizations	1

The lack of adequate comprehensive policies disadvantages the maturing community garden movement. Since community gardens were never planned for in municipal policy, they end up being located where land happens to be available and a willing host can be found. In many cases the sites are far from where prospective gardeners reside or are not accessible by public transit. Often soil quality is poorer than desired, water is unavailable, and tenure is insecure because the donors of land may understandably view the gardens as temporary usage of land that sits in reserve for other eventual uses. Locations may be prone to theft or vandalism, and the gardens cannot contribute optimally to the neighbourhoods in which they are situated. Good planning is needed to correct this situation.

5.5. Social Benefits of Community Gardens

Community gardens are highly social entities. Most are initiated by individuals or voluntary organizations, and the majority are given homes by civic institutions. They value novice gardeners, newcomers to Canada and the

community, and in turn are increasingly recognized as important social amenities in their neighbourhoods.

This descriptor for a community garden listed on the Community Garden Council website provides a good example of how these gardens can be embedded in neighbourhood life:

Wilmot Community Garden – FULL
Sponsored by: Trinity Lutheran Church
No. of Plots: 12
Open to: The Public

This peaceful garden in New Hamburg has been running since 1996. It began as a cooperative effort as a means for low income single parents to feed their families. It grew into a community effort where today many individuals benefit. Children learn to garden with their parents and grandparents. Cancer patients have enjoyed the therapeutic benefits. People have pitched together to make the garden the success it is today. A private member has graciously donated the use of the land where the garden is located.

5.5.1 Linkages

Region of Waterloo community gardens have links to a variety of different organizations and groups. The main links are through the sponsors (see Figure 1 on page 7). Many are integral parts of community centres or neighbourhood associations, which emphasize their role in strengthening the neighbourhoods. Those sponsored by faith groups are extensions of their sponsors' spiritual or social missions. Other strong links are forged through produce given to charitable causes. Forty percent of gardens report donating food to a charity, the most popular of which is the Food Bank of Waterloo Region followed by St. John's Kitchen. One garden is operated by a group of people who have had mental health issues. Three have been initiated by university students and two of these have shown their preference for communal gardening, viewing themselves as garden clubs; two of these are associated with the well-organized Public Interest Research Groups on their campuses.

There are also institutional links to the Region of Waterloo Public Health through the Together 4 Health program, membership on the Food System Round Table, and more informal relationships with the variety of organizations emphasizing local food production in the Region. There are also educational contacts with the Master Gardeners of the Region whose

members each contribute a minimum of 30 hours of volunteer time annually, and the Waterloo and Kitchener horticultural societies. A therapeutic community garden at a nursing home was designed and developed by the Master Gardeners.

5.5.2 Objectives and Activities

Some gardens emphasize specific objectives beyond growing food and providing exercise and relaxation. At least three gardens hope to improve safety in their neighbourhoods and reduce or prevent crime. One community garden sponsored by The Working Centre focuses on developing gardening knowledge among poor people and helping loosen dependence on cash-bought food. A new garden has been started by the Region of Waterloo Police Services in Cambridge to help disadvantaged youth and provide a location for community-based activity. The garden at *rare* Charitable Research Reserve in Cambridge is part of a larger complex of gardens developed to fulfill the organization's program for sustainable local organic food production.

Many community gardens in the Region of Waterloo organize social activities for their members. They may have start-up events at the beginning of the garden year; work bees; picnics, potlucks, Canada Day celebrations or harvest and Thanksgiving observations; as well as holding fundraisers, tours, workshops, seminars and special events for children. Some of the gardens sponsored by churches may hold blessing ceremonies. Members also contribute to area-wide events staged by the Community Garden Council; in 2009 this included a spring Garden Festival, a charrette on garden design held at the School of Planning at the University of Waterloo, and a policy workshop to provide skills for organizing and attending to various needs of the gardens. There are some unusual projects such as the bake oven that is the focus of a garden in downtown Kitchener, and creative touches designed expressly for nearby residents, such as the perennial flower border at the street front of a community garden on Cherry Street in Kitchener.

5.6 Other Components of the Regional Urban Food and Agriculture System

There are several additional types of food gardening besides community gardens in the Region. They differ in ownership, tenure, membership and objectives. In general, when compared to places such as the U.K., central or eastern Europe, the overall level of vegetable gardening in the Region of Waterloo, like many Canadian cities, is low, but there has been strong recent growth in several areas, particularly the community gardens and novel food producer-consumer partnerships, such as community shared agriculture

(CSA) enterprises. They are mentioned here because some of them have clear similarities to community gardens, they are important or growing sectors of the urban food system, and their welfare can be safeguarded or promoted through some of the same planning and administrative initiatives.

5.6.1 Home Residence Food Gardening

Food gardening activity by homeowners has weakened considerably during the last decades, particularly in new subdivisions. Families have shifted to an unprecedented level of dual wage-earners with severe time constraints, and the delivery of completely sodded properties in new subdivisions by developers mitigates against gardening. Purchased food costs have also declined relative to total family income, thus weakening economic incentives to grow one's own food. On the other hand, growing income disparities have resulted in increasing numbers of poor people resorting to food banks; few of these residents would have home gardening opportunities.

Local scholarly research has shown, however, that *general* gardening and yard maintenance remain very popular, with some 80% of residents doing some kind of yard and lawn maintenance, as well as flower and food gardening.

5.6.2 Allotment Gardening

Allotment gardens are very common in British and European cities, but in the Region of Waterloo there is only one allotment garden, in the City of Kitchener. Here the gardeners are tenants of the city, paying an annual fee. Plots are large (minimum 400 square feet) and the City provides services at scale, such as plowing all plots in one go, twice a year. The gardeners in this garden are generally very experienced, and in many cases the experience was gained abroad (e.g. Jamaica, Romania, Vietnam) before immigration to Canada. Most are renters without access to garden space at their residence; only a few are home owners. Some of these gardens are very productive and with their large size can supply a substantial amount of produce to the gardeners or the recipients of their food donations, such as the food banks. The City of Kitchener Allotment Garden is scheduled to give way to the expansion of the Williamsburg cemetery, so a new location must be found. The participants in the allotment garden do form friendships and were able to organize themselves effectively to defend their garden when they learned about the cemetery expansion in the spring of 2009.

5.6.3 Other Institutional Gardens

There is good potential for growth here, particularly at retirement and nursing homes, seniors' communities and health care facilities. The retirement community of Luther Village in Waterloo has a flourishing garden with 45 plots. This older generation retains considerable gardening skills. Their gardening styles and preferences differ in some respects from other community gardens with more emphasis on flowers or specialty crops like tomatoes or asparagus, and a tendency to use smaller plots. Garden produce is often contributed to the village's weekly coffee meeting and sometimes sold at nominal cost for fundraising. Gardens especially designed for patients with limited mobility have been constructed at both the Grand River Hospital's Freeport Health Site in Kitchener and Homewood Health Centre in Guelph.

Many public schools planted native plant gardens beginning in the 1990s when the Waterloo Region District School Board was at the forefront of the new idea of greening school grounds. While there is interest in the schools in vegetable gardening, it is also realized that most activity would have to occur during the summer holidays. It seems likely that vegetable gardening will develop more strongly on school grounds in the near future, particularly if the study of food systems becomes part of the curriculum.

5.6.4 Green Roofs and Roof-top Gardens

Green roofs are mostly installed on municipal buildings but a growing number are appearing on newly constructed office buildings. They can have energy cost benefits and can help mitigate high temperatures, as well as provide great educational value and amenities to employees. Many do not permit access, usually for liability reasons. Small amounts of food are raised on balconies and the occasional rooftop gardens in apartment buildings. The new Regional Official Plan specifically encourages green roofs and roof gardens. [1] In Germany, more than 15% of new buildings have green roofs.

5.6.5 Small Animal Raising

An increasing number of municipalities both permit and encourage raising small flocks of chickens in backyards, and the number of homes acquiring chickens in the Region of Waterloo increased substantially in 2008 and 2009. However, the City of Waterloo has decided not to join in this movement and has banned chicken raising. Many municipalities are now encouraging beekeeping as a way to improve the pollination of gardens in cities. One community garden in a more isolated location in the City of Waterloo has a

pair of beehives. In Europe, it is quite common and acceptable to raise chickens, turkeys, rabbits, pigeons and bees in cities, and municipal regulations ensure they are kept under humane conditions and do not create a disturbance or hazard to other residents. At least one municipal composting operation in the U.S. uses chickens as part of its treatment operations and derives extra revenue from the sale of eggs and meat.

5.6.6 Municipal Gardens and Plantings, and Foraging

Municipal land held as parks, buffers or easements on residential streets presents opportunities for gardening or food growing. There is potential for planting fruit- and nut-bearing shrubs and trees for public benefit, but this is rarely practiced in the Region. A number of cities are now developing programs to distribute fruit tree saplings to residents and even plant municipal orchards with public access to the fruit. However, city parks, woodlots, waste areas and naturalized areas often support plants that supply a variety of food that foragers can gather. This includes things such as native wild berries and fruit, feral apple and pear trees, plant products for herbal and medicinal teas, fiddleheads, edible weeds like burdock and lambsquarters, and a surprising variety and quantity of edible wild mushrooms.

5.6.7 Urban-Rural Food Growing Partnerships

Increasing numbers of urban residents have joined community-shared agriculture (CSA) ventures that link rural market garden producers (some located within the boundaries of the Region of Waterloo) with urban subscriber-members who pick up weekly seasonal vegetable baskets at designated depots. Some of these have been initiated by local organizations with alternative social visions, such as The Working Centre in Kitchener (which also initiated a community garden), while others are for-profit ventures of individual market gardeners who match the needs of consumers seeking high quality local organic produce outside the operations of the giant supermarket chains.

5.6.. Gardening Organizations

There are horticultural societies in both Kitchener and Waterloo, as well as the Master Gardeners who are pledged through membership to undertake community service. Members of these organizations often assist community gardens, particularly in giving advice to new gardeners.

6.0 THE BASIS FOR COMMUNITY GARDEN POLICY

6.1 General Considerations

Until very recently, the urban (and in our case, Regional) food system was seldom considered in planning policy. As explained in a 2000 study, “The Food System: A Stranger to the Planning Field,”

Planning lays claim to being comprehensive, future-oriented, public-interest driven, and desirous of enhancing the livability of communities. It is concerned with community systems – such as land use, housing, transportation, the environment, and the economy – and their interconnections. The food system, however, is notable by its absence from most planning practice, research, and education. [10]

The authors of this study surveyed the attention given to urban food systems in planning-related fields in the U.S., and found it notably absent, whether in planning schools at universities, planning research and journals, education, and municipal planning policy and practice. Respondents from planning agencies felt that the food system only indirectly concerned the built environment, that food was really a rural issue, and that food was the responsibility of private market forces rather than town planners. Funding was not available, and the identification of food system connections, actors, partners, professionals and their various responsibilities was difficult. The authors’ remedy is to compile data on community food systems, analyze connections with other planning concerns, integrate food security into community goals, and educate about food system issues.

The Region of Waterloo and its constituent municipalities are fortunate that there have been some significant and impressive recent advances in the systematic integration of food concerns into planning policy. Such inclusive and holistic planning approaches are becoming increasingly common, particularly in municipalities that have formulated comprehensive food system sustainability plans or have institutionalized the concept of urban agriculture in decision making.

The directives made in the new Regional Official Plan to the municipalities make this an opportune time to consolidate and expand these advances, including the promotion of community gardening, which is singled out in Section 3.F.3 of the new plan. [1] The recommendations presented here focus on community gardens while keeping in mind that community gardens are a component of the larger food system and have strong link to community health issues. We also mention other gardening sectors and food production issues, particularly where there are strong allied interests or there

is no organized entity to advocate for those involved. A good summary of specific issues involved in planning for community gardens in the Region of Waterloo can be found in “Incorporating Community Gardens into Growing Urban Communities.” [11]

6.2 Basic Objectives for Community Garden Policy in the Region of Waterloo

Community gardens are an increasingly important component of the urban food and agriculture system. Well-designed, comprehensive food and urban agriculture policy should recognize the special nature of community gardens while making sure that they are integrated into the larger food system by:

- recognizing the intent and spirit of the new Regional Official Plan and ensuring compliance with it
- building on the strengths of the existing community garden movement and supporting the voluntary initiatives so fundamental to its welfare
- optimizing the integration of community gardens with wider community planning goals, such as increasing the availability of locally produced food and improving community health
- supporting residents facing food insecurity
- promoting the creation of productive partnerships with other organizations and sectors of the food system
- planning new developments with community gardens in mind, especially by reserving land of good quality for new gardens in locations most convenient to prospective users
- providing infrastructure support (e.g. water, top soil, compost) for garden start-ups, as well as for existing community gardens
- offering meaningful incentives to individuals and groups starting up gardens, as well as developers, community centres and faith groups which have the potential to provide space for community gardens
- ensuring long-term tenure and protection for community gardens, and provision for them in all zoning types
- developing educational and social programs conducive to the growth and development of gardening in the urban areas

6.3 Important Influencing Trends in Regional Urban Development.

6.3.1 Growth

The Region of Waterloo is one of the fastest growing urban areas in Canada. Land is in short supply, with the City of Waterloo, for example, possessing only enough land for about another 12 years at current rates and styles of development. At the same time, densification is being promoted in existing

urban areas. This has implications for provision of land for community gardens, and the setting of priorities for competing land uses.

6.3.2 Climate and Water

Water supply in Waterloo region is limited and highly dependent on groundwater. Shortages and watering restrictions are frequent and growing. Climate change forecasts predict hotter but slightly wetter conditions in the future, with increased evaporation and more unstable weather patterns. [12] A dependable water source is crucial to successful community gardens, yet many of the locations of present gardens have no convenient water supply. This suggests that water provision to gardens by municipalities or institutional garden hosts, and educational assistance to develop skills to conserve soil moisture in gardens will become increasingly important. A helpful guide for Canadian municipalities to examine opportunities to adapt to climate change is now available from the Adaptations and Impacts Research Division of Environment Canada. [13]

6.3.3 Demographic Change

The population of the region is ageing. Generally, the gardening activity of seniors is substantially higher than it is for younger people. There has been a notable increase in interest in eating locally grown produce and this will likely also be translated into more desire for vegetable gardening in the near future. There will be more residential developments expressly for seniors of varying physical capacity that will be ideal candidates for community gardens, as well as a need for design considerations for the elderly and people with disabilities.

6.3.4 Private Control of Development

Unlike in many European nations, in Canada urban land development is almost solely in private hands. New subdivision plans are mostly designed by the private developers themselves, although they must meet certain regulatory standards and go through screening and approval processes. Developers presently use very heavy machinery, operate at large scale, typically scrape away topsoil and level contours, then redeposit some of the soil on much compacted subsoil. The lots for new homes are typically completely sodded with grass on delivery to the buyer. Plans of subdivision provided to the municipal planners by developers rarely include community gardens or consider opportunities for urban agriculture.

However, there are good opportunities to develop creative regulations for urban agriculture and provide meaningful incentives to private developers to make appropriate provisions for community gardens. [8]

6.3.5 Setting Priorities

New priorities need to be set in land development. A substantial amount of land is allocated to roads, expansive parking lots, and buffers such as hydro corridors. Designating development lands for community gardens and giving them lasting tenure would thus present new challenges to the development industry and conventional municipal planning culture and practice.

Municipalities where the integration of urban agriculture and community gardens into planning is most advanced and accepted as a priority tend to have comprehensive sustainability policies that provide the framework for accepting urban agriculture, in all its forms, as an important and legitimate component of city development and city life.

7.0 SPECIFIC RECOMMENDATIONS FOR A COMPREHENSIVE COMMUNITY GARDEN POLICY

7.1 Soil

7.1.1 Soil conservation should be recognized as a priority in guiding new developments

- Topsoil quality and depth should be retained as close as possible to original conditions through the development process.
 - Soil compaction by heavy equipment in subdivision construction should be minimized and monitored to meet set standards based on the requirements of plants and trees for growth. Developers can easily meet such conditions if asked to; our municipalities must simply lose the fear of asking them to do so. Otherwise, gardening is much more difficult, and new subdivisions face severe limitations in selecting street trees because many desirable trees (including fruit trees) cannot tolerate soil compaction.
 - Areas with the best soil should be earmarked for possible use by future community or allotment gardens or public institutions that might host gardening or planting activity, such as parks, schools, community centres or churches.
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7.1.2 The cities and the Region should monitor potential urban agricultural land for residual contaminants before releasing it for use in community and allotment gardening

- This is particularly important if the land is on or adjacent to former or existing industrial properties. Municipalities should also provide assistance to gardening associations for testing soil for nutrients and structure, as well as contaminants. There has been unanimous voluntary acceptance in existing community gardens that only organic gardening methods should be employed, which ensures that gardening in the urban areas of the Region is more able to serve the Regional goal of “the achievement of broader public health objectives” in Section 3F of the Regional Official Plan. [1]
- The soil where many community gardens are located is not optimal, particularly because of excess clay or sand as well as poor drainage. Soil amelioration through composting or other amendments is often necessary. Assistance and support are needed to assure reliable access to such resources and the means to deliver them and apply them to gardens, particularly when used in large quantities in the initial phase of developing gardens. The Region of Waterloo has committed itself to provide such assistance in section 3.F.4 of the new Official Plan. [1]

7.1.3 The Region and municipalities should look at innovative management designs that recognize the linked cycles of the urban food system

Municipal food waste management solutions may sometimes be achieved through creative linkages back to the food production and distribution sectors of the overall food system. The Region of Waterloo already engages in municipal composting and distributes the compost free to individual and group gardens, so the foundation exists for developing more elegant and complex management systems. It may be fruitful to explore more formal arrangements between municipal organic waste management and gardening, particularly with the introduction of the new green bin program.

7.2 Land and Location

Region of Waterloo community gardens are now numerous and diverse. They cater to gardeners with a wide range of experience and provide the first opportunity for vegetable gardening for many participants. A large number of participants are from rental housing and apartments. Policy attentions need to be given to promoting and assisting existing gardens or finding potential

locations for new gardens within present built-up areas, especially where there is high residential density or demonstrated demand for more garden plots. Other completely new policies need to be developed for future gardens in new subdivision developments. Coordination with potential hosting institutions is important.

Municipalities with strongly developed urban agriculture policies and programs usually develop strategic frameworks to guide selection of target neighbourhoods and specific sites within them for gardens. Selection factors commonly include population density, demonstrated demand and length of waiting lists for garden plots, the presence of other gardening opportunities, and proximity to low income, rental and immigrant populations. Development constraints such as sun, water access and ownership are considered as well.

7.2.1 Community Gardens in Future Urban Developments

Land in future developments should be allocated for community gardens before subdivisions are approved and development takes place.

- Presently most gardens are started within existing neighbourhoods wherever land is made available through the generosity of faith communities or community centres, in parks and small unused pieces of public property, and occasionally by private landowners. Depending solely on the case-by-case generosity of these benefactors alone cannot ensure optimal locations for community gardening in new subdivisions.
- Designated parcels of land for community gardens should be included in all future land development, and not solely in residential zones. New zoning designations may need to be created, such as Cleveland's "urban garden districts." [5]
- As noted in Section 7.1, a primary criterion for allocating parcels of land should be good (or well amended) soil of tested quality, free of contaminants.

7.2.2 Since so many community gardeners are renters or apartment dwellers, the second primary criterion for site selection should be convenience to concentrations of residents from apartment and rental developments

As one renter respondent said in an interview: "Try to situate them close to our homes. Being able to walk there is half the fun." Many renters also have low incomes or are newcomers to Canada, and some do not have cars. Proximity to public transportation should also be considered. Good choice of locations will result in community gardens that are accessible, visible and located within neighbourhood hubs.

7.2.3 Partnerships with voluntary hosts and sponsors of community gardens should be developed, particularly in existing city areas

- Churches and community centres should be encouraged to host gardens, and to plan ahead for the possibility of them, particularly in terms of access to water. City parks should also be sited and designed with the possibility of hosting community gardens, taking care to consider the factors of infrastructure needs (particularly access to water and good soil), safety (theft and vandalism in existing park-situated gardens occur most often in secluded or interior park locations), convenience to renter populations, and the potential contribution of such gardens to educational programs and the enhancement of adjoining residential areas.
- Planners should explore changing the regulations respecting the amount and nature of required green space in apartment and townhouse complexes. The present requirements for apartment building approvals specify a minimum percentage of surface area for green space, but without distinction as to quality or use. The possibility of requiring part of the land in the green space to be designated specifically as land suitable for garden plots should be explored. Creative planning incentives have proved effective elsewhere for encouraging private sector partners.

7.2.4 Planning policies for community gardens should anticipate demographic and social trends

With an ageing population, there will be more retirement home and nursing home developments or even whole communities devoted to this section of our population. Policies should include enlightened provisions to encourage (or even require) community or allotment gardens in such facilities and communities, as well as the grounds of hospitals and other medical or therapeutic institutions. Such policies should be considerate of mobility, accessibility and special needs.

7.2.5 The area of parcels of land designated for community gardens in new developments needs to be calculated by considering plot size, number of plots, and related features and needs

- An individual plot size of 100 square feet is the standard in 60% of existing Region of Waterloo community gardens, but there should be provision for having a number of larger or smaller plots as well. Community garden plots in other cities tend to be larger, so it may be wise to use a higher figure for mean plot size in making estimates. Room must also be provided for paths and buffers, and also common space for
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other needs such as communal herb or flower gardens, community bread or “pizza” ovens, sheds, composters, fences, common space for socializing or relaxing, and space reserved for expansion. The preferred number of plots per garden recommended by community gardeners in the Region of Waterloo is 20, although gardens elsewhere tend to have more plots.

- Targets need to be set for how many community garden sites to provide in new developments. Available information on space needs is sketchy. Seattle uses a benchmark of constructing one community garden for every 2,500 residents, assuming 28 plots per garden, or one plot per 89 residents. [6] With about 425,000 residents in the three cities in the Region of Waterloo, and 40 gardens with a total of 700 plot equivalents in community gardens and 147 in the single allotment garden, the ratios for existing gardens would be one community garden per 11,000 residents, one community garden plot per 600 residents, and one allotment plot per 2,300 residents. These are very low figures, and targets need to be decidedly more realistic and ambitious. There is need for more research on these questions.

7.3 Providing for Community Gardens in Existing Urban Areas

Community garden participation rates in Waterloo region, as indicated in the calculations above, are low and need to be improved. A number of problems or issues have been identified that need to be addressed through improved policies and programs, at both the regional and municipal levels of government:

- a shortage of prospective sites for new gardens in developed areas
- an over-dependence on the generosity of voluntary hosts
- insecure tenure, with garden viewed as a temporary use until “more valuable development opportunities” arise
- chronic problems of access to convenient sources of water in many locations, as well as some soil quality problems
- suboptimal location in respect to rental accommodations and public transit
- issues of coordination, access to and provision of material resources (e.g. rototilling services and waste removal), funding, liaison and access to pertinent information
- administrative and staffing issues for municipal governments, and regulatory reform
- tapping the potential for community gardens to serve special client groups

A number of measures could be taken to address these issues:

7.3.1 The Region and municipalities need to conduct surveys to locate any available sites that could be prospects for future community gardens

- Such sites could be on city properties, in parks, corridors such as hydro lines, or land owned by institutions that could be willing hosts. The guiding objective should be that the resident populations which have the greatest need for community gardens are well served.
- Meaningful incentives should be developed to encourage possible hosts, particularly in the voluntary sector.

7.3.2. A variety of administrative and service needs or problems must be considered

- Issues respecting tenure, liability, insurance and land use agreements with sponsors, hosts and landowners need to be addressed at appropriate stages of development of new gardens, and assistance provided where such issues are concerns for existing gardens.
 - Programs for attending to infrastructure needs and providing for operating needs, such as soil testing, compost, mulch, wood chips and water, should be reviewed and improved. A dependable and convenient source of water is the most important infrastructure need, and water provision remains a chronic problem in gardens all over the Region. There are a number of possible solutions, and some may be very simple, such as reimbursing homes that agree to provide water from their outside taps to adjacent community gardens. Special provisions for start-up assistance to new gardens are also needed.
 - The Region as well as the municipalities should dedicate staff resources to work with community gardens. At the Regional level, the Region of Waterloo Public Health has a dedicated part-time staff person who works closely with the Community Garden Council and also works directly with community gardens and their coordinators. The Community Garden Council has also been fortunate in securing a grant to hire a capacity builder for the community gardens, but the term of the grant is now expired, and there is a resulting gap in human resources for serving community gardens. The City of Kitchener also has a designated person in its Community Services Department who provides valued assistance to community gardens as well as the allotment garden. There is a surprisingly wide variety of needs, concerns and enquiries that are brought to these individuals, as documented in a Needs and Asset Assessment report prepared by the Community Garden Council. [3] We strongly recommend that the garden coordinators and Community
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Garden Council be fully consulted when administrative arrangements are made to designate new staff responsibilities to work with community gardens.

- Overly restrictive regulations and “perverse” covenants that hinder gardening and associated activities should be prohibited, and, if possible, existing ones revoked. Several gardeners mentioned that the rental agreements in their townhouse complexes expressly prohibit vegetable gardens. The City of Cambridge imposes fines for growing vegetables on city land, gardens may be prohibited in certain planning zones, such as industrial areas, and sign bylaws designed for commercial or industrial purposes may confound community gardens that merely desire to erect a hand-made sign for their gardens. There was little fuss in 2008 when the Province of Ontario banned covenants forced on home buyers by private developers that prohibited outdoor clotheslines, and the imposition of provincial restrictions on urban pesticide and herbicide was readily accepted. It should not be difficult to get such covenants rescinded.
- The Region and cities should consider providing or improving information resources to assist all forms of gardening. Model demonstration vegetable gardens in accessible locations such as parks could provide living examples of the harvest potential from gardens of the size available in community, allotment gardens, townhouse or individual residential lots. Gardeners, particularly novices, greatly appreciate opportunities to learn about gardening, whether from others in their garden, from Master Gardeners, special events, workshops hosted by municipalities or voluntary organizations, or short courses. A full range of such aids should be maintained and developed.

8.0 OTHER URBAN GARDENING AND AGRICULTURAL MODES.

8.1 Allotment Gardens

Many allotment gardeners in Kitchener are very experienced and skilled, and plant between 400 to as much as 1,600 square feet of garden. They appear to form a sociable community of their own, despite not having the kind of organized structure of community gardens, and the lack of history in initiating the garden themselves. Many are new Canadians living on rental properties with no opportunity to garden at home, but who can draw on extensive food-growing experience from abroad and wish to grow a substantial portion of the produce they consume. Food security is often given as a rationale for advocating community gardening. Such arguments are certainly justified in the case of allotment gardening.

Interviews with allotment gardeners in Kitchener showed a strong desire to garden closer to home rather than have to drive from as far as five kilometers away. They felt that 400 square feet was the minimal size of allotment that could satisfy their interests, substantially larger than in community gardens. Good soil, provision of water, adequate plot size, and minimizing travel distance were their priorities. There are also some management and administrative issues.

8.1.1 The Kitchener allotment garden should be kept going in the present location at the back of the Williamsburg Cemetery as long as possible

There is a large parcel of unused land between the gardens and the present developed part of the cemetery, and the garden lands are clearly not needed for a number of years. The location is splendid, nestled between woods and plantations. The bird life is remarkable. Gardeners mentioned how fond they were of the surroundings and that they often used the nearby nature trails in the woods. In the meantime, a replacement location should be found and made ready.

8.1.2 All cities should have allotment gardens

- Allotment gardeners should be recognized for their general advanced skill level (although some are new to gardening). They constitute an asset to local vegetable gardening culture with good potential for teaching other gardeners, particularly novices. The allotment gardeners (as well as, of course, a number of private and community gardeners in the cities) represent the closest example to what could ideally be achieved in urban agriculture.
 - Cities developing allotment gardens should maintain a good level of consultation and convenient channels of communication with the gardeners to determine optimal rules of operation, and to track problems and rectify them. For example, the Kitchener allotment gardeners appreciated having their gardens tilled by a tractor-drawn plow. However, this prevented them from growing perennial flowers or vegetables like rhubarb or planting garlic in the fall. One respondent pointed out that this could easily be resolved simply by instructing gardeners to plant all perennials on the same side of their gardens so that the plow could avoid them. Some expressed frustration with maintaining continuity of access to the same plot over successive years.
 - One of the gardeners who maintained 1,600 square feet of garden donated a substantial portion of his produce to the Food Bank of Waterloo Region each year. Allotment gardens, because of the size of
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their plots, could provide opportunities for joint ventures combining the skills of the gardeners and the interests of agencies or associations assisting the less privileged in our communities.

8.2 Encouraging Home Gardening

- Home buyers should have the choice of purchasing finished homes and lots that are not completely covered by rolled-out turf from sod farms. This would make it easier for home buyers to consider gardening rather than just accepting the inevitability of a lot that consists of nothing but lawn.
- Educational programs to encourage more residents to engage in home gardening and learn how to garden should be developed.
- Innovative programs could be developed to make use of the situation where homeowners have land available for gardening in their yards, but do not wish to garden themselves. Notable models include “SPIN farming” – Small Plot INTensive farming – developed by Wally Satzewich in Saskatoon, who rents space in 25 different yards to grow produce that he sells in the civic market [14] and Backyard Bounty in Guelph, which hopes to garden in 40 yards in 2010. [15]

8.3 Parallel Urban Agricultural Activities

8.3.1 Additional possibilities should be permitted in cities, such as chicken and rabbit rearing

Some community gardeners expressed the wish to keep bees, pointing out the pollination benefits that would accrue to residents at large, aside from the honey that would be obtained by private or community/allotment gardeners. Beekeeping and small animal rearing are commonplace in most European cities as well as in a growing number of Canadian and U.S. municipalities. The City of Waterloo should reconsider its prohibition against keeping hens.

8.3.2. Parks and other public spaces could also be planted with food-bearing trees and shrubs

Non-destructive foraging should be encouraged.

8.3.3 A variety of urban agricultural institutions could be developed to enhance cities

A few municipalities maintain small model farms; one still exists in Toronto. Arboretums are particularly common and have good educational value; the

one in Guelph is a notable success. A number of universities support farms, sometimes through the initiative of students with interests in promoting campus sustainability. The small city of Fort Saskatchewan in Alberta uses a hired shepherd and a municipal flock of sheep to “mow” its parks and rights of way, and this has become a popular tourist attraction.

APPENDIX A

Regional Official Plan 2009

3.F Access to Locally Grown and Other Healthy Foods

...A strong and diverse regional food system provides many benefits to the community. It facilitates peoples' access to locally grown and other healthy foods, which contributes to healthier eating choices and the achievement of broader public health objectives. ...

3.F.1 The Region will support the development of a strong regional food system through the policies of this Plan that:

... (c) provide for a mix of land uses, including food destinations, within close proximity of each other to facilitate residents' access to locally grown and other healthy food products ...

3.F.3 Area Municipalities will establish policies in their official plans that encourage community gardens, green roofs and rooftop gardens.

3.F.4 The Region will support community gardens, wherever feasible, by granting access to Regional lands, and by providing rain barrels, composting bins, compost, wood mulch or other forms of in-kind support.

3.F.5 The Region will collaborate with stakeholders to continue to implement initiatives supporting the development of a strong regional food system.

3.F.6 The Region supports food system planning as a means of improving the regional food system. [1]

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