Growing a Just Garden

Environmental Justice and the Development of a

Community Garden Policy for Hamilton, Ontario

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« Cela est bien dit, répondit Candide, mais il faut cultiver notre jardin. »

- *Voltaire, 1998(1759): 163*

"To the extent that we celebrate wilderness as the measure with which we judge civilization, we reproduce the dualism that sets humanity and nature at opposite poles. We thereby leave ourselves little hope of discovering what an ethical, sustainable, honorable *human place in nature might actually look like."*

- Cronon, 1996: 81

Executive Summary

The proliferation of community gardening across North America and the increasing recognition of its benefits has led many municipalities to develop community garden policies. Using the process of drafting a community garden policy in the city of Hamilton, Ontario, as a case study, my research has two aims. First, I seek to illustrate how an environmental justice framework can create an effective, inclusive community gardening policy. Second, I seek to reflect upon the actual process involved in creating the first draft of the policy, and to evaluate the outcome thus far in terms of environmental justice. I approached these tasks through a literature review, key informant interviews, and participant observation. This information was analyzed using the lens of environmental justice, which I interpret as an equitable distribution of environmental amenities and hazards predicated on recognition of difference and on citizen participation in the public realm.

My research suggests that an environmentally just policy will ensure stability of land tenure, affordability, an equitable distribution of gardens, the provision of education and information, and the autonomy of gardens. While the first draft of Hamilton's community garden policy offered several helpful services to gardeners, the constraints under which it was written precluded an initial consideration of equity concerns. These constraints, which include limited budgets, departmental divisions of labour and expertise, and limited engagement of stakeholders, can be overcome to create a just policy. First, various city departments should collaborate with Public Works to pool resources and knowledge. Second, the city should look to external sources of funding to provide more support to gardeners. Third, the city should allow external stakeholders such as the Hamilton Community Garden Network to participate in drafting the policy. Finally, proponents of community gardening should work together to show the city their support of a just policy and to brainstorm ideas of how they can work with the city to make this policy a reality. These forms of collaboration will improve the community gardening policy, and may have lasting implications on how policy is made in Hamilton.

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Introduction

There is something delightful about seeing a bevy of urban gardeners in action, cultivating their plot of land under the watchful gaze of skyscrapers, local businesses or row houses. As local food movements proliferate across North America, this scene is becoming increasingly common, to the extent that many municipalities now explicitly codify how community gardens should develop and operate within their boundaries. By developing these community garden policies, municipalities have an opportunity to introduce environmental justice principles into their work. Using the process of drafting a community garden policy in the city of Hamilton, Ontario, as a case study, my research has two aims. First, I seek to illustrate how an environmental justice framework can create an effective, inclusive community gardening policy. Second, I seek to reflect upon the actual process involved in creating this particular draft policy, and to evaluate the outcome thus far in terms of environmental justice.

The Research Context and Process

Placing myself in my research

In 2007, the Hamilton Board of Health created a Community Food Security Stakeholders' Committee (CFSSC) mandated to:

> "develop a food continuum policy and strategic action plan that will move Hamilton towards being a place where all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes self-reliance and social justice" (City of Hamilton, 2007: 4).

As one means of achieving community food security, the committee has advocated that the city adopt a community garden policy. This paper is a part of this advocacy work.

My involvement in promoting a community garden policy in Hamilton did not emerge spontaneously; in fact, as a relatively new arrival to Southern Ontario I had virtually no connections to Hamilton prior to engaging in this research. While the location was new

to me, the topic certainly was not: I had previously served two years as a Peace Corps Volunteer working in urban agriculture, and had continued to explore this interest in my Masters work. Moreover, my interests in both environmental sustainability and social justice, which brought me to Geography and Planning, logically led me to an interest in environmental justice.

Given my background and interests, then, I was quite pleased when my supervisor, Professor Sarah Wakefield, invited me to provide policy-making support to the Hamilton Community Food Security Stakeholders Committee (CFSSC) in their development of a community garden policy, which would be submitted to city council in the spring. By October of 2009, Sarah – also the chair of the CFSSC – had introduced me to the committee, explaining that I would be working with representatives of Public Health Services to develop a draft community garden policy, and that I would be conducting interviews as part of this process (City of Hamilton, 2009b). The ideas presented below come from this unique position of both participant in and observer of the policy process.

In addition to my position within this research project, my position within society is also fundamental to my ideas and interpretations (England, 1994). I am a white, upper middle class American, educated at both private and public universities. An overwhelming desire to do "good" in the world, whatever that may mean, led me to study urban planning, while a conflicted uncertainty of my role as an "expert-in-training" (and, more broadly, of my own knowledge) has led me to a distrust of both my chosen discipline's potential to do "good" and my own capacity to act in a way that promotes justice. My upbringing in a wealthy suburb of Milwaukee produced in me an acute sense (bordering on guilt) of my privilege, as well as a disdain for homogeneity and consumer culture. This upbringing also provided me an exceptional education, one that has allowed me to draw increasingly leftist conclusions about our world. Finally, I am quite shy and introverted, a trait that allows me to set others at ease and listen carefully, but at the expense of preventing me from approaching people for answers without great output of energy and effort.

While my position provides me with the unique perspective of being both participant and observer in this policy-making process, it also has certain limitations. First, I am an unabashed proponent of urban agriculture, of citizen participation, of public space. My inclination is to blame corporate interests for trumping social justice and environmental sustainability. Further, as a research assistant to the CFSSC, my research is intended to support their policy aims. Finally, while I have been an active observer of parts of the policy-making process, some information has been passed to me by Sarah, who has had more access to information than I as the chair of the CFSSC and as a long-time resident of Hamilton. Her perspectives, as well as my own, are present in this research.

My intention in writing this paper was to influence the policy process in a way that will result in an environmentally just community garden policy. To date, I have submitted a report to the department of Public Works outlining the preliminary results of my interviews in the context of a review of existing community gardening policies and literature (Appendix A). This current report concludes with recommendations for the department in the development of a policy for the City of Hamilton. It is my hope that this paper will be useful to city committees, staff, and community garden proponents in further developing the existing draft policy, with the ultimate goal of creating a policy for community gardens in Hamilton that enhances social justice.

Research methods

My research focused on both community gardens within the context of environmental justice and on the policy process itself. I sought to identify what an environmentally just policy would include, as well as to assess the city's policy process in the context of environmental justice.

To gain these insights, my research began with a review of the environmental justice, urban health, food, and community garden literatures to outline a rationale for supporting community gardens and to guide my policy recommendations. In addition, a review of community garden policies in North America allowed me to identify how environmental justice has (or has not) been supported in other jurisdictions. Additionally, semi-structured key informant interviews were conducted with eight policy-makers and

activists in Hamilton and Toronto who have substantial knowledge about community gardening. The key informants included experts in urban agriculture, representatives of the City of Hamilton who work in some capacity with community gardens, the organizer of a socially oriented community garden, and a representative of a community development organization. These informants were identified through contacts with the Community Food Security Stakeholders Committee. Further insights into the policy-making process were gained through participant observation as a research assistant to the Community Food Security Stakeholders Committee and through attending meetings of the Hamilton Community Garden Network, and a focus group was held with ten community garden supporters in Hamilton. This information was analyzed using an environmental justice framework, as described below.

Environmental Justice as a Planning Framework

Environmental justice in planning and public health

The practice of planning involves influencing decision-making related to the distribution of resources and the shaping of communities and regions. Planners act as intermediaries between experts, politicians and the public, and are responsible for making policy recommendations that take into account technical as well as community-based knowledge (Corburn, 2003; Forester, 1989). Thus, planning is an inherently subjective and political process: "planning practice involves choices regarding which information is deemed relevant, what decision-making processes will be used, and when, or if, various publics will be involved in making the plan" (Corburn, 2004: 543; see also Forester, 1989; Sandercock, 2003). Too often, planning decisions reinforce, rather than rectify, existing inequalities based on social status, race, gender, etc. To advocate decisions that benefit typically marginalized communities (Davidoff, 1973[1965]); Harwood, 2003), my approach in developing recommendations for Hamilton's community garden policy deliberately uses an environmental justice perspective.

An environmental justice framework applies social justice to environmental problems. It addresses questions of how environmental hazards and amenities are allocated, to whom

and why. Inherent in this framework is a belief that all communities and people have the right to live in a safe, healthy environment (Bullard, 2005). Therefore, environmental justice draws attention to distributional relationships – for example, the uneven location of polluting industries in low-income and racialized communities – and advocates for equity in these relationships (see, for example, Rees and Westra, 2003). In addition to a focus on distribution, Schlosberg (2004) has emphasized the need for the recognition of how this distribution is experienced by different groups, and for the true participation of those typically excluded from decision-making processes. Advocates of environmental justice therefore work to increase citizen participation in decision-making processes to benefit local communities (Faber and McCarthy, 2003).

Environmental justice work complements work to improve public health. While mainstream environmental movements conceive of the environment as something separate from people and idealize pristine wilderness, an environmental justice perspective redefines nature to encompass the places where we work, live and play (Di Chiro, 1996: 301). As a result, links can be made between human health and decisions impacting the built environment (Brulle and Pellow, 2006). Thus, exposure to harmful elements in the environment such as radiation or toxic chemicals, or limited access to elements in the environment that are beneficial to health, such as green space and healthy food, may be evaluated in the context of environmental justice (Masuda et al., 2008). Moreover, the environmental justice movement advocates for the use of the precautionary principle, meaning that environmental risk should be considered in a manner that places human health ahead of corporate profits (Brulle and Pellow, 2006; Bullard, 2005). Finally, the concern with procedural equity through the inclusion and participation of those typically excluded from the political process provides a model for linking public health to urban planning (Corburn, 2004).

Procedural justice

Planning histories tend to present the profession as "heroic," obfuscating the role of social processes such as racism or economic injustice in planning decisions (Sandercock, 2003: 38). Environmental justice theorists and activists increasingly are challenging this

tendency by emphasizing processes as well as outcomes (Pulido, 2000; Brulle and Pellow, 2006; Corburn, 2003, 2004; Schlosberg, 2004; Haluza-Delay, 2009; Gibson-Wood, 2010). As a whole, it is becoming clear that:

> "[t]hose with limited access to information, participatory opportunities, and/or the power to shape discourse(s) or decisions are less able to defend themselves and their communities from negative distributional environmental effects, and less prepared to advocate successfully for better environmental conditions" (Haluza-Delay et al., 2009: 8).

Essentially, procedural justice refers to participation in the political process. Schlosberg (2004: 519) highlights the dimension of recognition of cultural difference, as "[i]f you are not recognised, you do not participate." More broadly, this dimension raises questions of who has power in society and how these power structures are reproduced. For this project, I take recognition, participation and distribution to be the main components of environmental justice. Further, I interpret the term "participation" broadly, with participation in the political process including participation in civic life.

Food and environmental justice

My particular focus in using an environmental justice framework is food, particularly community gardens. Several scholars have argued for links to be made between food security agendas and environmental justice agendas. Gottlieb and Fisher (1996) were among the first of these voices, pointing to the range of environmental and social issues – from pesticide exposure to control of resources to access to food – encompassed within the food system. 'Food justice' movements challenge the global food system through local action, and meld notions of citizen rights and democracy with struggles for food security and sustainable agriculture (Wekerle, 2004). They seek citizen participation in decision-making processes related to how and where food is produced and distributed (Hassanein, 2003). Moreover, food justice acknowledges the institutionalized social inequalities that underpin food insecurity (Alkon and Norgaard, 2009). A community garden policy that is based on the principles of environmental justice will not only increase local access to healthy foods and green spaces, it will also recognize the injustice underpinning food insecurity and allow marginalized groups to participate in the policy

process. Moreover, the policy will recognize that some groups face economic, social or political barriers to participating in community gardening – a form of civic engagement – and seek to redress these barriers.

Linking Food, Health and Justice

Health and food

Food is one of the most basic human needs; it follows that access to food has a tremendous impact on health. Poor diet is associated with a wide variety of health problems, ranging from dental caries and osteoporosis to cancer and cardiovascular disease (Latham and Moffat, 2007; Pederson et al, 2000). Rising levels of overweight and obesity, associated with overnutrition and diets high in energy-dense but nutrient poor foods[1], are of particular concern among urban populations, as these conditions often lead to more serious conditions such as diabetes, heart disease and stroke (Latham and Moffat, 2007) as well as musculoskeletal disorders, sleep apnea, gall bladder disease and a variety of cancers (Finkelstein et al., 2003). In contrast, diets rich in fruits and vegetables are associated with lower rates of certain types of cancer, possibly due to the micronutrients available in fresh fruits and vegetables (Latham and Moffat, 2007; Pederson et al., 2000).

Beyond these diseases, malnutrition has also been shown to impact the long-term cognitive and social development of children, reducing academic performance, impairing the development of social skills, and leading to increased risk of overweight or obesity as the child ages (Jyoti et al., 2005). Thus, the impacts of an unjust distribution of food are likely to have long-term implications for individuals and communities for whom food access is a challenge. Individuals who grow up in food insecure households may be unable to achieve their full potential as adults, while communities afflicted by food

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[1] The causes of overweight and obesity are more complicated than nutrition alone; I focus on nutrition in this paper to illustrate the positive potential of community gardens.

insecurity may see their capacity to overcome poverty reduced by the negative impacts of malnutrition.

Barriers to food access in Canadian cities

A variety of barriers at different scales interact to produce food insecurity at the household level. In particular, here I will focus on barriers at the scales of the global food system, of Canada's political system, and of the municipal built environment.

Injustice in the agro-food system

Injustice in food access is rooted in the way food is produced today. The modern agro-food system has its roots in 17th and 18th Century British political economic thought, which transformed labour – including farming – from an act of subsistence to one of monetary gain (see Polanyi, 2001[1944]). Food has increasingly become a commodity bought and sold on the global market, valued more for its economic potential than for its value as one of the basic elements of human survival. Grown on large mechanized farms, food today is often processed and branded, providing a market for surplus corn in the US and profits for major companies (Pollan, 2006).

Contemporary agriculture has been critiqued for a variety of reasons. The large corporate farms that squeeze out small producers operate in an industrial manner, characterized by large chemical inputs and mono-cropping (Marsden et al, 1999) and by a dependence on cheap migrant labour (Wakefield, 2007a; Jarosz, 2008). These social and environmental costs are externalized, allowing industrial farms to produce cheap food, while food processing companies and large supermarkets reap profits and dictate prices to smaller farmers (Campbell, 2004). As a result of subsidies promoting high yielding monocultures, high calorie processed foods containing corn and soybean derivatives are priced more cheaply than healthier foods such as fruits and vegetables (Pollan, 2006; Gottlieb, 2001).

The political context

Food access is also affected by political decisions at the federal, provincial and municipal levels. In Canada, the 1980s and '90s marked a period of substantive restructuring in social service provision as part of the transition to an entrepreneurial rather than welfare state (McIntyre, 2003). This new political context is known as neoliberalism, the political-economic ideology that became ubiquitous in Europe and North America under the regimes of Margaret Thatcher and Ronald Reagan in the 1980s. It is characterized by a belief that markets should operate without regulation and emphasizes free trade, competition between cities and nations, individualism, and the dismantling of the welfare state (Peck and Tickell, 2002). Responsibilities under this system have been downloaded from the federal government to local government; the resources to fulfil these new responsibilities and provide the services they are now expected to provide, however, have not been provided to municipalities (Marwell, 2004; Tindal and Tindal, 2009).

One result of neoliberalism has been increasing levels of food insecurity in Canadian cities, coupled with a transition from governmental income support measures to ad-hoc community-based efforts by voluntary agencies to provide food to those in need through 'emergency' food sources such as food banks and soup kitchens (McIntyre, 2003; Tarasuk, 2001, 2005). These kinds of programs are criticized for depoliticizing hunger and constructing it as a problem of individuals to be dealt with through charity and altruism (Raine et al., 2003; Tarasuk, 2001, 2005). Further, these programs fail to address the underlying structural causes – underemployment, lack of affordable housing, discrimination, etc. – of food insecurity (Tarasuk, 2005). While programs to address the structural causes of food insecurity ultimately are the domain of the provincial and federal governments (Kitchen, 2002), the need at the local level to rectify the uneven distribution of food access justifies action on the part of municipal governments.

The built environment

In addition to these barriers to food access at the global and national scales, barriers at the local scale also constrain food access. A large body of literature illustrates the connection between health outcomes and the built environment, suggesting that the ways

in which we design and live in our cities have a profound impact on the health of individuals and populations (Galea and Vlahov, 2005; Frank and Engelke, 2001; Frumkin, 2003; Wrigley, 2002; Brimblecombe et al., 1999; Frank and Andresen, 2004; Booth et al., 2005). Access to food is one aspect of health that is influenced by the built environment.

Social and economic inequalities often find expression in the built environment, leading to spatially concentrated poverty and/or racial segregation in inner cities. Diminished health outcomes among certain segments of the population are one consequence of this phenomenon (Vlahov et al., 2004; Gee and Payne-Sturges, 2004; Corburn, 2004). Poor, minority neighbourhoods tend to be areas with limited access to healthy, affordable food, to the detriment of health in these communities (Beaulac et al., 2009; Morland et. al., 2002). Food access is influenced by factors including proximity to a food outlet, the diversity of food outlets and the variety of food types and prices available. Limited financial means to purchase food, cultural food preferences, physical disabilities and lack of cooking knowledge also complicate food access (Apparicio et al., 2007).

Healthy food choices, particularly fresh fruits and vegetables, are more costly than are unhealthy energy-rich foods like potato chips or candy bars (Beaulac et al., 2009; USDA, 2009). Further, these healthy foods are more prevalent, and more affordable, at large supermarkets than at corner stores (USDA, 2009; Latham and Moffat, 2007). Because supermarkets tend not to locate in poor neighbourhoods (Morland et al., 2002), and because lower-income people often lack the means to purchase healthy foods, the capitalist economy creates an unjust distribution of food. Just as banks' refusal to grant loans to homeowners in certain neighbourhoods has been deemed unjust, this phenomenon of "supermarket redlining" (Alkon and Norgaard, 2009: 295) illustrates injustice in the food system whereby access to food – particularly healthy food – varies by neighbourhood.

Local food movements

Since the 1990s, a growing movement has advocated for locally and sustainably grown food (e.g. Pollan, 2006). Local food movements promote social and environmental

sustainability by promoting small-scale and organic farming, reducing the distance between farmers and consumers, and linking them through farmers markets and community supported agriculture (Jarosz, 2008). In Canada, organizations such as Food Secure Canada, the Toronto Food Policy Council and FoodShare Toronto illustrate how social actors can collaborate to resist the industrial food system (Wakefield, 2007a).

The efforts of this local food movement, however, have not been unified in their goals and methods, nor have they always been socially inclusive (Campbell, 2004; Sherriff, 2009; Baker, 2004). In particular, local food movements have had difficulty in bridging the gap between equity campaigns for community food security and the sustainability campaigns of a more mainstream environmental movement (Sherriff, 2009; Gottlieb and Fisher, 1996; Alkon and Norgaard, 2009). Indeed, local food movements based on farmers' markets, community supported agriculture and organic food are fuelled primarily by middle-class consumers, and may be seen as "displac[ing] political action from a government orientation toward a marketplace orientation" (Hess, 2009: 144-145). Similarly, Johnston and Baker (2005: 321) explain that local food movements can do little on their own to address the "structural problems of industrial agriculture and unemployment that undergird a class-segregated food apartheid, providing cheap, industrially produced food for the poor and organic gourmandize for the wealthy." Thus, instead of seeing local food movements as an opening towards a new politics of food, critics view these movements as limited by their focus on consumption and individual – rather than collective – action (Bryant and Goodman, 2004). Given these critiques, government can play a role to increase equity within the food system by increasing labour and environmental standards within the food industry, supporting small-scale and local farmers, and developing policies to make farmers' markets and urban agriculture accessible to all city residents.

Achieving Health and Justice through Community Gardens

The health benefits of community gardens

One realm where food movements have moved beyond middle class consumerism to address social justice is community gardening (Baker, 2004). A community garden is a plot of land that is cultivated by multiple people, either collectively or in individual plots (Teig et al., 2009). These gardens are characterized by a degree of public ownership and democratic control (Ferris et al., 2001). The land may be owned publicly or privately, but is not owned individually by the gardeners (Schokoske, 2000). Community gardens are credited with a variety of benefits, from better nutrition and increased sense of well-being to increased social capital and improved local ecology (Wakefield et. al., 2007; Mendes et. al., 2004; Twiss et. al., 2003; Mougeot, 2006; Baker, 2004). Participation in community gardens increases trust among neighbours, which has associated health (Teig et al., 2009) and community (Schukoske, 2000) benefits. Gardens can serve to green inner cities (Ferris et al., 2001) and to increase habitat for pollinators such as bees (Matteson et al., 2008). The development of gardens on vacant lots abates blight, reduces crime and prevents illegal dumping of trash or hazardous materials (Schukoske, 2000).

A well-tended garden plot can produce significant amounts of food. For example, a 1.6-hectare garden in Hamilton, Ontario, produced over 14,000 pounds of fresh vegetables and fruits in 2008, all of which was donated to local food banks (West Highland Baptist Church Victory Garden, 2009). Access to land allows people to grow produce, which can provide an important source of nutrition for low-income communities, particularly for immigrants with connections to the land and without steady sources of income once they arrive in a new country (Kennedy, 2008). By supporting community gardens, local governments help provide access to a sustainable source of healthy food, and provide new opportunities for physical activity and social interaction (Public Health Law & Policy, 2009). The potential for community gardens to improve health as well as local ecology is thus significant; however, for gardens to address the problems of an unjust distribution of food requires measures to make them accessible to those most in need. Environmental justice offers a framework to envision how gardens can address the equity

problems associated with uneven food access while also promoting green space and urban sustainability.

The political nature of community gardens

The relationship between community gardens and city governments is complex, reflective of development pressures on the land, political will, and the degree of organization of gardeners. The conflicts that emerge over land tenure reflect one of the key justice problems that gardeners deal with as they seek the right to cultivate a plot of land. According to Hess (2009: 142), "many present day arrangements [between municipal governments and gardening groups] are the result of intense political struggles over a city government's right to sell its land and the citizens' right to use city-owned land." Far from the depoliticization of hunger associated with food banks and consumer-driven movements for organic food, community gardens have the potential to bring the right to food – and the right to *grow* food – into the political arena. As Baker (2004: 306) articulates, "[b]y digging into their small plot of land, gardeners are challenging conventional ideas of urban planning and design, working on community-development projects, engaging with place-based social movements, and creating alternative food systems."

Land tenure in particular often emerges as a source of conflict between community gardeners and municipalities because community gardens challenge the idea that land can only be valued based on its economic potential as a private real estate development. In our economic system that places private property rights ahead of community well-being, the intrinsic value that gardeners see in these *places* of community interaction and leisure contrasts sharply with the exchange value of abstract *space* in the urban land market typically seen by city officials (Schmelzkopf, 2002). While some benefits of community gardening, like food production or higher neighbourhood property values, may be quantified, others, like the empowerment that comes from learning a new skill or the joy of children provided with a safe place to play, cannot be measured or assigned a monetary value (Schmelzkopf, 2002).

Community gardens may also foster collective action by eliminating barriers such as language, cost and education that typically divide urbanites. Schukoske (2000) argues that gardening allows for interactions across racial and class lines around a common interest. As informal sites of congregation and social interaction, gardens form a sort of "Third Place" (Oldenburg, 1989), from which collective action is more likely to arise (Schmelzkopf, 2002). Further, the activity of gardening takes place in the open, drawing attention to gardeners' actions, presence and needs (Schmelzkopf, 2002). That is, gardening can lead to the *recognition* of people often excluded from the political realm. From my own experience of gardening in cities, I know that urban gardeners cause passersby to stop and ponder the activity they see before them, often producing reflexive thought about where their food comes from and how they interact with their environment and with their neighbours.

While the benefits and political potential are significant, community gardens are certainly not a panacea for urban food insecurity. Hinrichs and Kremer (2002: 83) point out that even local food projects that consider inclusivity and social justice generally fail to reach those in need; instead, the " 'advantaged' poor" possessing greater skills or resources are most likely to benefit. Certainly, the time commitment required to maintain a garden plot may be unmanageable for a single mother working three jobs to feed her family. Thus, while a policy may attempt to include poorer residents by waiving fees or promoting gardens in low-income neighbourhoods, many structural barriers cannot be addressed at the local level through a community garden policy. Similarly, in contrast to Schukoske's (2000) optimism that gardens facilitate interactions between different groups of people, Hinrichs and Kremer (2002) contend that the neighbourhood orientation of gardens reduces the opportunity for cooperation across class or racial lines.[2] Finally, calls by local governments for the voluntary sector to provide healthy and sustainable food

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[2] Mix will ultimately depend upon the diversity of the neighbourhood. In the Canadian context, segregation is not as pronounced as in the US. Hamilton has neighbourhoods characterized by low socio-economic status that are highly diverse (such as the downtown core), and that are primarily Anglo-Canadian (such as the northeast industrial neighbourhood) (Wilson et al., 2009).

through community gardens without funding these efforts (e.g. Meikle, 2010) – or for the poor to grow food for themselves – are an example of the downloading of responsibility to communities common under neoliberal policies.

The intentions of garden promoters also have a checkered history. Gottlieb (2001), for instance, indicates that the promotion of community gardens in the early 20th Century was meant to encourage people to move to rural areas, relieving congestion in rapidly growing and industrializing cities. Lawson (2004: 155) suggests that municipalities in America at the turn of the 20th Century supported community gardening because it "ke[pt] the unemployed busy—thereby avoiding the idleness that business leaders feared would lead to union organizing and socialism." Similarly, moralistic undertones frequently accompany garden promotion. Pollan (1991: 71) quotes Ezra Weston's (1845) statement that "he who cultivates a garden, and brings to perfection flowers and fruits, cultivates and advances at the same time his own nature." Pudup (2008) proposes that garden programs are one way in which the state governs from afar by teaching individuals to fend for themselves within a neoliberal context. These more negative views of community gardens are important in developing an environmentally just policy. In particular, they call attention to the purpose of the policy: rather than allowing unfunded gardens to remove pressure on local government to address food security, strong support of gardens by the city would illustrate a commitment to food justice.

In sum, community gardens provide local governments with one means of improving food security. While reliance on gardens alone is not sufficient to address the structural causes of food insecurity, they are a measure that can be taken in the present moment to improve lives and to increase the liveability of the city. Using an environmental justice framework, certain key components of a policy that benefits working-class and middle-class neighbourhoods alike are outlined below.

Environmental Justice in Practice: Creating a Just Policy

Grounding theory in place: Hamilton, Ontario

The City of Hamilton is currently in the process of developing a community garden policy. Hamilton is an industrial city situated on the western tip of Lake Ontario, 60 kilometres southwest of Toronto (Appendix B). While many North American cities have moved to post-industrial economies, Hamilton maintains its industrial character, with steel in particular playing an important role in the local economy (Wakefield, 2007b). This continued reliance on industry has made Hamilton's economy vulnerable to global patterns of economic restructuring: the decline of the manufacturing sector since the 1980s has resulted in declining employment for Hamilton's steel-workers, and the current recession has continued this trend. Between January 2008 and January 2009, the number of males receiving Employment Insurance benefits increased by 64% (Social Planning and Research Council, 2009). The city has the highest poverty rate in Ontario, with 18.1% of its over 500,000 inhabitants living in poverty.[3] Poverty rates are significantly higher among certain segments of the population: for example, 50.5% of recent immigrants, 39.4% of single mothers and 39.1% of First Nations people live in poverty. The overall child poverty rate for the city is 26.4%, and is as high as 75.9% in some neighbourhoods (Social Planning and Research Council, 2009).

Food insecurity is one result of the high poverty rates in the city, while spatial concentrations of poverty also correspond with environmental hazards. According to the Social Planning and Research Council (2009; see also Hamilton Food Share, 2009), the majority of Hamilton households receiving Ontario Works benefits access food banks, as social assistance benefits are insufficient to cover the rising costs of basic needs such as housing and utilities. A 2009 study by Hamilton Public Health Services found that the cost to feed a family of four a basic healthy diet is $701.89 monthly. In comparison, a family of four relying on one minimum wage income had a monthly income of $2,279 in

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[3] Statistics Canada uses a Low Income Cut-Off (LICO) as a measure of relative poverty. By this measure, a household that spends more than 55% of its income on basic necessities (food, shelter, clothing, utilities, etc.) is considered impoverished.

2009, while a family of four relying on Ontario Works had a monthly income of $1,804. Thus, these families would have to spend roughly one-third of their income on food in order to meet recommended nutrition guidelines. With the average rent of a three-bedroom apartment $900 monthly, families are often cannot afford to purchase nutritious food while simultaneously covering other basic needs such as child care, clothing, transportation and school supplies (City of Hamilton, 2009e). Even as households are spending more on housing and utilities, the costs of staple foods including milk, bread, potatoes and pasta have been increasing in recent years at more than double the rate of inflation (Hamilton Food Share notes that potatoes, for example, increased in price by 49% between 2008 and 2009). In 2009, 7,685 households (19,602 individuals) sought supplemental food from food banks (Hamilton Food Share, 2009). Moreover, a study of food availability found that Hamilton's poor downtown core has fewer supermarkets per capita than does the more affluent uptown neighbourhood, and that variety stores – characterized by higher prices and less fresh produce than supermarkets – are the more prevalent food outlets in the downtown (Latham and Moffat, 2007).

Historically, Hamilton residents with money and political power built their homes on the city's best land, while working-class residents lived in lower rent districts on poorly drained land adjacent to industry (Cruikshank and Bouchier, 2004). Today, the spatial concentration of heavy industry such as steel manufacturing and waste recycling in the city's 'North End' adjoining Hamilton Harbour – a working class neighbourhood – has resulted in heavy metal contamination in that area (Ali, 2002). These factories are visible point sources of pollution within the downtown, and contribute one-third of the air pollution in southern Ontario (Buzzelli et al., 2003). This older downtown core area not only suffers from higher poverty rates than the city as a whole, but it also has very little green space relative to more affluent areas (Latham and Moffat, 2007; Interview A, 2009; Cruikshank and Bouchier, 2004). In an account of Hamilton's history of environmental inequality, Cruikshank and Bouchier (2004) describe how working-class neighbourhoods were routinely provided fewer recreational facilities and green spaces than middle- and upper-class neighbourhoods. It is my hope that by linking community gardening to environmental justice, the city of Hamilton will promote health among its residents, make

food more accessible and begin to rectify some of the injustices wrought by past planning decisions.

Community gardening in Hamilton today

Hamilton currently has two gardens that are run by the city, with a third under development as part of the redesign of Victoria Park. These gardens are operated by the Public Works department, which rents out individual plots, roto-tills the soil prior to each gardening season, and provides water (Interview B, 2009). Plots in the two city-run gardens sell out each year, and the plots in the new garden at Victoria Park sold out in two weeks. In addition to these three, roughly a dozen other community gardens operate independently, often through religious institutions or community health centres (see Appendix C). Currently, requests to start a community garden are evaluated on an ad hoc basis; given the increasing interest in community gardening in Hamilton, the city has decided to develop and implement a community garden policy (Interview C, 2009). By developing a policy to support community gardens, the city shows an encouraging response to local desire. It is important that this response address local needs as well, which I suggest can be met by considering environmental justice in the policy.

What does it mean to create a community garden policy following environmental justice principles? Following Schlosberg (2004), the policy must **recognize** different levels of power and socio-economic status within the city, allow these different groups to **participate** both in the policy process and in the act of gardening itself, and provide for an equitable **distribution** of community gardens across the city. Attention to these three elements of environmental justice will locate food security in the context of historical and present day social, political and economic processes that have conspired to create food insecurity (Alkon and Norgaard, 2009).

The elements of a just policy

As my research progressed, social justice was a recurring theme. Below, I outline key elements of an environmentally just policy: stability of land tenure, affordability, an

equitable distribution of gardens, the provision of gardening support, and the autonomy of gardens.

Stability of land tenure

My interviews suggested that stability of land tenure is the greatest challenge faced by gardeners in Hamilton. This problem is common throughout North America: in many cities, the local government reserves the right to terminate a lease agreement granting use of publicly owned land. For example, in Baltimore, Maryland, the city can terminate a lease on 30 days notice if it wishes to use the land for another purpose; if the city receives complaints about the garden, it can terminate a lease on 5 days' notice (Schukoske, 2000). The city's revocation of tenure led to significant protests and legal battles in New York City and Los Angeles (Schmelzkopf, 2002; Kennedy, 2008). The short duration of leases, typically between two and five years, coupled with the threat of losing land discourages long-term investment in the garden (Focus Group Interview, 2009) and endangers an important source of food (Kennedy, 2008).

Unstable land tenure is a significant barrier to environmental justice, but municipalities are in the position to make tenure more secure. For example, Seattle, a leader in community gardening in the US, has a dynamic community garden program managed by the Department of Neighbourhoods. "P-Patch Program" staff assist community groups in acquiring land and securing a 5-year lease with the City, and also help groups secure matching grants to pay for the land. In addition, the program partners with a non-profit land trust, which purchases land suitable for gardens and leases it back to the City's P-Patch program at a nominal cost (City of Seattle, 2009). Vancouver also issues 5-year leases, but garden groups can apply for longer-term leases if the garden is part of a community outreach program or if they provide a long-term plan for the space (City of Vancouver, 2005). Through these programs, land that otherwise would have been developed by private real estate companies is reserved to serve as a community resource.

Making gardening accessible to low-income communities

Most city-operated community gardens rely on user fees to help recover some of the costs of land, water, equipment and education. One concern with charging user fees to finance community gardens is that even a small fee may exclude those who stand to benefit the most from access to a garden (Tarasuk, 2001). According to a Hamilton Board of Health document, "nutritious food security initiatives typically strive to . . . meet the food needs of everyone, including people with low-incomes" (City of Hamilton, 2006: 8). A policy that did not seek to make gardening accessible to all would be both unjust and antithetical to the philosophy of community food security.

By recognizing and working to reduce the barriers that different groups face both to food access and to participation in a community garden, Hamilton's policy can make gardening accessible to those with limited financial means. Montréal offers an example of how these barriers can be reduced: the city waives user fees for people receiving social assistance, for the elderly and for the handicapped (Ville de Montréal, 2005). Community gardening could be made even more accessible if municipalities subsidized or waived requirements for liability insurance when the land is used by gardening groups. By thus subsidizing community gardens, municipalities could allow more people to participate in this part of public life and achieve a more equitable distribution of gardens across the city.

The city could also consider establishing a fund to support community gardens. Supported by donations from local individuals and businesses as well as the city, such a fund could provide resources to lower-income gardening groups to cover the costs of soil testing, seeds, tools, water, etc. If clearly advertised and easily accessible, such a fund could increase participation among lower-income groups. Another possible solution would be for gardeners to work with non-profit organizations to help cover some of the costs of beginning and maintaining a community garden. In Chicago, for example, the non-profit NeighborSpace protects community-managed open spaces, including community gardens, by acquiring the land on behalf of the community and providing liability insurance coverage (NeighborSpace, 2010).

Equitable distribution of gardens

Given that food security and lack of access to green space are problems in low-income neighbourhoods, an environmentally just policy will prioritize the development of gardens in areas currently lacking green space and/or in areas with lower food access. In this vein, Cambridge, Massachusetts, gives priority for participation in community gardens to families who lack access to land (City of Cambridge, No Date). Further, interviewees in Hamilton emphasized that gardens should be located throughout the city and easily accessible by transit, as many living in poverty do not have cars. One respondent suggested that gardens could be clustered with other community assets such as libraries or community centres. This view reflects a common belief among respondents that community gardens are an important amenity to which all residents should have access.

Currently, all of the city-operated gardens are in affluent areas of Hamilton. Further, green space and leisure areas have historically been under-provided to lower-income neighbourhoods. An equitable distribution of community gardens, then, means not that every ward should have a garden, but rather that under-privileged areas should be prioritized for the development of new gardens. By favouring the use of city funds for gardens in poor neighbourhoods, the city will address both the diminished food access in these areas as well as the lack of green space, and will make important strides towards environmental justice.

Provision of gardening education and support

In both the focus group and in interviews, respondents stressed that access to information and advice is an essential service to support community gardens. Lack of gardening experience and the difficulties encountered during a growing season are likely to discourage first-time gardeners. The dissemination of information and support is best achieved when the city has staff devoted to community gardens. In Montréal, each arrondissement has a neighbourhood development worker and a garden animator, who work together to provide information and services to community gardens (Ville de Montréal, 2005). Toronto funds a full-time garden coordinator and two part-time

facilitators. The coordinator is responsible for facilitating access to land when a community group expresses interest in starting a garden, and puts the group in contact with the ward councillor. He or she is also responsible for providing the group with on-going technical support (City of Toronto, 2009). These coordinators can provide the training and support needed to encourage gardening among a wide range of people in the city, and to maintain ongoing interest in community gardens for years to come.

The importance of a garden facilitator is reinforced when we think in terms of procedural justice, that is, in terms of unequal participation in public life as a result of social hierarchies (Haluza-Delay et al., 2009). Class-based hierarchies resulting from political and economic structures impact the ties people have to one another and their ability to belong to, or move between, groups, as well as their access to cultural and material resources; this concept is referred to as social capital (Wakefield and Poland, 2005). Because disadvantaged groups tend to lack the social capital needed to access local government or to participate in civic life without a proportionally greater expenditure of effort (Wakefield and Poland, 2005), a garden facilitator could serve as an important bridge between community members and city staff. Moreover, this facilitator would serve as an important source of information, itself a source of power (Forester, 1989), to communities seeking to engage in gardening. This person would help communities navigate the process of establishing a garden and would provide on-going information, support and encouragement. Creating a garden coordinator position is therefore one of the most direct ways of making community gardening accessible to a wide range of people in Hamilton.

Autonomy of gardens

Different interests will use community gardens to serve different purposes. Earlier, I noted that governments may promote gardens with the intention of controlling populations or instilling desirable behaviours (Pudup, 2008; Lawson, 2004; Gottlieb, 2001; Pollan, 1991). To ensure that gardens promote environmental justice and meet the needs and dreams of participants, it is essential that the initiation and control of gardens lie in the hands of the gardeners themselves. Further, the critical importance of a

committed core group of people (or one really committed individual) to organize and maintain a garden in the long term and to keep gardeners motivated illustrates that a successful garden can only develop from the grassroots up.

The importance of community initiation and control of a garden, however, does not imply that the city should have no role in facilitating the development of that garden. Indeed, my interviews revealed a tension in the need for a policy providing governmental support to gardens, but in a manner that does not control or overly constrain gardeners. Respondents agreed that Hamilton's government should recognize the importance of community gardening and enable the organic development of gardens citywide through the provision of resources. In particular, help in acquiring land, establishing water connections and provision of information are the services most desired by local gardeners. This form of municipal support, by addressing structural inequalities in socio-economic resources and access to information, would allow people of all income levels to participate in gardening. With these issues addressed by the city, control of the day-to-day management of gardens – ie, the structure of the gardening organization, whether to garden collectively or in individual plots, what kinds of plants to grow, etc. – would be left to the gardeners themselves.

Developing Hamilton's Community Garden Policy

Above, I have connected community gardens to environmental justice and outlined the elements of an environmentally just community garden policy. I would like to shift my focus now to how the policy process is actually unfolding in Hamilton.

The beginnings of a policy

As of March 10th, 2010, Hamilton Public Works had developed a first draft of the community garden policy and presented it to both the Community Food Security Stakeholders Committee and the Hamilton Community Garden Network.

The first draft of the community garden policy provides measures that will be extremely helpful to people seeking to establish a new garden. First, under the policy the Public

Works department would develop an inventory of city-owned land suitable for gardening. Criteria for identifying these lands include proximity to a water source, no conflicting adjacent land uses, and no plans for the land to be developed for other purposes. Second, Public Works would facilitate the license agreement process between the city and the community garden group, granting the group access to the land by means of a three-year lease. Third, the policy gives control of gardens to the gardeners, ensuring their autonomy. Finally, through the policy Public Works seeks an annual budget to create five new 25 by 50 metre gardens each year. The money would be spent on the initial setup of the gardens, primarily preparing the land with a roto-tiller.

Limitations of the first draft

Despite these promising features in the first draft, there are certain limitations in the document with respect to equity. One concern that can be raised about the draft policy is that there is a requirement that all community gardens acquire a liability insurance policy of $2 million. Under the policy, control of the garden would be transferred to the gardeners themselves. At first glance, the transfer of control seems to be a win-win situation as it gives gardeners greater autonomy and allows Public Works staff to focus their resources on preparing rather than managing the gardens. However, to maintain this level of insurance, each garden would accrue an estimated annual cost of $800. This cost would present a significant financial barrier to gardeners, one that would disproportionately affect the lowest income gardeners. That is, low-income gardeners are less likely to have "money to spare" in their monthly budgets to pay for the insurance. This requirement also reflects an underlying assumption that all people have equal confidence and skills not only to approach the city to ask for a garden but to purchase an insurance policy as well.

Similarly, the policy does not provide a facilitator to help would-be gardeners navigate the process of applying for land from the city. While this omission is most likely attributable to a lack of funds, it again illustrates the expectation that residents are equally able to organize themselves to participate in the public realm. If the policy is not changed in later drafts to reflect these power differentials, it will not be able to address

the barriers to participation that prevent marginalized groups from accessing community gardening and will likely result in an inequitable distribution of gardens. That is, neighbourhoods with the resources and access to city hall will use these to develop gardens, while poorer neighbourhoods may be unable to participate in this form of civic life. Thus, existing unequal distributions of healthy food and green space could be reproduced by the policy.

Departmental division of labour and expertise

This criticism is not intended to place blame or point fingers; instead, I hope to highlight some of the limitations of the first draft and suggest ways to improve it. Certainly, the first draft was influenced by a variety of structural and procedural constraints.

Given that the first draft of the policy was developed by the Public Works department, it follows that this department's expertise and values are reflected in the document. Indeed, we see that the services the department plans to offer are tied to land, which is unsurprising given the department's mandate to maintain infrastructure and land in the city. The valuing of the department's priorities, however, necessarily excludes others; one result is that the 'softer' side of planning, and particularly questions of equity and knowledge transfer, have not been prioritized here. I believe that the draft policy would be significantly improved if the values it takes into account would extend beyond the realm of the physical to provide support to the *people* who will engage in gardening.

The fact that Public Works has been given responsibility for drafting the policy itself reflects a constraint on the policy process. While managing parkland does fall within the scope of the department's work, food security and poverty do not typically fall within their purview. Other city departments, such as Social Services or Public Health, have expertise in these areas; however, because Public Works currently operates the city's community gardens using money from the horticulture general fund, it became the department responsible for drafting the policy. Thus, budget lines rather than skill sets and interests determined policy directions in this case.

Constrained actors

Public Works staff operate under a number of constraints, which affected how the first draft was developed. For example, the city currently operates under a very limited budget, and full-time staff positions are very difficult to eliminate once they have been developed. As a result, it would be difficult to hire a new staff person to take on the responsibilities associated with an expanding commitment to community gardens. In addition, current staff are understandably concerned that any additional support given to community gardens will add to their already full workloads. In order for them to provide as much support as possible to community gardens without overburdening themselves, then, they made the decision to transfer full control of the gardens to the gardeners themselves, with the unfortunate corollary that gardeners will now be responsible for paying for their own insurance.

A variety of other actors are implicated in the development of Hamilton's garden policy as well. Initially, the development of a policy was proposed by the city's Community Food Security Stakeholders Committee (CFSSC). One of the CFSSC's objectives for 2009 was to: "Recommend strategic actions and specific policy/by-law changes to support and enhance community food security" (City of Hamilton, 2009a: 9); community gardens were deemed one such action. City councillor Brian McHattie has emerged as the strongest proponent within local government, tabling a motion at council requesting the development of a policy (City of Hamilton, 2009c). Public Health Services, through its work to support food access and healthy living, has been a strong advocate of the policy and was initially identified to develop the policy before the responsibility was passed to Public Works . Finally, the Hamilton Community Garden Network (HCGN) also has an interest in the policy, as it currently is the primary source of information for would-be gardeners and receives no institutional support from the city.

All of these actors operate under constraints. The CFSSC can only make recommendations to the Board of Health, which may or may not impact policy development. The HCGN is comprised of community garden activists and practitioners, but is entirely voluntary. The network has no funding and its members have limited time

to devote. Further, while the network can lobby for a certain outcome, their influence on the policy process is even less direct than that of the CFSSC. At the moment, members of CFSSC and HCGN are registering to depute at the April 19th meeting of the Public Works Committee to show their support for a community garden policy and to express their views on what the policy should provide. Public Health, while it has been more involved in the policy process than these external actors, no longer holds ownership over the policy and was not directly involved in its writing. Finally, city councillors can express their desire for the policy to contain certain elements, but again are not directly involved in actually writing the policy. Thus, while the input into the process from these various actors hopefully will influence how the draft policy is amended, they are not involved in the actual decision-making around how the policy will be written.

Procedural constraints

The constraints under which the policy is being drafted also extend to the policy process itself. At the outset of the process, input from the public was sought through a survey administered by Public Health Services and disseminated to listserves of community gardeners and other relevant stakeholders. The survey generated twenty-nine responses; the resulting information was compiled by Public Health staff and passed to Public Works. While this initial engagement of the community gardening community was an important effort on the part of the city, there is a disconnect between the consultation early on in the process and the actual process of *writing* the policy. Public Works has met on an ongoing basis with staff from other departments to shape the policy, but they have been unable to share the draft with the public (and more specifically, with interested organizations) prior to its approval by higher-ranking staff in the department. Similarly, Public Works gave a presentation to both the Community Food Security Stakeholders Committee and the Hamilton Community Garden Networks describing the policy draft in March, but it is unclear how the input gleaned at these meetings will be incorporated into the policy. For example, by the time the policy draft was presented to the HCGN, the document had already been passed up the chain of command for approval to move forward. Further, the presenters described the draft policy in detail and answered the groups' questions, but did not share the document itself. While the presenters were very

forthcoming in answering questions, it is possible that the actual wording of the document has implications beyond those presented.

The need for the city to ensure that any document meets a certain standard before it is made public is quite understandable. At the same time, the degree of secrecy within which policy is written shrouds the process from public scrutiny and may result in a policy that does not actually reflect the needs or desires of the people. Similarly, a lack of transparency in consultations with the public may lead to misunderstandings between city staff and local people, particularly if people are given the impression that their input will be used to change the language of a policy when in reality it is quite unlikely to. Indeed, in the current policy process it is unclear to those providing input from outside of the city how the policy is evolving and how their input will be used.

The first draft of the community garden policy reflects what clearly are rational decisions made within the constraints of city bureaucracy. The outcome of these decisions, though, is a policy that does not make gardening accessible to all. By adding an environmental justice framework to the way the city approaches policy-making, such consequences can be anticipated.

Towards an environmentally just policy

The first draft of the community garden policy, then, has certain limitations stemming from the constraints under which it was written. Some of these constraints may be overcome through increased collaboration across departments as well as with local non-profit organizations. Moreover, broadening participation in the policy process will allow for the representation a wider range of interests and needs.

Collaboration across departments

One development of particular importance to the policy outcome has been the decision to move the responsibility for community garden policy development from Public Health Services to Public Works. Public Works currently operates the city's community gardens; interest in *promoting* community gardens, however, originates in Public Health,

particularly in the Healthy Living Division (City of Hamilton, 2007, 2009a). In addition, the Community Services (which includes Housing) and Planning and Economic Development departments have been identified as stakeholders in efforts to increase food security (City of Hamilton, 2006), while the Culture and Recreation department is another stakeholder in creating open space for residents. Finally, the ongoing Roundtable for Poverty Reduction, a collaboration between the City of Hamilton and the Hamilton Community Foundation, is working with community partners to reduce poverty in the city (Hamilton Roundtable for Poverty Reduction, 2010) and therefore also has a potential interest in community gardens. Public Works, though it manages city land and infrastructure, is not mandated to take an interest in social justice issues, particularly food security, and does not have staff specialized in urban agriculture.

While it is logical that Public Works be involved in the policy development, Public Works alone should not be fully responsible for writing and implementing the policy. Rather, various departments and organizations with relevant knowledge and interests should collaborate with Public Works to pool resources and develop a policy that represents the interests of all city departments. The meetings Public Works has been holding with staff from other departments are an important element of this collaboration. Other departments, however, need to demonstrate greater commitment not only by providing their thoughts on the policy, but also by contributing staff and financial resources to the management of community gardens. In this manner, the policy can become one owned by the *city* rather than by one department, and can provide more support to Hamilton's gardeners.

Other jurisdictions offer examples of how different departments can work together to provide support to community gardens. Toronto, a North American leader in promoting food security, relies on the collaboration of various departments as well as the Food Policy Council to support gardens. The city's Parks and Recreation Department uses money from the Ontario Works Incentive Fund to provide water connections to gardens, and created an inventory of city land suitable for gardens. In addition, the city has a full-time garden coordinator and two part-time garden animators, whose salaries come from the Department of Economic Development, Culture and Tourism (City of Toronto, 2003).

Similarly, Montréal's community gardens are run by a hierarchy of actors with clearly defined roles from la Direction de la culture, des sports, des loisirs et du développement social as well as la Direction des travaux publics and different civil society organizations. This arrangement has produced the most extensive community garden program in Canada, active since 1975 and numbering over 6,400 gardens. Finally, community gardens in Seattle fall under the domain of the Department of Neighborhoods, which is explicitly committed to advocating for improved race relations and social justice in the city (City of Seattle, 2009). By collaborating with other departments, Public Works could access the budget and skill sets required to develop an environmentally just policy for Hamilton.

Partnering with non-profit organizations

In an ideal world, municipalities would have endless coffers from which to fund the programs and provide the services needed by the public. In reality, funding for Canadian municipalities comes from limited sources, primarily from the province, property taxes, and fees and charges. Under neoliberalism, the federal and provincial governments have downloaded increasing responsibilities on municipalities, while simultaneously reducing transfer payments to cities (Tindal and Tindal, 2009; cf. Peck and Tickell, 2002). In this context, finding the resources to fully support a city-run community gardening policy in addition to meeting its other responsibilities becomes quite difficult. Acknowledging the fiscal constraints of the city, working with non-profit organizations is an option to be explored by both the city and gardeners.

Finding the funding to hire a full- or part-time community garden coordinator is particularly important to achieve environmental justice. Focus group respondents repeatedly stated the importance of having a person in charge of disseminating information, organizing workshops, and facilitating relationships between gardeners and the city. This facilitating role is particularly important in terms of equity, as the garden coordinator would actively support community members from all backgrounds approach the city for access to a garden. In addition, several interviewees stressed the need to strengthen the network of gardeners to advocate more effectively for community gardens

and to provide needed support to new and existing gardens. The HCGN is in need of funding, as it is currently the primary source of information about community gardens in Hamilton. Local non-profit organizations such as the Trillium Foundation, the Hamilton Community Foundation, Evergreen, Friends of the Greenbelt, the David Suzuki Foundation, or even local school boards may be good sources for the funds to provide a salary for a full- or part-time garden coordinator or for educational programming, or to strengthen the HCGN to advocate on behalf of gardeners.

Relying on non-profits for funding, of course, is not ideal. Unlike local government, non-profit agencies are not accountable to the public, and may seek to further a particular interest in exchange for the services they provide (Marwell, 2004). Funding applications often have to be renewed on an annual basis, and the financial stability of non-profit organizations is not always guaranteed. In addition, collaboration with non-profits may limit the autonomy of community gardens by placing certain requirements on the groups actions or philosophy to be eligible for funding (Incite!, 2007). Finally, local government may be less likely to provide gardeners with resources in the future if they see that their needs can be met with outside funding. Despite these limitations, collaboration with non-profits or foundations may help to provide the resources needed to achieve equity in who can garden.

Broadening participation

The city has made some good efforts to engage the public in this process, but these efforts could be strengthened. At the outset of the policy-making process, input from community gardeners was sought through a survey distributed by Public Health. In addition, Public Works staff have presented the first draft of the policy to both the CFSSC and the HCGN and recorded their feedback. The extent to which this input has been used to influence the policy drafting, though, is unclear. In addition, because only Public Works staff are involved in writing the policy, and because the draft cannot be shown to the public prior to its approval by higher-ranking staff, ultimately Public Works has control of what to actually include in the document. Within the framework of representative democracy, this type of process is fairly typical; I would like to suggest

that better policy outcomes could be achieved by allowing more people to participate in writing policy.

The academic planning literature is replete with suggestions of how public engagement can be improved. For example, Innes and Booher (2004: 429) speak of the need for a paradigm shift in the way planners approach the public, arguing that "participation should be seen as a multi-way interaction in which citizens and other players work and talk in formal and informal ways to influence action in the public arena." Not only does true participation require that planners provide information and listen to the voices of citizens impacted by a policy, it is also important that these citizens participate in the deliberation process leading up to a decision (Agger and Löfgren, 2008). Drawing on local as well as expert knowledge, city staff and citizens can negotiate to coproduce policies that meet the needs of the public within the limitations of the possible (Corburn, 2003; Sandercock, 2003). In essence, these scholars are speaking of a need for procedural democracy, a central concern in environmental justice (Schlosberg, 2004; Haluza-Delay et al., 2009).

Because of the hierarchy within which policy is written, these ideals of participation and procedural justice are quite difficult to meet. While input from Hamilton's community gardening and food security communities has been sought in this particular process, it would be an exaggeration to say that the policy draft has been coproduced by city staff and local stakeholders, or that the interactions between these groups have been seamless. Instead, the process of writing the policy has been shrouded by the need to keep the draft document internal prior to its approval. Similarly, the limiting of the policy-writers to Public Works staff curbs the power of other stakeholders to influence the text. If the city broadened participation in policy writing, more perspectives would be included, likely leading to policies that better-served the needs of the public. Specifically, the city could implement policy-drafting committees of mid-level staff from several departments and stakeholders from outside of government. Acting collaboratively, these actors would create policies synthesizing their differing perspectives and knowledge. Creating policy-drafting committees would help to bridge the disconnect observed between public engagement at the outset of the policy process and the development of the text itself.

There is a need for concerted collaboration on the part of the CFSSC, HCGN, city councillors, community development organizations and community health workers to provide the city with ideas about how the policy can be changed. Collectively, these groups can depute to the Public Works Committee and to the Board of Health to show their support for an improved policy. This collaboration should also include brainstorming ways that the city can work together with gardeners to provide needed support, including sources of additional funding. Further, they can write letters to the editor of the local newspaper to raise public awareness both of the value of community gardens and of the current limitations in the policy and process. At a broader scale, the HCGN should collaborate with other community gardening organizations province-wide to lobby for recognition of gardening's value from higher orders of government, with the intention of attaining funding in the future.

Policy Recommendations

This paper has proposed a variety of steps that can be taken to create an environmentally just community garden policy. They are summarized here in the form of policy recommendations that I hope the city will consider incorporating prior to finalizing the community garden policy.

1. The City of Hamilton's community garden policy should give 5-year leases to community gardens, should be transparent about future plans for a parcel when arranging land agreements, and should give fair notice prior to the termination of leases on short notice. Given that leases of five years or longer require approval from council, it seems that a current practice of granting five-year leases is reasonable, provided that the city is open about its long-term plans for the land. This transparency should be ongoing, and not simply at the time of signing the lease agreement. In addition, if a garden is run through a community health centre or a similar establishment that demonstrates a long-term commitment to the project, or if a garden has been run successfully for at least two three-year lease periods, the city

should consider entering into a longer-term lease agreement with the gardeners. Finally, the conditions under which a lease can be terminated should be made clear to gardeners, who should be given at least 90 days notice prior to a termination of their lease.

2. Public Works should work with the city's risk management team to identify a solution to the high cost of liability insurance. To promote environmental justice through community gardens, it is essential that the city recognize the socio-economic barriers that prevent people from accessing food. Reducing the cost of liability insurance will allow a wider range of people to participate in community gardens. If a more affordable insurance policy is not an option, Public Works should consider whether a city-run community garden program might be an option that could make gardening more affordable without over-burdening staff. Alternatively, gardens could be encouraged to collaborate with non-profit organizations in order to obtain insurance coverage.

3. The city should establish a fund to help low-income groups start community gardens. This fund could be created through donations from local individuals and businesses. Through a simple application process, gardening groups could demonstrate their need for additional funds to cover the costs of seeds, tools, water, etc. If clearly advertised and easily accessible, such a fund could increase participation among lower-income groups.

4. The city should prioritize low-income areas of the city and areas with little existing green space for new gardens. The first draft of the policy asks for the funds to initiate five gardens annually. The city should give priority to requests from lower-income neighbourhoods. These areas are the most in need of improved access to healthy food; prioritizing them will create a more just distribution of food and green space in the city.

5. To ensure that all residents have adequate access to information and technical support, the city should hire a full-time garden coordinator. This coordinator would be responsible for developing educational materials and programs for gardeners, helping garden groups secure grants, identifying private lands suitable for gardens, assisting

garden groups acquire land from the city or from private land owners, initiating social events, promoting gardening to the general public, etc. Funding for this position could come from Public Works or from another city department, or from an external organization committed to increasing equity and health. Acknowledging that it is difficult for the city to fund an additional staff person, having a garden coordinator to help people navigate the bureaucracy to begin gardening is an important means of supporting justice. Therefore, the city should consider adding such a position at some point in the near future, or seeking support from non-profit organizations.

6. Community gardens should be initiated and controlled by the gardeners themselves. Although community gardens require support from local government, the actual day-to-day management of and decision-making in gardens should be left in the hands of the gardeners. Local government should address structural inequalities within the city by reducing barriers to participation, but should not be involved in deciding how a particular garden is run. In this manner, the autonomy of gardeners to determine their purpose, structure and rules is preserved.

7. Public Works should collaborate with other city departments to share ideas and resources. Many departments in the city have an interest in promoting community gardens, and in addressing social justice and health issues more broadly. These departments should work together to provide adequate support to community gardens. If other departments are willing to pool their resources and expertise, a better policy that offers greater support to gardeners could be developed.

8. Community garden supporters such as the Hamilton Community Garden Network and the Community Food Security Stakeholders Committee should collaborate to show support for an improved policy draft. Community gardens in Hamilton have many supporters, but they are not working together to achieve their common goal. By coming together to depute at meetings, writing letters to editors, and brainstorming to identify innovative ways for the city and gardeners to work together, these organizations are more likely to influence policy in a way that supports

environmental justice. In addition, garden supporters province-wide can collaborate to gain recognition from the province of the value of supporting community gardens.

9. The City of Hamilton should increase the transparency of the policy process. In consultations with stakeholder groups, city staff should explicitly state how the group's input will be used and explain the unfolding of the policy process, the constraints under which they operate, and their intentions in seeking input. Improved transparency will prevent confusion amongst stakeholders regarding their role in the process and inform residents about how policies are made.

10. The City of Hamilton should develop policy-drafting committees to broaden participation in the policy process. These committees would be composed of mid-level staff from different departments as well as members of the public with a particular interest or expertise in the topic of the policy. Committee members would combine their knowledge, experience and perspectives to create policies more reflective of the needs and desires of residents. This format would reduce the secrecy under which policy is currently written and would show increased commitment to engaging with the public.

Conclusion

This paper has argued for the use of an environmental justice framework to inform the development of a community garden policy for the city of Hamilton. With its focus on a just distribution of environmental amenities and hazards, on equitable participation in civic life, and on the recognition of difference within a community, environmental justice provides a useful approach to policy-making that aims to improve local food security.

The first draft of this community garden policy is a worthy attempt to support community gardens within the context of budgetary and staff constraints; however, a closer look at the draft reveals that this policy could in fact create *more* rather than less environmental injustice in the city. By placing most of the onus of garden development and operation on community groups, the first draft does not recognize the differentials in power and resources experienced by different groups in the city. The policy recommendations

outlined above provide ways that environmental justice can be incorporated into the draft before it becomes policy.

In the limited amount of time that I have spent in Hamilton, I have observed a general commitment to social justice and recognition of the challenges faced by many of the city's residents. I strongly believe that this spirit of justice can – and should – be captured within the community garden policy, and trust that the city will make a committed effort to revising the policy so that it reflects this spirit.

Appendix A: Report Submitted to Public Works

Report to Hamilton Public Works

Re: Community Garden Policy

13 January 2010

Introduction

This report summarizes findings to date based on 7 individual interview, 1 focus group, and a review of the literature on community gardens, urban health and environmental justice. The report also describes how community gardens are funded in 5 North American cities and outlines four main policy recommendations based on this research.

Moving forward, I foresee some tension between the gardeners' desire for resources from the City to provide access to water, information/education and security of land tenure with the City's limited financial and human resources: what the City is able to provide may not meet the hopes of the gardening community. Resolving this tension is particularly difficult, as much of the value that comes from gardening (ex: increased sense of well-being, spaces for social interaction, access to nature) cannot be given a monetary value. In contrast, the land itself has a value associated with the real estate market and property taxes, and the provision or promotion of gardens by the City has a very real financial cost attached to it. Some of the positive benefits of community gardens do, however, have economic benefits for the City and the Province: by providing access to healthy food and physical activity, community gardens reduce the burden on the public health and health care systems caused by obesity-related illnesses and malnutrition.

There also remains some question regarding who should be in charge of facilitating community garden activities, ie, whether this role should be filled by someone at the City or by someone external to local government. Regardless of how this role ends up being defined, those interviewed are in agreement that there is a need for some kind of garden

coordinator to provide information and trainings, and to facilitate the development and maintenance of gardens.

Finally, I would like to mention that the interviewees in general are quite excited about the community garden policy and are eager for its implementation.

Interview Highlights

Garden Nuts and Bolts

What is a garden? Respondents use the term 'community garden' to encompass a range of formats, from individuals cultivating plots for their own consumption (allotment garden), to groups of people working together and sharing the harvest amongst themselves or with those in need, to school and rooftop gardens.

What is needed to operate a garden? Land, water, basic tools and seeds/plants are the primary material needs cited by respondents. One added that a tool shed would allow storage of communal tools. Gardeners stressed that access to information and advice is an essential service that needs to be supported by the CG policy.

Costs: Respondents agreed that access to water is the biggest cost associated with starting a new garden. Additional costs mentioned included soil testing – and development of raised beds on contaminated lands – fencing, tools, plants, etc.

Location: The respondents feel that gardens should be located throughout the city and easily accessible by transit, and that it is better to have lots of small gardens than a few large ones. One respondent suggested that gardens be clustered with other community assets such as libraries or community centres. Some mentioned that there is a great deal of unused land in Hamilton that can be inventoried so that gardeners can arrange leases with the landowners.

Making a Successful and Diverse Garden

What elements make a garden successful? According to respondents, a committed core group of people (or one really committed individual) is needed to organize and maintain a garden in the long term and to keep gardeners/volunteers motivated.

What challenges do gardens encounter? Unstable land tenure and securing liability insurance are two key structural problems raised by gardeners. Several respondents also mentioned that declining motivation and failure to adequately keep up plots can lead to tensions amongst gardeners, particularly in gardens that are cultivated collectively. One respondent suggested that involving children in the garden and empowering people to garden reduces vandalism and theft.

Who gardens? Although interest in gardening is growing according to the respondents, it is unclear whether that interest extends to a broad segment of the Hamilton population. Several perceive that gardening is more common among environmentally- and community-oriented residents who own homes than among the food insecure or other marginalized segments of the population.

Developing a Policy

What is the role of a CG policy? The interviews revealed a tension between the need for a policy to provide governmental support to gardens, but in a manner that does not control or overly constrain gardeners. Some are concerned that too much government involvement will slow down the garden development process unnecessarily. Respondents agree that government should recognize the importance of CG and enable the organic development of gardens citywide.

What do people want to see in a CG policy? There is a general sense among respondents that the policy should help to address Hamilton's problems: community gardens can be spaces where people work collectively to grow food for food banks and soup kitchens. There is support among respondents for a full-time garden coordinator external to, but funded by, the City, with an internal part-time employee to act as a liaison between the City and gardens. An alternative proposal was that the external person could

be funded by a non-profit organization such as the Trillium Foundation or Hamilton Community Foundation.

What do gardeners want from the City? Interviewed gardeners emphasized that they want long-term leases and security of tenure. Several mentioned that the City should be responsible for soil testing if a garden is on public property. Ideally, the gardeners hope that the City would provide funding for water connections, as well as compost and mulch. Gardeners agreed that the City should provide information about gardening in Hamilton, or at least up-to-date contact information for external garden resource people.

What is needed beyond a policy? Gardeners agreed that a toolkit of information and resources is just as important as a policy. Several respondents stressed the need to strengthen the network of gardeners to advocate for CG and support new and existing gardens. There is also a desire among respondents to find ways to attract more food insecure people to gardens, and to help get them started in the garden.

Funding Community Gardens

Different North American cities provide different levels of support to community gardens. Funding often comes directly from the municipal budget, and is supplemented by user fees and/or partnerships with non-profit organizations. Here I provide a brief summary of how gardens are funded in Toronto, Vancouver, Victoria, Seattle and Montreal.

Toronto

Toronto has been a leader in promoting food security, creating a Food Policy Council in 1991. One stated objective of the Council is to create a community garden in every ward of the City. The City's Parks and Recreation Department has supported community gardens by using money from the Ontario Works Incentive Fund to provide water connections to gardens, and created an inventory of City land suitable for gardens. The City has a full-time Community Gardens Coordinator and two part-time garden animators, whose salaries come from the Department of Economic Development, Culture and Tourism. The coordinator is responsible for facilitating access to land when a

community group expresses interest in starting a garden, and puts the group in contact with the ward councillor. He is also responsible for providing the group with on-going technical support.

Vancouver

Vancouver established its community garden policy in 1995. The City provides access to information about the development of gardens and facilitates networking of gardening organizations. City staff aid in the selection of appropriate spaces on public land for new gardens and provide the land for a 5-year term. The staff also roto-till the land prior to the first season, add compost to the land and establish a municipal water connection for the garden. Once this initial set-up phase is completed, the garden's operation and maintenance is turned over to the gardeners, and the City provides no more services beyond the guaranteed access to land. The costs to the City to prepare one garden are approximately $6,000-8,000.

Victoria

The City of Victoria provides gardening groups with start-up funds through Neighbourhood Development Matching Grants and Greenways Grants. In addition, the City allows for the development of gardens on its property, and Parks staff provide contact information for other gardening groups. The City also donates compost to gardens. Given the lack of undeveloped land in Victoria, the City seeks to protect existing gardens by helping groups acquire longer-term leases.

Seattle

Seattle is recognized as a leader in community gardening in the US, and has a dynamic community garden program managed by the Department of Neighbourhoods. This "P-Patch Program" runs 68 gardens used by 4,500 residents, and has its own paid staff. The program assists community groups in acquiring land and securing a 5-year lease with the City, and also helps groups secure matching grants to pay for the land. Part of the success of the program is due to a partnership with a non-profit land trust, which

purchases land suitable for gardens and leases it back to the City's P-Patch program at a nominal cost.

Montréal

Montréal has the most extensive community garden program in Canada, active since 1975 and numbering over 6,400 gardens. The program is run by la Direction de la culture, des sports, des loisirs et du développement social through a hierarchy of actors with clearly defined roles. The City pays the salaries of garden animators and various other staff involved in the program's functioning. In addition, the Public Works department is responsible for the acquisition of land for new gardens, and also provides a water connection, fencing, soil and compost, tool shed and picnic table for each garden. To help cover programming costs, each gardening household pays an annual user fee, although this fee is waived for those receiving social assistance.

Policy Recommendations

The following policy recommendations take into consideration both the interview responses and an analysis of policies in other cities. In drafting these recommendations, I tried to use an environmental justice framework so that to emphasize both social justice concerns and environmental sustainability.

Stability of Land Tenure

Stable land tenure is a key element of a successful garden and assures the public's right to space. In many cities, the local government reserves the right to terminate a lease agreement granting use of publicly-owned land. For example, in Baltimore, Maryland, the city can terminate a lease on 30 days notice if they wish to use the land for another purpose; if the city receives complaints about the garden, they can terminate a lease on 5 days notice. The city's revocation of tenure led to significant protests and legal battles in both New York City and Los Angeles. Further, the short duration of leases, typically between two and five years, coupled with the threat of losing land discourages investment in the garden.

For these reasons, I suggest that the Hamilton community garden policy grant longer-term leases, and further that they not terminate leases on short notice. New garden organizations could start with a short two- or three-year lease, and then graduate to a long-term lease of ten years or more after demonstrating their capacity to run a successful garden over the initial lease period. These longer-term leases will allow the intrinsic value of a community garden to have some legal protection against the exchange value of the land.

Reduction of Fees for Low-income Groups

Community gardens typically charge fees for the use of land. It is recommended that these fees be reduced or waived where possible to allow lower-income groups to participate in gardening. Further, the provision of communal tools to be stored in the garden would increase access to lower-income groups. Given the budgetary constraints of the City of Hamilton, the funds for tools may be unavailable; in that case, it is recommended that the City provide access to information regarding local non-profit funding sources.
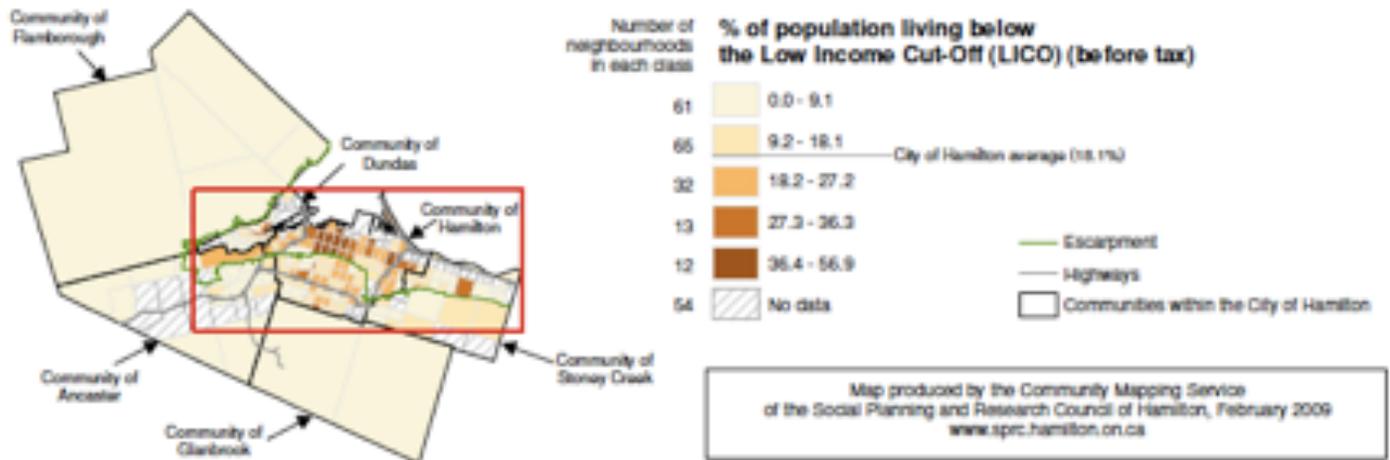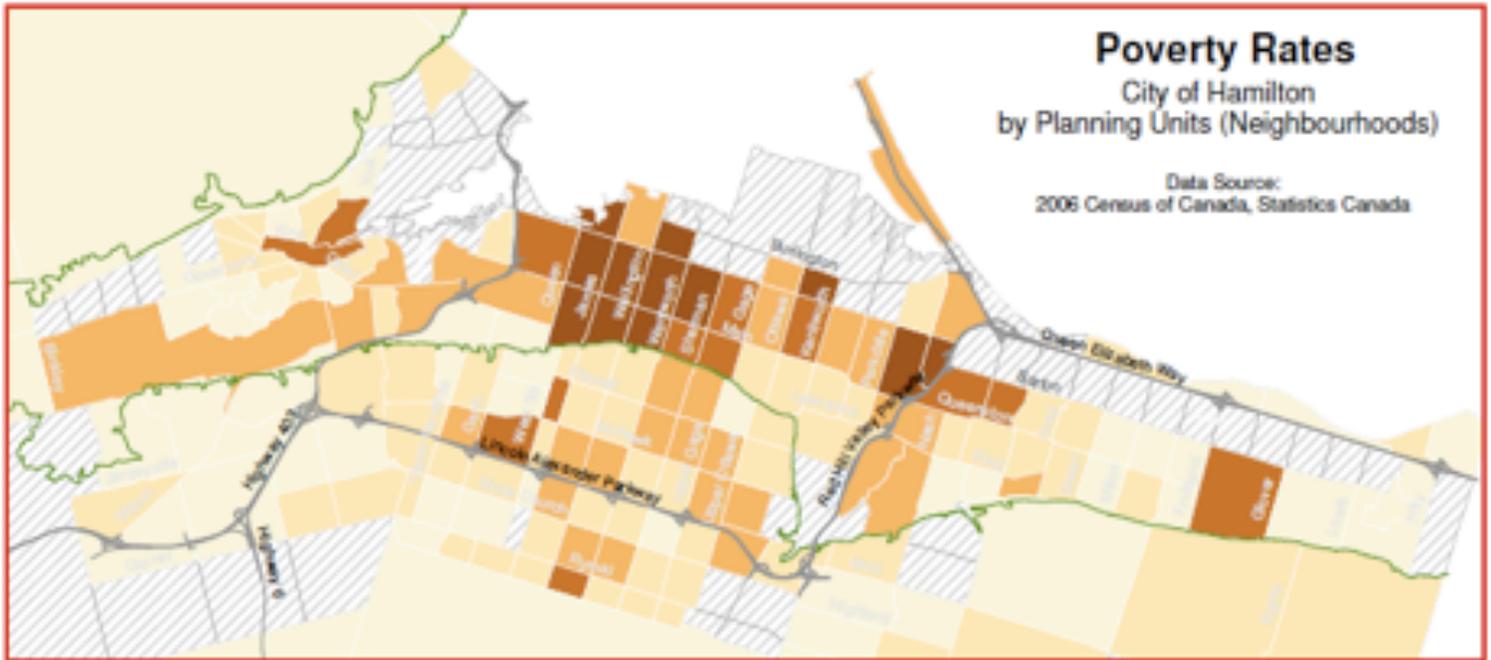
Equitable Distribution of Gardens

Given that food security and lack of access to green space are problems in low-income neighbourhoods, it is recommended that priority be given to establishing new gardens in low income areas of the city and areas with little existing green space. Moreover, the Department of Public Works should collaborate with Housing Services to initiate gardens on public housing property when possible. Gardens should be made wheelchair accessible whenever possible through the provision of raised beds.

Provision of Gardening Education and Support

Lack of gardening experience and the difficulties encountered during a growing season are likely to discourage potential gardeners. To ensure that all residents have adequate access to information, it is recommended that the City hire a full-time garden coordinator.

This coordinator would be responsible for developing educational materials and programs for gardeners, helping garden groups secure grants, identifying private lands suitable for gardens, assisting garden groups acquire land from the City or from private land owners, initiating social events, promoting gardening to the general public, etc. In addition, it is recommended that the City develop a garden resource centre to hold trainings and workshops. The centre would also be a space where gardeners can buy/sell/barter used tools, access information, save seeds, preserve produce, and socialize.   While acknowledging that the City's budget is limited, the provision of information and gardening education is essential to the success of the policy; providing a garden resource centre may be a 'Phase 2' initiative to be implemented as gardening becomes more widespread in Hamilton.

Appendix B: Hamilton Poverty Map

Poverty Rates
City of Hamilton
by Planning Units (Neighbourhoods)

Data Source:
2006 Census of Canada, Statistics Canada

Number of neighbourhoods in each class	% of population living below the Low Income Cut-Off (LICO) (before tax)
61	0.0 - 9.1
65	9.2 - 18.1 — City of Hamilton average (18.1%)
32	18.2 - 27.2
13	27.3 - 36.3
12	36.4 - 56.9
54	No data

Escarpment
Highways
Communities within the City of Hamilton

Map produced by the Community Mapping Service
of the Social Planning and Research Council of Hamilton, February 2009
www.sprc.hamilton.on.ca

Appendix C: Map of Community Gardens in Hamilton
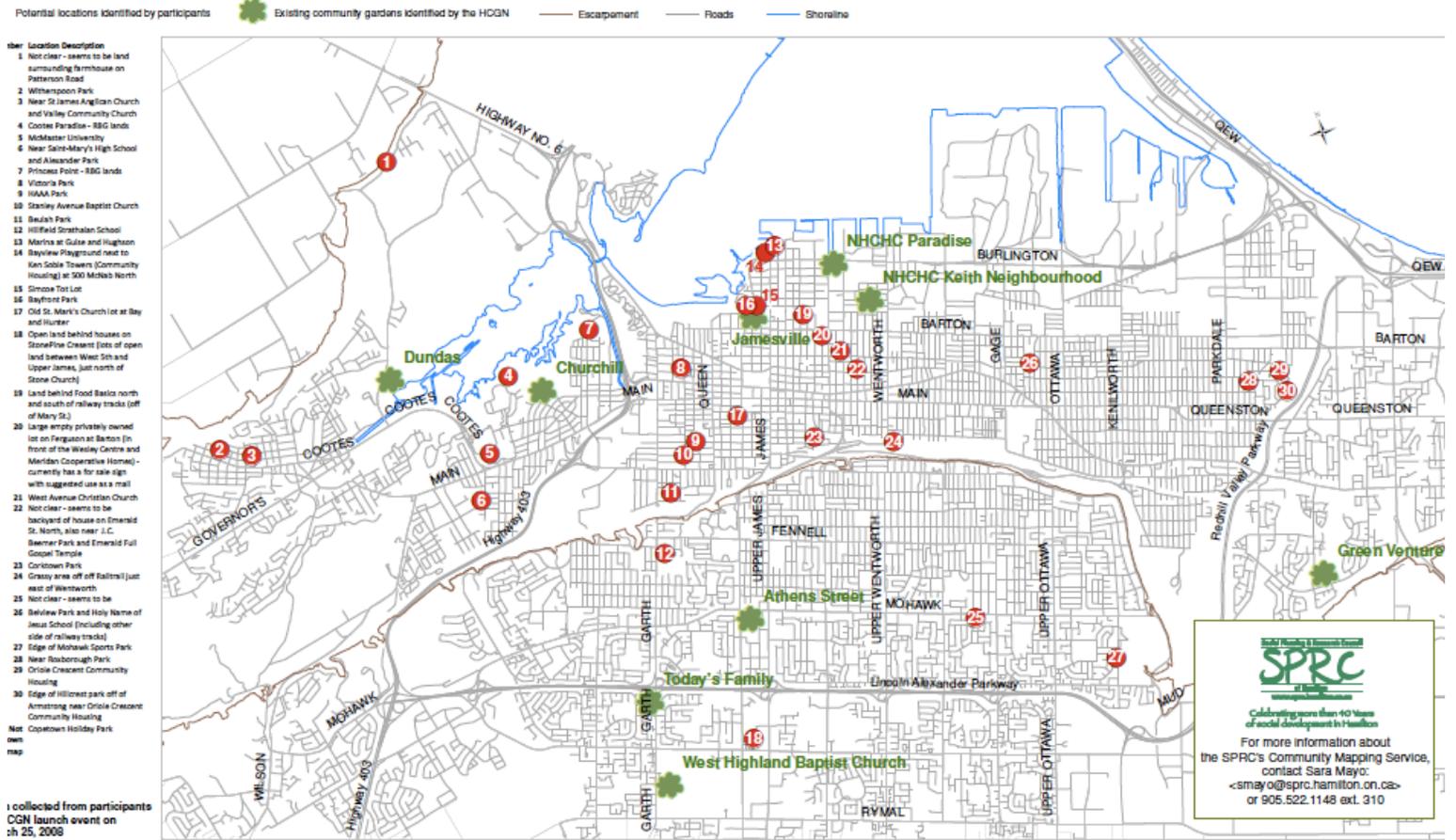
This map represents existing (green) and potential (red) sites for community gardens in the city of Hamilton as of 2008.

References

Agger, Anika and Karl Löfgren. 2008. "Democratic Assessment of Collaborative Planning Processes." *Planning Theory*, 7(2): 145-164.

Ali, S. Harris. 2002. "Disaster and the Political Economy of Recycling: Toxic Fire in an Industrial City." *Social Problems* 49(2): 129-149.

Alkon, Alison Hope and Kari Marie Norgaard. 2009. "Breaking the Food Chains: An Investigation of Food Justice Activism." *Sociological Inquiry* 79(3): 289-305.

American Planning Association. 2007. "Policy Guide on Regional and Community Food Planning." Available online at http://www.planning.org/policy/guides/adopted/food.htm. Accessed 31 January 2009.

Apparicio, P., Cloutier, M.S. and R. Shearmur. 2007. "The case of Montréal's missing food deserts: evaluation of accessibility to food supermarkets." *International Journal of Health Geography* 6(4).

Baker, Lauren E. 2004. "Tending Cultural Landscapes and Food Citizenship in Toronto's Community." *Geographical Review* 94(3): 305-325.

Beaulac, J., Kristjansson and S. Cummings. 2009. "A systematic review of food deserts, 1966-2007." *Preventing Chronic Disease* 6(3). Available online at http://www.cdc.gov/pcd/issues/2009/jul/08_0163.htm. Accessed 21 Nov 2009.

Booth, K.M., Pinkston, M.M. and W.S.C. Poston. 2005. "Obesity and the Built Environment." *Journal of the American Dietetic Association* 105: S110-S117.

Brimblecombe, Nicola, Dorling, Danny and Mary Shaw. 1999. "Where the poor die in a rich city: the case of Oxford." *Health and Place* 5: 287-300.

Brulle, Robert J. 2000. *Agency, Democracy, and Nature: The U.S. Environmental Movement from a Critical Theory Perspective*. Cambridge, Mass: MIT Press.

Brulle, Robert J. and David N. Pellow. 2006. "Environmental Justice: Human Health and Environmental Inequalities." *Annual Review of Public Health* 27: 103-124.

Bryant, Raymond L. and Michael K. Goodman. 2004. "Consuming narratives: the political ecology of 'alternative' consumption." *Transactions of the Institute of British Geographers* 29: 344-366.

Bullard, Robert D. 2005. *The Quest for Environmental Justice: Human Rights and the Politics of Pollution*. San Francisco: Sierra Club Books.

Buzzelli, Michael, Jerrett, Michael, Burnett, Richard and Norm Finkelstein. 2003. "Spatiotemporal Perspectives on Air Pollution and Environmental Justice in Hamilton, Canada, 1985-1996." *Annals of the Association of American Geographers* 93(3): 557-573.

Campbell, Marcia Caton. 2004. "Building a Common Table: The Role for Planning in Community Food Systems." *Journal of Planning Education and Research* 23: 341-355.

Campsie, Philippa. 2008. Food Connects Us All: Sustainable Local Food in Southern Ontario. Toronto: Metcalf Foundation.

City of Cambridge. No Date. "Cambridge Community Garden Program Policy for City-Owned Land." www.cambridgema.gov/CCC/garden_policy.pdf. Accessed 4 December 2009.

City of Hamilton. 2006. "Food Security: Planning Strategy and Approach to Policy Development." Public Health Services. http://www.hamilton.ca/NR/rdonlyres/CC47490C-AF07-446A-BE78-1727FC4ADD21/0/Jun26PH06024FoodSecurity.pdf Accessed 15 January 2010.

-------------. 2007. "Terms of Reference for the Community Food Security Stakeholders Committee." Public Health Services, Healthy Living Division. http://www.hamilton.ca/NR/rdonlyres/DE441F90-D161-4C86-832C-E1598CAB8315/0/Nov26BOH07031aFoodSecurityCommitteeTermsofReference.pdf. Accessed 23 September 2009.

-------------. 2009a. "Community Food Security Stakeholder Committee BOH07031(b) (City Wide)." Public Health Services, Healthy Living Division. 4 February 2009. http://www.hamilton.ca/NR/rdonlyres/096AEEE5-2210-4D39-9123-7AF871961473/0/Feb23BOH07031bCommunityFoodSecurity.pdf. Accessed 15 January 2010.

-------------. 2009b. "Minutes: Community Food Security Stakeholder Advisory Committee." 7 October 2009. http://www.hamilton.ca/NR/rdonlyres/E30894B6-AC96-4F92-AE02-1D0B07A1229D/0/Nov23MinCommunityFoodSecurityStakeholderComOct709.pdf. Accessed 15 January 2010.

-------------. 2009c. "Notice of Motion." Board of Health. 23 November 2009. http://www.hamilton.ca/NR/rdonlyres/3F371004-3EAB-4CFE-996C-96C7E07B3044/0/Nov23Item101McHattieNoticeofMotion.pdf. Accessed 15 January 2010.

------------. 2009d. "City Council Minutes." 9 December 2009.
http://www.hamilton.ca/NR/rdonlyres/E25C7F82-699E-4847-B149-9F324D934691/0/Dec09Minutes.pdf. Accessed 15 January 2010.

------------. 2009e. "Nutritious Food Basket - BOH09024." Board of Health. 15 September 2009.

City of Seattle. 2009. "Urban Agriculture in Seattle: Policy and Barriers."
http://www.seattle.gov/Neighborhoods/ppatch/pubs/Urban%20Agriculture%20in%20Seattle%20Policy%20and%20Barriers.pdf Accessed 28 October 2009.

City of Toronto. 2003. "Tending the Garden." Food and Hunger Action Committee.

-------------. 2009. "Community Gardens in the City of Toronto."
http://www.toronto.ca/parks/programs/community.htm Accessed 29 November 2009.

City of Vancouver. 2005. "Operational Guidelines for Community Gardens on City Owned Land Other Than Parks."
http://vancouver.ca/commsvcs/socialplanning/initiatives/foodpolicy/projects/pdf/commgardensguide.pdf Accessed 21 November 2009.

-------------. 2006. "Administrative Report: Community Garden Pilot Project."
http://vancouver.ca/commsvcs/socialplanning/initiatives/foodpolicy/projects/gardenresource.htm Accessed 21 November 2009.

City of Victoria. 2005. "Community Gardens Policy."

Corburn, Jason. 2003. "Bringing Local Knowledge into Environmental Decision Making: Improving Urban Planning for Communities at Risk." *Journal of Planning Education and Research* 22: 420-433.

------------. 2004. "Confronting the Challenges in Reconnecting Urban Planning and Public Health." *American Journal of Public Health* 94: 541-546.

Cronon, William. 1995. "The Trouble with Wilderness; or, Getting Back to the Wrong Nature." In: W. Cronon (ed). *Uncommon Ground: Rethinking the Human Place in Nature*. New York: W.W. Norton & Company, Inc. Pp. 69-90.

Cruikshank, Ken and Nancy B. Bouchier. 2004. "Blighted Areas and Obnoxious Industries: Constructing Environmental Inequality on an Industrial Waterfront, Hamilton, Ontario, 1890-1960." *Environmental History* 9(3): 464-496.

Davidoff, Paul. 1973[1965]. "Advocacy Planning and Diversity." In Faludi, Adreas (ed.) *A Reader in Planning Theory*. Oxford: Pergamom. Pp. 277-296.

Di Chiro, Giovanna. 1996. "Nature as Community: The Convergence of Environment and Social Justice." In William Cronon (ed.) *Uncommon Ground: Rethinking the Human Place in Nature*. New York: W.W. Norton & Co.

England, Kim V.L. 1994. "Getting Personal: Reflexivity, Positionality and Feminist Research." *Professional Geographer* 46(1): 80-89.

Faber, Daniel R. and Deborah McCarthy. 2003. "Neo-liberalism, Globalization and the Struggle for Ecological Democracy: Linking Sustainability and Environmental Justice." In Agyeman, Julian, Bullard, Robert D. and Bob Evans (eds) *Just Sustainabilities: Development in an Unequal World*. Cambridge, Mass: MIT Press. Pp. 38-63.

Ferris, J., Norman, C. and J. Sempik. 2001. "People, Land and Sustainability: Community Gardens and the Social Dimensions of Sustainable Development." *Social Policy & Administration* 35(5): 559-568.

Finkelstein, E.A., Fiebelkorn, I.A. and G. Wang. 2003. "NationalMedical Spending Attributable To Overweight And Obesity: How Much, And Who's Paying?" *Health Affairs* W3: 219-226.

Focus Group. 1 December 2009. Hamilton, Ontario.

Forester, John. 1989. *Planning in the Face of Power*. Berkeley: University of California Press.

Frank, L.D. and M.A. Andresen. 2004. "Obesity relationships with community design, physical activity, and time spent in cars." *American Journal of Preventive Medicine* 27(2): 87-96.

Frank, L.D. and P.O. Engelke. 2001. "The Built Environment and Human Activity Patterns: Exploring the Impacts of Urban Form on Public Health." *Journal of Planning Literature* 16(2): 201-218.

Frumkin, Howard. 2003. "Healthy Places: Exploring the Evidence." *American Journal of Public Health* 93(9): 1451-1456.

Galea, Sandro and David Vlahov. 2005. "Urban Health: Evidence, Challenges, and Directions." *Annual Review of Public Health* 26: 341-365.

Gee, Gilbert C. and Devon C. Payne-Sturges. 2004. "Environmental Health Disparities: A Framework Integrating Psychosocial and Environmental Concepts." *Environmental Health Perspectives* 112(17): 1645-1653.

Gibson-Wood, Hilary. 2010. *Exploring Environmental Justice and Interrogating 'Community Engagement': A Case Study in the Latin American Community of Toronto*. Unpublished MA Thesis. University of Toronto, Department of Geography.

Gottlieb, Robert. 2001. *Environmentalism Unbound: Exploring New Pathways for Change*. Cambridge, Mass: MIT Press.

Gottlieb, Robert and Andrew Fisher. 2006. " 'First Feed the Face': Environmental Justice and Community Food Security." *Antipode* 28(2): 193-203.

Haluza-Delay, Randolph, O'Riley, Pat, Cole, Peter and Julian Agyeman. 2009. "Introduction." In Agyeman, J. et al. (eds.) *Speaking for Ourselves: Environmental Justice in Canada*. Vancouver: UBC Press.

Hamilton Food Share. 2009. "Hamilton Hunger Count 2009." http://www.hamiltonfoodshare.org/hunger-in-our-backyard/index.htm Accessed 27 February 2010.

Hamilton Roundtable for Poverty Reduction. 2010. "Tackling Poverty in Hamilton." http://www.hamiltonpoverty.ca/index.html. Accessed 1 March 2010.

Harvey, David. 2003. "The Right to the City." *International Journal of Urban and Regional Research* 27(4): 939-941.

Harwood, Stacy Anne. 2003. "Environmental Justice on the Streets: Advocacy Planning as a Tool to Contest Environmental Racism." *Journal of Planning Education and Research* 23(1): 24-38.

Hassanein, Neva. 2003. "Practicing Food Democracy: A Pragmatic Politics of Transformation." *Journal of Rural Studies* 19(1): 77-86.

Hess, David J. 2009. *Localist Movements in a Global Economy: Sustainability, Justice, and Urban Development in the United States*. Cambridge, Mass: MIT Press.

INCITE! Women of Color Against Violence (eds.). 2007. *The Revolution Will Not Be Funded: Beyond the Non-Profit Industrial Complex*. Cambridge, Mass: South End Press.

Innes, J. and D. Booher. 2004. "Reframing Public Participation: Strategies for the 21st Century." *Planning Theory and Practice* 5(4): 419-436.

Interview A. 20 November 2009. Toronto, Ontario.

Interview B. 26 November 2009. Hamilton, Ontario.

Interview C. 26 November 2009. Hamilton, Ontario.

Jarosz, L. 2008. The city in the country: Growing alternative food networks in Metropolitan areas. *Journal of Rural Studies* 24: 231-244.

Johnston, Josée and Lauren Baker. 2005. "Eating Outside the Box: FoodShare's Good Food Box and the Challenge of Scale. *Agriculture and Human Values* 22: 313-325.

Jyoti, D.F., Frongillo, E.A. and S.J. Jones. 2005. "Food Insecurity Affects Children's Academic Performance, Weight Gain and Social Skills." *The Journal of Nutrition* 135(12): 2831-2839.

Kennedy, Scott Hamilton (Producer & Director). 2008. *The Garden*, DVD. Los Angeles, California: Black Valley Films.

Kitchen, Harry M. 2002. *Municipal Revenue and Expenditure Issues in Canada*. Toronto: Canadian Tax Foundation.

Latham, J. and T. Moffat. 2007. Determinants of variation in food cost and availability in two socioeconomically contrasting neighbourhoods of Hamilton, Ontario, Canada." *Health and Place* 13: 273-287.

Marwell, Nicole P. 2004. "Privatizing the Welfare State: Non-profit Community-based Organizations as Political Actors." *American Sociological Review* 69: 265-291.

Masuda, Jeffrey R., Zupancic, Tara, Poland, Blake and Donald C. Cole. 2008. "Environmental health and vulnerable populations in Canada: mapping an integrated equity-focused research agenda." *The Canadian Geographer* 52(4): 427-450.

Martinez-Alier, Joan. 2003. "Mining Conflicts, Environmental Justice and Valuation." In Agyeman, Julian, Bullard, Robert D. and Bob Evans (eds) *Just Sustainabilities: Development in an Unequal World*. Cambridge, Mass: MIT Press. Pp. 201-228.

Matteson, K.C., Ascher, J.S. and G.A. Langellotto. 2008. "Bee Richness and Abundance in New York City Urban Gardens." *Annals of the Entomological Society of America* 101(1): 140-150.

McIntyre, Lynne. 2003. "Food Security: More than a Determinant of Health." *Policy Options* March: 46-51.

Meikle, James. 2010. "Grow your own food revolution plans to seed unused land." *The Guardian* 4 January 2010. http://www.guardian.co.uk/uk/2010/jan/04/grow-your-own-unused-land-2030?&. Accessed 6 January 2010.

Mendes, Wendy, Balmer, Kevin, Kaethler, Terra and Amanda Rhoads. 2008. "Using Land Inventories to Plan for Urban Agriculture: Experiences from Portland and Vancouver." *Journal of the American Planning Association* 74(4): 435-449.

Morland, K., Wing, S., Diez Roux, A. and C. Poole. 2002. "Neighborhood characteristics associated with the location of food stores and food service places." *American Journal of Preventive Medicine* 22(1): 23-29.

Mougeot, Luc J. A. 2006. *Growing Better Cities: Urban Agriculture for Sustainable Development*. Ottawa: IDRC.

NeighborSpace. 2010. http://neighbor-space.org/main.htm. Accessed 22 March 2010.

Oldenburg, Ray. 1989. *The Great Good Place: Cafés, coffee shops, community centers, beauty parlors, general stores, bars, hangouts and how they get you through the day*. New York: Paragon Press.

Peck, Jamie and Adam Tickell. 2002. "Neoliberalizing Space." *Antipode* 34(3): 380-404.

Pederson, R.M., Robertson, A. and H. de Zeeuw. "Food, Health, and the Urban Environment." *Reviews on Environmental Health* 15(1-2): 231-247.

Perdue, W.C., Gostin, L.O. and L.A. Stone. 2003. "Public Health and the Built Environment: Historical, Emipirical, and Theoretical Foundations for an Expanded Role." *Journal of Law, Medicine & Ethics* 31(2003): 557-566.

Polanyi, Karl. 2001[1944]. *The Great Transformation: The Political and Economic Origins of our Times*. Boston, Mass.: Beacon Press.

Pollan, Michael. 2006. *The Omnivore's Dilemma: A Natural History of Four Meals*. New York: Penguin Press.

----------. 1991. *Second Nature: A Gardener's Education*. New York: Grove Press.

Pothukuchi, Kameshwari and Jerome L. Kaufman. 1999. "Placing the food system on the urban agenda: The role of municipal institutions in food systems planning." *Agriculture and Human Values* 16: 213-224.

Public Health Law & Policy. "Establishing Land Use Protections for Community Gardens." March 2009. Available online at www.healthyplanning.org.
 Accessed 21 September 2009.

Pudup, Mary Beth. 2008. "It takes a garden: Cultivating citizen-subjects in organized garden projects." *Geoforum* 39: 1228-1240.

Pulido, Laura. 2000. "Rethinking Environmental Racism: White Privilege and Urban Development in Southern California." *Annals of the Association of Geographers* 90(1): 12-40.

Rees, William E. and Laura Westra. 2003. "When Consumption Does Violence: Can There be Sustainability and Justice in a Resource Constrained World?" In Agyeman, Julian, Bullard, Robert D. and Bob Evans (eds) Just Sustainabilities: Development in an Unequal World. Cambridge, Mass: MIT Press. Pp. 99-124.

Sandercock, Leonie. 2003. Cosmopolis II: Mongrel Cities in the 21st Century. London: Continuum.

Schlosberg, David. 2004. "Reconceiving environmental justice: global movements and political theories." *Environmental Politics,* 13(3): 517-540.

Schmelzkopf, Karen. 2002. "Incommensurability, Land Use, and the Right to Space: Community Gardens in New York City." *Urban Geography* 23(4): 323-343.

Schukoske, Jane E. 2000. "Community Development through Gardening: State and Local Policies Transforming Urban Open Space." *New York University Journal of Legislation and Public Policy* 3(2): 351-392.

Sherriff, Graeme. 2009. "Towards healthy local food: issues in achieving Just Sustainability." *Local Environment* 14(1): 73-92.

Social Planning and Research Council of Hamilton. 2009. "Incomes and Poverty in Hamilton." Available online at http://www.sprc.hamilton.on.ca/Reports/pdf/Incomes-and-Poverty-Report-final-May-2009.pdf. Accessed 2 January 2010.

Tarasuk, Valerie. 2001. "A Critical Examination of Community-Based Responses to Household Food Insecurity in Canada." *Health Education & Behaviour* 28(4): 487-499.

------------. 2005. "Household Food Insecurity in Canada." *Topics in Clinical Nutrtition* 20(4): 299-312.

Teig, E., Amulya, J. , Bardwell, L., Buchenau, M., Marshall, J.A. and J.S. Litt. 2009. "Collective efficacy in Denver, Colorado: Strengthening neighborhoods and health through community gardens." *Health and Place* 15: 1115-1122.

Tindal, C.R. and S.N. Tindal. 2009. *Local Government in Canada*. 7th Edition. Toronto: Nelson Education Ltd.

Twiss, Joan, Dickinson, Joy, Duma, Shirley, Kleinman, Tanya, Paulsen, Heather and Liz Rilveria. 2003. "Community gardens: Lessons learned from California Healthy Cities and Communities." *American Journal of Public Health* 93(9): 1435-1438.

United States Department of Agriculture. 2009. "Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and Their Consequences." Report to Congress.

Ville de Montréal. "Le Cahier de Gestion du Programme des Jardins Communautaires." June 2005. Available online at http://ville.montreal.qc.ca/pls/portal/docs/page/prt_vdm_fr/media/documents/Cahier_de_gestion.pdf. Accessed 29 September 2009.

Vlahov, David, Gibble, Emily, Freudenberg, Nicholas and Sandro Galea. 2004. "Cities and Health: History, Approaches, and Key Questions." *Academic Medicine* 79(12): 1133-1138.

Voltaire. 1998[1759]. *Candide ou l'Optimisme*. Paris: Pocket Classiques.

Wakefield, Sarah. 2007a. Reflective Action in the Academy: Exploring Praxis in Critical Geography using a "Food Movement" Case Study. *Antipode* 39(2): 331-354.

------------------. 2007b. "Great expectations: Waterfront redevelopment and the Hamilton Harbour Waterfront Trail." *Cities* 24(4): 298-310.

Wakefield, Sarah E.L. and Blake Poland. 2005. "Family, friend or foe? Critical reflections on the relevance and role of social capital in health promotion and community development." *Social Science & Medicine* 60: 2819-2832.

Wakefield, Sarah, Yeudall, Fiona, Taron, Carolin, Reynolds, Jennifer and Ana Skinner. 2007. "Growing urban health: Community gardening in South-East Toronto." *Health Promotion International* 22(2): 92-101.

West Highland Baptist Church Victory Garden. 2009. "Facts and Figures," pamphlet.

Wilson, Kathi, Eyles, John, Elliott, Susan and Sue Keller-Olaman. 2009. "Health in Hamilton neighbourhoods: Exploring the determinants of health at the local level." *Health & Place* 15: 374-382.

Wrigley, N. 2002. " 'Food Deserts' in British Cities: Policy Context and Research Priorities." *Urban Studies* 39(11): 2029-2040.