Think City, Dream Vancouver:

Policy Brief

Keeping Vancouver Green

Protecting and Diversifying Urban Green Space

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Photos: Marta Iniewska

Executive Summary

Introduction

Public space is a precious common good that entails everything from streets to squares to parks. It is a space where movement is free, cultures and backgrounds intersect, and strangers are given the opportunity to connect, learn, relax and enjoy a common space. The aspect of public space that is under investigation in this report is urban green space. What is green space? Why is it important? How much green space is adequate? How do we protect it? How do we make sure it serves diverse needs? These are some of the questions that will be explored alongside three policy alternatives formulated to address those questions.

Background

Green urban space is highly used by Vancouver citizens and offers many benefits in the form of exercise, health, and leisure. Green space also offers economic benefits by raising the value of surrounding properties and creating more livable and desirable locales. However, there are barriers to maintaining and expanding green space in the city due to development pressures. Vancouver also faces high density and thus there are challenges in maintaining the Park Board standard of 2.75 acres of park land per thousand people.

Policy Options

The analysis in this paper approaches green space in a holistic manner which goes beyond the simple sum of green space in the city. It also goes beyond green space dedications per capita because although they have the ease of being measurable, they do not fully capture the complexities of green space needs in Vancouver. The analysis therefore captures the importance

of responding to community needs and diverse uses of green space. This analytical framework results in two goals: green space access (per capita allotment) and green space usability (responding to community needs and diverse uses). The following policies are offered as ways of addressing these goals:

- 1. Meaningful Public Participation and Consultation
- 2. Brownfield Redevelopment
- 3. No Net Loss of Green Space

Meaningful public consultation requires more than meetings and focus groups. There are innovative techniques that could be adopted to ensure full participation and informed feedback on green space projects and decisions which yield greater long term stewardship and community satisfaction. Brownfield redevelopment can be used to transform abandoned and contaminated sites into green spaces as well as other amenities. While this is already happening with Southeast False Creek, there are many possibilities for smaller site developments (i.e. old gas stations). These projects require government support and funding to balance the initial clean-up costs. Finally, while new green space can be created through brownfield redevelopment and while its quality can be maximized through meaningful public consultation, in order for Vancouver to preserve its existing green space a no-net-loss policy needs to be implemented. Lobbying for this policy to be incorporated into the Vancouver Charter will ensure adherence to no-net-loss.

Recommendation

The three policies are not mutually exclusive and can therefore be implemented in conjunction with each other. The first priority is to establish a no-net-loss policy to guarantee a detailed

accounting and protection of Vancouver's green spaces. The other two policies are important strategies that the city can utilize over the long term. All three require public pressure, creativity, and a commitment by the City to protect and enhance Vancouver's green spaces.

Keeping Vancouver Green

Protecting and Diversifying Urban Green Space

Public space is a precious common good that entails everything from streets to squares to parks. It is a space where movement is free, cultures and backgrounds intersect, and strangers are given the opportunity to connect, learn, relax and enjoy a common space. The aspect of public space that is under investigation in this report is urban green space. What is green space? Why is it important? How much green space is adequate? How do we protect it? How do we make sure it serves diverse needs? These are some of the questions that will be explored alongside three policy alternatives formulated to address those questions.

Background

Green space is one form of public space that can consist of nature reserves, natural and restored parks, soccer fields, greenways, golf courses, stormwater ponds, and ravines. As more people move from the rural to the urban landscape, there are fewer opportunities for private green space such as backyards in which to relax and enjoy nature. The urban population relies on urban green space as they often cannot obtain this privately. The City of Vancouver reported a survey that shows eighty-six percent of the Vancouver population used their city-wide parks during the year. Some of the advantages of having these types of green spaces in our city include their role in keeping air and water clean, increasing community well-being and social capital, investing in

¹ Evergreen. "The Nature of Cities: A Summary Report on Urban Green Space in the Georgia Basin." 2. http://www.evergreen.ca/en/cg/cg-nocsumm.pdf

² City of Vancouver. "Chapter V: Land" Licences and Inspections: Environmental Protection. http://vancouver.ca/commsvcs/licandinsp/inspections/environment/agenda/v.htm

local economies through increased real estate values, and providing natural habitat and local biodiversity.³

With the recently alarming trends on obesity and sedentary lifestyles, it is important to note that access to urban green space allows for and encourages recreational and physical activity. Studies have shown that greater access to nearby natural settings results in healthier individuals.⁴ Green space also has positive psychological by-products such as reducing stress and health recovery times. It is this recognition of benefits that led Mount Sinai Hospital in Manhattan, New York, to redesign the hospital to maximize the number of rooms overlooking Central Park.⁵ The role of green space in air filtration can be significant. Dianne Draper, a Canadian researcher on the environment, illustrates that each city tree removes approximately six kilograms of carbon dioxide from the atmosphere annually.⁶ She further states that urban trees are five to fifteen times more beneficial than wilderness trees in purifying city air due to their location in high-level emission areas.⁷ Green space provides social, health, and environmental benefits, but it also provides quantifiable economic benefits. For example, Hobden Laughton, and Morgan found that in Surrey, parks and green space are estimated to add around \$11,000 to the value of adjacent properties.⁸

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³ Evergreen, *Nature of Cities*.

⁴ Stephen Kaplan and Rachel Kaplan, "The Experience of Nature. A Psychological Perspective" Cambridge: University Press. (1989).

⁵ Robert Roach and Karen Wilkie, "Green Among the Concrete: The Benefits of Urban Natural Capital - A Natural Capital Project Discussion Paper" Canada West Foundation (April 2004):13.

http://www.biology.duke.edu/wilson/EcoSysServices/papers/GreenAmongtheConcrete.pdf

⁶ Draper (2002) as cited in Roach, Robert, and Karen Wilkie, "Green Among the Concrete: The Benefits of Urban Natural Capital - A Natural Capital Project Discussion Paper" Canada West Foundation (April 2004):13. http://www.biology.duke.edu/wilson/EcoSysServices/papers/GreenAmongtheConcrete.pdf ⁷ Ibid., 13.

⁸ David Hobden, Gary Laughton, Katherine Morgan "Green space borders--a tangible benefit? Evidence from four neighbourhoods in Surrey, British Columbia, 1980-2001" Land Use Policy, 21, 2, (April 2004):137. http://www.sciencedirect.com/science/article/B6VB0-4B9555D-1/2/8fb3f59b677b1d7d84e276384898dc6d

Awareness of these benefits is important for the proper evaluation of green space because in the urban context land for green space often comes with a large price tag. However, once the benefits are factored in through quantitative measures, one can more appropriately conduct a cost benefit analysis.

Evergreen, a national non-profit environmental organization, has conducted various studies on municipalities and their urban green spaces. According to one of their studies, "The Nature of Cities," the various benefits of urban green space are still not well known among the many municipalities in the Georgia Basin. These municipalities identified challenges in green space protection; the primary one being urban growth (pressure to develop, lack of available land). This was followed by issues around funding, political will and community support. The forms of support municipalities called for included funding, greater political support and increased public education and community stewardship. 10

Trends

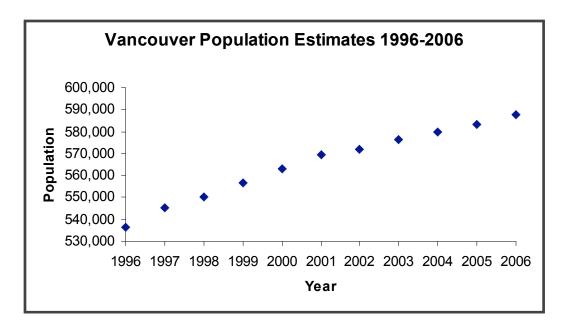
Urban green space is facing pressures from various areas. One of the main impediments to maintaining the Park Board standard for provision of park land at 2.75 acres per thousand people is the population growth pressures in Vancouver. As can be seen by BC government statistics, population figures have been steadily rising from 1996 to 2006 (see Figure 1).

⁹ Evergreen, *The Nature of Cities*, 7 ¹⁰ Ibid., 7.

Figure 1: Vancouver Population Estimates¹¹

Data Source: Population Section, BC Stats, Ministry of Labour & Citizens' Services,

Government of British Columbia. December 2006.



Without an equally increasing park land base, the 2.75 acre standard is clearly impossible to maintain. The City of Vancouver acknowledged that while ninety-five percent of Vancouverites surveyed were satisfied with their park system, the pressures on green space are increasing and open space is not evenly distributed throughout the city. With a somewhat resigned tone, the City also stated: "The amount of park land per capita peaked in the mid 1980's. While there is a commitment to purchasing more park land, it is very expensive. There may be a slow decline as the population increases. This decline should be offset by "Greenways" and tree plantings." The following graph shows park land per 1,000 population between the years of 1961 to 1998

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¹³ Ibid.

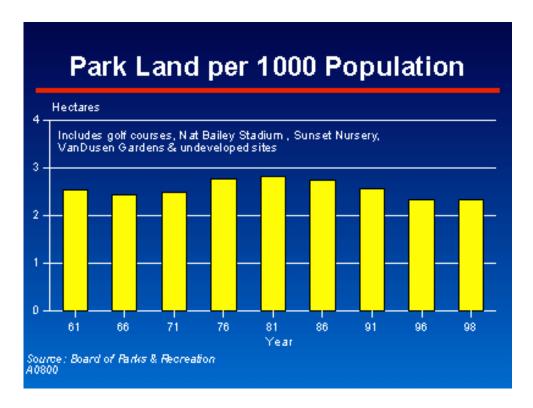
¹¹ Metro Vancouver. "GVRD Population Estimates 1996 – 2006" Services: Regional Development. http://www.gvrd.bc.ca/growth/keyfacts/popest.htm

¹² City of Vancouver. "Chapter V: Land" Licences and Inspections: Environmental Protection. http://vancouver.ca/commsvcs/licandinsp/inspections/environment/agenda/v.htm

(more recent data unavailable). This graph illustrates that since the early 1980's, park land per capita has indeed been decreasing.

Figure 2: Park Land per 1,000 Population

Source: City of Vancouver, Corporate Services Group¹⁴



Green space per capita is a useful indicator of green space availability as it measures the level of access possessed by each Vancouverite. In 2004, Evergreen published the results of a nation-wide study surveying urban municipalities about their green space. The study found that the City of Vancouver's green space provisions per capita are higher than their official standards (see Figure 3). While comparable to the two cities with larger populations than Vancouver (Montreal and Toronto), Vancouver's provisions are among the lowest four municipalities in

¹⁴ City of Vancouver. "The Setting of the City" Corporate Services: Vancouver Trends - 1999. http://www.city.vancouver.bc.ca/corpsvcs/budgets/trends/setting/index.htm

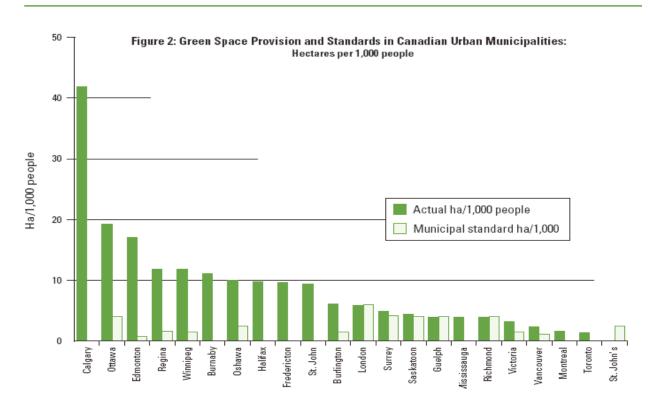
¹⁵ Evergreen. "Green Space Acquisition and Stewardship in Canada's Urban Municipalities: Results of a Nationwide Survey" Writer/Researcher: Lois Lindsay, Project Manager: Stewart Chisholm, Editor: Seana Irvine. (2004):8. http://www.evergreen.ca/en/cg/cg-parkland.pdf

Canada. In response to Evergreen's survey, the Vancouver Board of Parks reported that green space provision ratios have been decreasing over the last ten years. Both Richmond and Surrey have larger municipal standards and greater numbers of hectares per 1,000 people. However, these cities also have larger areas of land and much lower densities than Vancouver.

Figure 3: Green Space Provision and Standards in Canadian Municipalities

Source: Green Space Acquisition and Stewardship in Canada's Urban Municipalities,

Evergreen¹⁶



Vancouver has recently put forward an Ecodensity initiative whereby the belief that "high quality and strategically located density can make Vancouver more sustainable, livable and affordable" is the principle tenet.¹⁷ Given the adoption of the Ecodensity Initiative by the City of Vancouver, there will be increasing needs within each neighbourhood as they will be more

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¹⁶ Ibid., 8.

¹⁷ "What is EcoDensity?" *EcoDensity: Online Consultation of the Vancouver EcoDensity Planning*, 2007. Initiative http://www.vancouver-ecodensity.ca/content.php?id=39

densely populated. ¹⁸ Amenities within communities will experience greater strain as they will be expected to cater to higher per capita use. Vancouver has already lost 0.8 percent of the city's park base to development. This is a relatively small number; however, with an increasing population and with new EcoDensity initiatives, the City of Vancouver will experience a greater density and a shrinking park base leading to a lower per capita green space dedication.

There are many levels at which we can measure our satisfaction with green space in the city. The way we frame green space dictates the kind of policy options that stem from our analysis. The following are different levels at which we can analyze green space:

- Total acreage of green space
- Total acreage of green space per capita
- Level of responsiveness to community needs in green space decisions
- Level of diversity allowed for in green spaces

The analysis in this paper approaches green space in a holistic manner which goes beyond the simple sum of green space in the city. It also goes beyond green space dedications per capita because although they have the ease of being measurable, they do not fully capture the complexities of green space needs in cities that are culturally diverse, rapidly growing, and varied in terms of urban form and character. The analysis will therefore also capture the importance of responding to community needs and diverse uses of green space. Given this analytical framework, the main objectives of any green space policy must address green space

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¹⁸ B Toderian, R Howard, T Kuhlmann, "Next Stage of EcoDensity Public Consultation: Draft Charter and Draft Initial Actions" Policy Report: Urban Structure, City of Vancouver, November 20, 2007. http://vancouver.ca/ctyclerk/colerk/20071127/rr1.pdf.pdf

¹⁹ Evergreen, *Green Space Acquisition*, 31.

access (per capita allotment) and green space usability (responding to community needs and diverse uses). Additional criteria, which are important in most policy considerations, include efficiency, cost, and political viability.

Given that the current policies are lacking in strength and that green space per capita is shrinking and predicted to shrink further, alternatives need to be considered for how to protect green space and ensure it is meeting citizen needs. The following section outlines these alternatives and methods for evaluation.

Objectives, Criteria, and Measures of Alternative Policies

OBJECTIVES	MEASURE			
Green Space Access	Maintaining the city standard of 2.75 acres of green space per			
	1,000 population.			
Green Space Usability	Offering green spaces that are appropriate for the community and			
	that address diverse needs.			
ADDITIONAL CRITERIA	MEASURE			
Efficient Use of	Obtaining green space results that are appropriate for the amount			
Resources	of resources used.			
Cost	Amount of municipal budget required to achieve objective is			
	proportional to the value of the result.			
Political Viability	Measure of how feasible introducing the policy to the public will be			
	given general perceptions.			

The following are the policy options explored to address the objectives within the set criteria. These policies are not a great departure from the city's current framework for green space, rather they allow for greater creativity, higher standards, and the transformation of existing vague and flexible goals into concrete and measurable outcomes. The options include:

Policy # 1	Meaningful Public Participation and Consultation			
Policy # 2	Brownfield Redevelopment			
Policy # 3	No Net Loss of Green Space			

Policy Options

Policy #1: Meaningful Public Participation and Consultation

"We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect" Aldo Leopold

One of the largest challenges faced by municipalities in managing green space is the need to increase community involvement as a tool for improved green space protection and stewardship. 20 Evergreen's research study, "Green Space Acquisition and Stewardship in Canada's Urban Municipalities," found that while budget limitations were most frequently listed as the primary obstacle to effective park stewardship, the need for new ways to engage communities and volunteers was listed as second.²¹ There is a natural link between the degree of ownership over and involvement with green spaces and the degree of care, effort, and protection afforded to these spaces. In its survey of urban municipalities, Evergreen found that using public involvement is a relatively untapped resource.²²

In order for public involvement and consultation to be effective and truly engaging, it has to start with the right philosophy. There are many organizations that are in the business of public

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Evergreen. *Green Space Acquisition*.Ibid., 20.

²² Ibid.

consultation, one of which is Projects for Public Space (PPS). PPS is a non-profit organization focused on effective planning and design that strives to meet community needs.²³ PPS has collaborated on numerous projects in the United States, Canada, and beyond. Box 1 describes their initial approach to public engagement.²⁴

Box 1 - Project for Public Spaces Philosophy

"We start by truly understanding how people will use a place and what activities will draw them there. Design cannot be the starting point for creating a great place. Within any successful park, there should be several dynamic destinations that attract different kinds of people. These destinations should offer many things to do, such as socializing, eating, reading, playing a game, interacting with art, and so on. Creating a great public space requires helping communities articulate a vision for these activities and destinations. From this Placemaking process, PPS [Projects for Public Spaces] creates a concept plan - a program for uses, activities, and destinations - which may lead to a more detailed design phase."

Source: Projects for Public Spaces, www.pps.org

While Vancouver does already have many forms of public consultation and participation, there remains a gap in achieving truly meaningful and engaging interaction between the City and its residents. For example, the recent Aquarium expansion plans in Stanley Park have evoked concerns about the successive expansion projects over the last number of years. This most recent proposal aims to expand the land base of the aquarium by fifty-two percent which includes a removal of 1.34 acres of green space from Stanley Park.²⁵ The public consultation process thus far has been far from thorough or meaningful.

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²³ "Our Mission" Project for Public Space. http://www.pps.org/info/aboutpps/about

²⁴ Ibid

²⁵ Board of Parks and Recreation "2006 Aquarium Expansions Proposal" November 20, 2006, 2. http://www.city.vancouver.bc.ca/parks/board/2006/061127/aquarium_revitalization_expansion_proposal.pdf

Recently, the Board of Parks and Recreation decided to distance itself from the Aquarium consultation process through the following motion:

"THAT the Board distance itself from this process by not being a cosponsor but allow the Vancouver Aquarium to go forward to convince the community that what they are doing is the right thing." (Carried)²⁶.

The consultation process has thus largely been left in the hands of the Vancouver Aquarium which has conducted various consultative processes such as focus groups, open houses, stakeholder meetings, a website and on-line feedback form, focus group meetings and a public attitude survey. On most accounts the public has responded positively to elements of the proposed development, including green space reductions to allow for expansion (see Appendix B). However, in order for consultation to be meaningful, the public needs to be able to give informed feedback with full consideration of the consequences of each option. It does not appear that this opportunity has been given in the aquarium consultation. Even by looking at the percentage of people who answered "No Opinion", it appears there is a knowledge gap that has left respondents unclear of the different scenarios. An expansion as significant as one that impacts Stanley Park and its share of green space requires public consultation that is informed and thorough. The Vancouver Aquarium is one example of the room for growth in this area.

The Board of Parks and Recreation generally makes use of public meetings, open houses, and online/mail/telephone feedback from the public as their primary forms of consultation. They have adopted some creative strategies that are more engaging such as enabling an online feedback form alongside all listed consultation items on the website as well as assembling

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²⁶ Ibid., 2.

citizen-based task forces²⁷ (ie. dog strategy task force) but there is arguably a lot more to be done on this front. Evergreen recently hosted a Vancouver public forum on how urban development can be a green space opportunity. Among the themes explored in the presentations and dialogue, it was it echoed that, "True participation means creative opportunities for public input, with resulting protection priorities and development design responsive to community feedback."²⁸

There are many innovative forms of public participation and incorporating technology can elevate participation and the efficiency of that participation. Knapp, Bogdahn, and Coors argue that the introduction of information and communication technologies (ICT) in early stages of development planning yields transparent and higher quality results. 29 While these forms introduce a technology bias, they do address previous biases such as holding meetings that only a limited amount of people can or are motivated to go to. Allowing for forms of online interactive participation may increase overall feedback from the public. Increased participation may stem from participants feeling more at ease in their home since they can avoid the sometimes confrontational tone of face-to-face meetings. Also, participants have the advantage of immediate access to online research tools so that they can make informed opinions and thus more meaningfully contribute.

To achieve truly meaningful public participation and consultation, there are a number of elements required. Public consultations run the risk of being or looking like tokenism if they do

http://www.city.vancouver.bc.ca/parks/info/meetings/2006meeting.htm

²⁷ Vancouver Park Board "2006 Public Consultation"

²⁸ Evergreen. "Vancouver 2006 public forum Urban Development: A green space opportunity- Summary" (2006):

^{1-2.} http://www.evergreen.ca/en/cg/pdf/Publicforumsummarv.pdf

²⁹ Knapp, Sonja, Jurgen Bogdahn, and Volker Coors, "Improve public participation in planning processes by using web-based 3D-models for communication platforms" Proceedings from REAL CORP 007: To Plan Is Not Enough: Strategies, Plans, Concepts, Projects and their successful implementation in Urban, Regional and Real Estate Development. (2007). http://programm.corp.at/cdrom2007/archiv/papers2007/corp2007 KNAPP.pdf

not follow certain guiding principles. For example, if consultations occur late in the planning process, the public's input is narrowed to simply approval or disapproval of a project with little room for making amendments. The following excerpt from "A Primer on Public Involvement" does a thorough job of summarizing these essential components of meaningful public participation which include representativeness, independence, early involvement, influencing policy decisions, and providing information (see Box 2).

Box 2 - Key Conditions for Successful Public Involvement

Excerpt from "Primer on Public Involvement" 30

Among the most often cited key conditions for successful public consultation and public participation are the following (Rowe and Frewer, 2000 and 2004; Forest et al., 2000):

- Representativeness: Participants must be as representative of the population as possible, reflecting geography, demography, political affiliation, and ideology. It is essential to avoid co-option and exclusion.
- **Independence**: The public involvement process must be perceived as fair and independent. The moderators must be impartial and everybody must have a chance to express himself or herself including those who hold diverging views.
- Early involvement: Participants should be involved as early as possible in the design of the public involvement process. The public should be able to contribute in developing the agenda, defining the rules of the process, choosing the experts, and defining their need for information.
- **Influencing the policy decisions**: A key condition of success is that participants must have a real impact on the policy and decision-making process.
- Providing information: Information must be provided to the public and the participants
 to allow them to learn, discuss, and deliberate about the policy issues. In order to do so,
 the information must be accessible and transparent but also easy to understand and
 interpret. Experts and other witnesses who are providing information must be selected
 for their ability to communicate with lay people.

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³⁰François-Pierre Gauvin, Julia Abelson, Mary Pat MacKinnon and Judy Watling "Primer on Public Involvement" Prepared for the Health Council of Canada, Toronto (July 2006). http://www.cprn.org/documents/45131_en.pdf

- Resource accessibility: Resources must be made available to allow the meaningful
 participation of the public. This includes having enough time to inform oneself,
 understand, and discuss. It also means being able to access the material and economic
 resources necessary to participate. It is important to keep in mind that some participants
 cannot afford the costs associated with their involvement (e.g. missing a day of work,
 paying for child care, or commuting to the public involvement setting).
- Structured decision-making: The public involvement process must be legitimate, transparent, and official. The objectives must be realistic and clearly communicated to the public. From the beginning, the public should know how their input will be integrated in the decision-making process. A feedback mechanism should also be implemented to inform the general public and the participants about the final decision and how the public involvement process influenced it.

The City of Vancouver can take a leadership role in exploring consistent and new methods for engagement. The issue is not that there is generally inadequate public consultation; however, it seems that the city has the ability to circumvent a proper consultation process in some cases (i.e. the aquarium example previously discussed). While consultation is a time-consuming and potentially expensive endeavor, it does create community-appropriate developments that will yield more stewardship over the area and save money in the long term. It is worthwhile for the city to investigate emerging trends in consultation methods, which may include information and communication technologies, so as to increase and diversify public input. Also, entrenching more meaningful and creative consultation into development contracts will ensure implementation and accountability. Investing greater efforts into truly meaningful consultation has two large costs associated with it: time and money. The following provides some more explanation of the implication such a policy would have:

Impacts and Implications

- Creating meaningful public participation requires investment both in money and staff time.

 The public requires information, engagement, and outreach, all of which require resources.

 However, the City can reduce costs through stronger partnerships with non-profit organizations and community groups and enable them greater access to the public and foster an environment of open information sharing and education.
- More meaningful participation may create increased roadblocks and challenges for the city to negotiate. If the public is fully aware of development proposals and a diversity of opinions are sought, there will likely be more dissent expressed. The remedy for this is to ensure that participation happens at early stages of development planning so that problems are resolved in a more manageable manner.
- The time allotted for development projects and green space consultations will likely need to be increased to ensure adequate education, deliberation, and decision making processes.
- All of these implications put stress on the system but they yield long term benefits: community satisfaction, high use of green space, and maintenance of diversity.

Policy #2: Brownfield Redevelopment

The amount of green land available for development is scarce in the City of Vancouver. Due to the constraints of greenfield land capacity, investments in brownfield re-development may prove strategic. As Evergreen posits, non-traditional strategies are needed to create new public green space within the built-up city environment.³¹

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³¹ Evergreen. "Green Space Acquisition and Stewardship in Canada's Urban Municipalities: Results of a Nationwide Survey" Writer/Researcher: Lois Lindsay, Project Manager: Stewart Chisholm, Editor: Seana Irvine. (2004) http://www.evergreen.ca/en/cg/cg-parkland.pdf

Brownfield: an abandoned vacant derelict or underutilized commercial or industrial property where past actions have resulted in actual or perceived contamination or threat to public health and safety and where there is an active potential for redevelopment.³²

The range of brownfield sites include former railway yards, old waterfronts and riverbanks, crumbling warehouses, abandoned gas stations, former drycleaners and other commercial properties where toxic substances may have been used or stored.³³ The National Roundtable on the Environment and the Economy estimates that there may be up to 30,000 of such sites in Canada.³⁴ Brownfield redevelopment is not simply a land use opportunity; it is also an opportunity for mitigating potential hazards that can pose a threat to human health and environmental quality.³⁵ The redevelopment of brownfields requires contamination clean-up efforts that are beneficial to the environment and the surrounding communities. There are a range of benefits of developing brownfields that are not necessarily reaped from developing greenfields.

According to Regional Analytics, studies have quantified economic benefits of brownfield development. Using an input-output analysis, it was shown that for every dollar spent on brownfield redevelopment in Canada, \$3.80 is generated as an output for industries Canadawide. Financial benefits can include job creation, increased incomes and property taxes at the local level, and increased income and sales taxes at the provincial and federal levels. This implies potential for stimulating economic growth through such redevelopment.

³² Canadian Federation of Municipalities. "2007 Brownfields RFP Glossary" Green Municipal Fund Grants and Loans. http://sustainablecommunities.fcm.ca/GMF/Glossary Brownfield 2007.asp

³³ National Round Table on the Environment and the Economy "Cleaning up the Past, Building the Future: A National Brownfield Redevelopment Strategy for Canada." 2003.

http://www.sustainablecommunities.fcm.ca/files/Capacity_Building_-_Brownfields/SOD_Brownfield-Strategy E.pdf

³⁴ Ibid.

³⁵ Ibid.

³⁶ Regional Analytics, *Preliminary Investigation*, 6

³⁷ Ibid., 6

Box 3 – General Brownfield Redevelopment Benefits^{38 39}

- Creation of parkland and public open spaces
- Reduction in urban sprawl and associated costs such as:
 - extension of infrastructure, traffic congestion
 - o smog, greenhouse gas emissions
- Neighbourhood, employment area and urban core revitalization
- Improved aesthetic quality of the urban fabric
- Improved public waterfront access
- Elimination of significant environmental hazards
- Protection of groundwater resources, halts pollution runoff and erosion
- Protection of wetlands and wildlife habitat, greater biodiversity
- Protection and improvement of public health
- Increased sense of civic and community pride

On the other hand, there are some clear challenges in working with brownfield development. The following are ones identified by the national brownfield redevelopment strategy created by the National Roundtable on the Environment and the Economy (NRTEE):

Box 4 – Brownfield Redevelopment Challenges 40

- Lack of access to capital
- Regulatory liability risk
- Civil liability risk
- Limited access to insurance protection
- Regulatory delays
- Stigma and risk perception
- Lack of awareness among many key public sector and private sector group

³⁸ Regional Analytics. "A Preliminary Investigation into the Economic Impact of Brownfield Redevelopment Activities in Canada." Prepared for the National Round Table on the Environment and the Economy (Nov 2002). http://www.aboutremediation.com/PDFS/National_Bf_Strategy_Investigation_on_Economic_Impact_Nov_02.pdf ³⁹ Minnesota Pollution Control Agency. "Brownfields to Green Space" Cleanup/Brownsfield/#1.01 (August 2006). http://www.pca.state.mn.us/publications/c-brwnfld1-01.pdf

⁴⁰ National Round Table on the Environment and the Economy "Cleaning up the Past, Building the Future: A National Brownfield Redevelopment Strategy for Canada." 2003. http://www.sustainablecommunities.fcm.ca/files/Capacity_Building_-_Brownfields/SOD_Brownfield-Strategy E.pdf

Developers are often discouraged by brownfields by the large investment required to assess and clean-up the degraded site. Cities can play an important role through conducting initial assessments of the land so that developers know the exact degree of damage and the costs involved in reclaiming the land. Municipalities can also encourage investment through clean-up funding in the form of targeted grants or tax-incentives. Brownfield re-development requires partnership between a municipality and developers as some of the costs and risks must be shared and in return, developers are more flexible in giving space for amenities or green space. Despite the long term benefits of brownfield redevelopment there are significant challenges and barriers to such projects which are discussed below.

Encouraging and Financing Brownfield Development in Vancouver

Due to the challenges inherent in brownfield development, there is a disincentive to develop which results in a market failure. To rectify this failure, it is the role of government to step in and create the conditions necessary for appropriate and sustainable brownfield redevelopment. Some municipal governments in Canada have already started taking steps towards this goal. The City of Hamilton's Environmental Remediation and Site Enhancement (ERASE) Community Improvement Plan provides a program of incentives, tax breaks, and grants to encourage and promote brownfield redevelopment. ⁴¹ In Ontario, About Remediation, Canada's leading information resource on site remediation and brownfield redevelopment, has developed a

⁴¹ Hamilton Economic Development. "Brownfields/ERASE Program" http://www.investinhamilton.ca/brownfieldseraseprogram.asp

Brownfields Redevelopment Toolbox to guide municipalities through this kind of process⁴² (see Appendix D).

There are opportunities for municipalities to receive funding for brownfield projects. Administered through the Centre for Sustainable Community Development of the Federation of Canadian Municipalities (FCM), financing for municipal projects is available through the Green Municipal Fund. The fund has a total of \$550 million for six sectors of municipal activity: brownfields, energy, planning, transportation, waste and water. The fund allows for the preliminary steps entailed in brownfield development such as field tests and feasibility studies of proposed brownfield sites.

The City of Vancouver has already engaged in some large scale brownfield re-development projects. The most notable are in South East False Creek (SEFC) and the East Fraserlands. Both of these sites have been planned with green public and open space in mind. However, these are mega projects with the East Fraserlands estimated to take twenty-five years to develop. The main industrial areas have been mapped by the City of Vancouver (see Appendix C). However, there are more brownfield sites that are smaller and would benefit from re-development and the re-invigoration of city space in the shorter term.

Some of the steps that the City of Vancouver could take in implementing a more aggressive brownfield redevelopment strategy are as follows: seek out smaller scale brownfield redevelopment sites with shorter project lengths than SEFC or East Fraserlands; actively apply

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⁴² About Remediation. "Brownfield Decision Tree" Brownfield Toolbox – A Guide to Redevelopment for Ontario Municipalities, v.2, 2005. http://www.aboutremediation.com/Toolbox/DecisionTree.pdf

for funding from outside sources such as the Green Municipal Fund, implement new by-laws for larger developer costs to increase revenue for amenities, and include more meaningful public consultation and green space requirements for any new brownfield redevelopment policy. These kinds of actions will have broad implications and barriers to implementation as discussed below:

Impacts and Implications:

- It is difficult for brownfield sites desired for community green space to compete for existing brownfield development applications that are meant to yield increased property tax revenues and/or job opportunities. 43
- Redevelopment of brownfield sites means less land for industrial sites. The implications for future industries can be summarized by this Vancouver Sun article excerpt:

"A 2005 inventory of industrial lands in the Lower Mainland underlines just how little land the whole region -- especially Vancouver -- has available for new industrial uses. Although old-fashioned industrial jobs aren't likely to ever again dominate the local economy, this is a matter of concern. We can't out-source everything, whether to other countries or to the suburbs." - Don Cayo, Vancouver Sun.

However, the lands targeted for brownfield redevelopment will be ones that are abandoned or too contaminated for regular development. The standards for redevelopment of brownfields into green spaces are lower than for other uses.

⁴⁴ Don Cayo, "Vancouver needs to keep jobs close at hand" Vancouver Sun, April 12, 2007.

http://www.canada.com/vancouversun/columnists/story.html?id=55837d00-ab9c-408c-8126-cb14a935368e&p=1

⁴³ Minnesota Pollution Control Agency. "Brownfields to Green Space" Cleanup/Brownsfield/#1.01 (August 2006):2. http://www.pca.state.mn.us/publications/c-brwnfld1-01.pdf

Policy #3: No Net Loss of Green Space

Existing Tools for Protecting Green Space

Evergreen's study, "A Summary Report on Urban Green Space in the Georgia Basin," looks at urban green space in twenty-nine municipalities in the Georgia Basin including the City of Vancouver. Evergreen surveyed these municipalities to examine what policies were currently available and in use to manage and protect green space (natural areas in particular) (see Box 5).

Box 5 – Policies Available for Managing and Protecting Green Space by Municipalities

- Regional land designations and protection plans including the Vancouver Island Environmentally Sensitive Ecosystem Inventory (ESE), the Capital Regional District's (CRD) Green Blue Spaces Plan, and the Greater Vancouver Regional District's (GVRD) Green Zone
- Official Community Plans (OCPs) and local area plans
- Naturescaping Principles and Policies
- · Park Dedication Policies
- Density Bonusing
- Subdivision Review Processes
- · Design Guideline Manuals
- Zoning (by-laws)
- Environmentally Sensitive Areas (ESA) (with development restrictions)
- Development Permit Areas (DPA)
- Environmental Protection Policies such as leave strips and watercourse by-laws
- Tree by-laws and policies that restrict cutting, set out retention standards, etc.
- Flood Control By-laws

Source: The Nature of Cities, A Summary Report on Urban Green Space in the Georgia Basin, Evergreen Common Grounds

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⁴⁵ Evergreen, *Nature of Cities*.

Out of all these measures, the municipalities surveyed "overwhelmingly cited the use of the OCP [official community plan] as a key instrument to help planning departments and developers consider natural spaces in the face of development proposals." Evergreen's research found that one of the issues with the use of OCPs is that they tend not to translate into on-the-ground standards or policies and procedures. They noted Surrey as one exception in which they have adopted a Natural Areas Management Plan which has specific goals and measures. Some of the specifics the plan mentions include developing annual operational work plans that include recommendations found within the plan, doing annual report cards to review accomplishments in regard to the plan, and developing a comprehensive inventory database of all park natural areas to facilitate long term preservation and conservation goals. The plan is a comprehensive inventory database of all park natural areas to facilitate long term preservation and conservation goals.

The City of Vancouver does not officially have an OCP as they instead have a variety of policies and plans which collectively form a strategic direction equivalent to an OCP.⁴⁹ The relevant policies in "CityPlan" and the "Vancouver Board of Parks and Recreation Strategic Plan 2005-2010" that pertain to the protection of green space can be found in Appendix A. These documents are lacking in concrete targets, indicators, or goals.

Examples of the vague wording in *CityPlan*:

- Acquire new park space and areas where there is a shortage of park space now
- Create a greater variety of park sizes, shapes, and uses

⁴⁶ Evergreen, *Nature of Cities*.

⁴⁷ Ibid., 5

⁴⁸ Greg Ward, "Overview of the Natural Areas Management Plan: Strategic Directions" City of Surrey, Parks, Recreation and Culture Department.

http://www.arbrescanada.ca/programs/urbanforestry/cufn/Resources_Canadian/NAMPlanSurreyBC.pdf ⁴⁹ B Riera and A McAfee, "City of Vancouver Regional Context Statement." Policy Report: Urban Structure, City of Vancouver, January 10, 1988. http://vancouver.ca/ctyclerk/cclerk/980205/PE3.HTM

Examples of the vague wording in the *Park Board Strategic Plan*:

• Strengthen and expand natural park environments

• Preserve existing native habitat and vegetation

While these objectives are desirable, they do not lend themselves to quantifiable measures of

success. As Evergreen has pointed out, there is little to suggest on-the-ground guidance from

these policies.

Wilkie and Roach argue that municipalities need to take an integrated and long-range approach

to urban natural capital in which natural assets are identified and protected before development

pressures emerge. 50 Rather than looking at areas of the city on a case-by-case basis, Wilkie and

Roach suggest adopting an approach that looks at the entire city and its networks of natural

capital.⁵¹ When green space is taken away for development, it is not easily recoverable or

replaced, therefore proactive, integrated and long term thinking is required.⁵² Although not

specifically mentioned in their report, this is similar to the goals of a no net loss of green space

policy.

A no net loss policy would map existing green space and prohibit any overall decrease in the

space. This affords a certain amount of flexibility in that where development is highly desirable,

green space can be removed, provided that the same amount, or more, is added in another area.

⁵⁰ Robert Roach and Karen Wilkie, "Green Among the Concrete: The Benefits of Urban Natural Capital - A Natural Capital Project Discussion Paper" Canada West Foundation (April 2004).

http://www.biology.duke.edu/wilson/EcoSysServices/papers/GreenAmongtheConcrete.pdf

51 Ibid.

⁵² Ibid.

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This is also useful for shifting green space so that under-served communities have the opportunity to "borrow" green space from green-space-rich communities that are seeking development. In November 2007, the motion for a No Net Loss Policy was brought forward to the Board of Parks and Recreation (see Box 6). The motion, which called for staff to research and develop such a policy and report back within five months time, was supported by non-profit organizations (for example, see Appendix E) but was ultimately defeated.

Box 6 – Motion for No Net Loss Policy for City of Vancouver⁵³

"MOTION

The following motion was put forward by Commissioner Spencer Herbert,

WHEREAS in the last two years the Park Board has seen the planned elimination of green space for increased building footprints in Burrardview, China Creek, Stanley, Hillcrest Riley, Trout Lake, and Killarney Parks;

WHEREAS a policy to guide decision-making on such expansion proposals, and that protects existing green space, while still providing the flexibility to deal with pressures for increased space in community facilities, is needed;

WHEREAS with Vancouver's population increasing, green space in parks will be of even greater necessity and value to the well being of the community;

AND, WHEREAS pressures on our parks for development and other uses are rising while net green space has not kept pace;

THEREFORE BE IT RESOLVED that the Park Board request that staff research, and develop a policy on no-net loss of green space that would be used to guide future decision-making;

AND BE IT FURTHER RESOLVED that staff report back to the Board for further guidance by April 2008."

Source: Board of Parks and Recreation Regular Board Meeting Minutes, Monday, November 26, 2007 at 7:00 pm

⁵³ City of Vancouver "Minutes of meeting of the Board of Parks and Recreation held at Vandusen Botanical Gardens" September 11, 2006. http://www.city.vancouver.bc.ca/parks/board/2006/060925/mom_sep11_06.pdf

There have been other cities that have adopted the no-net-loss policy. One such city is Saint Paul, Minnesota. This policy is reflected in the following: "Section 13.01 of the City Charter limits the disposal or diversion of park property. Park property is broadly defined and requires replacement for any disposal or diversion." ⁵⁴ The city is now under pressure to enact a further means of protecting park property through a park dedication ordinance which would require the creation of additional open space as new residential developments are planned. In this light, the no-net-loss policy does not appear remarkable compared to the park dedication proposal.

Vancouver is not completely unfamiliar with this policy as it has been used on a case-by-case basis throughout the Lower Mainland. For example, the Canada Line has publicly announced that they are committed to no net loss of green space in building of the Line.⁵⁵ Adopting the nonet-loss policy within a systematic structure through which all future developments on green space will be considered is an effective way of encouraging more serious considerations of development needs.

In order for a no-net-loss policy to be treated seriously and for it to be applied consistently, it needs to be implemented within the Vancouver Charter. By creating a condition within the Charter that stipulates a no-net-loss policy, the City and the Parks Board can be held accountable for any development that infringes on green space. The appropriate section for this clause would be in "Vancouver Charter [SBC 1953] Chapter 55, Part XXIII – Parks". An amendment to the Vancouver Charter would need to be approved by the provincial government. This process could be pushed forward through the City of Vancouver, or in the absence of such interest, through

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⁵⁴ "Improving and Protecting Open Space" Recommendations of the Saint Paul Environmental Roundtable, 2006. http://www.eurekarecycling.org/pdfs/Appendix_E_OpenSpace.pdf

^{55 &}quot;Restoration and Future Planning" Canada Line. http://www.canadaline.ca/constructionRestorationPlanning.asp

public advocacy on the issue. In the latter case, citizen groups can organize and rally the provincial government to introduce such an amendment. The amendment to the Charter would allow for a greater level of permanency and accountability for a no-net-loss policy. There are obviously many pressures from development in the city which would oppose such a motion and citizen groups must therefore be well organized and persistent.

Impacts and Implications

• No net loss is both a response and a threat to development. The very reason for its existence would be to more systematically cope with development pressures. At the same time, these pressures would likely create tension for the city as it looks to housing an increasing population. However, if the park dedication rate of 2.75 acres per 1,000 persons is to be prioritized and maintained, at the very least there should be no loss of green space.

Policy Evaluation

The following section evaluates the policy options on the previously mentioned measures of green space access, green space usability, efficiency, cost, and political viability. While examining the options it is instructive to include the status quo to consider what would happen if no policy change occurred. While it is highly improbably for one policy to fulfill all criteria perfectly, it is helpful to consider the strengths and weaknesses of each policy. This evaluation is written in table format to allow for easier comparisons.

Assessing the Options

Goal	Criteria	Status Quo	Brownfield Redevelopment	No Net Loss	Meaningful Public Involvement
Green Space Access	Maintaining the city standard of 2.75 acres of green space per 1,000 population.	Low. The City has acknowledged that parkland dedication will decrease with greater populations.	High. This policy allows for new creative developments of green space which may be necessary given greenfield limitations within city boundaries.	Medium. This policy will not ensure the ratio of green space to people is maintained, but it does guarantee no loss of green space from development pressures.	Low. Unless the city has specific policies to the contrary, it is still free to give in to development pressures. This policy would see greater public resistance but no guarantee of green space dedication.
Green Space Usability	Offering green spaces that are appropriate for the community and address diverse needs.	Medium Current consultation arrangements do allow for a certain degree of community voice.	Medium Brownfield redevelopments can make use of current consultation arrangements.	Medium. Policy focuses on quantity not quality of green space allotment. However, it does allow for green space shifting which may be appropriate for balancing community needs.	High. Meaningful involvement means green spaces designed with community needs in mind. Greater participation may encourage additional uses for current spaces.
Efficiency	Obtaining green space results that are appropriate for the amount of resources used.	Medium. The status quo allows for resource input that results in both positive and negative results. If time and resources were more focused, there could be better results.	Medium. Initial costs are high but the net long term effect is likely beneficial.	High. This policy is very straightforward and thus requires few resources for implementation. Resources would be most needed for strategic development decisions.	Mixed. In order to achieve truly meaningful participation and consultation, large resource and time dedications will be required from the City. Emerging online technology trends may however see high efficiency results.
Costs	Amount of municipal budget required to	Medium. While the city may save money in the short term	High. Initial costs for brownfield	Medium. The main costs will be incurred when	Mixed. Costs will vary according to the level of

	achieve objective is proportional to the value of the result.	with decreasing green space, it will incur long term costs of negative outcomes in health, community interaction and satisfaction, and physical fitness.	redevelopment (especially ones with greater contamination) are high. However, there are also benefits (environmental, social and economic) to such development that are desirable even if land was not developed into green space.	development pressures require the loss of green space and new areas available for green space will be sought. There is also the cost of lost development opportunities.	intensity of the proposal. An increase in partnerships with local groups and volunteers will have low costs. Innovative online consultations may also be cost effective. More involved consultations, educational campaigns, etc will require more resources to fund.
Political Viability	Measure of how feasible introducing the policy to the public will be given general perceptions.	Medium. The public does not seem particularly in tune with the decreasing green space dedication. Maintaining the status quo may be politically viable in the short term but green space crowding and inaccessibility will likely lead to dissatisfaction in the medium to long term range.	Medium. The City can use the generally popular perception of the SEFC development to point to the success of brownfield development. Effective communication would be required to convince the public that initial costs are worthwhile.	High. This policy is easily understood and would likely be perceived favourably by the public. It would also help long term political viability for refusing or negotiating developments proposing to infringe on green space. There may be barriers to political acceptance considering the motion was struck down by the Parks Board.	High. This will be of high interest to active citizens, non-profit organizations, and environmental groups. It is not the kind of policy inclined to elicit any significant dissent assuming the associated costs are reasonably regulated.

Recommendation

Physical allotment dedication and diversity and usability of green space use are both critical considerations when looking at protecting and maximizing green space. A holistic approach to the issue of green space could see an adoption of all three proposed policies with varying timeframes.

The no-net-loss policy could easily be adopted by the Parks Board in a short time frame given a required level of political will. Elevating such a policy to the Vancouver Charter, however, would require greater time and effort. This task would be easier if it received the support of the City of Vancouver. Since this motion was defeated by the Parks Board and likely has similar support levels from the City, the initiative must arise from public interest and advocacy. This requires a greater time interval before the goal is accomplished and is therefore a medium-term policy. However, if accomplished, this policy would ensure access to existing green space and thus is of the greatest priority among the policies. While ensuring green space per capita is ideal, it is important that at a minimum our existing green spaces are protected. Once we are assured of this protection then further action can be taken to expand on green space availability.

More sophisticated and meaningful public consultation is an on-going process. In order to stay in tune with the latest discoveries in effective consultation, the Parks Board or the City could establish a task force to research such methods, their applicability to the Vancouver context, and proposed implementation. Similar to the no-net-loss policy, if the consultation method is to be consistent and accountable, it would need to be documented in the form of a very concrete

guideline. A consultation approach that allows for short cuts when there are contentious development situations is not adequate for a proper community process.

Brownfield redevelopment has the *potential* to address both issues of usability and access to green space. Furthermore, while the initial costs may be high, there are opportunities for funding and the long term benefits of brownfield redevelopment are considerable. Brownfield sites will need to be de-contaminated at some point in the future, so it is strategic to take advantage of these opportunities now to create more green spaces for the surrounding communities. There are large challenges in the City finding finances to encourage development on brownfields. However, smaller brownfield sites can be investigated and stricter amenity requirements can be negotiated. This is an on-going initiative that is already active but could be further developed.

Appendix A

Box 9 – Vancouver CityPlan⁵⁶ - Public Places Highlights

New & More Diverse Public Places

Vancouverites seek new and more diverse public places — places where people can relax, walk, bike, socialize, celebrate, and play. There will be: more parks for areas of the city that need them; streets that serve pedestrians as well as cars; more extensive greenways to explore and enjoy on foot or bike; and more welcoming public places downtown. Nature will be protected and so will the public views to the mountains and water that make up the city's spectacular setting.

Direction

The CityPlan direction is to: ensure that the number and quality of the city's public places matches the needs of a growing and increasingly diverse population; and encourage neighbourhoods and businesses to participate in enhancing the city's public places. To achieve this, Vancouver will:

- acquire new park space in growing areas and areas where there is a shortage of park space now;
- create a greater variety of park sizes, shapes, and uses;
- encourage more intensive, shared use of public space parks, streets, schools, and hospital grounds;
- increase the number and variety of trees on public streets;
- promote lively neighbourhood shopping streets where it is comfortable to buy, sell, stroll, relax, and perform;
- encourage the city s major thoroughfares to develop their own look and feel;
- encourage friendlier residential streets by calming traffic;
- build city-wide and neighbourhood greenways that make moving through the city

http://www.city.vancouver.bc.ca/commsvcs/planning/cityplan/dfvf.htm

⁵⁶ City of Vancouver "CityPlan – Directions for Vancouver" Community Services: Planning: City Plans. Approved by Council on June 6, 1995. Last modified 2003.

on foot or bike a more pleasant, interesting experience, including increased access to the waterfront;

- promote more attractive, usable downtown plazas and parks; and
- continue to protect public views of water and mountains.

Challenges

Keeping up with park needs as the city grows will mean finding ways to buy, develop, and maintain new parks. However, some approaches such as raising taxes and/or extending development cost levies over the entire city, are likely to be controversial. A number of CityPlan's proposals will mean that existing users of public space will have to accommodate new users. Examples could include more community use of school grounds, or more pedestrian and bike use of streets. This will raise issues of liability and competing demands for space.

Future Direction

Other sections of CityPlan show that, even when it was clear the choice would require increased funding from city residents, people supported: parks and open space that keep pace with a growing population.

The directions from other sections of CityPlan, combined with the financing choices, indicate a willingness to consider: fees to encourage conservation; charges to new developments to provide new parks and amenities; more efficient use of public spaces, such as using road space to create greenways; and redirecting City spending to match the directions established in CityPlan.

Source: CityPlan, City of Vancouver

Box 10 – Board of Parks and Recreation Strategic Plan 2005 – 2010⁵⁷: Highlights

Sustainability and Accessibility

- Preserve existing native habitat and vegetation
- Strengthen and expand natural park environments: local wildlife, storm water management, native biodiversity
- Make parks more beautiful: incorporation of environmental and community art, innovative interpretation of ecological processes and environmental benefits
- Train staff in sustainable maintenance and environmental management best practices
- Recognize and provide for emerging trends in community gardening
- Analyse the physical, cultural, economic and programming barriers that restrict participation in park and recreation services
- Develop multiple ways for user to participate and provide input

Transparency and Consultation

- Establish criteria, standards and priorities for active public involvement in decisionmaking processes
- Develop innovative participation techniques for public processes
- Continue efforts to involve public in the allocation of and request for funds
- Refine performance indicators and benchmarks. Create opportunities to incorporate these in allocating and using our funds.
- Encourage interaction with the public, colleagues, professionals and those with outside interests to welcome the exploration and implementation of new ideas

Partnerships

- Implement Board decisions regarding the Joint Operating Agreement with Community Centre Associations
- Develop a similar framework for parallel agreements with other not-for-profit partners

⁵⁷ Vancouver Board of Parks and Recreation. "Strategic Plan 2005-2010" http://www.city.vancouver.bc.ca/parks/info/strategy/strategicplan/strategicplan2005.pdf

- Cooperate with other agencies to provide services
- Recruit, develop and reward volunteers
- Expand and cultivate partnerships that are mutually beneficial
- Support community initiatives through co-funding, space use, staff time and flexibility in policy and practice
- Continue to develop and explore the potential of existing programs such as

 ParkPartners, the Neighbourhood Matching Fund, the Artists in Residence program

 and other community-supportive initiatives

Planning

• Outline a long-term park land acquisition strategy including focus on neighbourhood park deficiencies, population growth, acquisition opportunities and unique site attributes

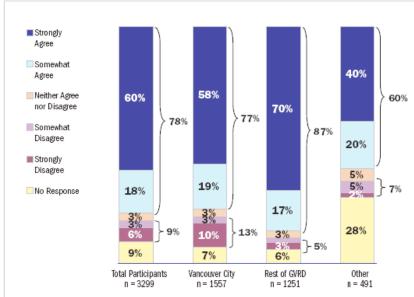
Source: Strategic Plan 2005 – 2010, Vancouver Board of Parks and Recreation

Appendix B

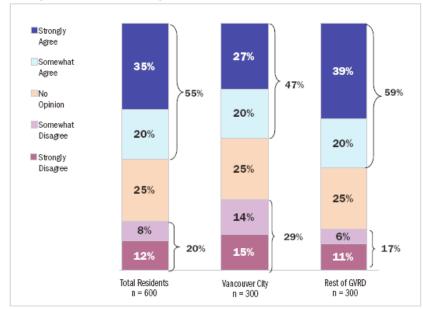
Figure 5: Consultation and Survey Results for Removal of Green Space

Source: Community Consultation Summary Report: Vancouver Aquarium Revitalization and Expansion Proposal⁵⁸







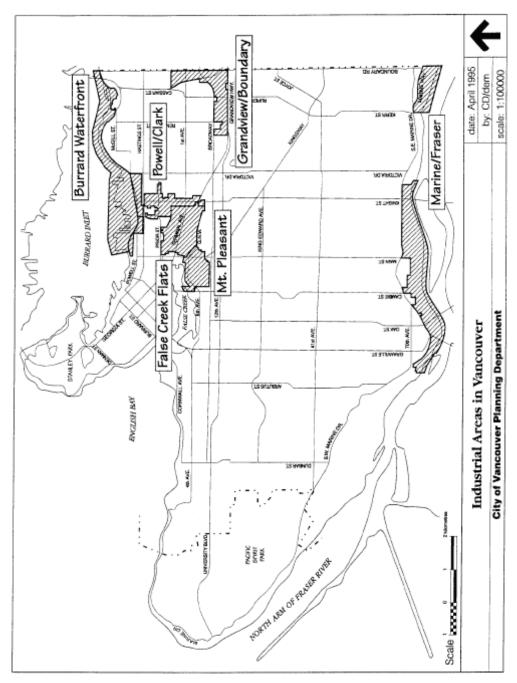


^{58 &}quot;Community Consultation Summary Report" Vancouver Aquarium Revitalization and Expansion Proposal, Prepared for the Vancouver Aquarium, Kirk & Co. Consulting Ltd., November 8 2006, xi. http://www.vanaqua.org/consultation/documents/ExecutiveSummaryofConsultationSummaryReport.pdf

Appendix C

Figure 6: Industrial Areas in Vancouver

Source: Vancouver Planning Department⁵⁹

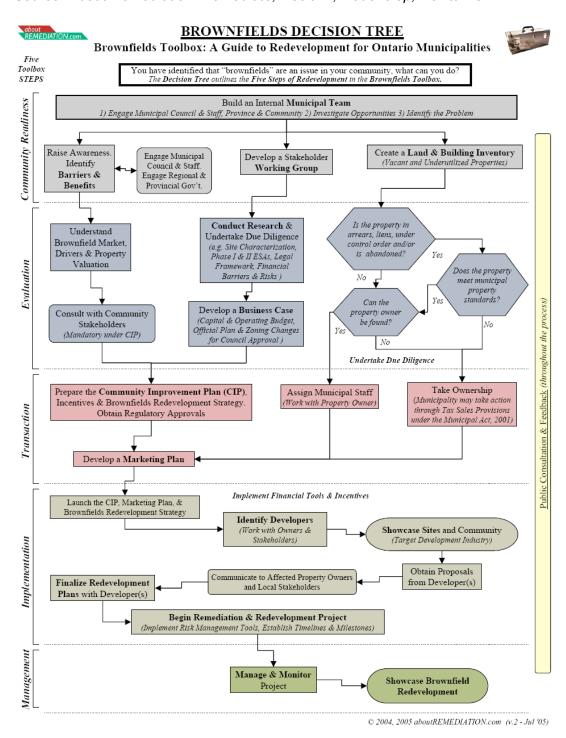


⁵⁹ "Industrial Lands Policies" City of Vancouver Land Use and Development Policies and Guidelines. Adopted by City Council March 14, 1995, 2. http://www.city.vancouver.bc.ca/commsvcs/guidelines/I003.pdf

Appendix D

Figure 7: Brownfields Decision Tree

Source: About Remediation: Remediate, Reclaim, Redevelop, Revitalize⁶⁰



⁶⁰ About Remediation. "Brownfield Decision Tree" Brownfield Toolbox – A Guide to Redevelopment for Ontario Municipalities, v.2, 2005. http://www.aboutremediation.com/Toolbox/DecisionTree.pdf

Appendix E - Public Space Network Letter of Support for No Net Loss Motion



November 26, 2007

Vancouver Board of Parks and Recreation Administration Office 2099 Beach Avenue Vancouver, BC V6G 174

Re: No Net Loss (Greenspace) Motion

Dear Board Commissioners,

I am writing on behalf of the Vancouver Public Space Network (VPSN) to offer our support for Commissioner Spencer Herbert's *No Net Loss* (Greenspace) Policy Motion.

The Vancouver Public Space Network is a grassroots organization that works on advocacy, education and outreach related to Vancouver's public realm. We were formed in early 2006 and have a current listed membership of 500 individuals and organizations located throughout the city. Among our project areas is an active Green Spaces Working Group which undertakes various greenspace clean-up activities, gardening workshops and plantings, and administers a community garden in the downtown peninsula.

As you know, Commissioner Herbert's motion requests that Park Board staff "research, and develop a policy on no-net loss of green space that would be used to guide future decision making."

We believe that this is a particularly important motion to have on the table at a time when the City is experiencing considerable growth and development pressures.

We also believe that the long-term implications of the motion are substantive, and worthy of present consideration and action.

First, as citizens of a city that is growing in leaps and bounds, we are in a position where the amount of greenspace and community facilities *per capita*

risks declining as the city increases in population. Any loss of physical greenspace will, in essence, exacerbate this risk. It is therefore desirable to have some sort of clearly articulated tool that (a) advocates for the preservation of existing net amounts of physical greenspace across the city; and (b) spells out the planning formulae through which adjustments to the net amount greenspace are to be made within a given park, or across the sum tota of parks board properties.

We recognize that in striving to provide increased community amenities that there is an obvious need to expand facilities, which often (though not necessarily) leads to increasing the size building envelopes. And to be clear, we also want to note that we support the provision of increased facilities. However, we want to be sure that increased facilities do not come with a defacto reduction in parkland.

Thus, the reason that we are keen to support Commissioner Herbert's motion is because it is designed to ensure that, in planning for demographic changes/facilities increases, we don't get into a situation where we "Rob pete to pay Paul." In other words, expanding community facilities by using one amenity type (open green space) to support another (a larger building footprint, etc.)

Finally, we also note that the City has recently undertaken some ambitious activities in related planning areas - and that these are also supportive of the type of research that Commissioner Herbert's motion requests of Parks Board staff. For example, we believe that the type of policy tool that Commissioner Herbert's motion anticipates could dovetail very effectively with some of the Draft EcoDensity Initial Actions that are envisioned by the City's Planning Department (see, e.g. the November 20, 2007 Council report entitled Next Stage of EcoDensity Public Consultation: Draft Charter and Draft Initial Actions). Here, the subject of Amenity Tools specifically looks at pursuing "additional policy tools for obtaining public benefits in order to ensure that growth is accompanied with adequate community amenities."

As an advocate for the role that greenspaces play in ensuring a rich quality of life, the VPSN views Commissioner Herbert's motion as an important step to ensure that the city is able to provide an equitable array of quality parks and other community facilities for all citizens of the city. We hope that all Commissions will offer their support to this initiative.

Thank you for allowing us the opportunity to offer our support for this motion. Please feel free to contact me should you have any questions. I can be reached by email at shauna@vancouverpublicspace.ca.

Yours truly,

Shauna MacKinnon Coordinator, Greenspaces Working Group Vancouver Public Space Network

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