



Canada's Capital Greenbelt Master Plan

National Capital Commission November 2013

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Message from the Chief Executive Officer



It is with great pleasure and pride that I present the new Master Plan for the Greenbelt of Canada's Capital. Canada's Capital is rich today because of bold and courageous decisions made by those who came before. Natural treasures such as our publicly owned shorelines, Gatineau Park and the Greenbelt are part of the unique identity of Canada's Capital and are undeniable pillars of the Capital's cultural and natural heritage.

This Master Plan replaces the highly regarded 1996 Plan, and is the culmination of five years of intense and considered effort. I would like to thank and recognize the contribution of the general public, the Public Advisory Committee, City of Ottawa, stakeholders,

partners and study team members to this important document. Their input helped to refine the orientation and directions of this Plan. Comments and suggestions provided by the NCC's Advisory Committee on Planning, Design and Realty and Board of Directors were also key to strengthening the Plan throughout the process.

Canada's Capital Greenbelt is a gem found within the heart of the Capital. Here, nature, agriculture, recreation, research, discovery and environmental stewardship come together, in the most ecologically diverse, publicly-owned landscape to be found in an urbanized area anywhere in the world. The Greenbelt hosts a number of natural areas where residents and visitors can enjoy year-round recreation. It possesses great potential to become a national showcase in environmental leadership and sustainable agriculture, and a setting where ecological connections are expanded so as to further strengthen the biodiversity of natural areas. The Greenbelt also hosts federal institutions and facilities of national significance that benefit from a secluded location.

This Master Plan sets out a long-term view. The Plan will guide the decisions of the next decade in a way that ensures the sustainability of Canada's Capital Greenbelt. Natural environment is the Greenbelt's primary role, followed by secondary roles for sustainable agriculture and Capital experiences and recreation, and a tertiary role for facilities. Natural and cultural heritage features will be conserved and the Greenbelt will become even better known and valued as a place that contributes to the overall sustainability of Canada's Capital Region, where people can enjoy nature, discover our heritage and sample fresh, local food. The lands and features of the Greenbelt will continue to contribute significantly to a sustainable way of life for present and future residents.

By approving this Plan, the NCC is making a commitment to continue to plan and manage the Greenbelt with great care, and to partner with others to ensure achievement of the actions that are essential to ensure sustainability of the Greenbelt and Canada's Capital. The NCC will continue the dialogue with Canadians to ensure that, together, we work to safeguard this jewel.

I thank you for your interest in the planning and conservation of Canada's Capital Greenbelt, and urge you to join us in making the vision of this Plan a reality.

Jean-François Trépanier Chief Executive Officer



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Foreword

Canada's Capital is rich today because of bold and courageous decisions made by those who came before. Natural treasures such as our publicly owned shorelines, Gatineau Park and the Greenbelt are part of the unique identity of Canada's Capital and are undeniable pillars of the Capital's cultural and natural heritage.

The Greenbelt, introduced over 60 years ago to shape the character and beauty of the National Capital, is now part of the region's vast network of natural spaces. It is a place of sensitive natural areas, healthy local food, agriculture, research, forests, water and play, symbolic of the vast and diverse landscapes of Canada. Covering almost five percent of Canada's Capital Region, the Greenbelt is significant because of its location, size and role in providing a place for residents and visitors to experience nature and a breath of fresh air.

However, the Greenbelt faces many challenges. It is expected to respond to diverse and at times conflicting needs, and attracts considerable scrutiny due to the strict planning controls which govern land use and the urban pressures confronting it.

The previous and first Master Plan (1996), established land use strategies to provide recreation and attractive landscapes, to improve damaged and abandoned lands, to secure natural spaces and to support agriculture and forestry. This Plan takes into account the extent to which the Greenbelt is presently meeting these objectives and looks ahead to where the Greenbelt could be in 2067. The Plan renews and expands upon the original vision for the Greenbelt so that future generations of Canadians can continue to enjoy a superior quality of life in Canada's Capital.

Canada's Capital Greenbelt has strongly influenced - and continues to shape - the overall character of the Capital Region. The Greenbelt encircles much of the oldest urban City of Ottawa communities¹. Its size of 20,600 hectares (206 square kilometres) is equal to the urbanized area of Ottawa that it surrounds. In 2011, approximately half a million people lived within the inner urban area surrounded by the Greenbelt², representing only a slightly larger population than that of 1996. Another approximately half million people live within the City of Ottawa outside of the Greenbelt. Ranging in width from two to ten kilometres, the Greenbelt lies within eight kilometres of Parliament Hill and the heart of the Capital.

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¹ The urban area inside of the Greenbelt includes the former City of Ottawa and parts of the former Cities of Gloucester and Nepean. These local municipalities, as well as the others outside of the Greenbelt that all were part of the Region of Ottawa Carleton, were amalgamated to become the City of Ottawa in 2001. ² Statistics Canada. 2011.

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This magnificent, publicly-owned landscape exists thanks to past efforts to shape the future of the Capital. Without the vision and courage of those who planned and conserved the Greenbelt, many treasured landscapes would have been lost to the urban sprawl characteristic of many North American cities. Research and analysis of the Greenbelt's current condition reveal that these 20,600 hectares of forests, wetlands, farms and streams represent a rich and predominantly natural environment that hosts over 3.5 million visits per year for various recreational activities. Canada's Capital Greenbelt is unique in being the largest publicly-owned Greenbelt in the world and the most ecologically diverse landscape within an urban area. The ecosystem services provided by Greenbelt lands - such as fresh air, clean water, diverse habitat, food and timber, carbon storage and pollination, to name but a few - are significant and have an economic value that is not yet fully appreciated. One of the conclusions of this Master Plan process is that the Greenbelt could assume an even greater significance in the face of climate change, growing population, ecological connectivity and the need for a low carbon and ecological footprint economy. It can also contribute to a healthier society through the provision of space for active outdoor lifestyles and nutritious locally grown food.

This second Master Plan calls for more leadership and determination to enhance the benefits and services provided by the Greenbelt. The result will be a stronger national treasure that local communities appreciate as a vibrant natural environment that can be proudly passed on to future generations.

This Plan identifies opportunities to achieve the collaboratively developed vision and supporting goals. The NCC invites all those who have an interest in the management and conservation of this national resource to help strengthen the Greenbelt into the future.

The Plan provides context and directions for the Greenbelt's management starting at a high level, strategic perspective and moving through more detailed levels of information, ultimately arriving at site specific directions for each of the Greenbelt geographic sectors.

The **Foreword / Plan Format** describes the Greenbelt's relevance and explains how to read this Plan (this section).

The first section presents the **2067 Vision** for the Greenbelt.

Chapter 1, Introduction describes the purpose, general planning approach, audiences and Plan development process.

Chapter 2, Background sets out the Greenbelt's history, current state, Capital planning context, international positioning and future.

Chapter 3 reviews the Strategic Statements that support the Vision.

Chapter 4 illustrates the 2067 Greenbelt Land Use Concept.

Chapter 5, Land Designations translate the Concept into the directions for land use over the next 10 years.

Chapter 6, Greenbelt Policies provide additional guidance for accomplishing the Greenbelt Roles and Goals.

Chapter 7, Implementation presents the Greenbelt Sector Plans.

Chapter 8, Plan Administration describes the priorities and processes that follow approval of the Plan by the NCC Board of Directors.

Chapter 9, Conclusion summarizes the Plan's accomplishments.

Chapter 10, Glossary guides interpretation of the Plan content.

A number of **Appendices** provide supporting descriptive content to further document the key review findings and the Plan directions that will both guide interpretation over the 10 to 15 year life of the Plan and inform the next review process.





Greenbelt Vision

The Greenbelt Vision for 2067

The future vision or dream of what the Greenbelt should become is the anchor for building the strategic directions for managing the Greenbelt into the future.

Looking to 2067:

The Greenbelt will forever protect natural systems, agriculture and opportunities for outdoor recreation and education that will inspire Canadians and contribute to the sustainability and quality of life in Canada's Capital Region.

A key feature of this far-reaching vision is captured in the inspiration to Canadians and the contribution to the Capital's sustainability and quality of life that the Greenbelt will provide. In order to **inspire**, the Greenbelt will need to be truly great in demonstrating its roles and enhancing its prominence within the Capital. Human activities that occur within or touch upon the Greenbelt will all be moving towards the goal of sustainable development and management that is in harmony with natural features and processes, rather than at their expense or depletion. This will support a sustainable Greenbelt that will be able to contribute even more to the quality of life of future generations. The natural systems will be vibrant and healthy, a part of the greater ecosystem that demonstrates the ecological diversity of Canada's Capital landscapes and has stronger natural features, relative to 2013, that have rebounded or been actively restored from the human impacts of the past century. Diversified sustainable agriculture activities will move towards a "work within nature" principle to provide local food with strong community involvement. Greenbelt farming practices will decrease energy and chemical inputs and waste outputs while positively contributing to natural system processes. Visitors will find many diverse experiences throughout the Greenbelt, predominantly outdoor learning and recreation featuring the rich natural and cultural history of Canada. The facilities accommodated within the Greenbelt will also operate and perform sustainably, in harmony with natural, cultural and social features.

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Chapter 1

1.1 Purpose of this Plan

The Greenbelt is the responsibility of the National Capital Commission (NCC), a federal Crown Corporation that plans and regulates the development, conservation and improvement of federal lands in Canada's Capital Region in order that the character of the seat of government accords with its national significance.

The Master Plan is one of several coordinated policy and development documents that are prepared by the NCC to guide the planning and use of federal lands in the Capital. The *Plan for Canada's Capital*³ is the high-level strategic plan for all federal lands in the Capital, while master plans such as the Gatineau Park Master Plan (completed in 2005) and the Greenbelt Master Plan provide more specific policy direction to guide area planning, development, and management decisions. The strategic plan for the Capital provides high-level principles which are meant to reflect and guide the NCC's unique responsibilities in Canada's Capital. These principles reflect the importance of symbolism, places for all people, excellence in stewardship and design, liveability and resiliency, and coordination and collaboration.

The Greenbelt Master Plan is designed to incorporate these principles and provide strategic policy guidance for land use, programming and landscape character in order to ensure the long-term relevance and quality of the Greenbelt. This Plan also provides detailed guidelines and actions for specific sites through its seven sector plans.



³The Plan for Canada's Capital was approved in 1999; an update of this plan was in progress in 2013.

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Planning Tools An integrated land use planning approach allows for greater success of planning outcomes because of consideration of all aspects affecting the plan goals, process and implementation. The Master Plan applies to all federally owned Greenbelt lands and is intended to form the basis for all decisions relating to the Greenbelt commencing at the date of its approval. Other public agencies, such as municipal or provincial governments, are encouraged, though not required, to apply the provisions of this Plan to lands they own and to private lands within the Greenbelt.

The Master Plan takes an **integrated land use planning approach** that incorporates ecological, economic and social factors in Plan proposals and policies. The purpose of the Greenbelt and its roles are articulated at a national and regional level. While supporting the larger region in many ways, the Greenbelt in turn relies upon the surrounding environment to sustain the valued natural and human landscapes within it. The Plan accounts for land use relationships within and beyond the Greenbelt (including natural and recreational networks, rural areas, existing and future urban areas and transportation networks), and for relationships between the Greenbelt and other federal lands in the Capital. Consequently, the needs of the larger regional community that may affect the Greenbelt have been anticipated and provided for in such a way as to respect the Greenbelt's integrity. The reverse should also hold true - plans and actions occurring beyond the Greenbelt should respect Greenbelt interests.

The Master Plan will improve the quality of NCC planning and land management decisions, and thus serve Greenbelt stakeholders more effectively. It will enhance the many diverse benefits derived from the Greenbelt, and emphasize the continued careful stewardship of these important lands. Most importantly, the Master Plan represents an NCC commitment to Canadians to plan and manage the Greenbelt on behalf of present and future generations.

The Greenbelt Master Plan sets policies for:

- protected ecologically significant habitats;
- a connected system of natural lands;
- sustainable farming;
- Capital experiences, achieved through completion of a recreational pathway system and offering of visitor features such as trails, protected views and interpretation areas;
- Greenbelt profile and environmental leadership; and
- federal and non-federal facilities which respect the Greenbelt roles of Natural Environment, Sustainable Agriculture and Capital Experiences & Recreation and which demonstrate sustainable design and operations.

1.2 Interpreting the Master Plan

The following points should be kept in mind when using the Plan:

The Plan is different from municipal official plans. Land use is the basis of this Plan, as with municipal plans. However, the Master Plan goes farther as it provides guidance relating to landscape character, public programming, engagement and other concerns related to the planning and animation of the nation's Capital. In addition, this Plan guides land management, an activity not typically governed by municipal official plans, because the Greenbelt is owned and managed by public agencies.

The Plan protects future opportunities. Opportunities that are unlikely to be pursued in the short and medium term are referenced within the policies and management actions so that their intent is protected and the long-term potential of Master Plan proposals is articulated for completion by future generations.

The Plan is flexible. Given the wide variety of possible influences on the Greenbelt in the future, the Plan was developed to provide sufficient guidance for consistent decision making while remaining flexible enough to address changing contexts. It does so by first emphasizing the functions and values of different Greenbelt areas before prescribing supporting land uses. The Plan thus serves as a framework for decision making and not as a rigid blueprint.

The Plan builds from the general to the specific. The Plan begins by introducing the Greenbelt, with a brief overview of its history and present uses. Next, a philosophy and concept plan guides the use of the Greenbelt. A set of land designations elaborates the concept by describing a range of land functions, future characteristics, and activities for the Greenbelt. These land designations work together with policies to guide the location, development and management of uses, activities and specific features. More area-specific means to implement the Master Plan are described by way of plans and actions relating to seven specific geographic sectors of the Greenbelt.

The Plan is cross-referenced to enable users to obtain the necessary information efficiently and in a clear, concise form. Not everyone will need to consult the entire Master Plan to find an answer to a particular question. Throughout the Master Plan, the main roles of the concept are linked to the specific goals, policies and implementation strategies.

1.3 Users of the Master Plan

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CANADA'S

The Master Plan communicates the long-term direction for the Greenbelt. The NCC has the majority of responsibility for administering and implementing the Greenbelt Master Plan. The Plan will, however, also guide the actions of all organizations that influence the future of the Greenbelt. Specifically, the Plan will assist:

CAPITAL GREENBELT

NCC staff to:

Agence canadienne d'inspection des alir

Travaux publics et

Services gouverne

Public Works and

National Defence

al Airport hority

Government Services

Défens

Royal Canadian Mounted Police

Gendarmerie royale

Administration do

- coordinate the activities of various branches within the NCC;
- facilitate federal land use and design approvals and environmental effects analyses;
- manage real estate aspects of the Greenbelt portfolio, including the guidance of leasing agreements for NCC lands;
- undertake more detailed area, site and development plans;
- develop land management practices; and
- guide public programming.

Federal agencies with lands in the Greenbelt to:

- seek compatibility of their plans and activities with municipal plans;
- enhance the Capital role of their lands, over and above existing program contributions;
- guide development and management of sites in a manner consistent with this Plan; and
- obtain federal land use and design approvals.

Provincial agencies, municipalities and utility companies to:

- encourage integration of Capital and Greenbelt planning objectives for Natural Environment, Sustainable Agriculture, Capital Experiences and Recreation, and Facilities in the design and management of their lands, activities and projects; and
- ensure that their transportation, community servicing, land use and recreation plans respect and complement Greenbelt land uses, activities, and special features.

Public, private and not-for-profit organizations to:

support Master Plan directions with respect to location, management and public programming of lands they use and occupy.

The general public to:

understand and support the long-term direction for the Greenbelt, its role in enhancing quality of life, and the range of land uses and activities encouraged within it.











More specific information on how various stakeholders are affected by the Plan is found in Chapter 8: Administration.

1.4 Creation of the Updated Master Plan

The Greenbelt plays an important role in the Capital and at the same time significantly influences everyday life in the region. As a result, expectations for the Greenbelt's future are diverse and come from many sources, including the Canadian public, federal government and regional and local communities.

To obtain a comprehensive regional perspective, a number of local and site-specific plans were considered in the revision of this Plan. These include:

- the City of Ottawa's Official Plan (2008), Comprehensive Zoning Bylaw, and Community Design Plans;
- City of Ottawa Transportation and Infrastructure Master Plans (2008);
- Choosing our Future: Building a Sustainable National Capital Region (2012), (renamed "Framing our Future"), a joint initiative of the City of Ottawa, NCC and City of Gatineau;
- Pathway Network for Canada's Capital Region Strategic Plan (2006);
- Campus Master Plans for the Ottawa MacDonald Cartier International Airport, Queensway Carleton Hospital, Communications Research Centre, RCMP Technical and Protective Operations Facility; and
- City of Gatineau *Schéma d'aménagement* (2009).



The five main steps in the Master Plan review process were:



A. Existing Conditions Assessment

Steenbelt Master Plan Review Market - Name Steenberg Steenberg

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B. Development of a 50 Year Vision for the Greenbelt



C. Greenbelt Land Use Concept 2067



D. Land Designations, Policies and Sector Plans



E. Compilation and Approval of Updated Greenbelt Master Plan

Greenbelt Partnerships Many stakeholder groups provided thorough input throughout all stages of the review process, through meetings and submissions, enriching the Master Plan content. Reports are available that document the work for steps A to D, along with separate reports on the public consultation process and results⁴. A Commissioning Plan to implement the updated Master Plan directions will be completed after approval of this Plan.

The Plan review involved regular engagement with stakeholders to obtain input and feedback from all of those with an interest in the Greenbelt's future. At a regional scale, the consultation approach included thematic workshops and discussions, open houses, presentations and regular postings of updated information and requests for feedback on the NCC website. At a national scale, consultation included hosting a national workshop/forum to obtain expert and stakeholder input, online discussions with organizations and experts at key points during the review process, as well as sharing of information and receipt of feedback from the public via the NCC website.



⁴ All reports (2009-2013) completed during the review of the 1996 Greenbelt Master Plan are available on the National Capital Commission website under the section "Reports and Publications" http://www.ncc-ccn.gc.ca/about-ncc/reports-publications

Stakeholders that participated throughout the review included:

- Owners and tenants of federal facilities within the Greenbelt;
- Agencies with a stake or interest in Greenbelt lands through ownership, tenancy or legislative /policy roles (City of Ottawa, Conservation Authorities, Provincial Ministries of Natural Resources and Agriculture & Food, Infrastructure Ontario);
- The general public;
- The Public Advisory Committee, established to support the Plan process;
- The Greenbelt Coalition (multiple interest groups);
- Greenbelt agricultural tenants;
- Greenbelt commercial tenants;
- The NCC's Advisory Committee on Planning, Design and Realty; and
- NCC staff.

A Strategic Environmental Assessment (SEA), as required by federal policy, also informed the Master Plan process⁵. Comparison of the draft Plan to the Federal Sustainable Development Strategy, NCC Environmental Strategy and Framing our Future: A Plan for Sustainability & Resilience in Canada's Capital Region contributed to the refinement of the Plan directions.





Chapter 2

2.1 Evolution of the Greenbelt

The story begins shortly after World War II with the 1950 Plan for the National Capital prepared by Parisian architect-planner Jacques Gréber. Gréber's Plan guided the shape and development of the capital region for over half a century. It directed the establishment of the Greenbelt as a means to limit the extent of urban growth in the expanding Capital, to protect its scenic countryside, to create a connected system of natural areas and to provide a home for large public institutions. The Gréber Plan recommendations for a rural Greenbelt to surround the urban area of the Capital included:

- establishment of large properties for natural areas and government institutions;
- dedication of lands to agriculture;
- protection from undesirable development through regulations; and
- conservation of sites with outstanding scenic value, particularly those bordering lakes and rivers.

The Greenbelt was envisioned as part of "an organic system of parks and an uninterrupted network of verdure within the entire region" through "reservation of appropriate lands". Watercourses, urban parks, wooded areas and parkways or touristic routes were all described as part of this connected system of green.

Federal planners defined the limits of Gréber's proposed Greenbelt to encompass natural areas, many small farms, several large government institutions, such as the Connaught Rifle Range (now the Connaught Range and Primary Training Centre) and the Uplands (later Ottawa Macdonald-Cartier International) Airport, and other lands to allow for future institutions. The federal government, lacking local support to zone these lands as a greenbelt, decided to purchase them outright, starting in 1958. The majority of the lands were purchased by 1966 at an approximate cost of \$40 million in 1966 dollars. Roughly 40 percent of these lands were acquired through expropriation. Today, Canada's Capital Greenbelt is one of the largest and most contiguous greenbelts in the world, and the only greenbelt that is almost entirely publicly owned.

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For some of the new Greenbelt lands, the NCC entered into a 50-year forest management agreement with the Government of Ontario in 1961 which led to the re-forestation of abandoned and marginal farmland. The Pine Grove and Pinhey forests of today resulted largely from that initiative. By the 1970s, the significance of the Greenbelt's ecological areas had been recognized, and steps were taken to protect natural areas such as Mer Bleue and Stony Swamp. Also at this time, many walking and ski trails were created, and the Greenbelt began to be widely recognized as an accessible rural and natural oasis for outdoor recreation in the Capital.

The living landscapes within the Greenbelt and the lands beyond it continue to change. While the Greenbelt was originally intended to encircle and contain the urban Capital, rapid growth in the 1960s meant that Gréber's population forecast for the year 2000 was reached by 1970. Kanata was created in 1965, and it and the suburban communities of Orléans and Barrhaven grew up quickly, even before the inner city had filled out. Roads and other services have since been extended through the Greenbelt to serve these outlying communities. In 1974, 1,100 hectares of land were added to the Greenbelt to define a community proposed near Carlsbad Springs. This community was never built; much of these lands southeast of the Greenbelt consist of provincially owned natural features⁶. In 1975, Highway 417 leading to Montréal was completed through the eastern Greenbelt and more recently, in 1996, Highway 416 was extended through the southwestern Greenbelt.

2.2 The Greenbelt Today

Greenbelt management progressively improved with the adoption of *The Greenbelt*⁷ (1972), the *Management Plan for the Greenbelt*⁸ (1981) and the first *Greenbelt Master Plan* (1996). The understanding of Greenbelt landscapes and their integrated roles has evolved steadily since its creation. The biodiversity and area of the natural environment, as well as the overall size of the Greenbelt, have increased, recreation has become more popular, and efforts continue to establish viable Greenbelt farms. For example, since 1996, a total of 875 hectares of natural lands have been acquired within Mer Bleue Bog. Lands transferred from the Greenbelt consist mainly of areas conveyed to provincial and municipal governments for new roads (150 hectares in total between 1996 and 2009).

Land owned by the NCC represents approximately 75% of the Greenbelt and is dominated by natural areas, farms and forests. NCC Greenbelt lands also accommodate recreational, residential, commercial and institutional uses. Major uses in portions of the Greenbelt owned and managed by federal agencies other than the NCC include the Canadian Food Inspection Agency and Agriculture and Agri-Food Canada operations, two Natural Resources

 ⁶ Much of the area south of Carlsbad Springs and Mer Bleue is designated as part of the City of Ottawa Natural Heritage System; see 2008 City of Ottawa Official Plan and October 2012 Official Plan Amendment.
 ⁷ National Capital Commission. 1972. *The Greenbelt*. {a detailed compilation and analysis of the natural resources, agriculture, hydrology, recreational amenities, visual landscape and cultural features of the Greenbelt lands}.
 ⁸ NCC. 1981. *Management Plan for the Greenbelt*. {comprehensive plan for the management of the Greenbelt to ensure that all of its various resources are managed and developed in a coordinated way}

Canada research complexes, the RCMP Technical and Protective Operations Facility and various Department of National Defence (DND) installations. Most roads crossing the Greenbelt are owned by local or provincial governments, accounting for about 5% of the overall Greenbelt area.

With increasing urban intensification and suburbanization, the Greenbelt plays a very significant role in providing space for public education, information and programming activities, including cycling, walking and passive recreation. The public health benefits of this role are notable. There are over 3.5 million visits to the Greenbelt each year. One third of NCC-owned lands are leased to tenants for a variety of uses ranging from farms to municipally-run recreational facilities. Over 12,000 people work in the Greenbelt at federal facilities such as the DND Connaught Rifle Range and Primary Training Centre and Communications Research Centre at Shirleys Bay in the western Greenbelt, and the DND Canadian Forces Station Leitrim and RCMP Technical and Protective Operations Facility in the east. The Greenbelt is also home to over 1,000 people living in leased residences and farmsteads.



Greenbelt Success Despite rapid urban growth, Canada's Capital Greenbelt is one of the largest and most contiguous greenbelts in the world.



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The existing conditions assessment⁹ completed for the Greenbelt identified the following challenges and opportunities to be addressed within this Plan:

- Promote the Greenbelt as an environmental showcase for Canada's Capital;
- Enhance the Greenbelt as a recreational tourist destination for the Capital;
- Build upon the existing extensive protected land area of significant and diverse natural, agriculture and recreational features;
- Better define and simplify Greenbelt roles;
- Determine how to address future impacts resulting from the stresses of continuing adjacent urbanization;
- Increase the Greenbelt's ability to withstand expected changes in climate, water availability, invasive species, and land use;
- Maintain a sustainable balance amongst human, landscape and ecological needs;
- Provide specific policy directions, balanced appropriately with flexibility to achieve stated objectives; and
- Increase the national and regional profile of the Greenbelt by enhancing public knowledge.

The Greenbelt will continue to experience a normal process of evolution as national and municipal priorities change with the times. This Plan guides the diversity of Greenbelt land uses and landscapes so as to conserve and build on this Capital treasure to achieve the long-term 2067 Vision.

2.3 The Significance of Canada's Capital Greenbelt

The Greenbelt's extensive landscape reminds us how natural areas and farms have influenced the building of Canada and its Capital. The Greenbelt's significance for the Capital is expressed primarily through its natural heritage, and then through its cultural heritage. The future potential of the Greenbelt will be influenced by opportunities that may arise for its use in the future. The local and global influences of and on the Greenbelt are summarized in this section.

2.3.1 Our Global Environment

There is growing popular acceptance that people need to live differently if we are to continue thriving as a species. Sustainability, or the capacity to endure, is the evolving approach necessary to achieve the required shift in reducing human impacts upon world ecosystems. Sustainability provides a framework for humans to live and prosper in harmony with nature so that ecosystems will endure, rather than have human society live at nature's expense. Building a society in which we behave and live sustainably means that we do not borrow from our future quality of life or from that of our descendants¹⁰.

⁹ SENES Consultants Limited. 2010. Greenbelt Master Plan Review: Phase 1 – Step A Existing Conditions, Issues and Opportunities

¹⁰ John Dernbach. 2010. Agenda for a Sustainable America.

Recent analyses^{11,12} of human impact on the earth conclude that, as a global population, we are using up the earth's resources at a rate faster than they can be replenished (energy, food from croplands, forests, fish stocks). Recent solutions offered by sustainability experts to address our increasing overuse of "natural capital" focus upon building a global "green economy" within which "economic thinking embraces people and the planet". To respond to this global human impact, the Organization for Economic Cooperation and Development (OECD) proposed a global Green Growth Strategy¹³. These concepts for a green economy as listed below are reflected in this Plan:

- 1. **Redefine human success and prosperity** to include individual and societal wellbeing and use of natural resources within ecological limits
- 2. **Invest in natural capital** by protecting representative natural areas, restoring degraded areas, improving land tenure and management, and measuring and promoting the value of biodiversity and ecosystem services
- 3. **Invest in renewable energy and sustainable food** by providing renewable energy, energy efficient buildings and transportation systems, protecting productive lands, promoting sustainable food choices and providing equitable access to food
- 4. **Carefully plan land use**, considering the global availability of productive lands and waters and protecting and allocating them appropriately to ensure long-term biocapacity
- 5. Share limited resources of energy, water and food
- 6. Effect change through **collaborative decision making** by governments, businesses and communities regarding resource management.

The Greenbelt can continue to significantly contribute to and model the above concepts to help achieve a sustainable future for the Capital.

2.3.2 International Perspective

In the literature review of Greenbelts worldwide completed to support this Plan, other jurisdictions report objectives and challenges common to those of Canada's Capital Greenbelt. Primary common greenbelt objectives include protection and provision of natural environment areas that are connected and often augmented by adjoining parks or open space areas. Many greenbelts also aim to secure and maintain agricultural lands for local food supply. Most allow some community or government-oriented built facilities, with controls. The extent of controls on new built facilities varies, with all greenbelts facing significant development pressures to release lands for housing, commercial, industrial, transportation or institutional development.

¹¹ Wackernagel, M., Schulz, N.B., et al, "Tracking the ecological overshoot of the human economy," <u>Proceedings of</u> <u>the National Academy of Science, USA</u>, **99**(14), 9266–9271, (2002)

¹²The 2010 World Wildlife Fund (WWF) Living Planet report noted that for 2007, the most recent year for which data is available, humans' Ecological Footprint exceeded the Earth's biocapacity — the area actually available to produce renewable resources and absorb CO2 — by 50 per cent.

¹³ OECD (Organization for Economic Co-operation and Development). 2011. Towards Green Growth. This strategy responds to the results of the 2010 WWF report.

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Most international greenbelt experts envy Canada's Capital Greenbelt because of the public ownership which provides more control over how lands are planned, managed and conserved. Greenbelts in different countries tend to consist of predominantly or at least partly privately-owned lands, a situation requiring significant effort to develop and implement common greenbelt objectives amongst many partners.



During the visioning process for this Plan, greenbelt experts and stakeholders stressed the need for a long-term perspective, urging the NCC to think big and take full advantage of the efforts that led to the Greenbelt's creation and protection. One of the greatest accomplishments of Canada's Capital Greenbelt is that it exists. Recurring, dominant themes of this feedback stressed the importance of the connection of this landscape to nearby human and wildlife communities and the Greenbelt's potential as a model of sustainability. The Greenbelt should progress as far in the next 50 years as it has in the past half-century, since its articulation by Gréber in his 1950 plan. Canada's Capital Greenbelt in the world.

Lessons from international greenbelts applicable to Canada's Capital Greenbelt include:

- stable and simple governance supports greenbelt longevity;
- a clear planning context and vision are necessary for greenbelts to evolve and endure over time; a long-term view can help resist development pressures by expressing the increased value a current greenbelt will provide to future generations;
- greenbelts are valued as key planning tools for the 21st century; and
- collaboration and partnerships enable tremendous accomplishments in greenbelt conservation, restoration, promotion and contribution to community sustainability.



Key International Input

- Clear planning context and vision can help resist development pressures by expressing the increased value a current greenbelt will provide to future generations
- Collaboration and partnerships enable tremendous accomplishments in greenbelt conservation, restoration, promotion and contribution to community sustainability

*Choosing Our Future*¹⁴ was a joint initiative between the City of Ottawa, the City of Gatineau and the National Capital Commission. Its aim was to prepare Canada's Capital Region to be successful in meeting the challenges of the 21st century, by integrating sustainability, resiliency and liveability into all facets of the community. The resulting *Sustainability and Resilience Plan* notes that the "forces of change include a shifting global economy, resource scarcity, rising energy prices, a changing climate, new population dynamics, and unforeseeable events such as ice storms and other natural disasters". The Plan's directions can help to guide informed choices in responding to future challenges and in managing the long-term impacts of how we travel, where we live and how we build prosperous, healthy communities within Canada's Capital.

This Sustainability and Resilience Plan defines ten main strategies to a sustainable path. All of the theme areas connect with the vision and directions for the Greenbelt; the most pertinent relate to natural systems, local food and agriculture, water, and reduction of human impacts. The approach to plan implementation stresses that collaboration and partnerships are key to achieving a sustainable and resilient Capital. These are also important delivery mechanisms for the Greenbelt Master Plan.

A major part of the Greenbelt's contribution to quality of life and sustainability stems from the value of the Greenbelt's ecological goods and services. Their value is estimated at \$73 million per year¹⁵, and they consist of:

- goods (e.g. food, wood, fibre, biofuels),
- regulating services (water filtration, waste decomposition, climate regulation, crop pollination),
- supporting services (nutrient cycling, photosynthesis, soil formation), and
- cultural services (enriching recreational, aesthetic and spiritual experiences).

The Strategic Environmental Assessment (SEA) provides a more detailed comparison of how the updated Greenbelt Master Plan directions align with those of the *Sustainability and Resilience Plan* (see Appendix A).

¹⁴ City of Ottawa 2012. The Sustainability and Resilience Plan. The Sustainability and Resilience Plan, and the supporting Energy and Emissions Plan and Risk Prevention and Mitigation Plan, were received by the three participating organizations in 2012.

¹⁵ SENES 2013. Strategic Environmental Assessment for the Greenbelt.





NEW PLAN FOR CANADA'S CAPITAL GREENBELT

2.3.4 The Greenbelt and Defining Canada's Capital

The value and contribution of the Greenbelt to the identity of Canada's Capital stems from the following factors¹⁶:

- The Greenbelt was conceived as, and continues to be, a tangible expression of the federal government's desire for a Capital of outstanding character and beauty. The Greenbelt enhances the unique identity of Canada's Capital Region. As the urban area grows¹⁷, the Greenbelt's role in defining, beautifying and conserving nature in the Capital for the benefit of Canadians will continue to grow in importance.
- The Greenbelt is a cornerstone of Capital sustainability, offering many social and environmental benefits to visitors and residents. The Capital's growing population increasingly seeks out the Greenbelt's natural spaces, farms and pathways as places to enjoy nature, find good food and exercise. Sustainable land and building management practices make the Greenbelt a Capital environmental showcase.
- The Greenbelt is a living symbol of the natural and cultural landscapes that provide the foundation for much of Canada's inhabited areas. This diverse, predominantly rural landscape provides a fitting and symbolic setting for the capital of a country rich in natural resources and of a people who aim to use the land wisely. In so doing, the Greenbelt complements the wilderness of Gatineau Park and the urban Capital's parks, buildings and parkways as expressions of Canada's diverse landscapes. The Greenbelt also demonstrates our national commitment to stewardship of natural resources.
- The Greenbelt provides a setting for specialized research institutions that work to enhance Canada's international reputation. Leading and internationally-recognized public research organizations, such as the telecommunications work of the Communications Research Centre, are located in the Greenbelt. The research in energy, animal and plant disease, geomagnetism and telecommunications that occurs here, in the Greenbelt, is unique in Canada.
- With the current intensity of land use, the circumstances that led to the creation of the Greenbelt no longer exist, and it would be impossible to replicate the creation of such a greenbelt today. This irreplaceable landscape is a key legacy of efforts to create a distinctive Capital and *represents the most ecologically diverse landscape within a Canadian urban area*, and possibly within the world.
- As an important and original concept in Canadian and North American city planning, the Greenbelt provides a *unique and internationally significant demonstration of the value of natural and countryside spaces in shaping urban form* and improving the quality of urban life. By separating three large suburban communities from the inner urban area, the Greenbelt has influenced the living, work and recreation patterns of close to a million people and created an urban form that is unique in North America.

¹⁶ See Wackernagel

¹⁷ Capital Region population projected to be 1.8 million by 2060; *The Sustainability and Resiliency Plan*.

NEW PLAN FOR CANADA'S CAPITAL GREENI

N B E L T

2.3.5 The Greenbelt Within the City of Ottawa

The Greenbelt Master Plan aligns with the land use designations and policies of the City of Ottawa Official Plan (2008) and its supporting Greenspace Master Plan – Strategies for Ottawa's Urban Greenspaces (2007). The City's Greenspace Master Plan presents a vision, policies and objectives for greenspace in Ottawa to provide for adequate areas that are accessible, connected, high quality and managed in a sustainable way. The City works closely with local conservation authorities and the NCC to coordinate and improve regionally significant greenspace.

The City's Official Plan and supporting Master Plans for Infrastructure, Transportation and Greenspace, under review through 2013, will integrate relevant directions from the approved Greenbelt Master Plan. The location of City-identified natural systems features and policies has been considered within the Greenbelt concept, including the evolving connected natural heritage system, much of which extends through the City's rural areas. The City will be working in partnership with others, including conservation authorities and the NCC, to pursue a variety of conservation measures to accomplish long-term protection of the natural heritage system.

The City's policy directions for land use, infrastructure, transportation and greenspace network development have been considered in the updating of the Greenbelt Master Plan. The updated directions of this Plan were established through stakeholder discussions with particular attention given to transportation through a study of cumulative effects upon the Greenbelt¹⁸. Findings from this study were integrated into this Plan's updated infrastructure policies.

2.4 Anticipating the Future

In looking forward to 2067, it is expected that the Greenbelt and its place within the Capital Region will face challenges and changes that are both local and global. Human activities impact upon local ecosystems, the effects of which are becoming better understood and the means to lessen those impacts continue to evolve. At a global environmental scale, human activities are effecting climate change; these impacts are being observed in the Capital through changes in temperature, precipitation profiles and resulting species response.

A global influence also dominates the Capital's economic activities, whereby Greenbelt farms and federal government research must be competitive on the world stage. The flexibility, responsiveness and resilience key to the survival of ecosystems are also necessary in order for businesses to survive globally. As well, the environment of fiscal restraint faced by all governments in the 1990s continues today. Alternative means of funding and delivering programs and Greenbelt management will continue to be necessary.





Integrating with Canada's Capital The City of Ottawa, City of Gatineau and NCC Sustainability and Resiliency Plan for the Capital establishes a strong environmental vision with which the directions in this Plan for the Greenbelt are well aligned.

NEW PLAN FOR CANADA'S CAPITAL GREENBEL





Greenbelt Challenges The population of Canada's Capital Region increased by 23%, from 1 million people in 1996 to 1,236,324 in 2011. The estimated 2060 population for the Capital region is 1.8 million. The population of the Capital Region over the 15 year period between 1996 and 2011 increased by 23%, from just over 1 million people to 1,236,324 in 2011¹⁹. The 2060 population for the Capital is projected to be 1.8 million²⁰. Much of the growth within the City of Ottawa will be directed to communities adjacent to the outer edges of the Greenbelt, including Kanata, Barrhaven, Riverside South, Leitrim and the East Urban Community²¹. Demographically, the diversity of the region's population will continue to increase, as will the median age. These population changes will in turn increase demand for use of the Greenbelt for such pursuits as walking, nature interpretation and growing of food.

The nature and quality of the long-term benefits that the Greenbelt provides to the Capital will be influenced by the future growth of the Capital's urban communities. Downtown Ottawa-Gatineau will continue to dominate as an employment centre. Employment in the outlying urban communities is also likely to grow, but at a slower pace than in the central core. Although promotion and use of sustainable transportation modes such as public transit, walking and cycling, and alternative work arrangements such as telecommuting are projected to increase, reliance on the need for transportation infrastructure through the Greenbelt will continue²² in order to connect outlying suburban communities with the Capital core.

The Greenbelt provides residents of Canada's Capital Region with many quality-of-life benefits that will continue and are expected to be even more important in a future with more people and increased recreational and economic activities. As the urban matrix evolves and intensifies, the Greenbelt's significance will increase and become more important to residents and visitors as a place for nature, recreation and agriculture. Facilities such as trails, natural areas for interpretation and field trips, farm market gardens, access to waterways and equestrian centres will ensure continued access for pursuit of recreational, educational and fitness activities.

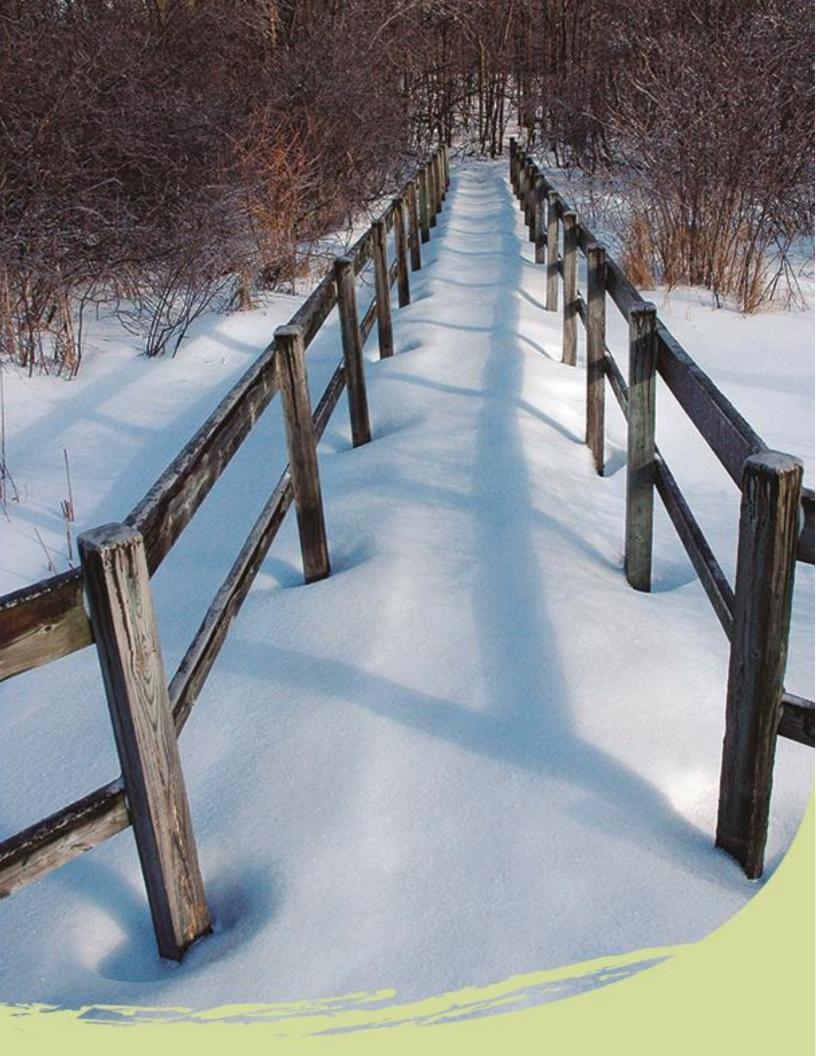
In the context of these anticipated challenges and changes, the Greenbelt's contributions to the long-term structure and vitality of the regional community were integrated into the Greenbelt land use concept and strategic statements that appear in Chapters 3 and 4.

¹⁹Statistics Canada. 2011. <u>http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/vc-</u> rv/index.cfm?Lang=ENG&VIEW=D&TOPIC_ID=1&CFORMAT=flash&GEOCODE=505

²⁰ City of Ottawa. 2012. Sustainability and Resilience Plan. Framing our Future.

²¹ City of Ottawa. 2008. Official Plan.

²² Joint Study to Assess Cumulative Effects of Transportation Infrastructure on the National Capital Greenbelt, AECOM. 2012.





Chapter 3

3.1 Land Use Concept

The Greenbelt concept embraces the Greenbelt vision, mission and roles and provides an overview of the desired functions and qualities of the Greenbelt. The concept planalso depicts the geographic areas where the four roles will take priority across the Greenbelt. This section describes the 2067 Greenbelt concept and how it will be implemented over the approximate 10 to 15 year horizon of the 2013 Plan and within the context of the next 54 years.

The concept plan is the first step in translating the Greenbelt's purpose and roles into reality; it displays the desired land characteristics and landscape qualities of the Greenbelt and provides direction for its long term use and management.

From a regional perspective, the appearance and function of the Greenbelt within Canada's Capital Region remains relatively similar to the picture articulated in the 1996 Plan. The Greenbelt is a large, living and critical component of the Capital's urban and rural infrastructure. Its natural systems and features are connected to, strengthen and are strengthened by natural systems and features beyond its boundaries. The Greenbelt's extensive natural and rural landscapes differentiate the character of the urban core of the City of Ottawa from the suburban communities outside the Greenbelt such as Kanata, Orleans, Barrhaven and Riverside South. It provides visitors and residents an attractive and symbolic gateway to the Capital and gives easy access to the Capital's nearby countryside with its diverse range of farm products, rural services and recreational experiences. There are also significant federal facilities established within the Greenbelt. These perform predominantly nationally significant functions and require a location within the Capital that is isolated from the urban population for activities such as the geotechnical and explosives research of Natural Resources Canada and the military training and communications monitoring conducted by National Defence. These diverse Greenbelt features will be managed in ways that support the conservation, improvement and development of Canada's Capital Region, enhancing quality of life while communicating aspects of Canada to Canadians who visit their Capital.

Three concept options were developed to meet the 2067 Greenbelt vision, through consideration of:

- increasing the area and strengthening the features, functions and overall systems of the Greenbelt's natural environment;
- enhancing and increasing the connections to the regional natural system;

Greenbelt Concept

The Land Use Concept displays the desired land characteristics and landscape qualities of the Greenbelt and provides direction for its long-term use and management. ■ strength

Figure 3.1 Progression of Concept to Land Designations and Sector Plans



Capital Context



Greenbelt Concept



Land Designations



Sector Plan

- exploring options to expand the Greenbelt area and to strengthen its overall resources;
- enhancing the consistency of the landscape functions and uses within the Greenbelt lands to improve their alignment with the Greenbelt roles; and
- strengthening the four Greenbelt roles (Natural Environment, Sustainable Agriculture, Capital Experiences & Recreation, and Facilities).

Overall, the updated content for the Greenbelt Master Plan integrates comments and input obtained throughout the review process and the 2007 evaluation of the 1996 Master Plan. The following summarizes the updates for the 2067 Greenbelt Concept:

- Enhance the Natural Environment as the primary Greenbelt role in order to contribute to the sustainability and quality of life in Canada's Capital Region. This includes conserving and enhancing the health and diversity of core natural areas and investing in the natural links that connect them so that the links become fully functioning over the long term.
- Expand natural areas within the Greenbelt by adding selected natural areas adjacent to the Greenbelt, such as lands south of the Airport that include the Leitrim Wetland as well as NCC-owned lands adjacent to Pine Grove Forest and Green's Creek.
- *Promote Sustainable Agriculture practices* and opportunities in order to provide economic returns now and for future generations.
- Increase the amount of land dedicated to Sustainable Agriculture within the Greenbelt (by reassigning 770 ha of lands formerly designated rural), to achieve a total of approximately 5,700 ha of land that will be characterized by smallscale operations of varied crops and livestock (28% of the Greenbelt area).
- Connect the Greenbelt to the regional ecological network, to significant Ottawa natural features such as Carp Hills, South March Highlands and the Cumberland Forest, and across the Ottawa River to protected lands within the City of Gatineau such as agricultural reserve lands, Gatineau Park and McLaurin Bay.
- Connect the Greenbelt Pathway and trails to the Capital Pathway Network to provide access to varied recreation destinations where landscapes, natural areas and farms of the Capital can be experienced.
- Maintain a Facilities role for the Greenbelt that is last in the hierarchy of roles:
 - *No new federal facilities are permitted* and improved policies will guide the expansion and management of those that exist.
 - Recognize the National Defence facility on Carling Avenue, the Queensway Carleton Hospital and the Nepean Sportsplex as edge facilities which interact with both Greenbelt and urban landscapes.
 - Maintain existing Non-federal facilities and prohibit the establishment of new sites.
 - Encourage phase-out of existing facilities at the end of their life cycle, followed by re-naturalization of the subject lands.

3.2 Capital Context

The 2067 concept provides a Capital and regional perspective for the Greenbelt. It features a regional natural environment and agricultural resources that offer opportunities for connection and strengthening of the Greenbelt. It highlights the built-up areas of the region that frame and sometimes constrain the Greenbelt roles of natural environment, sustainable agriculture and Capital experiences and recreation. This Capital view of the Greenbelt also recognizes the importance of and depicts ecological connections to significant regional natural features beyond the Greenbelt. These "connections" could be accomplished through timely partnerships with agencies, communities and landowners to secure their long-term function. The result would be a strengthened Greenbelt, and formulation of the originally conceived "emerald necklace" through extending fingers that connect the Greenbelt's core natural areas across the Ottawa River through Gatineau to Gatineau Park, and through elongated connections that follow water and land corridors and connect to significant land features throughout the region and beyond. Figure 3.2 illustrates the Concept, positioning the Greenbelt in its Capital context.

The Greenbelt is recognized as contributing significantly to the achievement of a sustainable community, in this review of the 1996 Plan, and in the Capital planning initiatives of Horizon 2067 and Choosing our Future²³. The Greenbelt concept aligns with these evolving directions for Canada's Capital.



²³ City of Ottawa. 2012.

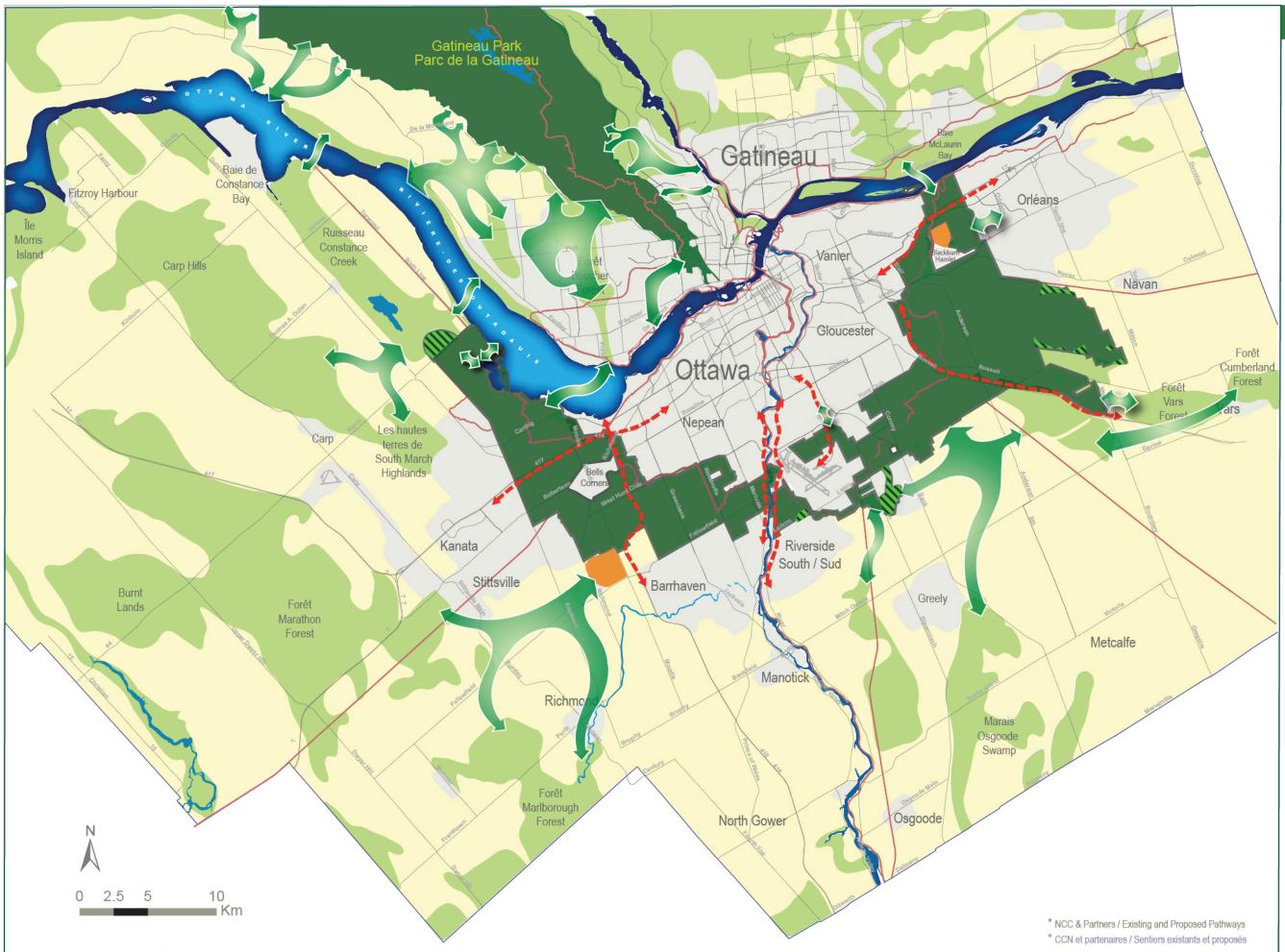


Successful Greenbelt Management

Partnerships and stakeholder engagement are key to future Greenbelt management and a chievement of short, medium and long-term goals. As presented in Chapter 2, people within the Capital and around the world recognize that, as more people live in cities, urban environments need to become more sustainable. Cities that have Greenbelts are assigning higher value to them as they strive to manage the pressures of continued urban growth. Cities without Greenbelts are looking to establish or grow the "green" spaces that they do have. The strength, size, connectivity and diversity of the 20,600 ha of landscapes that comprise the Greenbelt represent an increasingly identifiable and valuable feature of Canada's Capital and the backbone of the connected Capital greenbelts envisioned by Gréber. The future Greenbelt should be celebrated for continuing to evolve over the next 54 years as progressively as the benefits it has brought to the Capital over the past 60 years.

Conservation and strengthening of the Greenbelt ensures that future generations will inherit its system of contiguous natural spaces, healthy agricultural lands, and important ecological attributes, that together function as an essential transition zone between city and countryside. While this effort will be led by the NCC, the greatest opportunity to realize the vision for a healthier Greenbelt for future generations, as set out in the vision, will build upon the support and participation of the broader community and regional stakeholders.

The 20,600 hectare Greenbelt belongs to the people of Canada. Compared to other Greenbelts that tend to have more privately owned than public land, the opportunities are vast to build upon the progress of the past 60 years that led to the Canada's Capital Greenbelt of today. Figure 3.2 Greenbelt Concept, Capital Context



NCC



Greenbelt Concept Capital Context

Concept de la Ceinture de verdure Contexte de la capitale

Capital Arrival & Scenic Entry Accès à la capitale et entrée panoramique

> Capital Pathways * Sentiers de la capitale *



Additions Ajouts

Special Study Areas Zones d'étude spéciale

Urban Area Zones urbanisées

Connecting Natural Areas Zones naturelles connexes

Agriculture / Rural Agriculture / Rural



_

Ecological Corridors Couloirs écologiques

Greenbelt Limits Limites de la Ceinture de verdure

National Capital Region Boundary Limite de la région de la capitale nationale





3.3 Details of the Land Use Concept

In addition to setting a regional context for the Greenbelt, the long-term concept builds on the approved vision for the Greenbelt, details the scope of land uses for the future Greenbelt system, and provides the framework for how the NCC and its partners will proceed to accomplish the vision. It also reflects the strategic directions presented in Chapter 4, and public and stakeholder feedback.

More fully elaborated, the Concept for the 2013 Greenbelt Master Plan, illustrated in Figure 3.3, presents a future Greenbelt that is:

1. **Connected**, primarily as a natural system whereby core natural areas within the Greenbelt boundaries are linked to one another through well-functioning ecological linkages and to regional natural features outside the Greenbelt through ecological corridors that extend along watercourses and naturally vegetated land pathways. Connectivity is accomplished in the concept by:

- natural areas within the existing Greenbelt boundaries that are strengthened and expanded in area, including enhancements of Greenbelt core natural areas in terms of function, areal extent and ecological linkages across the Greenbelt, and through the addition of forest plantations to the Greenbelt's Natural Environment and management of these forests to become diversified habitats over time;
- inclusion in the Greenbelt of the segment of the Rideau River that passes through the Greenbelt;
- identification of ecological corridor areas that will be further defined through future study. These corridors extend from the Greenbelt's core natural areas to significant regional natural features that contribute to the Greenbelt. The approximate location of ecological corridors and the regionally significant natural features to which they connect the Greenbelt are outlined as green connecting arrows and regional natural features on the concept map. Partnerships will be actively pursued with other agencies having an interest in natural heritage system maintenance and with landowners in the areas of interest. Agreements with landowners or pursuit of other measures could ensure long-term retention of these lands as part of the regional natural heritage system. This concept element builds a Greenbelt of extending fingers that follow water and land corridors from the Greenbelt's core natural areas to identified regional natural features; and
- improvement of the Greenbelt's connections to adjacent communities, mainly through the connected recreational pathways that extend from the Greenbelt system to the surrounding City and Provincial pathways. Pathways of the regional network that connect to the Greenbelt pathway are shown on the Capital Context map, Figure 3.2.

2. Strengthened, through focus on Four Greenbelt Roles - *Natural Environment, Sustainable Agriculture, Capital Experiences and Recreation, and Facilities,* through the following:

Improvement of the biodiversity, health and resilience of the Greenbelt Natural Environment by addition of selected significant natural areas immediately adjacent to the Greenbelt boundaries, dramatic enhancement of Greenbelt Natural Links (i.e. increase and rehabilitate natural habitat corridors that connect Core Natural Areas to each other and to regional natural features) and through partnerships for natural lands stewardship with other agencies, groups and landowners;

Re-designation of former Rural lands within the Greenbelt to Sustainable Agriculture lands; there is a resulting increase in the agricultural land base, to compensate for the transfer of other agricultural lands to strengthen core natural areas and natural link functions (such as along stream corridors of Black Rapids, Watts and Green's Creeks, the Rideau River). Means to achieve sustainable agriculture include diversification of farm types, support for smaller farm parcels and ongoing integration of farm management practices that support biological processes of the Greenbelt's natural environment;

Selected parcels of the above proposed natural environment land additions also enhance visual resources and recreational opportunities to strengthen the Capital Experiences & Recreation role of the Greenbelt and enhance the connectivity of the Greenbelt Pathway to the regional pathway system;

Retention of existing Facilities within the Greenbelt, with a focus on federal facilities requiring isolation and location within the Capital. All facilities, federal and non-federal, will be encouraged to not exceed and, where possible, reduce the land footprint that supports built structures.

3. Evolving – The Greenbelt concept focuses on strengthening natural systems to mitigate the effects of continued urban growth, climate change and expected increased demand for the Greenbelt's recreational opportunities. Although not possible to visually depict on a map, the concept directs supporting policies that recognize that Greenbelt natural systems, farming, recreational and Capital experiences and facility functions and features will all change over time because the Greenbelt exists within an evolving landscape of human and natural pressures. The Greenbelt's land base and characteristics must evolve over time to stay ahead of these pressures to protect its roles in the order of their importance²⁴ – natural

²⁴ See Chapter 4 for further description of the Hierarchy of Greenbelt roles.

experiences and recreation, and the tertiary facilities role.

4. Known and Understood – A consistent message from stakeholders and the public is that the wonders of the Greenbelt are not known or promoted sufficiently. This challenge is addressed specifically through the Plan policies and recommended initiatives in Chapters 6 and 7 that will see expanded promotional and awareness efforts led by the NCC and achieved through partnerships with Greenbelt stakeholders.

5. Collaboratively Managed – The Plan recommends increasing the number and type of partnerships to support Greenbelt management. This approach will assist in addressing the continuing challenge of resource shortfalls. As well, the concept, strategic directions and supporting policies and guidelines guide how the NCC and stakeholders will work together, for example, in responding to potential future expansion of certain federal campus facilities.

3.4 Making the Concept Happen

Several challenges will be encountered in terms of achieving the Greenbelt concept. Resources for Greenbelt management and for acquisition of Greenbelt additions will continue to be limited. Costs for the management of assets such as houses, farm buildings and infrastructure continue to increase. The NCC has less control over Greenbelt lands owned by other parties. It will also be challenging to meet expectations that are associated with a vision and concept that look forward 50 years into the future. Finally, the use of a conceptual map of the future Greenbelt which does not precisely locate specific desired features and connections is a concern for some stakeholders who wish more clarity.

Some solutions to these challenges are referenced in this Master Plan. Resource availability is the predominant challenge, hence the emphasis on management in partnership with others. Examples of potential partnership opportunities include support to farmers, education and promotion activities, recreational pathway maintenance, and the development of shared support for protection of ecological corridors and regional natural features outside of the Greenbelt. Exploration of land stewardship opportunities with other parties will also help accomplish the goal of connectivity to natural area lands adjacent to the Greenbelt. Clarity regarding implementation of the concept will increase over time, through the land designations, policies, and guidelines and actions.

For the approximately 26% of Greenbelt lands that are owned by others, mainly other federal departments, a collaborative working relationship is an effective means to implement Greenbelt directions on these lands. The NCC has an established working relationship with the majority of these Greenbelt land owners who are committed to the Plan's directions. Their involvement in the Plan's review is expected to extend into the future and assist in Plan implementation.

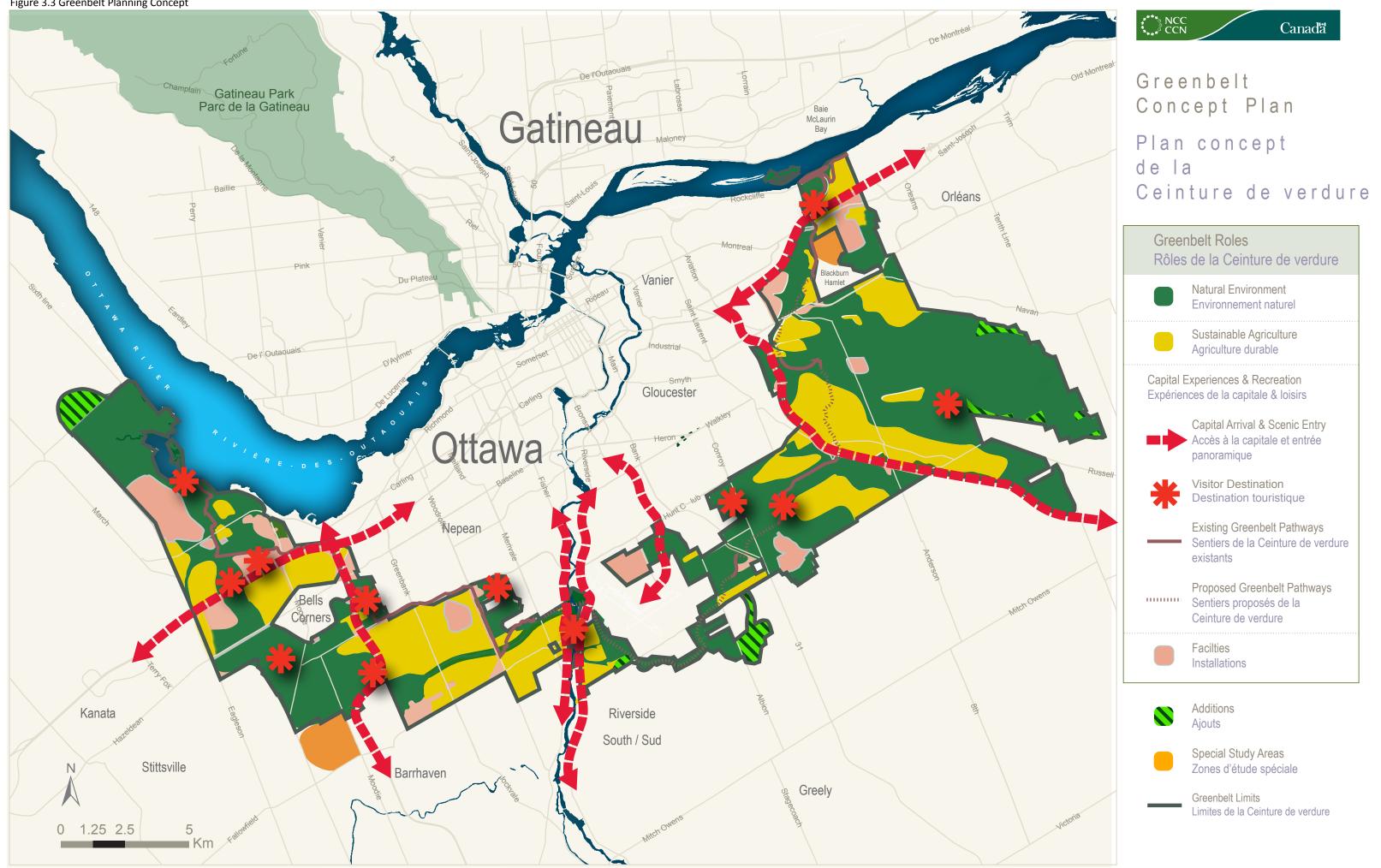
It is important to note that the Greenbelt depicted by the concept will be realized through many significant efforts and individual initiatives that require the full term of 54 years to



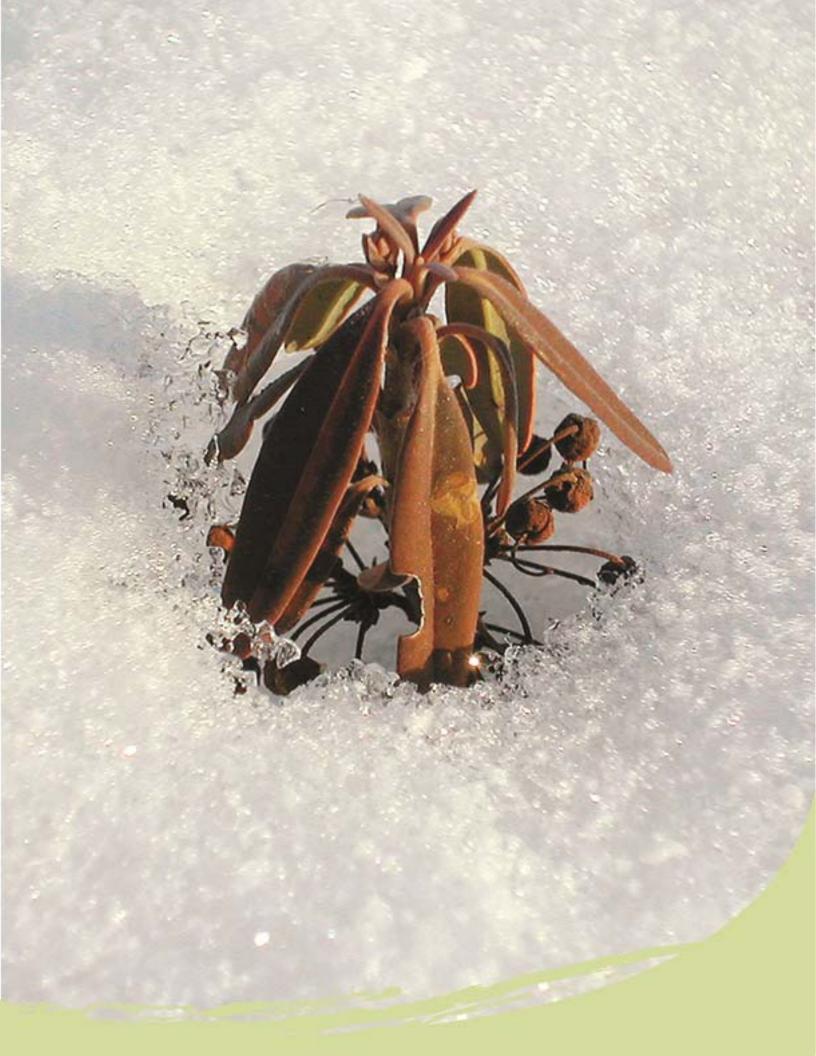
meet the 2067 vision. The 1996 Greenbelt Master Plan presented a strong foundation for the 2013 Master Plan. Implementation of the updated Plan will occur in a context of competing corporate priorities and demands for resources, and will be affected by a range of external factors. The implementation approach for the 2013 Plan will be critical to achieving the desired Greenbelt of the future, setting out the necessary project steps within short, medium and long-term periods over the 54 years. Greater precision and certainty will be required, for example, to identify that particular pathway location, or to strike the balance "on the ground" between creating an experience and protecting a resource. This Plan will help to guide those future management decisions.



Figure 3.3 Greenbelt Planning Concept









Chapter 4

4.1 Strategic Statements to Guide Our Way to 2067

A hierarchy of strategic statements supports the vision. Presented in Figure 4.1, these statements comprise the majority of content for the Greenbelt Master Plan. The strategic statements, from the vision to the goal level, are articulated in Figure 4.2. More detailed directional statements follow in this and the remaining Plan chapters.

The desires for the Greenbelt, as articulated by the community and stakeholders, have not changed significantly since the planning for and subsequent careful execution of Gréber's directions to establish a publicly-owned Greenbelt²⁵. The public and stakeholders expressed strong support for the 2067 vision and concept for the Greenbelt, and for even bolder future efforts to ensure its long term health.

The Greenbelt's position and significance within the Capital has changed somewhat since the approval of the 1996 Master Plan. The main difference is the intensity of pressure from surrounding urbanization, and correspondingly, the increasing importance of the reprieve from urban life that the Greenbelt provides to residents and visitors. Visionary in its conception, the protection and enhancement of the Greenbelt represents a significant accomplishment over the past 50 years. Not only does the Greenbelt provide a place to cycle, hike, experience nature, learn about our history, or buy fresh food for dinner, it has become increasingly important for the ecological services and quality of life benefits it provides. Connected to adjacent communities, it buffers the effects of urbanization, absorbing air and water pollutants, storing carbon dioxide and supporting biodiversity. The result is a combination of landscapes and benefits that is a signature of the Capital Region and unique in Canada.



Figure 4.1 Hierarchy of Strategic Statements

Vision: long-term view or dream of a desired future state

Mission: fundamental purpose and contribution of the Greenbelt to the Capital

Role: a more elaborate description of the mission, highlighting both site-specific and regional aspects of the Greenbelt Goal: a destination or aim; commitment to strategic action, by role, that will together achieve the vision **Policy:** adopted course or principle of action

Guideline: a rule, principle or criterion that guides action or behaviour

Action: a tangible project or program that requires proactive effort and leads to a product or outcome which contributes to the vision, goal and policy statements.

²⁵ All Greenbelt Master Plan public consultation reports are available on the NCC's website under "Reports and Publications": http://www.ncc-ccn.gc.ca/about-ncc/reports-publications.



Figure 4.2: Strategic Statements Fundamental Premises

- 1. The Greenbelt will remain a large, rural green space running in a continuous belt in roughly its present shape and location and it will accommodate natural linkages to regional natural systems and expansion of the Greenbelt area.
- 2. The Greenbelt will be an environmental showcase for Canada's Capital, balancing favourable ecological, social and economic factors, demonstrating leadership in environmental stewardship and facilitating use of environmental best management practices in all activities, facilities and land uses throughout the Greenbelt.
- 3. The Greenbelt will remain in the public domain.
- 4. The Greenbelt will be an integrated, recognizable and relevant feature in the Capital and for Canadians that:
- a. Provides a gateway to the Capital;
- b. Preserves and connects natural ecosystems within and outside the Greenbelt;
- c. Buffers and connects human activities;
- d. Promotes sustainable agriculture;
- e. Protects and promotes cultural resources; and
- f. Contributes to a healthy environment and to quality of life in Canada's Capital.
- 5. The Greenbelt will support federal facilities that require space, seclusion and a location within Canada's Capital Region.
- 6. The Greenbelt will continue to play an important national research role in the Capital.
- 7. Outreach, education, co-operation and multi-sector partnerships with citizens, organizations and governments are essential to the Greenbelt's success.
- 8. The Greenbelt will provide various opportunities for public education and promotion about Canada's natural, agricultural and cultural heritage and of the importance of ecosystem and resource conservation.

2067 Greenbelt Vision Statement

"The Greenbelt will forever protect natural systems, agriculture and opportunities for outdoor recreation and education that will inspire Canadians and contribute to the sustainability and quality of life in Canada's Capital Region."

The Greenbelt contributes to the identity and enhancement of Canada's Capital through its provision of natural and rural setting, valued ecological and cultural resources, sustainable agriculture, support for selected Mission federal facilities, and a diversity of uses, activities and experiences for Canadians.

ROLES

Natural Environment

Sustainable Agriculture

Provide opportunities for sustainable

and for future generations without

agriculture, providing economic returns now

interfering with natural processes and by

realizing benefits for Canada's Capital

Protect and enhance natural areas, ecosystems and habitats which are integral to the larger natural environment of Canada's Capital Region as the primary priority, in harmony with Canadians' aspirations for a healthy and resilient environment.

1. Biodiversity: Protect, restore and maintain high-value ecosystems and natural habitats by encouraging management approaches that consider the broader Greenbelt ecosystem and regional natural areas.

- 2. Linkages: Preserve and establish functional connections and corridors between and around buffer zones and significant natural areas within and beyond Greenbelt boundaries.
- 3. Water Resources: Protect water resources through ecosystem management to guide land uses, activities and facility design and operation within the Greenbelt and on lands adjacent to the Greenbelt.
- 4. Land Resources: Protect significant geological, landform and soil features in the Greenbelt.
- 5. Vegetation: Sustain and restore the long-term composition, structure, and dynamics of vegetation communities.

1. Greenbelt Agriculture: Encourage modern, diversified, sustainable and viable agriculture, rooted within the legacy of Canada's past.

- 2. Support for Farming: Support and partner with Greenbelt farmers to protect farm assets, to implement best management practices and to provide for long-term opportunities in agricultural and food production.
- 3. Relevance to the Community: Engage passionate people with the knowledge needed to increase farm diversification, visibility and the contribution of Greenbelt agriculture to local food, and agricultural experiences, resulting in greater relevance for the community.
- 1. Recreation: Encourage Canadians to experience the Greenbelt through a variety of low impact recreational activities that ensure protection of the natural environment and are delivered through a Greenbelt-wide system of amenities and programs that optimize internal and partnership resources.
- 2. Cultural Resources: Protect and promote the significance and contributions of past and current representations of Canada's rural roots and national institutions to the existence and health of our Greenbelt.
- 3. Public Access: Manage public access to the Greenbelt in a way that respects and protects its integrity, provides a variety of recreational experiences and promotes public health, safety and enjoyment.
- 4. Interpretation, Education and Research: Enhance visitor understanding of natural, agricultural and federal places and activities and cultural resources in the Greenbelt and their contribution to the Capital Region and Canada.
- 1. Federal Facilities: Support environmentally sound built federal facilities of national significance that require space, seclusion and location within the Capital and which align with the other Greenbelt roles; phase out existing federal facilities over time.
- 2. Non-Federal Facilities: Encourage existing built facilities to be environmentally sound and to adapt their structure and operations to support the other Greenbelt roles; do not allow new non-federal facilities and phase out existing facilities over time.
- 3. Sustainable Transportation and Infrastructure: Ensure that environmental best management practices are applied in the design, operation and maintenance of existing infrastructure.

Do not permit new infrastructure unless there is demonstration that there are no alternatives outside of the Greenbelt and no net loss will result to ecological or overall Greenbelt integrity.

condary

Primary

Ś **Capital Experiences & Recreation**

Offer a rich and diverse array of outdoor activities and Capital experiences that respect and promote the other roles of the Greenbelt.

Facilities

Region.

- Support a range of federal facilities with
- seclusion requirements and maintain
- existing community facilities, limiting new
- ertiary facility development to current built F
 - areas. Minimize infrastructure intrusions in the Greenbelt.

GOALS

The Greenbelt Plan's strategic statements in Figure 4.2 present the four main roles of the Greenbelt – Natural Environment; Sustainable Agriculture; Capital Experiences & Recreation; and Facilities.

The shifts in emphasis since the 1996 Plan described for the Greenbelt concept in Chapter 3 apply with regard to the Greenbelt roles. Refinement of the strategic statements includes:

- Protection and enhancement of the Greenbelt natural environment role as a primary priority involves strengthened and functional natural links and conservation of biodiversity;
- Evolution of the former role of a vibrant rural community that consisted of productive farms and forests to, respectively, an emphasis on sustainable agriculture whereby Greenbelt farms demonstrate economic, social and ecological viability, and on the management of plantation forests to support the natural environment role through diversification of habitats;
- Infusion of the concept of sustainability throughout the Greenbelt's strategic statements, into the vision, fundamental premises and role statements;
- A focus upon federal facilities while discouraging non-federal facility development on Greenbelt lands, particularly municipal roads or infrastructure, or non-federal types of facilities (institutional, commercial or residential).
 Federal facilities with unique requirements for isolation and location within the Capital remains one of the four key roles of the Greenbelt; and
- An increased emphasis on partnerships.

Together, these directions reflect the increased importance placed upon maintaining a cohesive and more robust Greenbelt in Canada's Capital over the long-term.



What is Sustainable Agriculture? Sustainable agriculture integrates environmental health, economic profitability, and social equity for sustainable and long-term agriculture.



4.2 Greenbelt Vision and Mission

This Plan began with the *vision* of what the Greenbelt should be in 2067. This future view is the result of a spirited collaboration of Greenbelt stakeholders, experts and an interested public. Much hope for the Capital is captured within this bold statement:

The Greenbelt will forever protect natural systems, agriculture and opportunities for outdoor recreation and education that will inspire Canadians and contribute to the sustainability and quality of life in Canada's Capital Region.

This vision statement is supported and further expanded by the *mission* that articulates the overall purpose of the Greenbelt:

The Greenbelt contributes to the identity and enhancement of Canada's Capital through its provision of a natural and rural setting, valued ecological and cultural resources, sustainable agriculture, support for selected federal facilities, and a diversity of uses, activities and experiences for Canadians.

In addition to further explaining the Greenbelt's purpose and how the 2067 vision will be accomplished, this statement represents a commitment of the National Capital Commission and its partners and stakeholders that the Greenbelt will enrich and heighten the profile of Canada's Capital over the long term, through the conservation of Greenbelt resources and fulfillment of its four main roles.



4.3 Fundamental Premises

The fundamental premises or principles of the Greenbelt articulate the basis for Greenbelt management and the corporate values and commitments which support the strategic directions of this Plan. These are consistent with many of the original premises for the Greenbelt and have been refined through stakeholder and public input, and consideration of the NCC's Environmental Strategy²⁶. The main refinements to the premises involve an increased emphasis on Greenbelt sustainability (integrated throughout the Plan directions), partnerships, education, promotion, protection of cultural resources, and conservation and enhancement of natural and human connections. There is less emphasis on a requirement for all activities in the Greenbelt to generate revenue.

The following fundamental premises provide the foundation for Greenbelt land use planning and management:

- 1. The Greenbelt will remain a large, rural green space running in a continuous belt in roughly its present shape and location and it will accommodate natural linkages to regional natural systems and expansion of the Greenbelt area. The current size of the Greenbelt is sufficient to maintain a diverse and functioning landscape of connected natural features, recreation areas and farms. Its location maximizes public accessibility from existing and evolving urban areas. The Greenbelt's form and size buffers sensitive uses more effectively than would smaller isolated areas, and enables a distinct, unified identity that contributes strongly to the Capital's green image. It is recognized that the Greenbelt must remain dynamic in order to thrive within the changing urban area by which it is surrounded. As a result, Greenbelt land uses may change. Its boundaries may also evolve in order to strengthen its purpose and main roles, and to ensure its continued relevance, integrity and quality.
- 2. The Greenbelt will be an environmental showcase for Canada's Capital, balancing favourable ecological, social and economic factors, demonstrating leadership in environmental stewardship, and facilitating use of environmental best management practices in all activities, facilities and land uses throughout the Greenbelt. Location of this rich and diverse resource within the Capital of Canada provides an optimal opportunity to demonstrate how the activities of human work and living can be designed and adjusted to occur in harmony with natural, food and recreation systems in order to ensure quality of life. This commitment to the long-term and progressive demonstration of environmental best practices will eventually touch all aspects of land, human activity and facility management within the Greenbelt. The demonstration of leadership has begun on NCC-owned lands where the level of control is strongest, first on self-managed lands and then to varying degrees on lands managed by others. Expectations for lands owned and managed by other Greenbelt stakeholders fit within the showcase model due to the types of activities practiced, such as research on renewable energy and communications

²⁶ NCC. 2009. Environmental Strategy.

excellence, and due to the commitments to sustainable development by federal organizations²⁷ and the City of Ottawa²⁸.

- 3. The Greenbelt will remain in the public domain, planned and managed for the broad public good. Federal ownership of the majority of the Greenbelt lands will remain the primary mechanism for achieving Greenbelt objectives. Public ownership of the Greenbelt will begin to be shared with other levels of government through the addition of natural lands owned by others such as the Province of Ontario, City of Ottawa or Conservation Authorities. This sharing is possible due to common objectives for landscape connectivity and natural resource management. Shared Greenbelt public ownership and management will also create efficiencies as all levels of government continue to experience budget constraints. All public agencies can also engage private organizations, individuals and community groups to explore use of land protection tools to extend and enhance natural connectivity to and beyond the Greenbelt.
- 4. The Greenbelt will be an integrated, recognizable and relevant feature in the Capital and for Canadians that:
 - a. Provides a gateway to the Capital;
 - b. Preserves and connects natural ecosystems within and outside the Greenbelt;
 - c. Buffers and connects human activities;
 - d. Promotes sustainable agriculture;
 - e. Protects and promotes cultural resources; and
 - f. Contributes to a healthy environment and to quality of life in Canada's Capital.

The natural and cultural heritage of the Greenbelt will be protected, strengthened and promoted so it is well recognized, understood and valued, as an entity, by visitors to and residents of the Capital.

- 5. The Greenbelt will support federal facilities that require space, seclusion and a location within Canada's Capital Region. National institutions with operations that require separation from the urban population and a central location within the Capital will continue to have a home within the Greenbelt, in keeping with one of the Greenbelt's original purposes²⁹.
- 6. The Greenbelt will continue to play an important national research role in the Capital. The Greenbelt has traditionally provided a home for research related to agriculture, advanced technology for energy and communications, and geology. In the future, the Greenbelt will enhance its research contributions to advance Canadian expertise in managing the environment, the urban/rural interface and other topics related to its roles.
- 7. Outreach, education, co-operation and multi-sector partnerships with citizens, organizations and governments are essential to the Greenbelt's success. Since its

²⁹ 1950. Gréber Plan.

²⁷ 2010. Environment Canada. Federal Sustainable Development Strategy.

²⁸ 2012. City of Ottawa. Sustainability and Resilience Plan.

inception, the Greenbelt has depended on partnerships for its management, development and use. The NCC, federal partners, other levels of government, private and not-for-profit organizations and individuals such as Greenbelt tenants, will continue to share a range of responsibilities. These partnerships develop a broad constituency for the Greenbelt and make it more interesting, while helping the NCC face the challenges of fiscal restraint.

8. The Greenbelt will provide various opportunities for public education and promotion about Canada's natural, agricultural and cultural heritage and the importance of ecosystem and resource conservation. Many of the services that the Greenbelt currently provides are directed towards or are enjoyed by local residents. Efforts will be made to enhance the use and management of the Greenbelt for the benefit of all Canadians. In particular, public education and promotion of Greenbelt heritage and conservation will be emphasized to a greater degree than in the past. Greenbelt visitor activities and facilities will continue to be accessible by being well known, barrier-free and affordable.

4.4 Greenbelt Roles

The five roles articulated in the 1996 Greenbelt Master Plan have been refined and updated to fit with aspirations for the Greenbelt of 2067. This has resulted in four roles which elaborate upon the vision and mission statements expressed for the Greenbelt. Similar to the vision, the revised role statements aim to strengthen and clarify the intent of the individual roles and thereby enhance the overall Greenbelt. The four roles are set in a hierarchy, as presented in Figure 4.2, to better reflect and meet the 2067 vision. The roles represent the main areas of intervention within the Greenbelt:

- Primary role of Natural Environment;
- Secondary roles of Sustainable Agriculture; and Capital Experiences & Recreation; and the
- Tertiary role of Facilities.

Natural Environment	- More buffer, wider links - Capital Ecosystem Network	
Sustainable Agriculture	 Local food, community gardens Diversified farming 	
Capital Experience and Recreation	 Regional integration of systems Increase awareness and visibility 	
Facilities		

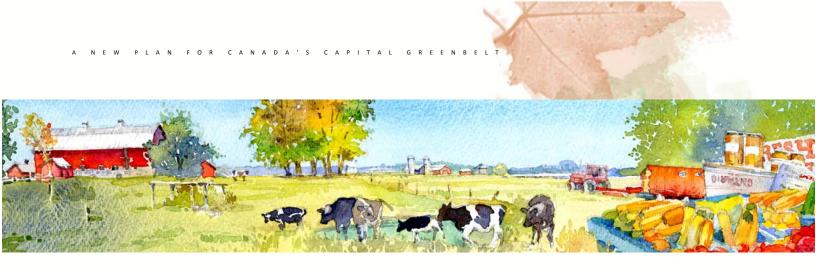
Figure 4.3 Greenbelt Roles



The Greenbelt role statements and descriptions are as follows:

Natural Environment

Protect and enhance natural areas, ecosystems and habitats which are integral to the larger natural environment of Canada's Capital Region as the primary priority, in harmony with Canadians' aspirations for a healthy and resilient environment. A large area of the Greenbelt consists of natural environments that feature ten valued ecosystems and habitats, including a Wetland of International Significance recognized by the Ramsar Convention of UNESCO. The Greenbelt also features several provincially significant wetlands and habitats designated as an Area of Natural and Scientific Interest (ANSI) due to their unique and rare assemblage of plants and animals. Natural resources in the Greenbelt contribute to supporting regional biological diversity, mitigating climate change and air quality concerns, protecting aquatic and terrestrial resources, safeguarding species at risk and associated habitats, and enhancing natural environment succession. This "natural infrastructure" provides important functions and benefits for the greater Capital Region, including panoramic views, solace, health and fitness, biodiversity and protection of vital resources, including plant and animal life, water, soil and air.



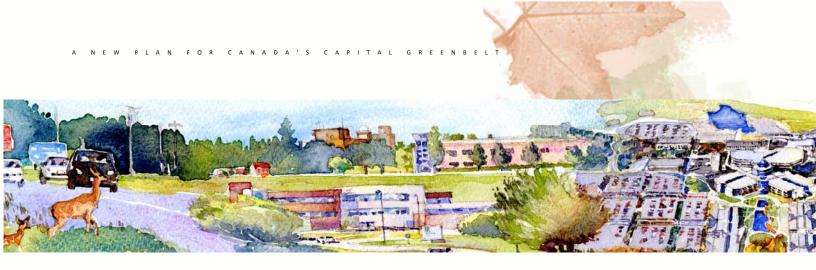
Sustainable Agriculture

Provide opportunities for sustainable agriculture, providing economic returns now and for future generations without interfering with natural processes and by realizing benefits for Canada's Capital Region. Agricultural lands encompass just over one-quarter of the Greenbelt's overall area, and include 78 properties owned by the NCC and leased to farmers. As well, a block of farmland in the southwestern Greenbelt north of Barrhaven constitutes the NCC-owned Greenbelt Research Farm. The Canadian Food Inspection Agency's Ottawa Laboratory for plant and animal disease research is located immediately adjacent to these lands to the west. The Greenbelt's agricultural lands feature high capability soils and farm assets such as houses, farm buildings, fences and tile drains. The productivity and proximity to the surrounding urban population of these farms presents the opportunity to increase production and contribution of local food to the Capital's community.



Capital Experiences & Recreation

Offer a rich and diverse array of outdoor activities and Capital experiences that respect and promote the other roles of the Greenbelt. Recreational facilities within the Greenbelt are enjoyed regularly by many local residents and occasional visitors to the Capital. This translates into 3.5 million visits per year to enjoy the wide-ranging mix of recreational opportunities and facilities, including: more than 150 km of existing trails for hiking, cycling, skiing, and snow-shoeing; facilities that include a boat launch, picnic sites, sports fields, community centre, campground, a national equestrian centre, toboggan hills, offleash dog-walking areas, and golf courses; cultural heritage sites such as the Log Farm, Lime Kiln, and Carlsbad Springs; and interpretation panels on 11 Greenbelt trails. Many Greenbelt trails connect to the regional recreational pathway network at the urban boundaries. Once completed, the Greenbelt Pathway will provide for a continuous recreational experience across the entire Greenbelt.



Facilities

Support a range of federal facilities with seclusion requirements and maintain existing community facilities, limiting new facility development to current built areas.

Minimize infrastructure intrusions in the Greenbelt.

One of the original roles of the Greenbelt was to host federal facilities that require physical separation from the urban population due to the nature of their operations. Examples of these national interest institutions include Department of National Defence, Natural Resources' Canada Centre for Mineral and Energy Technology (CANMET), Royal Canadian Mounted Police (RCMP), Industry Canada, Canadian Food Inspection Agency, and Agriculture Canada.

Acquisition of Greenbelt lands through the late 1950s and early 1960s meant corresponding acquisition of buildings and infrastructure. These include houses, institutions (e.g. churches, schools, the Regional Detention Centre) and existing municipal and regional infrastructure (e.g. roads, sanitary and storm sewer systems, water pipes, hydro lines, gas pipelines). Other non-federal buildings and infrastructure have been added to the Greenbelt over time, and include the former Nortel Carling Campus, the Queensway-Carleton Hospital, and transportation infrastructure (e.g. Highways 416 and 417, Transitways and Park & Ride facilities). Together, these constitute the "non-federal facilities" of the Greenbelt.

Looking forward, all facilities – federal and non-federal - will be carefully managed to control their footprint and ecological impact.

4.5 Goals

Each of the Greenbelt's four main roles is supported by a set of goals and corresponding policies. The goals and policies are the basis for the actions needed to ultimately achieve the 2067 vision. The goals and their supporting policies are presented in Chapters 5 Land Designations and 6 Greenbelt Policies.

Role	Goal
Natural Environment	Biodiversity
	Linkages
	Water Resources
	Land Resources
	Vegetation
Sustainable Agriculture	Greenbelt Agriculture
	Support for Farming
	Relevance to the Community
	Recreation
Capital Experiences and	Cultural Resources
Recreation	Public Access
	Interpretation, Education and Research
Facilities	Federal Facilities
	Non-Federal Facilities
	Sustainable Transportation and Infrastructure







Chapter 5

5.1 Greenbelt Land Designations

The Concept Plan is elaborated through the Greenbelt's Land Designations. The proposed land designations are a "classification" which assigns desired landscape character and uses to defined land areas across the Greenbelt. Areas are classified according to their desired role, whether to protect biodiversity, maintain agricultural resources, or accommodate permanent facilities. The land use controls will originate from the designation of the land upon which the feature occurs. These controls are specified in the land designation policies within this Chapter. The capability and suitability of these designated areas to host Capital Experiences and Recreation are also considered when making decisions about land uses. Three of the four Greenbelt roles are expressed through five land designations:

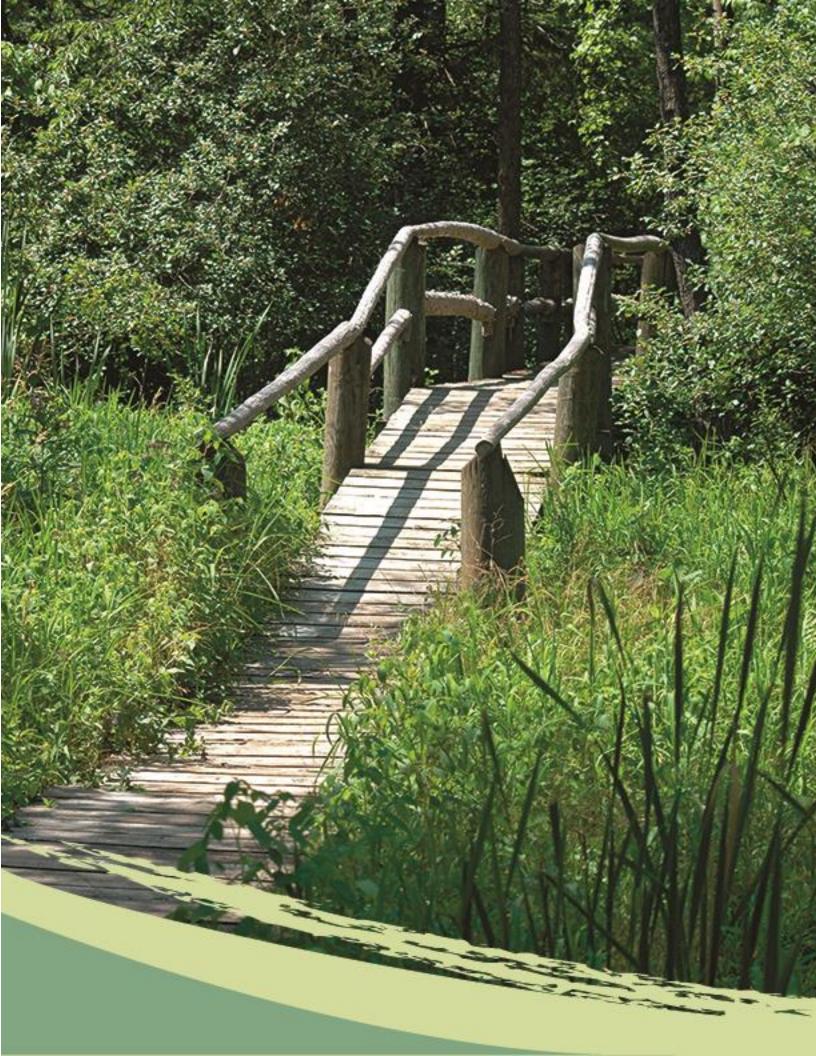
GREENBELT ROLES	LAND DESIGNATIONS	ROLE COMPONENTS
Natural Environment	1. Core Natural Area	
	2. Natural Link	
Sustainable Agriculture	3. Agriculture	
Capital Experiences and Recreation		May occur in all designations
	 Federal Facility and Operations 	
	5. Non-Federal Facility and Operations	
Facilities		Transportation Infrastructure is an overlay (see Chapter 7 Sector Plans and Appendix C)

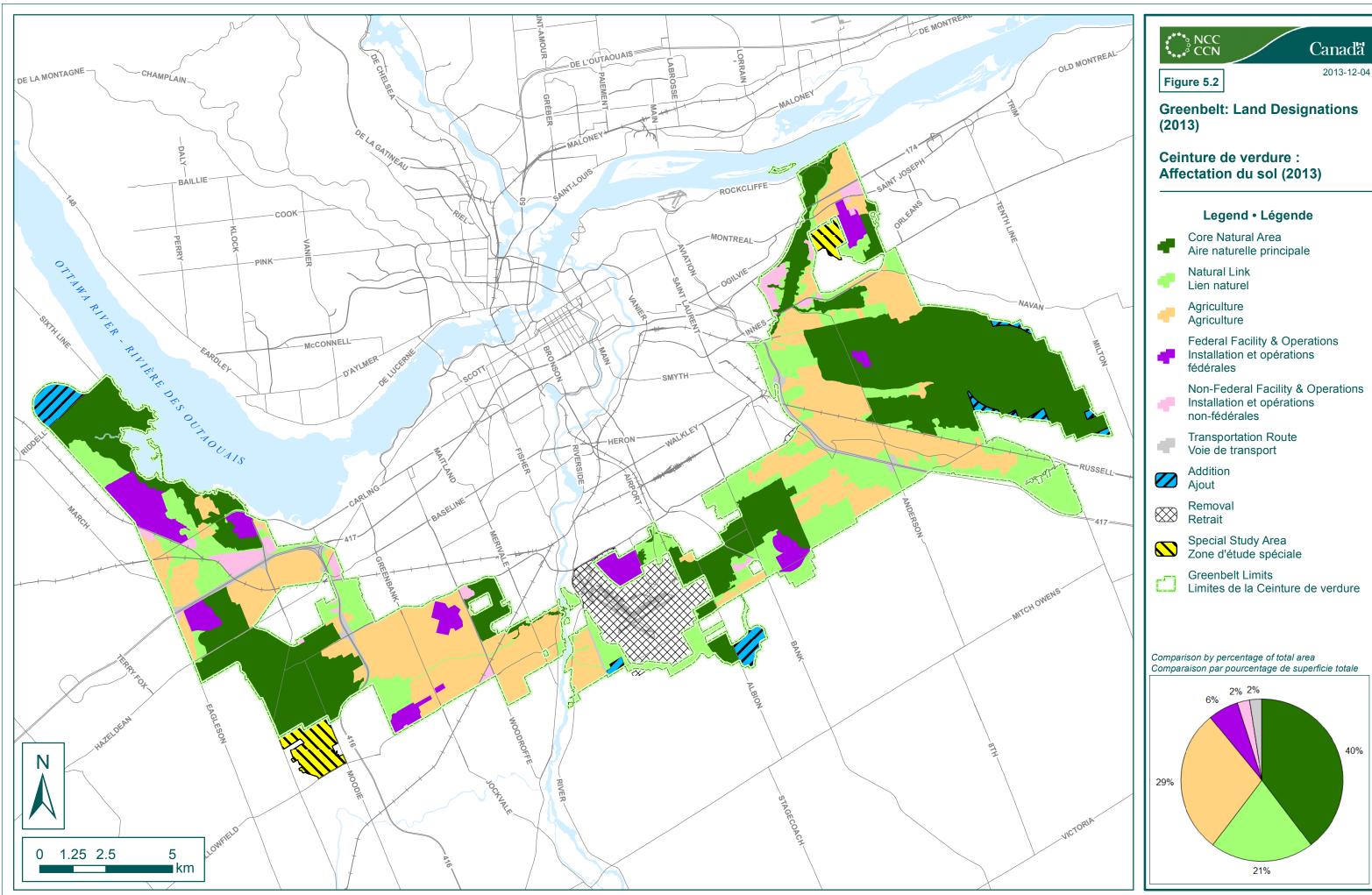
Figure 5.1 Greenbelt Land Designations

The Land Designations reflect the desired land uses at a landscape level. Each Land Designation will be managed according to its desired characteristics, as defined in the following sections. These criteria provide a basic framework for structuring land use, public activities and landscape character in the Land Designations.

Activities and features associated with the Capital Experiences and Recreation Role must respond to the intent of the Land Designation in which they are situated in terms of character, size, and public programming.

The following Figure 5.2 illustrates the assignment of land designations within the Greenbelt.















The Land Designations tables appearing within this chapter provide a description, primary objectives, desired experience and characteristics, policies, and a list of allowable and prohibited uses, for each of the five land designations. The Land Designations map and summary tables are supported by policies to guide stewardship and management. The land designation policies work with those of Chapter 6 for recreation, Greenbelt resources, integrity, promotion and leadership, ecological corridors, transportation, infrastructure, and residences.

Together, these policies are designed to help the National Capital Commission and all stakeholders achieve positive benefits and avoid negative impacts over the next 10 to 15 years, striving to achieve the Greenbelt vision and goals. By providing direction for all decisions related to the Greenbelt, they are meant to ensure that it becomes a showcase of best management practices that demonstrate leadership in stewardship and sustainability.

For interpretation of any specific policy, Plan users are encouraged to review all Greenbelt Policies in Chapters 5 and 6 for full understanding of the context within any specific policy direction.

5.2 Natural Environment

The Natural Environment role is the primary role in the Greenbelt, as defined through the 2067 Greenbelt Vision and Land Use Concept. Natural environment lands contain or support unique, threatened or endangered natural or cultural features, or are among the best examples of features that represent Greenbelt biodiversity. These vary in diversity: some contain globally and provincially significant wetlands; others contain rare sand dune ecosystems; while many support stream corridors or wooded areas. In all cases, Greenbelt natural resources contribute to the environment lands within the Greenbelt should function as a healthy ecosystem that is linked across the Greenbelt and connected by ecological corridors to the regional ecological network. The following policies provide direction to protect, enhance and restore these natural resource areas for the benefit of future generations.

This Plan identifies two Natural Environment designations – Core Natural Area and Natural Link. Together these areas occupy approximately 61% or 12,249 hectares of the Greenbelt. These land designations are defined according to the ecological functions they serve. Diverse, mature and significant natural features are designated as *Core Natural Area*. A *Natural Link* designation is applied to natural and regenerating areas that connect Core Natural Areas to each other.



Natural Environment Goals

The Core Natural Area and Natural Link land designations contribute to all of the Natural Environment Goals of:

1. **Biodiversity:** Protect, restore and maintain high-value ecosystems and natural habitats by encouraging management approaches that consider the broader Greenbelt ecosystem and regional natural areas.

2. Linkages: Conserve and establish functional connections and corridors between and around buffer zones and significant natural areas within and beyond Greenbelt boundaries.

3. Water Resources: Protect water resources through ecosystem management to guide land uses, activities and facility design and operation within the Greenbelt and on lands adjacent to the Greenbelt.

4. Land Resources: Protect significant geological, landform and soil features in the Greenbelt.

5. Vegetation: Sustain and restore the long-term composition, structure, and dynamics of vegetation communities.





Valued Natural Ecosystems & Habitats within the Greenbelt

- 1. Shirleys Bay Connaught
- 2. Shirleys Bay Crystal Bay
- 3. Stony Swamp
- 4. Pinhey Forest
- 5. Black Rapids Creek
- 6. Lester Wetland
- 7. Pine Grove Forest
- 8. Mer Bleue Bog
- 9. Chapel Hill's North Forest
- 10. Green's Creek

5.2.1 Core Natural Areas

The Core Natural Area designation is based on a natural heritage assessment by the National Capital Commission in 2010³⁰ and represents outstanding examples of Greenbelt natural, scenic, geological, scientific, ecological, floral, faunal and recreational value. These lands include Provincially Significant Wetlands, Areas of Natural and Scientific Interest (ANSI), a RAMSAR wetland and Significant Woodlands. Core Natural Areas provide large, relatively unfragmented habitats for species of regional, provincial or national significance as well as some species at risk. These areas comprise approximately 40 %, or 7,998 ha, of the Greenbelt and are designated as Core Natural Area on the Greenbelt Land Designations map.

As fulfillment of a commitment in the NCC's Corporate Environmental Strategy, ten (10) high-value ecosystems and habitats (HVEH) found within the Greenbelt are incorporated in the Core Natural Area designation in this Plan. These designations respect the framework of protected management area categories developed by the International Union for the Conservation of Nature (IUCN).

Table 5.1 presents the primary objectives, desired character, allowable and prohibited activities and uses, and policy directions for Core Natural Areas.

5.2.2 Natural Links

The Natural Link designation consists of lands that form ecological connections across land or along watercourses between Core Natural Areas. These areas may be natural or seminatural in character, providing many resources for species, but are not of sufficient size or quality to provide for all habitat requirements or ecological functions. Natural Links connect significant natural areas and allow for the free movement of animals and plants within the Greenbelt and in the larger regional environment for daily species movement, seasonal migrations, gene dispersal, habitat connectivity and species persistence. Protection and reestablishment of ecological connectivity along the identified Greenbelt Natural Links are key to maintaining the biodiversity of Core Natural Areas. Connections between the Greenbelt and regionally significant natural features are also required for ongoing ecological health; these connections are addressed in the ecological corridors policies in Chapter 6.

Lands designated as Natural Link comprise approximately 21% of the Greenbelt (4,251 ha). Table 5.2 presents the primary objectives, desired character, allowable and prohibited activities and uses, and policy directions for Natural Links.

³⁰ Del, Degan & Massé. 2010. Catalogue of the Valued Ecosystems and Habitats in the Greenbelt and Urban Lands.

Table 5.1 Core Natural Area

LAND DESIGNATION	CORE NATURAL AREA
DESCRIPTION	 Core Natural Areas represent ecologically sensitive habitats that contain or support unique, threatened or endangered species and natural features, or are among the best examples of these in the Capital Region. Consist of provincially and globally significant wetlands, habitat of threatened and endangered species, wildlife habitat, woodlands, sand dunes, Areas of Natural & Scientific Interest, fish habitat, escarpment geology. There are ten (10) Core Natural Areas (CNAs), encompassing approximately 40% of the Greenbelt.
PRIMARY OBJECTIVES	 Protect biodiversity and ecosystem health of the CNAs for the long term. Restore and enhance terrestrial and aquatic biodiversity of the CNAs. Enhance Canada's Capital through the conservation of natural visual landscapes.
EXPERIENCE / CHARACTER DESIRED	 Provide continuous areas of natural vegetation and landscapes, comprised of significant natural features that support healthy ecological processes. Allow for nature enjoyment while minimizing intrusion into sensitive features of <i>Core Natural Areas</i>. Support rich public outdoor recreation activities and nature interpretation at specified locations that are compatible with and which respect ecosystem processes and natural features.

MAIN SUPPORTING POLICIES /STRATEGIES

1. Manage activities to conserve and enhance biodiversity through the following strategies:

- a. Prepare a Greenbelt Natural Resource Management Plan.
- b. Participate with others to develop and implement recovery and management programs for unique, rare, threatened and endangered species and invasive species.
- c. Conduct scientific studies, regularly monitor indicators and thresholds to ensure the health of natural resources.
- 2. Require a net ecological gain for the Greenbelt from project proponents when land use changes or impacts are inevitable within *CNAs*; identified mitigation and restoration are to ensure that ecological assets and processes within the Greenbelt will achieve a net gain.
- 3. Restore and enhance terrestrial and aquatic biodiversity in identified impacted and damaged areas, with focus upon:
 - a. Improving key habitats for target species;

facility structures, as opportunities occur.

- b. Advancing the natural succession of plantation forests; and
- c. Curtailing the spread of invasive species through development and implementation of species-specific management protocols for those species that present the greatest threat and giving priority to effective control methods.
- 4. Protect the landform and landscape character together with the hydrological regime of *CNAs*, through measures such as controlling road density and achieving optimum habitat size.
- 5. Apply preventive management practices, notably regarding potential negative impacts from human activities.
- Continue to engage stakeholders in activities and processes that will enhance biodiversity and help all Canadians appreciate the Greenbelt (stakeholders include visitors, Greenbelt landowners, tenants, facility managers, the City of Ottawa, conservation authorities, academic institutions, and conservation and community groups).

ALLOWABLE ACTIVITIES AND USES	PROHIBITED ACTIVITIES AND USES
 Non-intensive, passive and/or linear recreational uses such as: 	New facility area
 Low-impact multi-use trails or boardwalks to support walking, hiking, 	 New stormwater management facilities
nature interpretation, cross-country skiing, snow-shoeing	Agriculture
 Wayfinding and interpretive signs 	 Motorized access along recreational trails
Ecological research	 Any other uses that would degrade natural
 Cycling on designated trails 	features and functions, fragment features or
• Geo-caching and orienteering events, in designated areas allowable by	undermine ecosystems. Seasonal restrictions may
permit	occur for some of the listed Allowable Activities
 Low impact federal training activities 	and Uses.
• Existing residences and federal facilities (i.e. fences, communication towers	
or antennas) that support facility operations without causing permanent	
ecosystem damage. Over the long term, remove residences and federal	

Table 5.2 Natural Link

LAND DESIGNATION	NATURAL LINK
DESCRIPTION	 The Natural Link (NL) designation applies to both natural and semi-natural terrestrial and aquatic features (e.g. riparian areas, ravines, regenerating vegetation). Natural Link lands provide or have the potential to provide many resources for species but are not of sufficient size or quality to provide for all habitat requirements or ecological functions. Initiative of this Master Plan to maintain and re-establish landscape connections between Core Natural Areas. Natural Link lands support ecological connectivity, a key component of greenbelt natural resource management, to allow the daily movement of species, seasonal migrations, dispersal, habitat connectivity and species persistence. The Natural Links comprise approximately 21% of the Greenbelt.
PRIMARY OBJECTIVES	 Protect existing linkages between <i>Core Natural Areas</i>. Establish or restore terrestrial and aquatic linkages in fragmented landscapes within the Greenbelt. Provide for public activities and interpretation away from sensitive features. Facilitate adaptation to environmental change, including climate change (resilience). Enhance Canada's Capital through the conservation of natural visual landscapes.
EXPERIENCE / CHARACTER DESIRED	 Provide continuous areas of natural and/or regenerating vegetation, habitat and function that provide a varied natural setting for recreation opportunities. Allow for nature appreciation while minimizing intrusion into sensitive features. Support public passive, low impact outdoor recreation activities and nature interpretation.

MAIN SUPPORTING POLICIES/STRATEGIES

1. Actively manage *Natural Links* to convert existing land uses to a natural state to support CNA health and connectivity. Support and encourage stakeholders to maintain and enhance the natural state and function of their *Natural Links*.

- 2. Maintain or restore riparian areas of naturalized vegetation along watercourses, targeting the most prescriptive version of Ontario or federal standards.
- 3. Establish widths of Greenbelt *Natural Links* that are at minimum 60 metres initially, working towards a minimum 250 m width over the longer term for target Natural Links.
- 4. Prevent fragmentation of designated natural links, providing connectivity elsewhere when facility security or structures (such as linear infrastructure) impact upon natural link function.
- 5. Restore fragmented ecosystems by providing for species movement and prohibiting land use changes that interfere with the function and health of *Natural Links*.
- 6. Continue to engage stakeholders to achieve the above objectives.

ALLOWABLE ACTIVITIES AND USES

- Non-intensive or linear recreational uses, such as nature interpretation, walking, cross-country skiing, snowshoeing
- Geo-caching and orienteering events, in designated areas allowable by permit
- Cycling & horseback riding on designated trails
- Ecological research
- Federal activities that support facility operations without causing permanent ecosystem damage
- Existing residences and facilities that support federal facility operations (i.e. small storage or testing buildings, antennas, communications towers, observatories) or other Greenbelt roles. For those that do not, phase out over time as opportunities occur.
- Existing interpretive or training facilities
- Existing off-leash dog areas
- Existing houses
- New interpretive or training facilities
- Non-intensive farming that respects natural features and functions.

PROHIBITED ACTIVITIES AND USES

- New facility areas
- Motorized access along recreational trails
- Any other uses that would negatively impact or interfere with existing and developing natural link functions. Seasonal restrictions may occur for some of the listed Allowable Activities and Uses.

5.3 Agriculture

Sustainable Agriculture is defined as a secondary role of the Greenbelt. Lands designated as Agriculture comprise extensive areas of existing productive farmlands, typically part of a farmstead, and are characterized by mostly class 2 to 4 soils which are capable of sustained production of different types of crops. Some farms support specialty crop land or long-term cultivation of Class 5 soils. Most farmlands have tile drainage and buildings necessary to achieve viable farm operations. The presence of natural hedgerows and forest stands contributes to natural linkages across the landscape, and the application of best farming practices allows for conservation of soil and water resources. While field crops currently dominate the agricultural landscape, it is foreseen that the number of farms and land area dedicated to horticultural crops, orchards, dairy farms and livestock operations will increase over time. The close proximity of a large urban population offers a considerable and diverse market potential and allows Greenbelt farmers to provide a variety of fresh and locally-grown agricultural products. Farming can be experienced and fresh produce from the Greenbelt can be enjoyed, through pick-your-own operations, roadside stands and Community Supported Agriculture.

Approximately 28% of the Greenbelt, representing 5,713 ha, is designated as Agriculture on the Land Designations map.

The NCC will encourage Sustainable Agriculture in the Greenbelt through strategies identified within the draft *Strategy to Implement Sustainable Agriculture in the Greenbelt of Canada's Capital Region³¹*. Examples of the support to be provided to farm tenants include: permitting ancillary farm uses that conserve the agricultural soil base for long-term use; investing in farm houses and buildings; encouraging community supported agriculture, organic farming and community gardens; and working with farmers and exploring partnerships with others to promote Greenbelt farm products and experiences. In recruiting new farmers, the NCC will seek those committed to sustainable agriculture characterized by farm diversification, agricultural product transformation, marketing, and environmental stewardship.

Table 5.3 specifies the primary objectives, desired character, permitted and prohibited uses on Agriculture Lands and the policy directions that support their achievement. The Agriculture policy directions and those respecting Natural Environment in Chapter 6 will also contribute to sustainable agriculture that respects and contributes to healthy natural features and processes.



Sustainable Agriculture Goals

Greenbelt Agriculture: Encourage modern, diversified, sustainable and viable agriculture, rooted within the legacy of Canada's past.

Support for Farming: Support and partner with Greenbelt farmers to protect farm assets, to implement best management practices and to provide for longterm opportunities in agricultural and food production.

Relevance to the Community: Engage passionate people with the knowledge needed to increase farm diversification, visibility and the contribution of Greenbelt agriculture to local food, and agricultural experiences, resulting in greater relevance for the community.

³¹ National Capital Commission. 2012. Draft Strategy to Implement Sustainable Agriculture in the Greenbelt of Canada's Capital Region, under development.

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Table 5.3 Agriculture

LAND DESIGNATION	AGRICULTURE
DESCRIPTION	 Sustainable agriculture consists of extensive areas of productive farmlands, typically part of a farmstead, and characterized by class 2 to 4 soils capable of sustained production of a variety of crops. A permanent, active, productive and environmentally-sensitive farm community is of Capital relevance. Field crops now dominate the landscape with some vegetable, orchard, dairy and livestock operations. The close proximity of urban and rural populations offers a considerable and diverse market potential and allows for Greenbelt farmers to provide a variety of fresh and locally-grown agricultural products. Approximately 28% of the Greenbelt is designated as <i>Agriculture</i>.
PRIMARY OBJECTIVES	 Practice sustainable agriculture which integrates environmental stewardship, economic profitability and social responsibility. Showcase the Greenbelt as a living example of Canada's farming heritage. Support productive Greenbelt Farms that contribute to a local and regional food supply. Diversify Greenbelt farming and provide opportunities for agri-tourism. Reduce area covered by large mono-culture farming operations and promote diverse agricultural lands. Enhance Canada's Capital through the conservation of rural visual landscapes.
EXPERIENCE / CHARACTER DESIRED	 Prioritize production of food for people as the primary use of Greenbelt farmlands. Support diversified farm and production types. Demonstrate environmental land stewardship. Feature agri-tourism, agricultural research and education. Provide opportunities for community participation in farming.

MAIN SUPPORTING POLICIES/STRATEGIES

- 1. Maintain or establish conditions for farms to be more economically, environmentally, and socially viable.
- 2. Encourage the desired types of farm and agricultural practices:
 - a. Promote farm best management practices to conserve soil and water resources and promote biodiversity while ensuring farm productivity and viability.
 - b. Apply a tenant selection process to identify farm candidates able to deliver sustainable and locally relevant agriculture, with priority given to food production.
 - c. Create new small farm sites using adjoining houses and selected land parcels within the Greenbelt.
 - d. Facilitate value-added activities on Greenbelt farms and establishment of more organic farms and community gardens.
- 3. Protect and expand farm assets and built infrastructure:
 - a. Revise farm leases in order to promote long term sustainable farm development.
 - b. Conserve and improve selected heritage farmsteads for modern farm use and permit integration of new farm buildings where a need for an updated facility is identified.
- 4. Direct those agricultural activities not requiring high capability soils for food production to locate on lower capability soils.
- 5. Enhance visibility of the Greenbelt farm sector and help visitors appreciate the region's farming culture and rural heritage.
- 6. Support farm tenants in resolution of conflicts that arise between normal farm operations and neighbouring urban land uses.
- 7. Engage Greenbelt farmers and build effective partnerships to achieve all the above objectives.

ALLOWABLE ACTIVITIES AND USES	PROHIBITED ACTIVITIES & USES
 Production of vegetable, fruit and animal food products Small- to medium-scale livestock and poultry operations Field crops in rotation, grains, oilseeds and forage crops Horticultural crops of fruit, vegetables, flowers and herbs Orchards, vineyards, pick-your-own operations/facilities, greenhouses Market gardens, community gardens, Community Supported Agriculture, organic farming and permaculture 	 Large livestock operations of over 200 animal units Production that has recognized negative impacts on soil and water
 Sale of agricultural products, value-added agriculture (transformation), agri-tourism, bed and breakfast, Farm-to-Fork dining (table champêtre) 	

- Animal husbandry such as equestrian establishments
- Residential, crop storage and livestock-housing facilities in support of the farm operation
- Renewable energy production, appropriately scaled, that supports farm operations
- Farm-related educational opportunities, community events and research

5.4 Facilities

Facilities are assigned a tertiary role that acknowledges a necessary function of the Greenbelt but one whose footprint will be reduced over time to reduce impacts on the other Greenbelt roles. The Facilities role is reflected in two (2) land designations: "Federal Facility & Operations" and "Non-Federal Facility and Operations". These lands occupy 8% or 1,679 hectares of the Greenbelt. Upholding one of the original purposes of the Greenbelt and consistent with the Greenbelt land use concept that acknowledges the contribution of Federal Facilities to the Greenbelt, the Federal Facility and Operations designation takes precedence over Non-Federal Facility and Operations.

Facility and Operations areas consist of existing buildings, parking lots, landscaped areas and surrounding campus or facility areas that are used for activities that directly support facility operations, such as training, monitoring or intensive recreation activities (e.g. golf courses, sports fields). The following land designations and policies guide the way these facilities are to be managed so as to be consistent with and complementary to the primary and secondary Greenbelt roles.

5.4.1 Federal Facility and Operations

Federal Facilities consist of federally owned and managed properties with specialized land needs within the Capital, such as seclusion, security or large operational areas. Lands that comprise built, landscaped and paved areas and surrounding lands that support facility operations are designated as Federal Facility and Operations on the Land Designations map, Figure 5.2. These lands comprise approximately 6% of the Greenbelt (1,196 hectares).

Table 5.4 specifies the primary objectives, desired character, permitted and prohibited uses within Federal Facility and Operations designation. This table also presents the policy directions to achieve the primary objectives, desired character and alignment of federal facility activities with the other Greenbelt roles. The policy directions will be implemented in collaboration with facility owners and managers.

A Built Area overlay is shown on the Federal Facility and Operations designations on the Sector Plans (Chapter 7) to provide additional direction. The footprint of this Built Area consists of existing buildings, parking lots, major roads and landscaped areas.



Facilities Goals

Federal Facilities: Support environmentally-sound built federal facilities of national significance that require space, seclusion and location within the Capital and which align with the other Greenbelt roles; phase out existing federal facilities over time.

Non-Federal Facilities:

Encourage existing built facilities to be environmentallysound and to adapt their structure and operations to support the other Greenbelt roles; do not allow new nonfederal facilities and phase out existing facilities over time. NEW PLAN FOR CANADA'S CAPITAL GREENBEL

5.4.2 Non-Federal Facility and Operations

Non-Federal Facilities are owned or managed by non-federal entities, such as municipal, provincial or private organizations, or individuals. These facilities include community recreational and institutional installations and public transit park-and-ride facilities. Lands that comprise the built site areas and surrounding lands that support these facility operations are designated as Non-Federal Facility and Operations areas on the Land Designations map, Figure 5.2. Table 5.5 specifies the primary objectives, desired character, permitted and prohibited uses within this designation. This table also presents the policy directions to achieve the primary objectives, desired character and alignment of non-federal facility activities with the other Greenbelt roles. The policy directions will be implemented in collaboration with facility owners and managers.

The lands designated as Non-Federal Facility and Operations comprise approximately 2% of the Greenbelt area (483 hectares).



Table 5.4 Federal Facility and Operations

LAND DESIGNATION	FEDERAL FACILITY AND OPERATIONS	
DESCRIPTION	 Federally owned and managed properties with specialized land needs within the Capital, suc seclusion, security, or larger operational areas. A Built Area footprint within the <i>Federal Facility and Operations</i> is delineated on the sector plan ensure efficient siting of existing buildings, parking lots and landscaped areas. Surrounding campus or facility areas outside of the Built Area footprint are used for federal active that directly support facility operations, such as training and monitoring. Approximately 6% of the Greenbelt is designated as <i>Federal Facility and Operations</i>. 	
PRIMARY OBJECTIVES	 Accommodate existing federal facilities of organizations of Capital importance with specialized land needs, i.e. seclusion or large operational areas. Enhance Canada's Capital by ensuring federal facilities in the Greenbelt contribute positively to the Greenbelt's visual landscapes. Establish and maintain Built Area footprint limits. Phase out federal facilities, over the long term and at the end of their life cycle, as opportunities occur. Provide specific direction for sustainable building management and design for edge facilities that interact with both urban and Greenbelt landscapes, such as the Public Works Government Services Canada (PWGSC) Carling Campus (future National Defence Headquarters). 	
EXPERIENCE / CHARACTER DESIRED	 Demonstrate functions that contribute to national security, research and well-being. Provide for educational and recreational activities within constraints of federal agency activities and required security. 	

MAIN SUPPORTING POLICIES/STRATEGIES

- 1. Accommodate needs of the existing federal facilities within the designated *Federal Facility and Operations* areas; allow facility expansion to occur only within the defined Built Area footprint (on the sector plans).
- 2. Ensure facility uses that complement adjacent Greenbelt land functions, character, design features and public programming and do not impact negatively upon other Greenbelt roles.
- 3. Encourage development of a Federal Facility Master Plan for each site to document the existing site facilities and operations, future changes and how the facility is integrated within the Greenbelt.
- 4. Require a Federal Facility Master Plan prior to any major expansion or redevelopment.
- 5. Maintain appropriate land buffers that restrict public access and uses in selected areas to safeguard from adjacent activities of federal facilities or other agencies.
- 6. When federal facility custodians determine that their facilities are surplus to the needs of the Government of Canada, explore the opportunity for voluntary facility phase-out and site re-naturalization.
- 7. Encourage federal facilities to apply environmental stewardship and best management practices in facility design and management, such as transportation demand management measures, and modern stormwater management approaches.
- 8. Encourage federal partners to explain their activities and roles of their facilities and the overall Greenbelt to visitors, Encourage them to introduce interpretation and events, and feature commemoration and public art along the public face of Federal Facilities near recreational pathways and along roadways.

	ALLOWABLE ACTIVITIES AND USES	PROHIBITED ACTIVITIES AND USES
•	Federal agency activities that require seclusion and space within the Capital	
•	Public recreation and education that is permissible according to the security	

- Public recreation and education that is permissible according to the securi and public safety policies of individual facilities
- Expansion of facilities within the defined Built Area footprint
- Research

Table 5.5 Non-Federal Facility and Operations

LAND DESIGNATION	NON-FEDERAL FACILITY AND OPERATIONS	
DESCRIPTION	 Facilities owned, leased and managed by others, such as municipal, provincial or private organizations or individuals. These include community recreational, commercial and institutional facilities, and public transit park-and-ride facilities. Approximately 2% of the Greenbelt is designated as <i>Non-Federal Facility & Operations</i>. 	
PRIMARY OBJECTIVES	 Permit existing non-federal facilities, encouraging them to complement the Natural Environment, Agriculture, and Capital Experiences & Recreation roles of the Greenbelt Enhance Canada's Capital by ensuring that Non-Federal Facilities in the Greenbelt contribute positively to the Greenbelt's visual landscapes. Provide specific direction for sustainable design for edge facilities that interact with urban and Greenbelt landscapes, such as the Queensway-Carleton Hospital and the Nepean Sportsplex. 	
EXPERIENCE / CHARACTER DESIRED	• Provide a Greenbelt context and opportunities for Greenbelt promotion and education to visitors	

MAIN SUPPORTING POLICIES/STRATEGIES

- 1. Limit non-federal facilities to those currently existing within the Greenbelt and prohibit new facilities on new sites.
- 2. Permit existing small-scale commercial and community recreational facilities and increase their contribution to other Greenbelt roles.
- 3. Allow minor expansion of existing non-federal facilities on the condition that the other Greenbelt roles (*Natural Environment, Agriculture* or *Capital Experiences & Recreation*) are not *negatively* impacted (neutral effect), and/or the minor expansion contributes *positively* to these Greenbelt roles.
- 4. Champion environmental stewardship and best management practices in facility management.
- 5. Pursue phase-out and site re-naturalization of non-federal facilities when they are determined to be surplus and have reached the end of their life cycle.

ALLOWABLE ACTIVITIES AND USES

- Facilities existing at the approval of the Master Plan
- Minor expansion of existing non-federal facility, consistent with above policies

PROHIBITED ACTIVITIES AND USES

- Major expansions of existing nonfederal facilities
- New facilities on new sites





Chapter 6

6.1 Greenbelt Policies

There are a number of features, activities and resources which can be found across the Greenbelt regardless of the land designation for their particular location. The policies of this Chapter apply to **all** Greenbelt lands, and build upon Land Designation policies in order to meet the overall intent of the Master Plan. These policies place natural environment first and promote ecologically supportive and environmentally-sound practices for farming, federal and non-federal facilities, and NCC operations.

This Chapter presents policies that apply to features of the *Capital Experiences and Recreation* network, Greenbelt resources, Greenbelt integrity, profile and leadership, facilities, ecological corridors, transportation, infrastructure, and residences.

6.2 Capital Experiences and Recreation Network

The Capital Experiences and Recreation role will enhance the overall visibility of the Greenbelt by making it more prominent, understood and valued by visitors to and residents of Canada's Capital Region. This secondary Greenbelt role helps fulfill the 2067 Vision "to inspire Canadians and contribute to the quality of life in Canada's Capital Region". A clearer identity and focus of the Capital Experiences and Recreation function will help raise the status and awareness of the Greenbelt as a premier Capital Experience. This is the only Greenbelt role that does not have a specific land designation as it transcends across the entire Greenbelt and can appear within any designation.

The special features of the *Capital Experiences and Recreation Network* provide a range of opportunities for Greenbelt recreation and experience. The current diversity of recreational facilities within the Greenbelt is enjoyed regularly by residents of and visitors to the Capital. This translates into 3.5 million visits per year during which the wide-ranging mix of recreational opportunities and facilities within the Greenbelt are enjoyed.

Hiking, cycling, skiing and snow-shoeing are pursued on more than 150 km of existing trails (located predominantly in the Core Natural Areas and Natural Links). Many Greenbelt trails connect to the regional recreational network at the urban boundaries, with a continuous recreational experience to be provided through the Greenbelt Pathway (to extend across the entire Greenbelt when completed). People use Greenbelt sites for launching watercraft, picnicking, camping, horseback riding and events (including at a national calibre equestrian centre), tobogganing, and off-leash dog-walking. Sports fields and golf courses are found in



A Connected Greenbelt

The Greenbelt Pathway will extend across the entire Greenbelt when complete, further facilitating access to the Greenbelt for the more than 3.5 million visits that take place each year. NEW PLAN FOR CANADA'S CAPITAL GREENBELT

the Greenbelt, as are community centres and cultural heritage sites such as the Log Farm, the Lime Kiln and Carlsbad Springs. Interpretation panels are located on 11 Greenbelt trails.

Recreational activities within the Greenbelt provide nearby residents and visitors the opportunity to directly experience Greenbelt resources without having any long-term impacts on them.

The *Capital Experiences and Recreation Network* links across the lands of the Greenbelt and connects to Visitor Destinations across Canada's Capital. The Greenbelt *Capital Experiences and Recreation Network* is comprised of:

- 1. **Capital Arrivals and Visitor Destinations**: Visitor Destinations include Recreational Facilities, Cultural Resources and Core Natural Areas.
- 2. Visual Landscapes and Resources: Scenic Routes, Panoramic Views and Greenbelt Edge.

A more detailed description of the *Capital Experiences and Recreation Network* and supporting policy directions appear in the following sections and on Figure 6.1. This network is related to the *Greenbelt Profile and Environmental Leadership* directions of Chapter 6.3 and is supported by the Core Natural Area and Natural Link land designation policies in Chapter 5.

6.2.1 Capital Arrivals and Visitor Destinations

The "arrivals and destinations" components of the Greenbelt *Capital Experiences and Recreation Network* identify specific locations where visitors may see and experience the beauty and diversity of Canada's Capital.

Capital Arrivals are the main transportation entryways – road, rail and air – by which visitors arrive in the Capital. These entrances feature a mix of natural and farm landscapes, with views of the urban area that provide people with a sense of the Capital. The quality of landscape presented to people entering the Capital is of prime interest, whether they arrive via automobile on Highways 416 and 417, by train from Montreal and Kingston, or by air via the Ottawa Macdonald-Cartier International Airport.



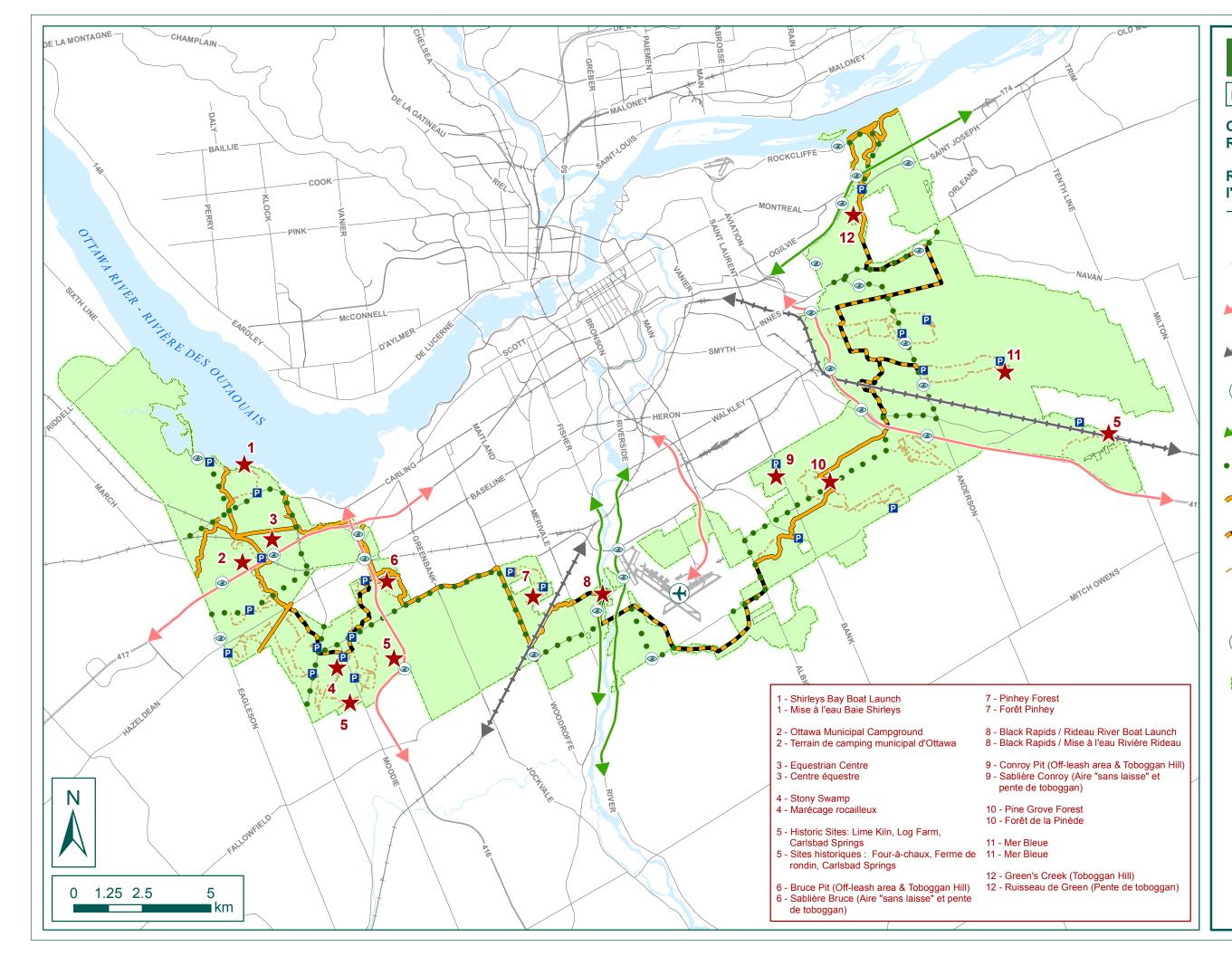
The quality of the Capital Arrivals is highly dependent upon the visual quality of the landscape, and is addressed in the following section. For example, the vistas of the Greenbelt along the western Capital Arrival of Highway 417 are very attractive. Select improvements could include more visual screening of park-and-ride facilities, and increased buffer plantings along drainage ditches and creeks. Such changes would also provide benefits in terms of erosion protection and wildlife habitat connectivity. Views from Highway 417 along the eastern approach to the Capital are not as impressive as those from the west because of the area's more level topography; however, this Capital Arrival does offer views of representative agricultural and natural landscapes. Additional vegetated buffers, in partnership with the City of Ottawa and landowners, could screen certain man-made elements, including hydro infrastructure and commercial and industrial properties.

Visitor Destinations within the Greenbelt offer places where people can stop or take a more leisurely approach to enjoying the Greenbelt environment at the many recreational facilities, and cultural and natural heritage features. The twelve Greenbelt Visitor Destinations identified on Figure 6.1 comprise desirable places for experiencing diverse natural areas, learning of area history and participating in the many recreational activities offered in the Greenbelt, from hiking, camping, boating to national equestrian events. Opportunities exist for enhancement of the facilities at these locations, developed in partnership with others, and for increasing their profile as Visitor Destinations.

The Greenbelt Capital Arrivals and Visitor Destinations are further described in Table 6.1. Policies to achieve the desired features and experiences are presented in this table.









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Table 6.1		Capital Experiences and Recreation
DESCRIPTION		 The Greenbelt's special features provide a range of opportunities for Greenbelt recreation and experience. Recreational activities within the Greenbelt provide visitors and residents the opportunity to experience and connect with its resources without having any long-term impacts on them. <u>Visitor Destinations</u> are sites which provide the opportunity to experience the Capital and the Greenbelt. <u>Capital Arrivals</u> introduce and welcome visitors and residents to Canada's Capital through a distinct, high quality landscape character with accompanying signage and facilities.
ECTIVES	Visitor Destina- tions	 Increase the quality and diversity of visitor destinations in the Greenbelt. Provide meaningful experiences for visitors to learn about and enjoy Greenbelt cultural and natural features. Connect the Greenbelt's key attributes to the Capital through completion of the Greenbelt Pathway Network.
PRIMARY OBJECTIVES	Capital Arrivals	 Provide a symbolic and recognizable introduction to, and exit from, the Capital and the Greenbelt along major roads, scenic routes and rail lines. Provide clearly marked and highly visible gateways to the Capital for visitors arriving from all directions. Create a sense of welcome and distinct entry to Canada's Capital, in keeping with the scenic attributes of the Capital and its natural setting.
EXPERIENCE / CHARACTER DESIRED		 Activities and programming will promote natural and cultural features as well as characteristics of the destinations. Activities will appeal to all ages and a variety of user types, and will be affordable. Features will include welcoming and promotional signage, design of complementary structures and landscapes that introduce the Greenbelt and Canada's Capital, and establishment of interpretive nodes to enhance visitor understanding and appreciation of the Capital and Greenbelt attractions. The Greenbelt will be better understood and known for its Capital and local recreational opportunities.
ALLOV ACTIV AND U		 Public access, enjoyment and understanding of each specific destination through pathways and trails Agri-tourism, research, educational and interpretive activities and opportunities Landscaping along infrastructure corridors

MAIN SUPPORTING POLICIES/STRATEGIES

- 1. Allow and facilitate a diverse mix of low-impact outdoor activities and experiences that minimize impacts on the natural environment (for example: walking, cycling, cross-country skiing, in-line skating, snow-shoeing, bird watching, geocaching and orienteering).
- 2. Communicate the importance of the Greenbelt through development of an interpretation strategy and communication initiatives.
- 3. Complete the Greenbelt Pathway.
- 4. Develop a Greenbelt visitor experience and programming strategy.
- 5. Prohibit activities and events that detract from low-impact activities or increase the existing human activities footprint.
- 6. Foster partnerships and co-operation with others to provide and promote low-impact recreational activities and experiences.
- 7. Limit existing high-impact recreational activities (e.g. sports fields, golf courses, off-leash dog parks, recreation centre), as identified on the sector plans, to their existing footprint and prohibit new high-impact recreational facilities and activities.

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6.2.2 Visual Resources & Landscapes – Scenic Routes, Panoramas & Greenbelt Edge

Visual resources include the distinct and visually appealing landscapes and features across the Greenbelt that are captured specifically through panoramas, scenic routes and the Greenbelt edge. The visual character of the Greenbelt is very important because of the role that the Greenbelt plays in fostering the iconic image of Ottawa as Canada's Capital. The preceding section notes the importance of high quality views along the designated Capital Arrivals. Also important is the visual quality of the Greenbelt as experienced by people moving about the Capital along Scenic Routes and when viewing Panoramas and the Greenbelt Edge during their daily activities.

Along the numerous other roads and pathways that cross the Greenbelt, there are many interesting farm and natural landscapes and identified panoramic views. In some areas, visual interest within the margins of roads crossing or bordering the Greenbelt could be improved, by planting hedgerows of naturalistic groupings of trees and shrubs. This could enhance the variety of views and support additional paths to enhance walking and cycling connections across the Greenbelt.

Landscape diversity and quality is further supported by the Agriculture policies in Chapter 5. Over time, as the Greenbelt draft sustainable agriculture strategy is implemented, large monoculture fields will reduce in size and more hedgerows could be introduced. More diversity of use within the resulting smaller fields would enrich visual interest. Enhanced variety of agriculture activity could also facilitate public contact through garden produce outlets, allotment gardens, gardening education programs, and demonstration of alternative farming and gardening techniques.

These Greenbelt features and overall Greenbelt visual quality will be protected and enhanced through the supporting policies presented in Table 6.2.



EW PLAN FOR CANADA'S CAPITAL GREENBEL

Table 6.2		Capital Experiences and Recreation – Visual Resources & Landscapes
DESCRIPTION		 The Greenbelt's visual appeal supports a range of opportunities for Greenbelt recreation and experience. <u>Scenic Routes</u> - Recreational pathways and scenic routes that provide the opportunity to experience a range of Greenbelt landscapes and attractions. <u>Panoramas</u> - Select locations present long-range high-quality views of Greenbelt landscapes. <u>Greenbelt Edge</u> - A distinct visible edge clearly delineates Greenbelt landscapes from adjacent urban areas.
lives	SCENIC ROUTES	 Provide scenic access to a variety of attractions through a diverse range of Greenbelt landscapes. Provide regional connectivity of the Greenbelt Pathway and trail system to the Capital Pathway Network.
PRIMARY OBJECTIVES	Panoramas	 Portray and express the character of the Greenbelt and its surrounding Capital context. Protect and enhance the scenic quality of the Greenbelt as an appropriate visual setting for the Capital and a visually distinct landscape that is recognizable as the Greenbelt.
PRIM/	GREENBELT Edge	• Distinguish the Greenbelt from neighbouring lands so that people are aware of the Greenbelt's location.
СНА	ERIENCE / ARACTER IRED	 Create a positive experience of the natural environment and farming areas. Provide key views of the diversity of the Greenbelt's natural environment and agricultural landscapes. Encourage appreciation of the Greenbelt's landscapes and their extent.
ALLOWABLE ACTIVITIES AND USES		 Public access, enjoyment and understanding of each scenic route and its representative features Land uses, features and characteristics that contribute to the positive image, landscapes, panoramic views and vistas of the respective sectors Public access, enjoyment and understanding of each specific destination through pathways and trails Agri-tourism. research, educational and interpretive activities and opportunities Landscaping along infrastructure corridors

MAIN SUPPORTING POLICIES/STRATEGIES

- 1. Rationalize the Greenbelt trail network so as to provide connections to the Greenbelt Pathway and Capital Pathways, a range of experiences, and access to Greenbelt Visitor Destinations and Views, and to avoid sensitive natural areas.
- 2. Increase the visual interest of large agricultural fields by planting naturalistic groupings of shrubs and trees along the edges and intersections of roads and encouraging farm diversification that will increase the variety of landscapes. See further details in the draft *Sustainable Agriculture Strategy*.
- 3. Improve the vistas of selected transportation routes, as identified in the sector plans, through use of context-sensitive landscaping.
- 4. Protect and enhance panoramas identified as medium and high quality (2008 Greenbelt Visual Assessment), as identified on the sector plans. This includes views within and extending beyond Greenbelt boundaries. Consult both 1992 and 2008 Visual Assessments to determine precise land areas and the range of approaches available to improve landscape quality.
- 5. Strengthen the recreational pathway links to the Capital Pathway Network outside the Greenbelt, for example, by enhancing trail and transit access from adjacent communities. See Map 6.1 and the Greenbelt Concept Map (3.3) for location of the Greenbelt Pathway and how this system connects to the Capital Pathway Network.
- 6. Maintain and enhance the visual character of landscape views from roadways, working in partnerships and using a variety of approaches. Employ measures such as strategic roadside tree planting, increased hedgerows, establishment of shelterbelts, woodlot and ravine restoration, compensation of tree canopy losses, vegetative screening, minimization of urban lighting, and infrastructure design. Assess each situation on its own merits to determine the most appropriate approach.
- 7. Develop guidelines for desired Greenbelt visual, aesthetic and scenic quality and address management of visual character and impacts considering such matters as transportation route views, billboards, lighting, and communication towers.
- Maintain and enhance the edges of the Greenbelt to demonstrate best management practices and to delineate the Greenbelt. Encourage neighbouring owners to emulate such practices. Reinforce a distinct Greenbelt edge through such means as roadside plantings and shielded lighting.



6.3 Greenbelt Resources

This section presents policies intended to guide the long-term protection and enjoyment of the natural environment, and cultural and visual resources of the Greenbelt. These build upon the land designations and policies.

6.3.1 Natural Environment

In addition to the natural environment policies within the *Core Natural Area* and *Natural Link* designations, the following policies apply to ecosystem management of lands across the Greenbelt, to support achievement of goals for biodiversity, linkages, water and land resources, and vegetation.

6.3.1.1 Water Resources

The Greenbelt includes many tributary watercourses of the Rideau, Ottawa and South Nation Rivers, as well as stretches of the Ottawa and Heritage Rideau Rivers. The Greenbelt also hosts significant land areas that comprise portions of the headwaters, and mid or lower reaches of twenty (20) sub-watersheds. The NCC partners with the three conservation authorities for the South Nation, Rideau and Mississippi Valley watersheds, the City of Ottawa, the Province of Ontario and Fisheries and Oceans Canada to understand, maintain, restore and enhance these watercourses. Many watercourses and valley lands are affected by adjacent and upstream urban development, as well as by industrial and agricultural activities.

The NCC's goal is to work with partners and stakeholders to protect, restore and enhance Greenbelt water resources. Water resources encompass the management of subwatersheds, headwater and aquifer recharge areas and hazard lands. The following policies will guide their management:

- a. Protect the aquatic, land, vegetation and forest resources within the Greenbelt through implementation of a watershed-based ecosystem management approach.
- b. Engage partners in ecosystem restoration efforts, enhancement of biodiversity and maintenance of healthy functioning of aquifer recharge areas, headwaters and waterways.
- c. Identify and prioritize opportunities for regeneration of watercourses to ensure that improvements occur where they are most needed in order to restore degraded water resource areas.
- d. Ensure that interventions in watercourses within the Greenbelt contribute to restoration and enhancement of the watercourse's overall ecological health.
- e. Adopt and implement the Rideau Valley Conservation Authority's (RVCA's) sediment and erosion control guidelines for projects on federal lands.
- f. Seek to improve the resilience of the Greenbelt's water resources to the effects of climate change.
- g. Partner with others to manage and report on water resource health and to continue to conduct innovative studies on water resources.



6.3.1.2 Land Resources

The Greenbelt's topography is relatively flat, and is comprised of a mix of sand plains, clay plains, organic soils, sand dunes and limestone bedrock close to or at the soil surface (in the area of Stony Swamp and towards Shirleys Bay). Topographic relief occurs mainly in relation to creek systems, the Rideau River and in the area of bedrock-controlled topography, including unique karst landforms in the western Greenbelt. Many valley lands across the Greenbelt have been identified as sensitive to disruption and erosion, particularly the Leda clays along Greens Creek and its tributaries. This land resource base supports the natural systems and agricultural activities that flourish within the Greenbelt. The NCC will work with its partners and stakeholders for the retention of healthy Greenbelt land resources.

The land resources of the Greenbelt will be protected through the following policies:

- a. Conserve the natural land base and topography required for fulfillment of the primary and secondary Greenbelt roles.
- b. Work with partners and stakeholders to reduce and mitigate flooding, geotechnical and fluvial geomorphological risks to Greenbelt ecosystems, properties and unstable valley lands. Consider ecological health, hydrology and stormwater management in an integrated manner.
- c. Prevent establishment of infrastructure, structures, development or site alteration within areas defined as "natural hazard lands" by the NCC and its partners.
- d. Encourage partners to respect natural hazard restrictions upstream of and adjacent to the Greenbelt.
- e. Support the securement of contaminated sites within the Greenbelt.
- f. Require that all projects completed within the Greenbelt are conducted in a sustainable manner to maintain the integrity of landforms.
- g. Promote knowledge of Greenbelt geology and landforms by identifying and interpreting these features across the Greenbelt.
- Allow extraction of mineral aggregate or non-renewable resources within the Greenbelt only within the Built Area footprint limits of Federal Facility & Operations Areas and within the existing Non-Federal Facility & Operations Areas.

6.3.1.3 Vegetation and Forests

The Greenbelt supports a large and diverse base of natural areas that represent a mix of landscapes found throughout those areas of Eastern Ontario that are not part of the Canadian Shield. As described in Chapter 5, natural areas in the Greenbelt consist of wetlands, forests, meadows and stream corridors. The Greenbelt's Core Natural Areas provide vital ecological services. They are irreplaceable reservoirs of native biodiversity. They provide a variety of groundwater and surface water enhancement benefits through headwater protection and form critical ecological 'stepping stones' across the Greenbelt and the urbanized portion of Canada's Capital Region. Restoration of degraded landscapes within the Greenbelt and beyond is often dependent on replacement populations that originate in such Core Natural Areas. They support and sustain a wide variety of special features including rare flora and fauna, unusual earth science features and high quality ecological functions. Maintaining the Greenbelt as a green oasis serves to produce many benefits (i.e.



What is a Heritage Forest?

A Plantation or a Natural stand that would resemble, in native species composition and size of trees, the original forests that existed along the Ottawa River prior to settlement.

A 2009 ground survey within the Greenbelt identified 15 areas that could be classified as Heritage Forest Stands. NEW PLAN FOR CANADA'S CAPITAL GREENBEL

water purification, absorbing air pollution and GHG emissions, cycling nutrients, providing habitat for rare or threatened species, and slowing stormwater flow, etc.) that will remain important as the Capital faces stresses such as climate change and increased urbanization. The natural vegetation within the Greenbelt is quite diverse; species that occur here represent over 80% of the City of Ottawa's total natural plant diversity. Significant plant species, namely those that are provincially or regionally rare, are concentrated in relatively few areas of the Greenbelt. The most important of these is Stony Swamp, with its wide representation of habitats that support the greatest number of significant species in the Greenbelt and the greatest total diversity of any site in Canada's Capital Region. Plant diversity and presence of significant species are also characteristic of other Greenbelt ecological jewels including Mer Bleue, Shirleys Bay, Greens Creek/ Lower Duck Island, Carlsbad Springs, and Pinhey and Pine Grove Forests.

Threats to the ecological integrity of Greenbelt natural areas consist largely of humaninduced factors. These threats include: arbitrary boundaries (not established for conservation of ecological function), fragmentation by infrastructure and urban development, limited ecological representation of the Ottawa River, impacts from adjacent urban development, climate change shifts in annual temperatures (and the subsequent changes in water availability, native species populations, peat development, soil organic matter content and non-native species), prevalence of invasive species, and suppression of natural functions (i.e. predators, fire, insect infestations). These threats are considered in the Core Natural Area, Natural Link and Ecological Corridor polices of this Plan and in the vegetation and forest policies below.

Forest plantations are also an important part of the Greenbelt forests. They add to the diversity of plant and animal life within the Greenbelt and, with management, will help foster an ecologically diverse and healthy forest. Greenbelt plantations consist of mostly conifer species, ranging in age from 19 to 50 years and established on a total of 825 hectares, about 27% of the forested area of the Greenbelt. The majority of the plantations are located in Stony Swamp and Pine Grove Forest.



The biodiversity and health of the Greenbelt's vegetation and forests will be protected and promoted through the following policies:

- a. Provide for the conservation and enhancement of biodiversity on all Greenbelt lands.
- b. Provide for long-term health of forest ecosystems for the benefit of local and regional environments, avoiding slow growth, potential insect infestations and damage from wind and ice storms.
- c. Through selective harvesting and thinning, promote mixed wood native stands and enhance biodiversity within a set period of time in Pine Grove and Pinhey Forests and in Stony Swamp.
- d. Through management of selected plantation areas, provide examples of presettlement heritage pine stands in Pine Grove and Pinhey Forests.
- e. Use best management practices to maintain a representative range of vegetation communities across the Greenbelt.
- f. Allow natural forces to predominate in forests, harvesting trees when needed to enhance biodiversity, forest health and to contribute to sustainable agriculture.
- g. Implement species at risk, invasive species and disease management programs.
- Promote sustainable agriculture, particularly in the encouragement of crop diversity, hedgerow, and shelterbelts. Adopt a holistic management approach through which farm lands will increasingly contribute to healthy, well-functioning Greenbelt natural systems.

6.3.2 Cultural Resources

Cultural resources consist of a combination of distinctive landscape features and man-made structures having historic value. The main Greenbelt cultural resources include heritage farmsteads and specific engineering and industrial structures such as the Lime Kiln and Rideau Canal lockstation at Black Rapids.

The management of Greenbelt cultural resources will ensure that such resources are promoted and protected to provide current and future generations a connection to human history within the Capital, and is guided by the following policies:

- a. Conserve a mosaic of landscape features that visually express land stewardship, ecological diversity and the history of the Capital.
- b. Conserve buildings, structures and features of cultural and heritage value (i.e. Lime Kiln, Carlsbad Springs, Rideau Canal) that celebrate the Capital's rural history.
- c. Explore ways and locations to feature First Nations' history within the Capital.
- d. Actively promote, in partnership with others, the distinction and relevance of Greenbelt cultural heritage features that link us to our past.
- e. Optimize partnership opportunities, where feasible, in the protection and promotion of Greenbelt cultural heritage.
- f. Encourage the development of more sustainable agriculture practices, buildings, and structures that also contribute to maintaining or promoting rural cultural heritage.
- g. Protect identified archaeological and paleontological sites.









6.4 Greenbelt Profile and Environmental Leadership

Many people who live in or who visit Ottawa are unaware of Canada's Capital Greenbelt. They may pass through it or beside it and not know that the field, forest or wetland they are viewing is part of a unique, publicly-owned landscape. It is important that public awareness be increased so that there is a greater level of appreciation and support for the Greenbelt and so that optimal use can be made of the many opportunities it provides.

The Greenbelt needs to be better known and understood in order to realize its full potential as articulated in the 2067 Vision. Given the primary role of natural environment and a fundamental premise that the Greenbelt will be an environmental showcase for Canada's Capital, prominent demonstration of environmental leadership is one of the main ways that the Greenbelt will become better known. Increased public awareness and understanding of the Greenbelt as an entity and environmental showcase will be achieved through the following policies.

- a. Develop a marketing, branding and communications strategy to help define the message, programs and visual identity for the Greenbelt. Improve Greenbelt profile and visibility through a physical branding and identity program that includes such initiatives as signage along Capital Arrivals, Scenic Routes and the Greenbelt Edge, recognizable fencing and furniture, and partnership development of recreational amenities.
- b. Work in partnership with others (City of Ottawa, community groups, Greenbelt user groups and/or private organizations) to identify and establish recreational amenities needed to enhance the visitor experience. Develop and provide additional amenities (guided and circuit tours, refreshment service) that support the Greenbelt vision and goals. Use Greenbelt facilities and landscapes, and build on existing promotional materials, the NCC website, social media and the internet, to increase the Greenbelt profile and identity and to communicate the Greenbelt's richness and diversity.
- c. Develop an interpretation, education and research program that:
 - i. Encourages a diversity of public interpretation and education experiences;
 - ii. Encourages the use of the Greenbelt as an outdoor laboratory;
 - iii. Promotes the environmental, social, and economic resources of the Greenbelt;
 - iv. Promotes the Greenbelt as a showcase for sustainability and high environmental quality; and
 - v. Engages the support and contribution of a variety of partners to develop and deliver Greenbelt research, interpretive and educational programs.
- d. Establish the Greenbelt as an environmental showcase where partnerships emerge to foster the use, demonstration and research of environmental best management practices in all Greenbelt activities, facilities and land uses. Integrate directions

from the NCC's Environmental Strategy³² and the Federal Sustainable Development Strategy. Employ other strategies that include the following:

- i. Participate in and encourage integrated and comprehensive Capital planning at federal, provincial and municipal levels.
- ii. Demonstrate and require the highest environmental standards (municipal, provincial or federal) in land management.
- iii. Support small-scale renewable energy projects that use solar, geothermal or biomass energy sources, as well as energy-efficiency technologies, within Built Area limits of Federal Facility and Operations Areas, within Non-Federal Facility and Operations Areas, on or in farm buildings, or on brownfield sites in Natural Links. Such an installation will be permitted on the condition that it promotes more self-sufficient operations to reduce environmental footprints and costs, it does not negatively impact designated panoramas, and where it is demonstrated that the project will not cause a significant adverse environmental effect.
- Encourage and support adoption of sustainable building standards, such as identified in the NCC's Environmental Strategy for facility retrofits and expansion.
- v. Monitor and report regularly on environmental accomplishments and progress.

6.5 Greenbelt Limits

Clear delineation of the limits for the Greenbelt is important for a common understanding of the Greenbelt's exact location and to effectively engage partners for its long-term protection. The boundary for the Greenbelt will follow the Greenbelt Limits as presented in the Land Designations and Sector Maps.

The policies below outline the steps for defining the Greenbelt Limits over time. The NCC will:

- a. Pursue the establishment of legal limits for the Greenbelt that embody the lands within the Greenbelt.
- b. Acquire lands that are not currently owned by the NCC and that are not publicly owned (i.e. that are not federal, provincial, municipal or conservation authority lands).
- c. Where acquisition is not possible or not necessary, work with a range of public agencies (e.g. City of Ottawa, conservation authorities, Province of Ontario, Land Trusts) and private owners, through partnerships and other means, to encourage management of these lands in ways that support the Greenbelt roles. The NCC has jurisdiction only on federal lands (via the application of the *National Capital Act*) and does **not** have planning or other jurisdiction over non-federal lands.

³² National Capital Commission. 2009. Environmental Strategy.





Ecological Connectivity

Connecting the Greenbelt core natural areas and the City of Ottawa's Natural Heritage Systems is essential for environmental conservation as it facilitates nutrient flow, movement of resources and genetic exchange for plants and animals.

d. Explore working with partner agencies (City of Ottawa, conservation authorities, Province of Ontario, Land Trusts) and owners of the two Special Study Areas shown on Figure 5.2, to identify a range of options such as conservation easements, "ecogifts" for tax rebates on protected lands, voluntary protection of natural environment features, or land trusts. These "Special Study Areas" consist of privately-owned lands in the Stony Swamp and Greens Creek Sectors that have attributes of importance to key Greenbelt natural environment lands located immediately adjacent to them.

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e. Undertake further study to explore options that would ensure the protection of key environmental characteristics and achieve complementary recreational opportunities within the Special Study Areas.

6.6 Ecological Corridors

The Greenbelt Concept emphasizes the importance of the Greenbelt's linkage with a broader connected natural heritage system within the Capital and beyond. The present management challenge is to make these natural connections work on a real-world, landscape level where agricultural, institutional and topographic variations sometimes interfere with the development of ecological connections. Distances (for example between the Greenbelt and the Gatineau Hills) and fragmentation of significant woodlands (by urban development east and west of the Greenbelt) are obstacles. Over the long term, securing the ecological value of the Greenbelt for the future involves creating and maintaining internal and external ecological linkages that operate at much broader scale. (Some experts encourage a frame of reference for wildlife corridors from Algonquin Park to the Adirondack Mountains.)

The NCC is using an ecological network approach to promote the conservation of the Capital Region's rich natural heritage. Based on conservation science, this approach aims to protect biodiversity and ecological functions by recognizing the natural connections between core natural areas and their surroundings. Connectivity between Greenbelt core natural areas and the City of Ottawa's Natural Heritage System is inherent to promoting a regional ecological network. Ultimately, this network would enable animals, plants and ecological activities to persist on a regional landscape scale by facilitating critical processes such as nutrient flow, genetic exchange and movement of resources.

Continued expansion and strengthening of the Greenbelt will be pursued through land acquisition, easements, and land stewardship partnerships aimed primarily at protecting the Greenbelt's Natural Environment and connecting the Greenbelt to the regional ecological network. To accomplish an ecologically connected Greenbelt, the following policy is identified, wherein the NCC will:

- Support and work with stakeholders (e.g. the City of Ottawa and the Nature Conservancy of Canada) to identify and explore ways to conserve regional ecological corridors outside the Greenbelt that will connect and strengthen the Greenbelt natural environment, building towards a "regional ecological network". This support and work will consist of:
 - Identifying the location and extent of ecological corridors that extend from Greenbelt Core Natural Areas to regionally significant natural features, building upon the City of Ottawa's Natural Heritage System and the Nature Conservancy of Canada's "Ottawa Valley Natural Area Conservation Plan" initiative.
 - ii. Working to ensure protection of the identified ecological corridors through the most efficient and effective means, considering the significance of the natural features, land ownership and, if relevant, potential timing of development. Methods for protection include education and encouragement of land stewardship, landowner stewardship agreements, conservation easements, land designations and zoning, land trusts or agency acquisitions.

6.7 Transportation

In the Greenbelt, transportation is about more than just moving people swiftly between destinations. It is a key component of the Capital experience, providing travellers with the opportunity to enjoy and explore the diversity of natural environments and settings. Every year hundreds of thousands of people travel through the Greenbelt: some stop to visit the Greenbelt, some simply pass through on their daily commute or en route to other destinations.

Transportation infrastructure encompasses new roads, road extensions, road widenings, interchanges, bridges, transit routes, and transit and rail stations. This infrastructure has considerable impacts on the Greenbelt environment, including noise, visual nuisance, habitat loss and fragmentation, and pollution of air, water and land. Collectively, these act to reduce the suitability of adjacent natural areas for wildlife, and contribute significantly to habitat fragmentation by creating barriers to wildlife movement. Devaluation of the landscape and of natural areas in terms of their recreation and tourism value can also be a significant negative economic factor.

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While the primary transportation infrastructure located in the Greenbelt will remain for the foreseeable future, the NCC wishes to find alternatives and ways to reduce the environmental impacts of existing and proposed transportation infrastructure. The extent of effects from existing and planned transportation projects was evaluated as part of the *Joint Study to Assess Cumulative Effects of Transportation Infrastructure on the National Capital Greenbelt*.³³ Transportation infrastructure alignments should avoid severing the most highly vulnerable Core Natural Areas and habitats. Land removals and disturbance of adjacent habitats should also be minimized.

The NCC is committed to achieving sustainable transportation that complies with environmental conservation best practices in the Greenbelt, through collaboration with partners and stakeholders. The NCC will promote and give preference to sustainable, safe and active transportation infrastructure that is consistent with the vision, roles and goals of the Greenbelt and is in accordance with the following policies:

- a. Future transportation infrastructure projects that are proposed to be located within or adjacent to the Greenbelt will be considered according to the categories³⁴ determined through the Cumulative Effects Assessment study. The Study results are summarized in Appendix C (a map and table categorizing 30 currently proposed projects) and are reflected in Chapter 7, Sector Plans.
- b. Work with the City of Ottawa and other authorities to ensure that projects listed in Chapter 7 and Appendix C are planned from the earliest stage to ensure early consultation and collaboration with, and consideration of the input of, the NCC.
- c. Apply the ecological principle of "No net loss" to transportation infrastructure projects, through identification and implementation of appropriate mitigation measures. Where on-site restoration cannot achieve a no-net-loss environmental condition, seek off-site restoration of other ecosystems and/or compensation to achieve ecosystem restoration elsewhere at a minimum at a comparable level, and preferably at a net gain.
- d. Require, of proponents of any future new transportation infrastructure or improvement to existing transportation infrastructure, a thorough assessment of the loss in environmental value resulting from any such proposal(s), such assessment to include a cumulative effects component. Consistent with policy c. above, should a project be determined as "acceptable to proceed", the delivery of measures consistent with the principle of "no net loss" at a minimum and preferably according to the principle of "net environmental gain" will be required.
- e. Work with the City of Ottawa and other jurisdictions with the aim of closing unopened road allowances and existing low volume roads in the Greenbelt.

³³ AECOM. 2012. Joint Study to Assess Cumulative Effects of Transportation Infrastructure on the Greenbelt.
³⁴ The Cumulative Effects study findings led to categorization of 30 transportation projects according to their potential for cumulative effects on Core Natural Areas and Natural Links. The three categories for projects are:

Include in the Greenbelt Master Plan, subject to standard design, review and review processes and mitigation determined by Environmental Assessment;
Include in the Greenbelt Master Plan, subject to cumulative effects on the Greenbelt Master Plan and subject to measures that minimize, compensate or offset contributions to cumulative effects on the Greenbelt, with the possibility of designation as "Not Include" in cases where specific mitigative conditions cannot be implemented satisfactorily;, and 3. Not Include in the Greenbelt Master Plan with the requirement to determine alternative locations outside Core Natural Links in order to avoid adverse cumulative effects.

- f. Give priority to transport demand management measures when assessing new infrastructure proposals that respond to increasing demand for access to and within the Greenbelt. This will include consideration of the scope for giving priority to sustainable low-carbon and non-carbon transportation initiatives over schemes that create more capacity for vehicles.
- g. Apply context-sensitive design best practices to transportation infrastructure projects that aim to conserve Greenbelt natural and visual resources. Take landscape ecology principles into account in order to achieve ecological connectivity and wildlife safety. Include measures that seek to "blend" the infrastructure project into the Greenbelt landscape and protect views. Require the incorporation of wildlife-friendly designs and crossing facilities, where appropriate, in transportation infrastructure projects that affect natural areas in the Greenbelt.
- h. Work with proponents of transportation infrastructure projects to ensure the provision of a symbolic and distinctive sense of place and arrival, to and through the Greenbelt.
- i. Discourage Park-and-Ride facilities from locating in the Greenbelt.
- j. Identify and implement measures to mitigate the deficiencies of existing transportation corridors and other structures and their impacts upon terrestrial and aquatic habitats.
- k. Encourage the reduction or elimination of unnecessary lighting along transportation routes and at facilities in the Greenbelt to help achieve a night sky quality, without compromising safety.
- I. Work with stakeholders to monitor and evaluate the extent of fragmentation caused by transportation projects, and determine the effectiveness of mitigation measures.
- m. Maintain and enhance the continuity of recreational pathways and natural links in the planning, design and function of transportation infrastructure.

6.8 Infrastructure

Other types of infrastructure also cross Greenbelt landscapes. These include water mains, sewers, stormwater facilities, energy infrastructure, and communications installations. Some of this infrastructure services Greenbelt facilities, while others serve areas outside the Greenbelt. This infrastructure can be linear (e.g. buried pipes, transmission lines) or restricted to specific sites (e.g. water/sewage pumping or electrical distribution stations, stormwater management facilities).

The location and maintenance of this infrastructure has varying negative impacts upon natural vegetation, habitat, water systems and visual aesthetics. The types of potential impacts are linked to the nature of the infrastructure. The impacts of above-ground structures, such as pumping stations, antennae, communication and hydroelectric transmission towers, electricity transmission and distribution stations, and renewable energy facilities, can negatively affect views and land use, and disturb soil, water and vegetation resources in their immediate area. With pumping stations and renewable energy facilities, there is also the potential for odours and accidental releases of material to air, water or land. Most of these environmental effects can also be associated with



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establishment of underground facilities, such as sewers, water mains and energy pipelines. The differences relate mainly in the potential for visual and natural environment impacts associated with the removal of existing vegetation and disturbance of the soil's physical characteristics.

With regard to stormwater management, the effect of adjacent and upstream stormwater on watercourses located in the Greenbelt is significant. Addressing this issue has been the subject of much investment by the NCC and its partners. In many places, Greenbelt lands are located downstream of large urban areas and as a result, many watercourses located in the Greenbelt have and continue to receive large quantities of stormwater, with damaging results. Though advances in stormwater management have been made, modern stormwater management approaches were not employed in many urban developments near the Greenbelt until the 1980s. Although the level of understanding of the impacts of stormwater flows continues to evolve, the interaction between stormwater flows and watercourse banks and beds continues to be a serious concern. Recent site-specific studies in the Greenbelt indicate the need for further restoration studies and works.

The NCC will continue to work with partners and stakeholders to implement integrated stormwater management approaches and measures that ensure the maintenance and restoration of a water cycle that supports more stable and resilient watercourses. The result must be healthy watercourses in which water quality and quantity is addressed, and risks to ecosystem function are managed, with resulting improved aquatic ecosystem health, including fish populations and habitats, over time.

Managing the impact of existing and future infrastructure will be achieved by the following policies:

- a. For existing linear and point structures for water, sewage, stormwater, energy and communications:
 - i. Permit continued presence of existing facilities.
 - ii. When maintenance or upgrade of existing infrastructure is proposed, limit the works to the existing footprint of the infrastructure, to the extent possible. Prohibit further fragmentation of Core Natural Areas by infrastructure. Require inclusion of measures and works for local habitat improvement in the specifications for infrastructure upgrade projects.
 - iii. Prohibit location of new infrastructure projects within the Greenbelt for water, sewage, energy or communications that serve development <u>outside</u> the Greenbelt and that fail to consider and compare re-alignments or rerouting to avoid *Core Natural Areas* and *Natural Links*. Prohibit projects that fail to provide credible justification and rationale that demonstrate why a proposed Greenbelt alignment is the only option. When location within the Greenbelt cannot be avoided, require use of best practices to prevent permanent impacts upon streams, soils, water, vegetation, overall natural systems, land use and visual quality.
 - iv. Allow the establishment of new infrastructure projects for water, wastewater, energy or communications that serve facilities and tenants within the Greenbelt, provided that their planning, design, construction and

- b. For stormwater management facilities (in addition to a. and for greater clarity):
 - i. Work with the City of Ottawa to address deficiencies in stormwater management practices in order to diminish adverse downstream effects upon the Greenbelt.
 - ii. Work with partners to mitigate surface discharge of runoff to watercourses located within the Greenbelt where such discharges exist and avoid urban stormwater runoff to watercourses located within the Greenbelt in the future, through adoption of an integrated subwatershed and "stormwatershed" approach to stormwater management. This approach will evaluate and manage cumulative effects of stormwater management practices, including hydrological, geotechnical and fluvial geomorphological risks. The approach will also include use of at-source best management and Low Impact Development practices in system design and operation.
 - iii. Prohibit the establishment on Greenbelt lands of new stormwater management infrastructure and facility projects that support land uses located outside of the Greenbelt. Such facilities should be integrated with the proposed land use development and apply a subwatershed approach, as described in section 6.3.1.1.
- c. For any new infrastructure that might be established within the Greenbelt, require that such projects:
 - i. Demonstrate responsible environmental management by ensuring that all environmental assessments for projects influencing Greenbelt resources are of superior quality and are comprehensive in terms of integrating the best available research and information.
 - ii. Demonstrate that the new facility or infrastructure is bundled with existing built facilities or infrastructure to the maximum extent possible. To achieve effective bundling of infrastructure, specific design features or agreements may be necessary to ensure future flexibility for co-location of installations that differ in type or ownership.
 - iii. Apply, to infrastructure projects, context-sensitive design best practices that aim to conserve Greenbelt natural and visual resources. Take landscape ecology principles into account in order to achieve ecological connectivity and wildlife safety. Include measures that seek to "blend" the infrastructure project into the Greenbelt landscape and protect views. Require the incorporation of wildlife-friendly designs, where appropriate, in infrastructure projects that affect natural areas in the Greenbelt.
- d. Ensure that all infrastructure facilities demonstrate environmental best practices in their management.
- e. Ensure that both existing and any new infrastructure facilities minimize incremental and cumulative effects on land use, visual quality, natural systems, recreational activities and agricultural operations within the Greenbelt.



What is Low Impact Design?

Low Impact Design is the practice of development design minimizing changes to the hydrologic cycle using strategies to integrate natural hydrologic functions and native landscaping such as rain gardens, green roofs, and harvesting of rainfall for various uses.





6.9 Residences in the Greenbelt

At the time of this Master Plan, there are approximately 250 residences located, individually and in groupings, across the Greenbelt in a variety of land designations. These residential groupings and many of the other residences are situated within lands designated as Core Natural Area, Natural Link and Agriculture. To achieve the desired land characteristics and to efficiently use the limited resources available for capital asset management, the land designation policies in Chapter 5.0 will be applied along with the following policy in order to manage the impact of these residences upon the Greenbelt:

- a) Maintain a small, rural population within the Greenbelt in a limited number of houses, notably farmstead houses that can be maintained for future use.
- b) Over the long term, phase out houses in the Greenbelt that do not support a Greenbelt farmstead.





Chapter 7

7.0 Implementation – Sector Plans

In this section, a more detailed "Sector Plan" is presented for each of seven distinct sectors that together comprise the Greenbelt. These plans help users interpret the Land Designations and the Capital Experiences and Recreation Network elements.

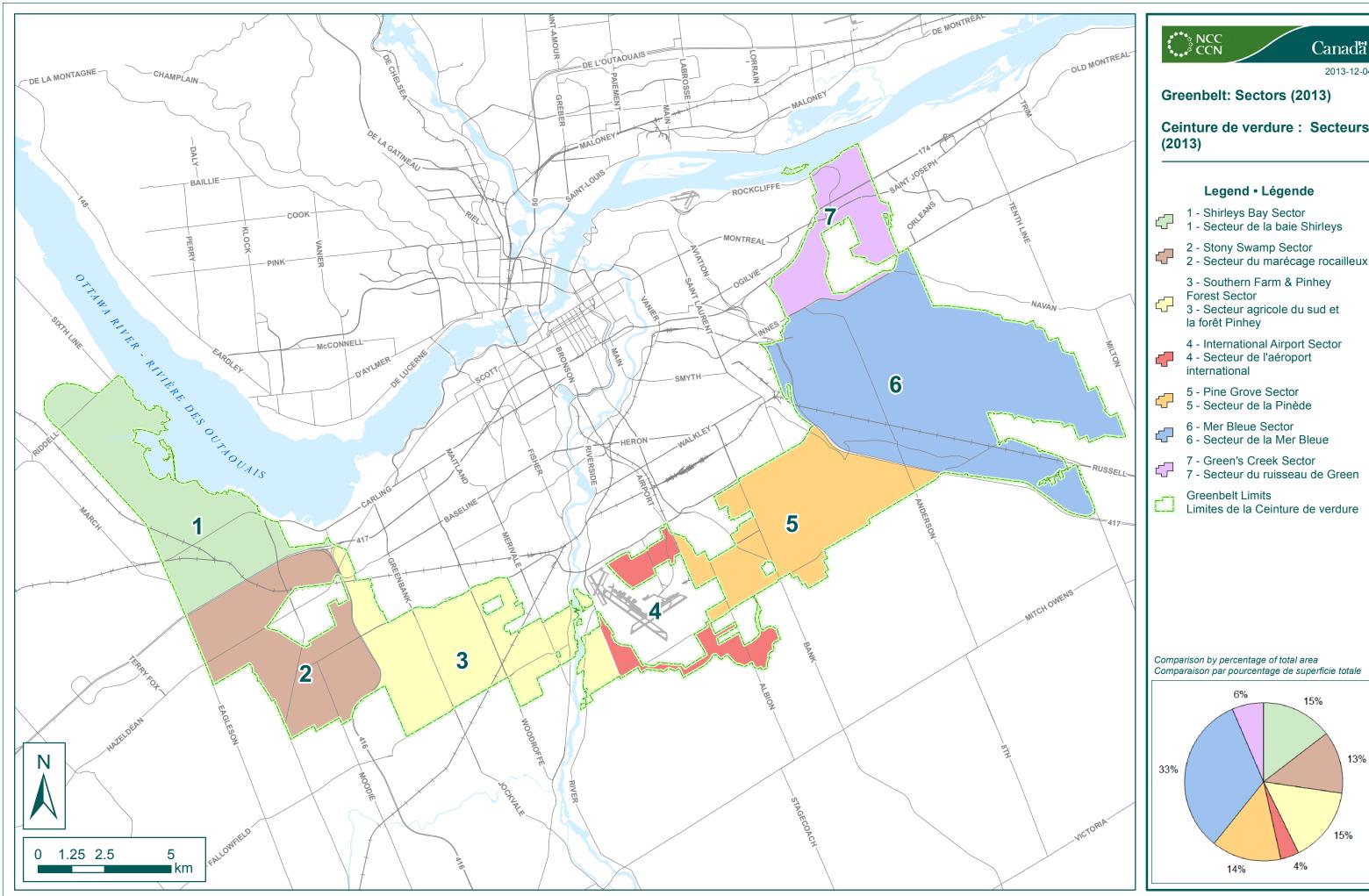
Boundaries between the different sectors were set in response to the following criteria:

- Existing road or other physical feature (e.g., rail line) that forms a significant boundary between lands, activities and uses;
- Natural area focus (e.g., conservation areas, integration of Rideau River);
- Dominant land uses and landmarks, to make sectors meaningful, easy to find and explain for the benefit of people who are less familiar with the Greenbelt; and
- Similar landscape areas.

Sector plans include more detailed maps than those presented for the concept and land designations. These maps have a 2011 aerial photographic base that illustrates the landscape features within and adjacent to the sector lands. On each of the sector maps, the operational lands that support activities of the federal facilities (e.g., training, rifle range, location of communications towers and other operations) and the non-federal facilities are indicated in purple and pink, respectively. The extent of the built area footprint for the federal facilities (including buildings, landscaping and paved areas such as parking lots) is delineated by a dotted overlay within the overall designation.

The Greenbelt's seven sectors are shown on the following map. The sector plan maps and accompanying text are presented from west to east. Each sector is introduced by an overall planning context, a discussion of opportunities and constraints affecting the sector, and the Master Plan concept for the sector. Individual actions that support the implementation of sector-specific land management strategies flow from the policies articulated in the previous chapters, including the Greenbelt-wide policies. Guidelines and actions specific to each sector are organized by the Greenbelt roles – Natural Environment, Sustainable Agriculture, Capital Experiences & Recreation, and Facilities – and are to be read in conjunction with the sector maps.





Canadä 2013-12-04 Ceinture de verdure : Secteurs 2 - Stony Swamp Sector2 - Secteur du marécage rocailleux



This 3,010 ha sector's main feature is the large Core Natural Area of Shirleys Bay, the Greenbelt's largest marsh and most significant bird migration area. Shirleys Bay, and the natural areas beyond the Greenbelt that extend northwest along Constance Creek to the Ottawa River, are home to the provincially and nationally threatened Blanding's Turtle. Watts Creek flows north to Shirleys Bay through this sector. The Core Natural Areas of the Shirleys Bay and Crystal Bay areas are connected to that of Stony Swamp and to natural areas beyond the Greenbelt along natural links that follow the creek systems of Shirleys Brook, Watts and Stillwater Creeks, as well as through the forested Ottawa Campground. A number of recreational opportunities exist in Shirleys Bay, with several focused upon the sector's extensive natural environment. This sector provides one of the Greenbelt's only two public access points to the Ottawa River, namely a boat launch and winter access to ice fishing.

The Ottawa Campground attracts approximately 40,000 visitors each year while the adjacent Nepean National Equestrian Park has been a long-time destination for national competitions and events. Pedestrians, cyclists and in-line skaters enjoy the varying agricultural and natural landscapes along the Greenbelt pathway and connected pathways, with further hiking and cycling opportunities offered on hiking trails situated in the Ottawa Campground and close to the Ottawa River. Shirleys Bay waterfront is a choice location for picnicking, fishing, bird watching, hiking and enjoying panoramic views. Shirleys Bay sector also supports two golf facilities: a portion of the Auduboncertified Marshes Golf Course east of March Road, and the Nineteenth Tee Driving Range on Carling Avenue. There is a variety of farm types on the mostly prime agricultural lands in the southern end of the sector, including a mix of row crops and market gardens to the southwest. Roadside produce stands are located along Carling Avenue along with a community supported agriculture farm on the agricultural lands north of Carling Avenue at Shirleys Bay.

Shirleys Bay hosts three federal facilities and one other large non-federal facility, in addition to the recreational sites noted above. The National Defence (DND) Connaught Rifle Range and Primary Training Centre site is used for DND military training and supports administration and training facilities for the Royal Canadian Mounted Police (RCMP). The site includes a mix of hay and fallow fields, regenerating forest and considerable naturally vegetated wetland and upland areas. Public Works and Government Services Canada (PWGSC) owns and manages the former

Nortel buildings located at 3500 Carling Avenue at Moodie Drive which are anticipated to house DND headquarters staff. The Shirleys Bay Campus on Carling Avenue, managed by Communications Research Centre (CRC) Canada, hosts the Canadian Space Agency and Defence Research and Development Canada, as well as a Library and Archives Canada facility. The site of the former Nortel facility located at 185 Corkstown Road (along Stillwater Creek and at Moodie Drive) is owned by the NCC and leased to Abbott Laboratories.

Opportunities and challenges

- The Shirleys Bay wetland is expected to remain in good health because of its size, isolation and stewardship by National Defence.
- In the short term, partnership efforts are required to conserve some of the natural link that extends along Shirleys Brook from Shirleys Bay to the South March Highlands; development in Kanata has already disrupted much of this natural link.
- Future development beyond the Greenbelt may affect the ecological connectivity to the northwest. Partnerships with others could help maintain this connection and secure wetland and significant woodlands as an ecological corridor along Constance Creek to the Ottawa River.
- Watts Creek is an important natural link connecting Stony Swamp to Shirleys Bay. The West Transitway Connection – Eagleson Station construction may cause impacts on Stillwater Creek, an important tributary of Watts Creek, which will require mitigation.
- There is an opportunity for restoration of Stillwater Creek as the Rideau Valley Conservation Authority is interested in engaging partners in an enhancement pilot project for this subwatershed.
- The view of the Capital from Highway 417 over the escarpment is the Greenbelt's most dramatic, and needs protection, to support the quality of this important Capital Arrival.
- The great visitor appeal of the impressive panoramas over Shirleys Bay and to the Outaouais is key to enhanced use of this multi-use publicly accessible waterfront area.

- A Gateway Node proposed by the Ontario Ministry of Transportation north of the intersection of Highways 416 and 417 could prominently announce the Greenbelt and the Capital. NCC and City support of this provincial initiative would be required.
- Expansion of the federal facilities is not anticipated in the foreseeable future; however, change may occur at the PWGSC site at Carling and Moodie.
- Population growth in Kanata could mean changes in the surface water regime and increased demand for recreational services and local farm products in this sector.

Master Plan Concept

Shirleys Bay is one of the anchors of the Greenbelt's Natural Environment. The natural waterfront and bird staging areas support public programming and interpretation in selected areas. Protection of the Shirleys Bay wetland and Watts Creek will be enhanced, and natural link areas increased. Partnerships will be pursued to identify and protect connections along Shirleys Brook to South March Highlands and along the Constance Creek natural areas further northwest to Constance Bay. Bird watching, canoeing and other passive wilderness activities can be enjoyed. Additional recreational opportunities along the Greenbelt Pathway that transects this sector include trails and camping within the Ottawa Campground and a variety of activities at the Equestrian Park.

As a dramatic arrival to the Capital, the landscapes viewed along Highway 417 epitomize the diversity and beauty of the Greenbelt and its importance to the Capital. The lands north of Highway 417 provide for a range of agricultural, natural and recreational uses, and are a striking contrast to the urban city skyline east and west of the Greenbelt. Military training facilities and activities of DND and RCMP at Connaught Range will continue to be carefully managed to avoid impacts on this sector's natural context. The edge facility of the PWGSC Carling Campus, planned as future DND headquarters at Carling and Moodie, will continue to demonstrate desired Greenbelt edge characteristics through landscaping and green building practices.

Internationally-recognized communications and aerospace research will continue at the Communications Research Centre, respectful of the surrounding natural environment and showcasing sustainable facility practices.

Sector Specific Policies and Considerations

Transportation: Work with City to implement agreed-upon tiered framework and mitigation approaches developed through the Joint Cumulative Effects Assessment Study for transportation infrastructure, including avoidance, mitigation and compensation, to prevent significant adverse environmental effects to the Greenbelt. Specific sector initiatives with early NCC engagement in the planning process include Carling Avenue Rail Underpass Widening, Western Transitway (Bayshore to Moodie) and Transitway (Bayshore to Baseline).





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A – Greenbelt Addition: Mud Pond

- Acquire the significant natural lands shown as addition.
- Designate as Core Natural Area once acquired. •
- Partner with others to identify and secure ecological corridors around Constance Lake, along Constance Creek to Ottawa River and to Carp Hills Complex.

B – Watts Creek

- Over time, re-locate DND training structures away from the creek.
- Re-establish native vegetation along length of Watts Creek.
- Work with Mississippi Valley Conservation Authority, the City and others to protect, restore, and enhance natural flow regimes of Watts Creek and other watercourses affected by existing and proposed upstream urban development.

C – Stillwater Creek

Continue to work with 185 Corkstown Road facility managers and Rideau Valley Conservation Authority (RVCA) for restoration and maintenance of stream health.

D – Shirleys Bay Core Natural Area (CNA)

- Work with federal partners to maintain integrity / natural functions defined in Shirleys Bay subwatershed and management plans.
- Relocate DND training structures from the CNA over time.

E – Natural Link – Connaught Range

- Encourage DND to ensure agricultural and training • activities maintain/enhance function of natural link and adiacent wetlands.
- Permit existing training bunker within the natural link and encourage its relocation to the Facility Operating Area over time.

F – Ecological Corridor

- Work with City, landowners and community groups to identify, retain and/or restore ecological corridor to South March Highlands and Carp Hills Wetland Complex.
- In support of this, maintain existing edge of Greenbelt (east of March Valley Road) as mix of fields, farms, rural residential uses as buffer from urban area.

G – 139 March Road Farmstead

H – Shirleys Bay Farmsteads

I – Carling Avenue Lands Beside Crystal Beach Community

Establish and support sustainable agriculture, including diversified farm cropping, and, where applicable, enhance riparian areas along streams to meet provincial and federal best management practices.

J – Expansion Area at 161 Hertzberg Road, near Carling Avenue

Work with the City of Ottawa to ensure appropriate zoning for lands added to the Greenbelt; designate as Agriculture.

K – Escarpment Panoramic View

Promote Greenbelt panoramic view from escarpment on Hwy 417. At this view, establish visitor gateway node of welcome & orientation signage and virtual promotion and interpretation materials to introduce the Greenbelt and Capital at this Capital Arrival entrance.

L - Shirleys Bay Waterfront

- Protect the panorama of Ottawa River shoreline
- Continue promotion of waterfront recreational activities.

M – Visual Quality – Carling Avenue & Range Road

Protect and upgrade visual quality along road corridors through native tree and shrub planting to reflect natural land designation, and enhance scenic route quality.

N – Visual Quality - Moodie Drive

Protect and improve visual quality along Moodie Drive • through maintenance of existing vegetation and planting of trees/shrubs & use of other contextsensitive design features, and enhance scenic route quality.

O - Visual Quality – March Road

Work with City of Ottawa to develop streetscape guidelines for March Road as part of the West Transitway Connections initiative.

P – Campground

- Support Greenbelt forest experience.
- Protect forest cover & Natural Link function in context of any expansion.
- Favour negotiation of a long-term lease.

Q – Equestrian Park

Ensure management of future facility expansion to align with Greenbelt roles and enhance Capital Experience, including appropriate landscape and infrastructure and nutrient best management practices.

R – The Marshes Golf Course &

S - Nineteenth Tee Driving Range

Encourage management practices (water, nutrients, . vegetation) that support Natural Link functions.

Guidelines & Actions

T-National Defence (DND) Connaught Range & Primary Train Centre

- Limit facility expansion by DND or RCMP to Built Ar
- Support DND in stewardship initiatives, i.e. turtle sanctuary & support to Ottawa Duck Club, Ottawa Naturalists, Innes Point Bird Observers.
- Support and promote RCMP's LEED buildings.
- Direct future growth away from natural areas.
- Allow existing Rifle Range structures within Facility Operations Area.
- Permit antennae, small accessory buildings needed support DND and RCMP functions within Facility & **Operations Area.**

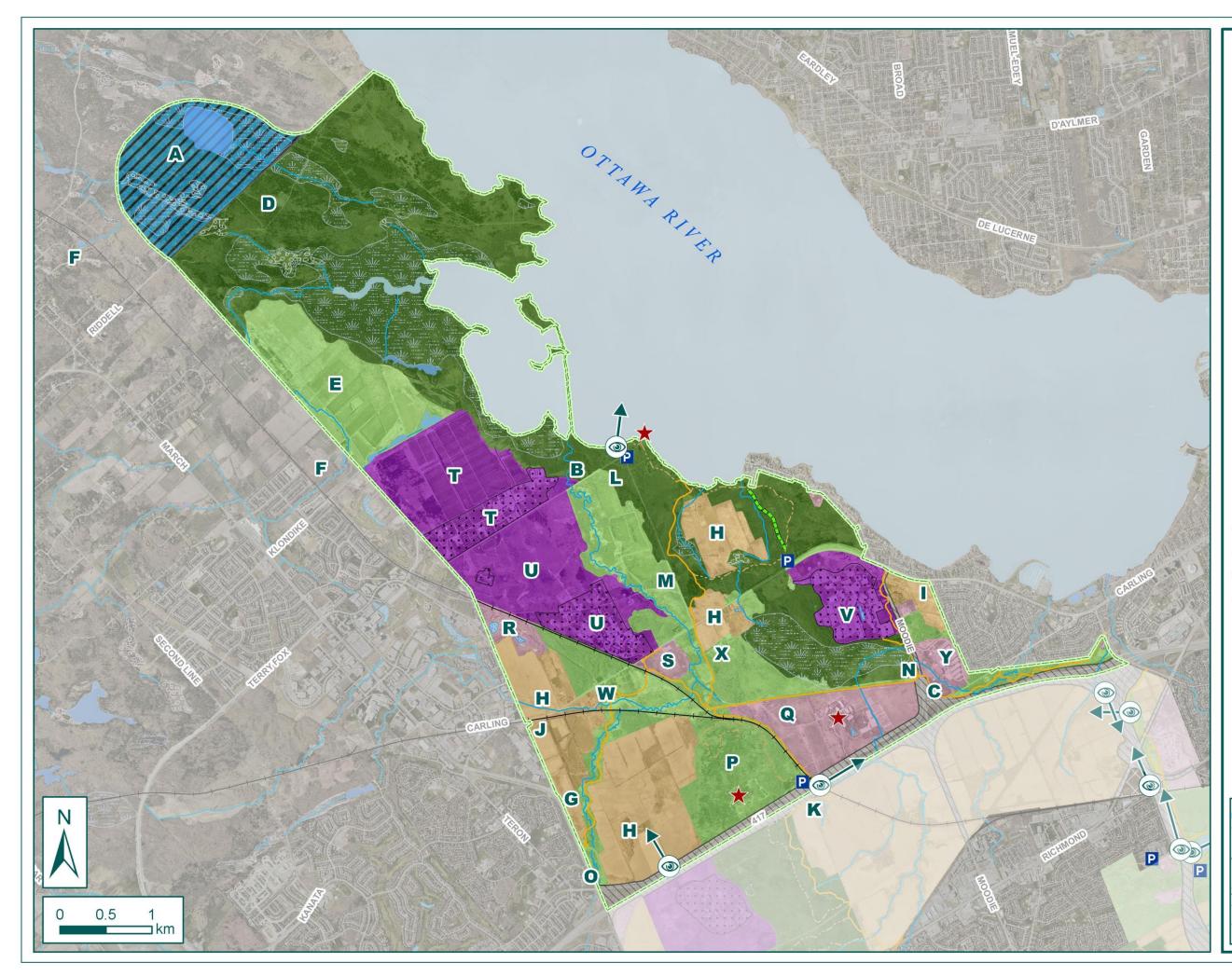
U – Communications Research Centre (CRC) - Shirleys Bay Campus

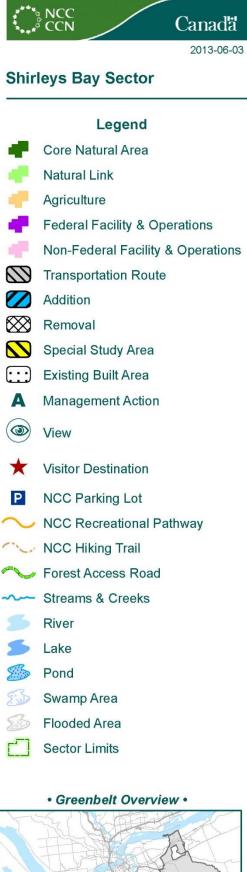
- Limit any future facility expansion to the Built Area
- Support goals in Shirleys Bay Campus Plan (2010) for good practice in site landscape and visual management, natural area conservation, facility integration with surroundings, and optimization of building asset efficiency, energy use and carbon footprint.
- Encourage interpretation and recognition of achievements.
- Allow antennae, storage, observatory & temporary buildings within Facility & Operations Area.
- Encourage naturalized maintenance within Facility & Operations Area to contribute to the adjacent natural link along Watts Creek.
- Permit site security, including perimeter fence, internal fences around select structures, access control & surveillance.

V – PWGSC Carling Campus (Future DND Headquarters), 3500 **Carling Avenue**

- Add balance of built area to the Greenbelt and designate as Federal Facility and Operations with the overlay of the Built Area.
- Permit adaptive re-use of existing buildings and facilities for DND.
- Require preparation of a facility Master Plan to document existing and future site uses and prior to any major expansion.
- Limit anticipated future facility expansion to the Built Area. Maintain and enhance the visual aesthetics and natural features and functions of the adjacent CNA, where feasible. PWGSC will seek NCC input for guidelines on visual aesthetic design, including protection of the panoramic view from Highway 417 (at the pathway), lighting, and conservation of the CNA.

ing	 Permit urban character and enhanced security requirements of this edge facility. Security fencing and
ea.	antenna structures are permitted within the CNA, provided that the CNA feature and functions are not
Field	disrupted.
	 Allow office, special purpose space & support services for site staff.
	 Encourage and support DND's adoption of a
&	transportation demand management strategy for this site, consistent with the Federal Sustainable
to	Development Strategy.
	 Maintain continuity of pathway along Moodie Drive. W – Burke's Settlement
	 Remove houses over the long-term. Re-naturalize site and/or create a rest stop for Greenbelt Pathway users.
	X – Watts Creek Sewage Treatment Plant
Dr	 Decommission facilities, using some of the buildings, as feasible, to support Greenbelt objectives for a recreation destination, nature interpretation centre or sustainable agriculture facility.
	Y – 185 Corkstown Road Non-Federal Facility
	 Limit facility expansion in accordance with Chapters 5 and 6.







The majority of the Stony Swamp sector consists of a large complex of wetlands and forests that forms the headwaters of five streams. Including the prime farmlands north of Bells Corners, largely within the subwatersheds of Stillwater and Graham Creeks, the area of this sector is 2,623 ha. Stony Swamp has the largest forest in the Greenbelt and contains many ski and nature trails that contribute to this feature being the most visited area in the Greenbelt.

A heritage farm and a federal research campus are also situated in this sector. Natural Resources Canada's CANMET energy and mining explosives research facility is located in the forested escarpment near Highway 417. Several regional roads and a major hydro corridor cross the swamp and some isolated houses are situated on Richmond Road. The Greenbelt's two federally recognized heritage buildings – Silver Springs Farm and the former Bruce House - are also located on Richmond Road. Two Capital Arrivals through the Greenbelt exist along Highways 416 and 417 which border this sector to the north and east. The sector's natural and agricultural lands that are visible from these highways are essential to creating the vistas

that make these Arrivals, particularly the one along Highway 417, so special. Greenbelt forests and farmlands play an important role in separating Bells Corners and Kanata from the rest of the city.

Opportunities and challenges

- Sustained monitoring and management of Stony Swamp is required to balance natural environment integrity with appropriate human use, given the number of visitor access points (see "P" parking areas on sector plan map), the proximity of a large urban population, and the predominance of visitor access along trails within the sensitive core natural area.
- It is challenging to balance the need for transportation infrastructure (in response to demands from the adjacent growing suburban community) with maintenance of the integrity and longevity of Core Natural Areas in the Greenbelt, such as Stony Swamp.
- The view of the Capital from Highway 417 over the escarpment creates the Greenbelt's most dramatic Capital Arrival.
- Continuing population growth in Kanata and Stittsville means an expanding market for agricultural products and services.

- Adjacent growth in Kanata places pressure on Stony Swamp's natural features and functions, through increased resident use and potential groundwater and stormwater impacts.
- Quarry expansion on the south edge of the swamp could also affect the water regime of the swamp and forest.
- Most visitor access is along trails within the sensitive core area of the swamp.
- Highway 416 provides high accessibility and visibility to adjacent natural environment and agricultural areas. The opportunity exists to improve the views along Highway 416 in partnership with the Ministry of Transportation, the City of Ottawa and others.
- There is continued pressure to expand the Eagleson Park-and-Ride facility and to accommodate other heavy infrastructure demands, largely within the municipal rights-of-way, in the northwest corner of this sector.
- The potential to bring current quarry sites south of Stony Swamp into the Greenbelt over the medium and long term would add natural area buffering capacity and recreational area potential.
- Opportunities exist to improve connections of Greenbelt trails and pathways to the regional / national recreational pathway network, including Rideau and TransCanada trails and community pathways.

Master Plan Concept

Stony Swamp's size, diversity and accessibility place it as the centre of the western Greenbelt's natural environment system, and position it as a desirable location for nature research, education and enjoyment. The swamp's diversity and forests will be enhanced to consolidate and diversify the ecosystem and to support larger birds and mammals. Natural links within the Greenbelt will be protected, and ecological corridor connections to the Marathon and Marlborough Forests beyond the Greenbelt will be identified and retained, in partnership with others, so as to minimize urban growth impacts around the swamp. National hiking and recreational trails cross the sector connecting Greenbelt trails to the Capital recreation system, Rideau Trail and

Trans Canada Trail network. Progressive stormwater management retrofit strategies are necessary for the upstream urban areas of Kanata, Bell's Corners and Crystal Beach to restore watercourse quality and function through the Greenbelt. The NCC will work in cooperation with partners such as the City, Mississippi Valley Conservation Authority and RVCA, and in line with the stormwater management policies identified in Chapter 6.8.

Sustainable agriculture will continue to expand on this sector's farmlands, through an increase in farm diversity and by integration of the farms with the community through provision of local food and offering of farm experiences. Agricultural best management practices will protect the headwaters of Stillwater and Watts Creeks. This sector will continue to feature the heritage farm of Silver Springs.

NCC residences within the Core Natural Area will continue to be removed over time. Natural Resources Canada's CANMET research facility will be an environmental showcase anchor in its demonstration of applied energy efficiency for residential and commercial use.

Sector Specific Policies and Considerations

Transportation: Work with the City of Ottawa to implement agreed-upon mitigation approach developed through the Joint Cumulative Effects Assessment Study for transportation infrastructure, including avoidance, mitigation and compensation, to prevent significant adverse environmental effects on the Greenbelt. Specific sector initiatives with early NCC engagement in the planning process include finding alternatives to the proposed Hope Side Road extension, through the environmental assessment process, that minimize and mitigate negative effects on the Stony Swamp Core Natural Area.

A – Stony Swamp Core Natural Area

- Enhance habitat diversity of Stony Swamp through active forest management of the forested area.
- Update nature interpretation facilities along trail system and integrate educational messages about reducing impacts of recreational activities.

B – Stony Swamp Core Natural Area along Richmond Road

- Phase out residential leases and remove houses in the Core Natural Area
- Maintain visual quality along this Scenic Route
- Work with City of Ottawa to mitigate fragmentation of the Core Natural Area and maintain access to trailheads.

C – Special Study Area – Operating Quarries

- Work with neighbouring quarry owners to monitor ongoing guarry operations and to ensure they do not disrupt water regime or public use of Stony Swamp.
- Explore potential to partner with existing quarry owners to L Greenbelt Edge at Urban Limit of Bells Corners add to or secure these lands for the Greenbelt upon closure.
- Further define the potential for quarry areas to contribute to the Greenbelt in terms of naturalized vegetation, water guality and guantity balance for Stony Swamp, recreation potential.
- Work with City and area landowners to identify, retain/ restore ecological corridor south & west of Stony Swamp.

D – Natural Area Addition at Highway 416

Finalize acquisition of lands located west of Highway 416 curve and designate as Core Natural Area.

E – Stony Swamp Natural Link

Protect exceptional tree stands and maintain natural vegetation to retain natural link and visual quality of lands west of Highway 416.

F - Farmstead at 670 Cedarview Road – Log Farm

- Optimize recreation and education role of log farm; allow small-scale commercial facility.
- Seek partners to establish possible interpretive centre, renewable energy demonstration.
- Conserve cultural heritage of log farm buildings.
- Explore opportunity to connect buildings to Greenbelt recreational trails (to the west) along existing access road.

G - Farmstead at 4420 West Hunt Club Road - Lone Star

Allow as a combination sustainable agriculture operation and small-scale commercial facility supportive of Greenbelt roles.

H – Silver Springs Farm & Market Garden – 3501 Richmond Road

- Support local food production and distribution at this heritage farmstead.
- Encourage enhanced riparian areas along streams to meet provincial and federal best management practices.

I – Eagleson Road Farm Fields

J – Stony Swamp Farmsteads

- Establish and support sustainable agriculture, including diversified farm cropping, and, where applicable, enhance riparian areas along streams to meet provincial and federal best management practices.
- Consider plantings along roadways to increase visual quality of Greenbelt Edge.
- Protect and enhance identified views.

K – Visual Quality – Highway 416

- Through partnerships (including with Ontario Ministry of Transportation), further enhance visual quality of Greenbelt at selected locations along Highway 416 through landscape design (native trees & shrubs).
- Establish signage to promote the Greenbelt and this Capital Arrival.

Work with partners to reinforce Greenbelt Edge and improve visual separation from inner Bells Corners urban area.

M – Eagleson Corners Trailhead

- Maintain natural woodland/wetland area as Stony Swamp entrance.
- Explore potential to establish a trailhead with visitor information and services, including education on Stony Swamp systems and their sensitivity.

N – Lime Kiln Heritage Destination

Continue to protect this feature and promote the interpretation of this cultural and natural heritage site.

O – Bell High School Sports Fields

Allow continued use of these sports fields, limiting their extent to the existing area; phase out over time, when no longer required.

P – Scenic Routes along Timm and West Hunt Club Roads

Enhance scenic route quality.

Guidelines & Actions

Q - CANMET Federal Facility

- Limit any expansion to the Built Area footprint
- Work with Natural Resources Canada/CANMET facility and operations managers to establish naturalized vegetation along the edges of and within the Federal Facility Operating Area, to maintain security at this facility and to screen the campus from major roads.
- Encourage conduct of on-site operations that protect and support the adjacent Natural Link and Core Natural Area.
- Encourage CANMET to expand the facility's programming for public education and demonstration of energy efficiency, and as an environmental showcase to educate Canadians on alternative and renewable energy technologies.
- Allow existing monitoring and storage facilities within the Core Natural Area east of the Federal Facility & Operations Area; encourage their relocation to the Facility & Operations Area over time.

R – Eagleson Park and Ride

- Limit this facility to its existing area.
- Encourage retrofit of this facility to integrate additional sustainability features, such as enhanced tree cover (for visual aesthetics and to reduce heat island effect), bicycle parking, provision of Greenbelt information, accommodation of weekend farmers' market, future consideration of pervious surface.
- Discourage use of static and digital billboards.
- Explore facility phase-out over the longer term.

S – Electrical System Transformer Station

- Limit this facility to its existing area; phase out over time, when no longer required.
- Encourage maintenance and enhancement of vegetation to screen facility from roadway and trail system.

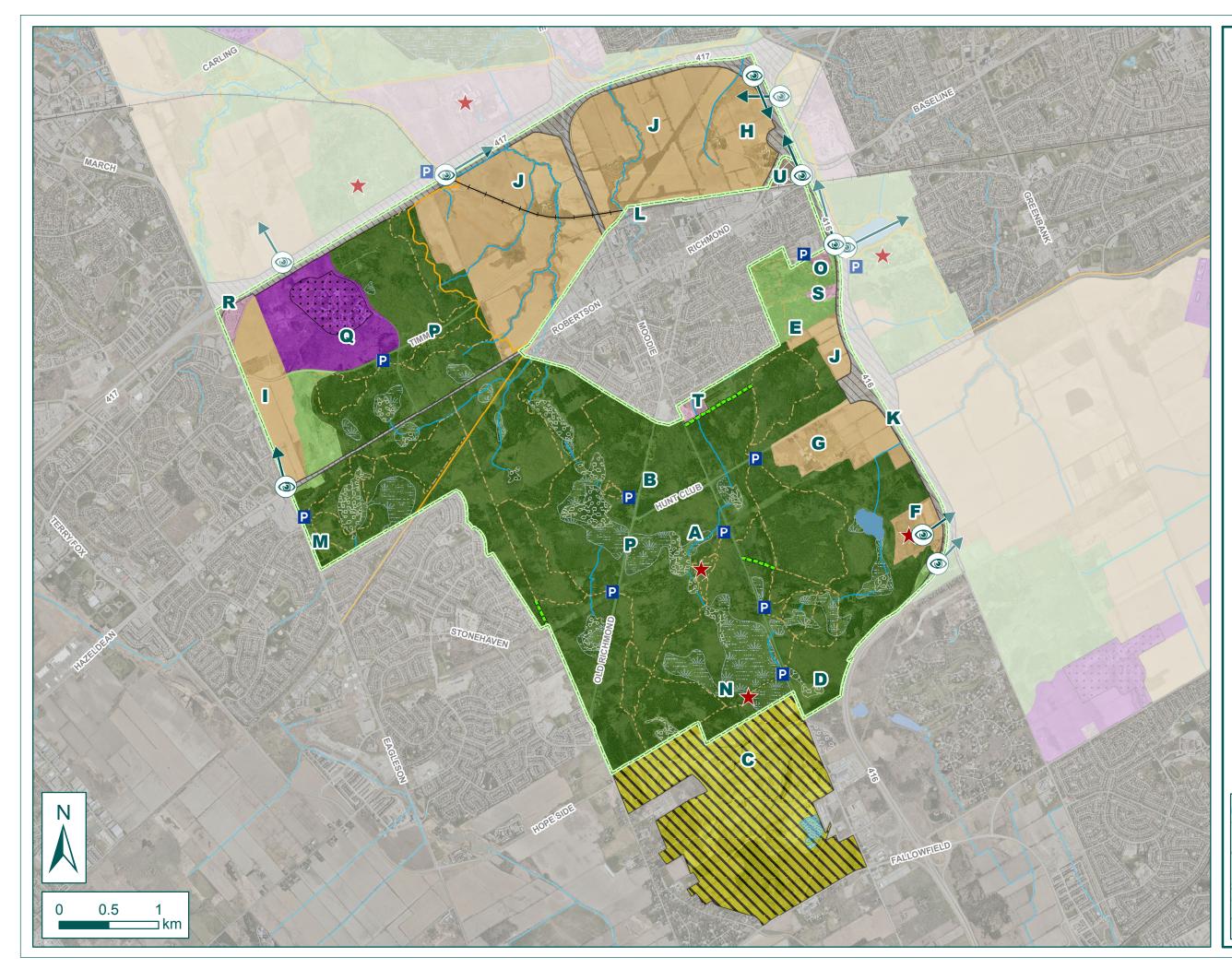
T – D. Aubrey Moodie Intermediate School

- Limit this facility to its existing area; phase out over time, when no longer required.
- Encourage maintenance and enhancement of vegetation along southern and eastern property edge to protect adjacent CNA.

U – Land Parcel at Highway 416, Baseline and Richmond Roads

Parcel is identified as Greenbelt Removal due to its isolated location and limited potential to support Greenbelt roles.

7.2 Stony Swamp Sector



2013-06-03 Stony Swamp Sector Legend Core Natural Area Natural Link Agriculture Federal Facility & Operations Non-Federal Facility & Operations Transportation Route Addition Removal Special Study Area Built Area A Management Action View ★ Visitor Destination P NCC Parking Lot NCC Recreational Pathway NCC Hiking Trail Forest Access Road ----- Streams & Creeks River Lake Pond Swamp Area S sho Flooded Area Sector Limits Greenbelt Overview

Canadä

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This sector spans 3,165 ha and features a predominantly agricultural landscape. Existing and proposed Natural Links connect the Greenbelt Core Natural Areas of Pinhey Forest and Black Rapids Creek. Pinhey Forest is a small (250 ha) but diverse Core Natural Area. A large part of the forest was planted in the 1960s to supplement existing forest cover and stabilize shifting sand dunes. Various fitness, ski and walking trails penetrate the forest which is bordered on three sides by housing and industrial developments and by Agriculture Canada farmlands on the fourth.

Merivale Gardens, a residential subdivision, is located in the middle of the forest. The Nepean Sportsplex, a large indoor/outdoor sports facility and the Confederation Education Centre on Woodroffe Avenue are located north of Pinhey Forest. Hunt Club Road follows the northern edge of the forest. This sector separates the urban communities of Nepean and Barrhaven. The Rideau Canal National Historic Site of Canada, a Canadian Heritage River and UNESCO World Heritage Site, is a key feature of this sector of the Greenbelt. An engineering marvel constructed in the early 19th century, this magnificent waterway winds through eastern Ontario from Canada's Capital to Kingston.

Visitors and residents travel through the Rideau Canal landscape by boat, by bicycle, on foot and by car, attracted by the canal itself as well as the natural and cultural attractions of the broader corridor, promoted as the Rideau Heritage Route. The historic Black Rapids Lockstation (circa 1830) is the gateway between the Rideau Canal corridor and the Greenbelt. Recreational opportunities at the Lockstation include trails, a picnic area, cultural and natural heritage interpretation and a boat launch. Bruce Pit is a diverse 300 ha naturalizing and recreational area that includes a former sand pit which has developed into a pond. Vegetation in the Bruce Pit Natural Link ranges from hardwood and regenerating forests to grasslands and sand dune vegetation. The Greenbelt Research Farm consists of 1700 ha, located between Highway 416 and Woodroffe Avenue.

The NCC owns the lands between Greenbank Road and Woodroffe Avenue; some of these lands are dedicated to cropland research by Agriculture and Agri-Food Canada and the rest are leased to farm tenants. The Canadian Food Inspection Agency (CFIA) owns the lands between Greenbelt, Fallowfield, Cedarview and Hunt Club Roads. Located in the southwest corner of the sector, the 435-ha CFIA Ottawa Laboratory (Fallowfield) for plant and animal disease research and monitoring represents the only research establishment of its kind in eastern Canada. Farm fields in the vicinity of Cedarview and Hunt Club Roads are

managed by a farm tenant. Lands located east of Woodroffe Avenue and immediately west of the Rideau River are owned by the NCC and are leased for various kinds of farming, including row crops and dairy. Finally, the Queensway Carleton Hospital is located in this sector. The grounds leased by the hospital also support a variety of recreational and small-scale commercial uses.

Opportunities and challenges

- The Rideau Heritage Route, River Road and Prince of Wales Drive are historic scenic routes into the Capital and provide connections to visitor attractions.
- The Rideau Canal is a visitor attraction that has the potential to be a key visitor node.
- High quality soils (the best in the Greenbelt), tile drainage and buildings make this area well suited for continued farming. Additional buildings may be required to implement sustainable agriculture in some parts of this sector.
- The vacancy of some former research farm buildings (seven buildings are now vacant) and lands, now owned by the NCC, provides opportunities to support sustainable agriculture at this centrally-located site
- Urban communities adjacent to the Greenbelt are a ready market for farm produce.
- The form and footprint of major transportation corridors in this sector, arising from the developing communities of Kanata and Stittsville, impact negatively on Greenbelt visual guality, natural links and farm parcels.
- A future Greenbelt pathway crossing of the Rideau River would be possible at either Black Rapids Lockstation or as part of a future extension of Fallowfield Road.
- Bruce Pit's strategic location favours it as a site for future interpretation, which could relieve recreational pressures on Stony Swamp.
- Pinhey Forest's isolation from other natural areas, small size and intensity of public use diminish its importance in the regional natural system. This can be addressed by restoring natural links to Pinhey Forest, for example, along Black Rapids Creek.
- Recent study of Pinhey Forest identified significant biodiversity of this sand dune ecosystem and positive

results from recent restoration efforts. This represents an opportunity for natural environment education activities.

Master Plan Concept

The Natural Links and the unique ecosystems of Pinhey Forest and Black Rapids Creek Core Natural Areas comprise the natural environment within this sector. Volunteer investment to restore the sand dune ecosystem within Pinhey Forest is expected to further increase the area's biodiversity and efforts will continue to enhance its natural environment value. Agricultural lands dominate this sector and much of the large area of the Greenbelt's best farmland will continue in agriculture, becoming more sustainable over time. Larger tracts of farmland will gradually transition to more diversified agriculture through selective leasing, encouragement of varied crops and naturalization of some lands, to improve and increase the Natural Link from Stony Swamp to Pinhey Forest and to the Rideau River. The sector's visual landscapes of farms and forest will be conserved and enhanced. The internationally renowned Rideau Canal UNESCO site, rich in history and scenic beauty, will form a major tourist and recreational corridor.

The sector will be readily accessible to visitors and residents by transit, boat and recreational pathway. Pinhey Forest will continue to offer outdoor recreational and educational experiences in a forest setting. Its natural value will be enhanced through consolidation and careful management. Easily accessible by transit and from the adjacent Nepean Sportsplex, Pinhey Forest will demonstrate how conservation, forest management and recreation can be integrated into an urban setting. Sustainability will be demonstrated at the Queensway Carleton Hospital, and the Nepean Sportsplex will further integrate Greenbelt promotion and nature interpretation programming into its services.

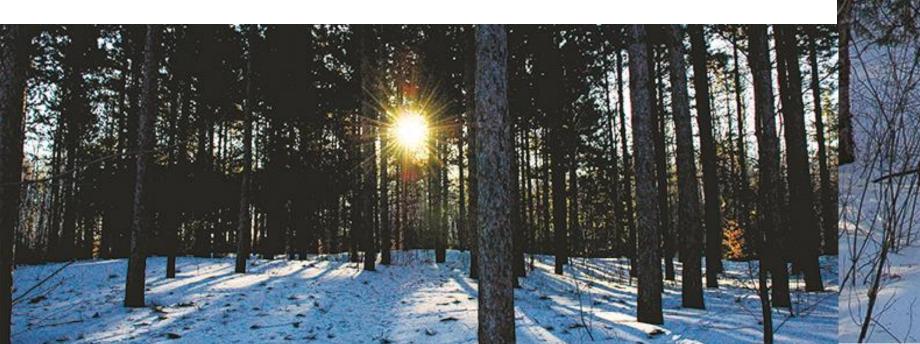
Sector Specific Policies and Considerations

Transportation: Work with City to implement agreed-upon tiered framework and mitigation approaches developed through the Joint Cumulative Effects Assessment Study for transportation infrastructure, including avoidance, mitigation and compensation, to prevent significant adverse environmental effects to the Greenbelt. Specific sector initiatives requiring early NCC engagement in the planning process include proposed road widenings for Fallowfield, Prince of Wales, West Hunt Club & Hunt Club and Riverside. Special conditions will be developed for Fallowfield crossing of Rideau River and Leitrim Road projects.

Rideau Canal: Respect directions of the Rideau Canal National Historic Site designation and Rideau Canal World Heritage Site Management Plan.

Airport Environmental Plan: Conditions of the Airport's Environmental Plan (that protect the airport from incompatible development) will be respected (see Appendix B and City of Ottawa Official Plan, including pertinent Schedules).

Greenbelt Pathway: The section from Merivale Road to Black Rapids Lockstation at the Rideau River will be completed within the next 2 years. The full 56-km Pathway will connect key visitor attractions and link with other pathways within Canada's Capital Region.



7.3 Southern Farm/Pinhey Forest Sector



A – Pinhey Forest Core Natural Area

- Manage selected areas to achieve Heritage Pine Stands
- Practice selective harvesting and thinning to improve habitat diversity, establish mixed wood stands and improve forest health.
- Expand and protect the Heritage Pine forests to ensure that they provide an example of past Pioneer forests.
- Work with community and agency partners to enhance the promotion and education value of this CNA Visitor Destination.
- Work with Merivale Gardens community to maintain naturalized Greenbelt edge and protect Pinhey Forest
- Work with the Biodiversity Conservancy organization to protect/restore sand dunes.

B – Southern Farm Natural Links

- Partner with Rideau Valley Conservation Authority, farm owners and tenants to restore riparian areas and enhance natural links along Black Rapids Creek and the headwaters of Graham Creek.
- Aim for a natural link width that is 60m initially, working towards a minimum 250 m in the long term to create a fully functioning natural link; reduce the tile drain system area as part of regular maintenance.

C – Black Rapids Core Natural Area (CNA)

Protect and enhance the extent and health of this CNA through working with adjacent community and tenant farmers.

D – Western Farm Natural Link

- Work in partnership with CFIA to maintain and enhance the natural link function, in balance with maintaining site security.
- Study site potential for designation as Core Natural Area.

E – Rideau River Shoreline

Work with Rideau Valley Conservation Authority and Parks Canada for protection and restoration of shoreline.

F – East Rideau River Natural Links

- Establish enhanced natural links along stream corridors to connect to Airport Sector natural link.
- Work with the Airport Authority and other landowners to mitigate existing erosion and degradation of watercourses and the escarpment caused by upstream land uses.

G – Urban Natural Feature Addition

Include this City owned and designated "Urban Natural Feature" in the Greenbelt; designate as Natural Link acknowledging that the NCC has no jurisdiction over this municipal parcel.

H – Farms at 2600 and 2664 Prince of Wales Drive

J – Farms East of Rideau River

- L Greenbelt Farmlands East of Woodroffe
 - Work with farm tenants to implement sustainable agriculture, including provincial and federal best management practices for enhanced stream riparian areas and shoreline buffers.

I - Greenbelt Research Farm Lands

- Encourage use and demonstration of provincial and federal recognized farm best management practices
- Diversify farm crop production over time.

K – CFIA Ottawa Laboratory (Fallowfield) - Agricultural Leased Farmlands

Encourage CFIA to implement sustainable agriculture in lease terms.

M – Qualicum Park Sports Fields

Permit existing sports field use of this area; phase out this use, when no longer required.

N – Visual Quality along Sector Roadways

- Further enhance visual quality of Greenbelt along transportation routes through context sensitive design and landscape management (planting of naturalized trees and shrubs), that maintain identified views and reduce effects of wind on roads.
- Protect views and enhance visual quality along the Highway 416 Capital Arrival and along Cedarview Road.
- Explore ways to protect and enhance visual experience along scenic routes of Fallowfield, Woodroffe, Limebank and West Hunt Club Roads and the Scenic Entries of Prince of Wales and River Roads.

O – Black Rapids Lock Station

- Work with Parks Canada on potential Greenbelt Pathway crossing of Rideau River; alternate crossing for pathway could be located south of Black Rapids Lock Station as part of City's planned extension of Fallowfield Road.
- Collaborate with Parks Canada on cultural and natural interpretation, with a focus on the Rideau Canal National Historic Site of Canada, a Canadian Heritage River and UNESCO World Heritage Site. Black Rapids Lockstation will be a gateway between the Greenbelt and the Rideau Canal corridor.
- Transition to facilitating public access to Victory Hill and the east bank, by land and water, over time.

Guidelines & Actions

P – Bruce Pit Recreation Area

- Offer a mix of outdoor recreational activities, i.e. hiking, cycling, tobogganing, at this Visitor Destination.
- Allow use of a designated area as one of two Greenbelt leash dog areas.
- Monitor recreational use to identify when action is required to protect ecosystems; educate users on how minimize impacts on the natural area.

Study site potential for designation as Core Natural Area **Q** – Nepean Sportsplex and Confederation Education Centre

- Limit buildings and parking lots to existing area in accordance with Chapters 5 and 6.
- Recognize this facility as an edge facility and permit future continued intensive use and adaptive re-use of the site, including maintenance of existing sports fields and use of school's existing site for recreational uses; encourage and support improved site landscaping.
- Encourage integration of educational and promotional messages about the Greenbelt and Pinhey Forest at the Nepean Sportsplex.

R – Fallowfield Park and Ride Facility

- Limit this facility to the existing site.
- Encourage facility retrofit to integrate additional sustainability features, i.e. improved stormwater management, enhanced tree cover, bicycle parking, weekend farmers' market, future consideration of pervious surface.
- Enhance the Via Rail Train Station as a Capital Arrival through visitor information and promotion of the Greenbelt and the Capital.
- Discourage use of static and digital billboards; ensure an appropriate Greenbelt Edge is created through landscaping.

S – CFIA Ottawa Laboratory (Fallowfield)

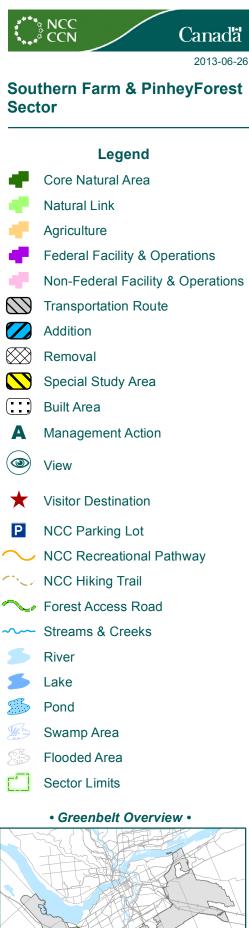
- Limit built facilities to Built Area footprint.
- Permit site functions of plant/animal disease research and testing.
- Encourage CFIA to provide naturalized landscape in their Federal Facility and Operations Area to complement Natural Link features and functions.
- Support CFIA in working with Agriculture and Agri-Food Canada to expand the width of the Natural Link along Black Rapids Creek over time.

T – Greenbelt Research Farm

- Limit built facilities to Built Area footprint.
- Allow shared and mixed use of built facilities and explore potential for partnerships to provide sustainable agriculture support at this site, through activities such as farming, processing or value-added facilities, markets, asset sharing.
- Reserve this site for federal use in the long term.

	U – Queensway Carleton Hospital (QCH)
,	Permit a more intensive site use for this edge facility in accordance with the QCH Master Plan and which will be
off-	balanced with maintaining Greenbelt landscapes that are compatible with other Greenbelt roles.
	Continue to work with the hospital on creation of an overall
to	naturalized site and Greenbelt edge and on enhanced site sustainability over time.
a.	Remove temporary parking lot north of Sutherland Drive as soon as second parking garage is constructed.
	V – Land Parcel at Baseline Road and Highway 416
	Allow non-federal use of these lands as an edge facility.
ure	W – National Research Council Canada - Time Signal Radio Station
	СНО
of	 Limit built facilities to Built Area footprint.







The namesake for this sector (813 ha) is the Ottawa Macdonald-Cartier International Airport. It is the Capital's international gateway and a major generator of economic activity in the region. The Greenbelt boundaries are modified in this sector, to serve two objectives. First, the Greenbelt designation no longer applies to the Airport operating lands, recognizing that this intensive land use, with its supporting commercial development, is incongruous with the Greenbelt Vision and Roles. The Greenbelt designation also no longer applies to certain federal facilities in proximity to the Airport's operating area, including the National Research Council wind tunnel northeast of the Airport Terminal, and the DND golf course located in the southeast area of the airport lands. Second, the Airport supports the designation of lands to form a natural link along the western and southern edges of the Airport. Together with key Transport Canada holdings near Albion Road, this will enable a new Greenbelt connection to the provincially significant Leitrim Wetland and further east, to the Lester Wetland complex and Pine Grove Forest. The link connects to the western Greenbelt via tributaries of the Rideau River. This newly defined Natural Link is a major accomplishment for strengthening of the Greenbelt.

The DND Canadian Forces Base Uplands and the RCMP facility located in the north-central part of the sector remain within the Greenbelt. The Airport Parkway provides direct access from the airport to the Capital core through a forested scenic corridor. A wooded escarpment runs along the western edge of the airport, and the Lester and Leitrim Wetlands define the sector's eastern and south-eastern edges. Pockets of the Lester Wetland are designated as Core Natural Area in the northeast portion of the sector, connecting via the natural link along the Airport Parkway to the main Lester Wetland areas within Pine Grove Forest Sector to the east.

Opportunities and challenges

- The Ottawa Macdonald-Cartier International Airport Authority (OMCIAA) envisions the Airport as a multimodal transportation hub in Ottawa that helps to enhance and promote "Ottawa's profile and ability to be a competitive global hub for innovative and knowledge-based talent, businesses and organizations". OMCIAA has identified their needs for supporting aviation infrastructure, intermodal connectivity and ample real estate to create the conditions to develop a global business destination. The NCC recognizes that a balanced approach is possible though the removal of the Greenbelt designation from the airport operating lands.
- Continuing urban and infrastructure development will affect the Greenbelt's visual, recreational and ecological continuity, and elevate the value of this sector as a buffer between urban areas.
- Long-term airport plans call for a third runway that • would follow an east-west axis in the vicinity of Leitrim Road in the southern part of the Airport, as well as expansion of the original east-west runway and potential removal of the diagonal runway.
- The visual appearance of airport operations and development does not fit well with the desired natural and farm landscape character of the Greenbelt.
- The international and national gateway status of the airport provides opportunities for dissemination of information about the Greenbelt.
- Creation of the natural link west and south of the . Airport provides for continuity and strengthening of

Greenbelt natural systems, connection to and an increase of the City's urban forest, and enables inclusion of the Leitrim Wetland within the Greenbelt boundary.

- Short term action by all stakeholders is necessary to ensure the protection of natural links from Leitrim Wetland to Pine Grove Forest, and to create an ecological corridor outside of the Greenbelt that would connect Leitrim Wetland to the Greenbelt at the Canadian Forces Station (CFS) Leitrim or near Mer Bleue.
- The Greenbelt Pathway will run within the natural link but its continuity is a challenge due to the same development and infrastructure pressures that affect the natural link.

Master Plan Concept

This important sector will contribute to the Greenbelt's visual, ecological and recreational continuity, while supporting regional economic growth. High quality standards befitting the Capital will be evident along Capital arrival and scenic routes. The natural environment and recreational value of this area will be significantly enhanced through the creation of a natural link west and south of Airport facilities that links both east and west to the Greenbelt natural environment. The Greenbelt's natural environment will also be strengthened through protection of the Lester Wetlands Core Natural Area and the Leitrim Wetland (Core Natural Area and Greenbelt addition), and green links through the developing Leitrim community.

These natural lands will be protected, as future improvements to airport and transportation infrastructure are planned in the south and east parts of the sector.

Critical additions of natural environment lands, including provincially significant wetlands, will ensure the long term continuity and connectivity of the Greenbelt in this strategic sector. Through partnership efforts, the longer term establishment of ecological corridors beyond the Greenbelt will enable connection of the Leitrim Wetland to the regional ecological network as well. Opportunities are also

created for future Greenbelt pathway connections through this sector, in the context of the natural link or as part of future infrastructure initiatives.

Sector Specific Policies and Considerations

Airport Presence: In recognition of the Airport's special transportation and economic development role, the operating lands of the airport no longer form part of the Greenbelt. However, the Airport will support the protection of a Greenbelt natural link along the west and south of the airport zone to promote Greenbelt connectivity.

Airport Environmental Plan: Conditions of the Airport's Environmental Plan (that protect the airport from incompatible development) will be respected (see Appendix B and City of Ottawa Official Plan, including pertinent Schedules).

Transportation: Work with City to implement agreedupon tiered framework and mitigation approaches developed through the Joint Cumulative Effects Assessment Study for transportation infrastructure, including avoidance, mitigation and compensation, to prevent significant adverse environmental effects on the Greenbelt. Specific sector initiatives with early NCC engagement in the planning process include road widening/twinning for the Airport Parkway, road widening for Hunt Club, Airport LRT Connection, North-South LRT and Leitrim Road realignment at CFS Leitrim. Special conditions will be developed for the Lester Road widening. Alternative routes will be sought for the location of the Leitrim Road realignment when this is required to accommodate a third runway at the Airport, for the Leitrim Park & Ride facility, and for the North-

Greenbelt Pathway: The proposed Greenbelt Pathway route is designed to provide a continuous and varied recreational and educational experience through the entire length of the Greenbelt (as described in Chapter 6.1). The full 56-km Pathway will connect key visitor attractions and link with other pathways within Canada's Capital Region. The Rideau River crossing and section of the pathway connecting the Rideau River to Pine Grove Forest is planned within the next 10 to 20 years.

South LRT Maintenance and Storage Yard.



A – Lester Wetland Core Natural Areas

Conserve the features and functions of these provincially significant wetlands.

B – Airport Parkway Natural Link

- Encourage City of Ottawa and Airport to maintain natural link function on lands on east side of Airport Parkway and seek their protection in context of any future transportation infrastructure initiatives.
- Partner with City and Rideau Valley Conservation Authority in implementation of City of Ottawa 2002 Sawmill Creek Watershed Study recommendations.

C –Natural Link of Leitrim & Lester Wetlands

- Work with City of Ottawa, Airport Authority and Transport Canada to protect a natural link between the Leitrim and Lester Wetlands.
- Retain a natural link in the area southeast of the airport as required, as infrastructure projects (Light Rail Transit, Airport airfield expansion and Leitrim Road realignment) are planned in more detail; include the Transport Canada lands east of the railway as part of this natural link.

D – Airport Natural Link – Limebank Parcel

• Ensure the maintenance of this site in its natural state, for ultimate incorporation in the larger natural link. Correspondingly, recognize and protect lands required for future airfield expansion on the east side of the Airport (see "Q" areas in Pine Grove Sector Plan, Chapter 7.5).

E – Natural Link Addition

- Secure identified additions in partnership with Airport and Transport Canada.
- Build and restore natural link function in this area, in partnership with the Airport, City of Ottawa and Conservation Authorities.

F – Natural Link Addition – Limebank & Leitrim Roads

Acquire privately-held parcel and designate as Natural Link once acquired.

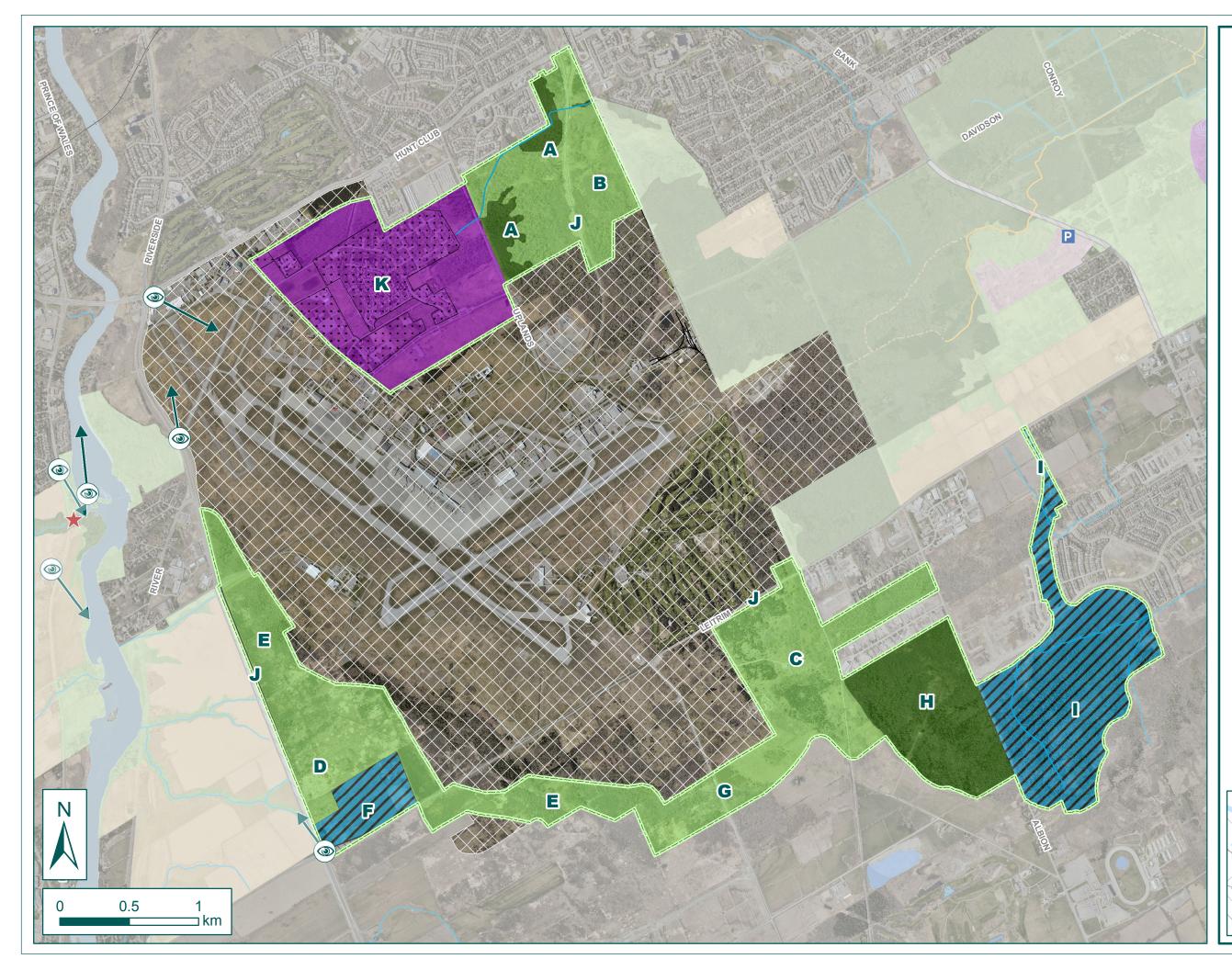
G – Natural Link Addition

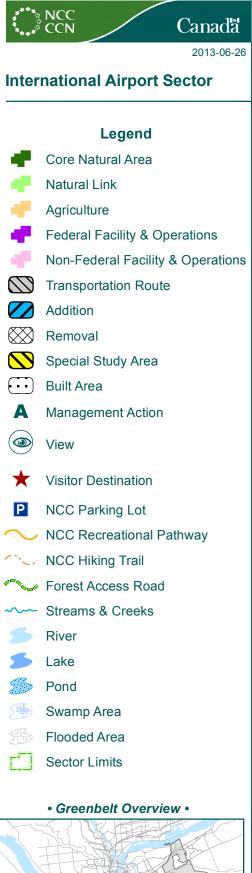
- Secure Natural Link in partnership with Airport and Transport Canada; seek transfer to the NCC of Transport Canada lands not required for airport purposes.
- Ensure wildlife passage is created under the future Light Rail Transit Line to ensure Natural Link connection to Leitrim Wetland.

H - Leitrim Wetland - Greenbelt Addition

- Designate the Transport Canada owned portion of the provincially significant wetland west of Albion Road as Core Natural Area.
- Protect existing NavCanada navigation installation.

тy	 I - Leitrim Wetland & Leitrim Natural Link - Greenbelt Addition Recognizing that the NCC has no jurisdiction over the non-federal lands east of Albion Road, work with South Nation Conservation Authority, and private landowner(s) to ensure protection of the Leitrim Wetland (Ottawa Official Plan boundary shown) and support for protection of ecological connections from the Wetland. Work with the City of Ottawa and South Nation Conservation Authority to connect Leitrim Wetland and community trails to the Greenbelt Pathway, and to encourage enhancement and protection of the natural link function of these connecting lands to the extent possible.
t	C E G H L-Greenhelt Pathway
S -	 C, E, G, H, I – Greenbelt Pathway Establish a segment of the Greenbelt Pathway across these parcels to connect west-east across the southern edge of the Greenbelt. Review the option of establishing the Pathway along Limebank Road and the future realigned Leitrim Road. J – Visual Quality – Scenic Routes and Capital Arrival Define Greenbelt Edge along Limebank and Leitrim Roads Protect and enhance the visual quality of Scenic Routes along Limebank and Leitrim Roads. Visually buffer uses, protect and enhance visual quality along Airport Parkway Capital Arrival.
	к – DND Uplands Base
d k	 Limit future expansion to the Built Area footprint. Explore need and potential for future federal facility at Uplands Base, should the existing facilities become surplus. Require preparation of a master plan for this site and explore acquisition of natural features (DND Woods) to ensure their long term protection.







This 2,936 ha sector is dominated by coniferous (red and white pine) plantations and mixed coniferous and deciduous natural forests known collectively as Pine Grove Forest. Located between the Macdonald-Cartier International Airport and Highway 417, this sector features a large Core Natural Area and Natural Link corridors of significant widths. Soils are predominantly sandy, and the sector contains a mix of upland and lowland areas, the latter recently identified as the Provincially Significant Lester Wetland Complex.

Medium quality farmland (Class 3, 4 and 5 soils) dominates the eastern reaches of the sector with old fields scattered throughout. Hiking and ski trails cross the area, and there is a toboggan hill and off-leash dog park at Conroy Pit. Residential, commercial and recreational uses, including a golf course, are located along Bank Street. Two residential enclaves currently front Bank Street in the sector: Kemp Park on private land abutting Bank Street, and a second cluster of homes on NCC-leased lands near the Bank/Conroy intersection. The Canadian Forces Station (CFS) Leitrim, a military communications centre established in 1941, lies east of Bank Street and on both sides of Leitrim Road

Opportunities and challenges

- Pressures on this sector resulting from continued . growth of the Leitrim urban community south of the Greenbelt result in impacts on the natural system, and demand for more transportation infrastructure and outdoor public recreation activities.
- Airport noise from existing and future east-west runways will limit the range of uses and activities in parts of the sector. Certain lands in the Pine Grove Sector west of Albion Road will be required for future airfield expansion and improvements (extended and new runway projects). This would result in loss of vegetation and Core Natural Area in this sector.
- Selected stands of large red and white pines provide • the opportunity for establishment of Heritage Forests.
- Through selective harvesting and thinning, forest management will provide for the conservation and enhancement of biodiversity of both plant and animal species, within the forested lands.
- The Natural Link (within the Greenbelt) and ecological corridor beyond the Greenbelt require strengthening. This could be accomplished through partnerships for land securement and protection of natural areas, in order to connect Pine Grove Forest to Mer Bleue and

to the South Gloucester and Cumberland Forest natural features.

Master Plan Concept

Pine Grove's mix of forest, recreational facilities, farms and institutions offers a wide range of experiences at the doorstep of the Capital's southern communities. The area as a whole will continue to be woven together by a significant natural forest, with forested ecological links extending to all corners of the sector. Pine Grove is the largest multi-purpose forest in the Greenbelt and will be managed for natural values and recreation. The eastern part of the sector will be managed to support sustainable farming. Bank Street will provide a focus for rural recreational opportunities, supported by associated visitor-oriented commercial and service uses. NCC-owned residences that are not associated with farmland are to be removed over the long term; the then vacant lands will be reclaimed and naturalized, or adapted for recreational purposes.

Pine Grove Sector will become strengthened through improved connectivity of natural environment lands, dominated by wetland areas. An addition to the Greenbelt will be made at Bank Street and Davidson Road; this parcel is part of the Lester Wetland. The new Greenbelt Natural Link in the neighbouring Airport Sector will connect the protected Leitrim Wetland to the provincially significant Lester Wetland at the southwest extremity of the Pine Grove sector. The potential of certain significant wetlands and woodlands located outside the Greenbelt to the southeast to serve as ecological corridors to connect to both Pine Grove and Mer Bleue will be explored with partners; these partners include the Province of Ontario and other landowners. Together, these connections will bolster the Greenbelt's long-term ecological health and contribute to establishing a connected regional ecological network, in particular, between Pine Grove, Mer Bleue and Leitrim Wetland, south to the South Gloucester natural areas and Osgoode Swamp, and south east to the Vars and Cumberland Forests.

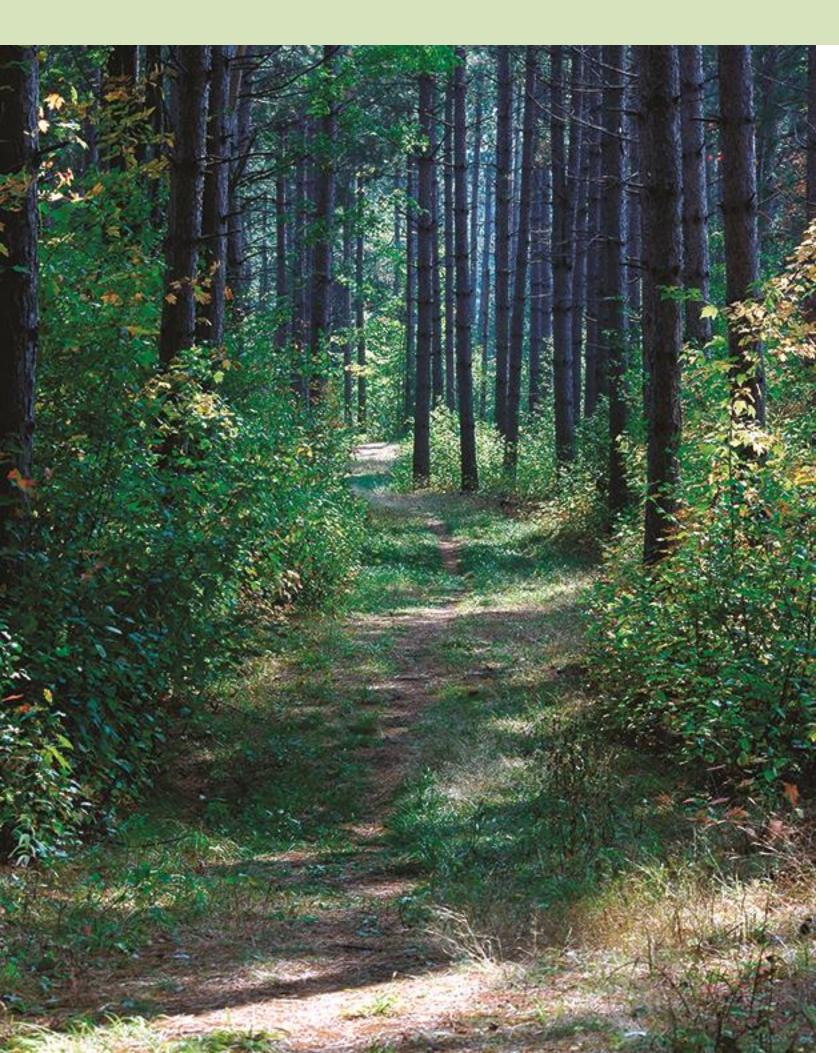
Sector Specific Policies and Considerations

Airport Environmental Plan: Conditions of the Airport's Environmental Plan (that protect the airport from incompatible development) will be respected (see Appendix B and City of Ottawa Official Plan, including pertinent Schedules).

Transportation: Work with City to implement agreedupon tiered framework and mitigation approaches developed through the Joint Cumulative Effects Assessment Study for transportation infrastructure, including avoidance, mitigation and compensation, to prevent significant adverse environmental effects on the Greenbelt. Specific sector initiatives with early NCC engagement in the planning process include implementation of special conditions for the Hunt Club Road Extension.

Canadian Forces Station Leitrim: No uses generating electromagnetic interference shall be permitted within three kilometres of the station, nor will construction be permitted in the path of the station's communication signals (see Appendix B).

Green's Creek Watershed: Continue efforts to improve the headwaters of Green's Creek and its tributaries in this sector. Have regard for recommendations of existing studies, particularly those addressing erosion control thresholds. Work with the City and others to ensure protection of water quality, water quantity, ecology and fluvial geomorphology. Request best practices in stormwater management for all upstream development on non-federal lands, and require these practices on federal lands, including agricultural lands.



A – Pine Grove Forest Core Natural Area

- Manage coniferous plantations for conversion to mixed o hardwood stands, with special attention given to White and Red Pines to ensure that they remain a major component of the forest.
- Expand and protect the Heritage Pine forests as an example of past Pioneer forests.
- Selectively harvest and thin forest plantations to promote habitat biodiversity and overall forest health.
- Permit existing communications antennae at CFS Leitrim.

B – Natural Environment Land Addition – Bank Street

 Add NCC-owned natural area to the Greenbelt and designate this part of the Lester Wetland as Core Natural Area.

C - Pine Grove Forest Natural Link

- Maintain and enhance the function of this link in partnership with community and user groups.
- Work with the City to incorporate appropriate setbacks in municipal zoning by-law to promote a buffer from development on private lands abutting Greenbelt boundary.

D – Natural Link – Lester Wetlands

 Establish and retain natural link of Lester Wetland across the future Light Rail Line along with special measures as required.

E – Ecological Corridor to Leitrim & Regional Natural Features

 Partner with City, agencies and area landowners to identify, retain and restore ecological corridor from the Pine Grove Forest southwest to the Leitrim Wetland, east to provincial forest areas adjacent to Highway 417 and south-southeast to the rural natural features of South Gloucester and to Osgoode Swamp.

F – Pine Grove Sector Farms

- Work with farm tenants to practice sustainable agricultur
- Encourage establishment of enhanced riparian areas alor Bearbrook Creek tributaries to meet provincial and feder best management practices.

G – Pine Grove Sector Farms

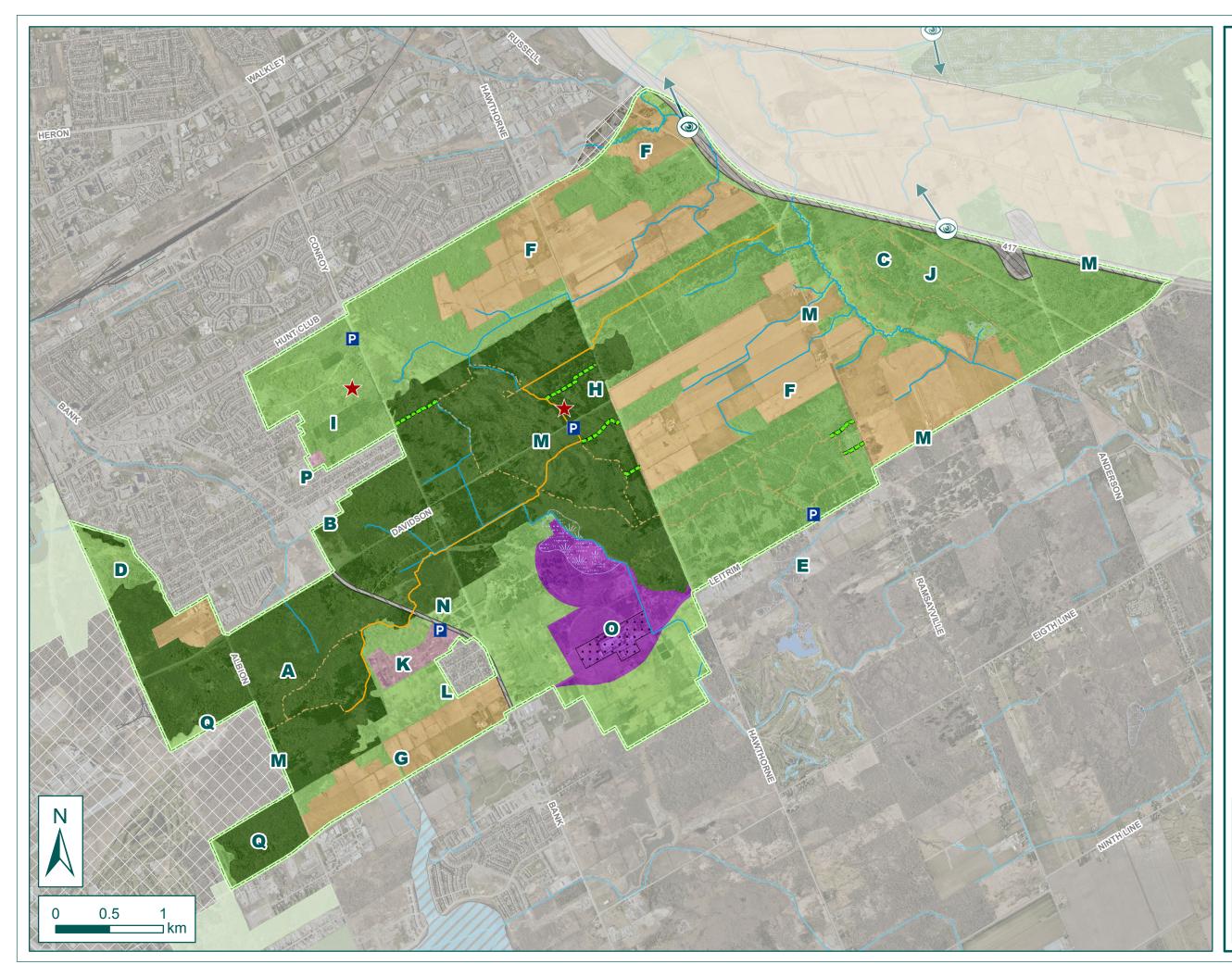
 Encourage sustainable agriculture, and reserve lands for natural link to connect to natural link and core natural are lands in the Airport sector.

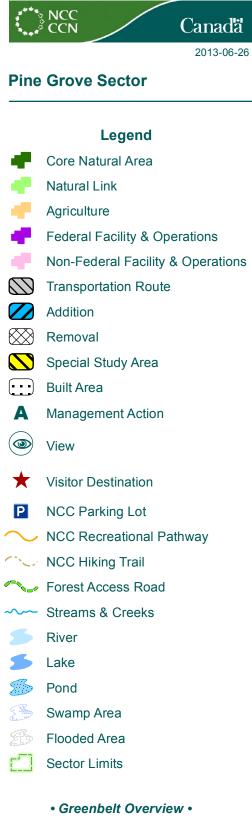
H – Pine Grove Forest Interpretation Trail

- Continue interpretation and demonstration of forest management (e.g., past and present techniques, silviculture, agri-forestry) at this Core Natural Area Visito Destination.
- Encourage forest management research and identify way to attract additional research partners.

L Conroy Dit Bograptional Area

	I – Conroy Pit Recreational Area
or	 Offer a mix of outdoor recreational activities, i.e. hiking, tobogganing, at this Visitor Destination.
	 Allow use of a designated area as one of two Greenbelt off- leash dog areas.
	J – Equestrian Trail
	 Permit continued use of equestrian trail, working in
e	partnership with users to minimize natural environment impacts.
•	K – Capital Golf Course
	Encourage maintenance and management practices that
	support functions and features of surrounding natural link
I	 Limit facility to existing area.
	L – Greenbelt Edge at Kemp Park
	 Encourage community environmental stewardship to support natural link features and functions in the
n	surrounding Greenbelt lands and to maintain a natural vegetated Greenbelt edge.
	M – Greenbelt Capital Arrival, Scenic Routes and Views
	Provide welcome and wayfinding signage at this Capital
	Arrival entrance along Highway 417.
	Protect and enhance quality of natural environment views
5	along the Capital Arrival of Highway 417. Implement
	elements of the MTO's Context Sensitive Design approach
	and continue to implement the NCC's orientation and wayfinding signage, in collaboration with the MTO and the
	City.
	 Explore potential to enhance scenic route quality along
st	Leitrim, Albion, Davidson and Ramsayville Roads.
	N – Residences in Conroy-Bank Street Area
	Remove NCC residences (i.e. Park Lane, Lynch and Braddish
	Streets) and associated redundant streets over time.
re.	Naturalize these lands to strengthen adjacent natural lands. O – Canadian Forces Station (CFS) Leitrim
ng	 Permit existing and future communications equipment in
ral	the Federal Facility & Operations Area.
	Encourage maintenance of natural vegetation and functions
	in Federal Facility & Operations Area to support continuity
	of adjacent natural lands.
rea	 Limit any future need for facility expansion to the Built Area footprint.
	P – École élémentaire Sainte Bernadette
	 Limit facilities to existing area.
	Q – Future Airfield Requirements
or	• Reserve lands as required for future airfield expansion and
	improvements, including runway, safety areas and
ys	taxiways.





Canadä





This 6,742 ha sector is the largest peat bog in Canada's Capital Region and the largest natural area in the Greenbelt. In 1995, Mer Bleue was designated as a wetland of international importance under the Ramsar convention on wetlands. Prior to the retreat of the post-glacial seas that started some 12,000 years ago, the bog area formed part of the main channel of the Ottawa River. Today, Mer Bleue is home to nationally rare plants and animals. A one kilometre boardwalk gives visitors a fascinating glimpse of the bog ecosystem. Two sand ridges penetrate the bog, supporting a pastoral mix of hobby farms, ski trails, old fields and forests. Some forests on these ridges were planted in the 1970s as part of the federal government's Central Research Forest. An 81 ha site on the southern ridge hosts Natural Resources Canada's Geomagnetic Laboratory. A large cultivated and forested area featuring productive soils occurs east of the bog.

Row crops currently characterize the farmlands south of Blackburn Hamlet, interspersed with rental houses along Renaud Road. A community garden, formerly an NCC allotment garden, is established at the east end of Renaud Road. Highway 417 is a major entrance into the Capital for visitors arriving from Montreal, the United States, and

other points east. Green's Creek and many of its tributaries traverse the northern part of this sector. A former landfill is located near the western end of Dolman Ridge.

Opportunities and challenges

- Mer Bleue's large size and excellent health make it the • only natural area in the Greenbelt that is capable of supporting self-sustaining populations of plants and animals.
- The bog has great potential for interpreting and demonstrating the boreal landscapes typical of Canada's north.
- The sand ridges offer good visitor access to the bog.
- Ravines have the potential of acting as natural links to connect Pine Grove to Mer Bleue.
- . The area under the Highway 417 overpass at Ramsay Creek provides the opportunity to enhance the natural link between the bog and Pine Grove, further strengthened by the possibility of road removal in the longer term.
- The length of the western part of the sector provides an extended arrival into the Capital for rail and automobile travelers.

- Moderate quality soils, poor water quality and small farms make some lands in this sector marginally viable for farming.
- Urban development borders the northern limit of the bog in the developing East Urban Community/Orleans.
- Elevated levels of nutrients entering Mer Bleue from agricultural drainage and urban runoff could change the bog ecosystem.
- Significant transportation routes presently fragment some parts of the sector (e.g. Hunt Club Road extension, Highway 417). A number of future transportation and transit projects are proposed by the City to accommodate the growth of Orleans. These will have effects upon farmland, and ecological and visual continuity.

Master Plan Concept

Mer Bleue's expanse offers important opportunities for Greenbelt nature experiences. Few signs of the city are apparent from within the bog, yet Mer Bleue is only a 15 minute drive from the Capital core and Parliament Hill. Visitors can see a part of Canada's vast boreal landscape in this largest Greenbelt ecosystem unit, and appreciate and understand its geographic influence. At the same time, remnants of farm cultural landscapes on Mer Bleue's Borthwick sand ridges (south side) are retained and enhance the visitor approach to the bog. The Dolman sand ridge to the north will act as a buffer and link the bog with the Green's Creek conservation area. The longterm ecological integrity of Mer Bleue will be further safeguarded through consolidation of the entire bog area as part of the Greenbelt and through implementation of the Mer Bleue Management Plan. The southeastern end of the sector will provide a strong rural entrance into the Capital.

The visual quality along Highway 417 and the CN rail line will be enhanced for visitors arriving from the east. Gateway signage with reference to virtual interpretation information will announce passage through the Greenbelt. Farms on good quality soils (class 2, 3 and improved class 4 and 5 soils) will continue in production north of Highway 417. Areas in the Greenbelt between

Mer Bleue and Cumberland Forest will be conserved and enhanced to strengthen the ecological ties between these two important natural areas. Hedgerows, creeks and hollows will contribute to a network of natural links connecting Mer Bleue to Green's Creek and Pine Grove Forest. Among the many farms in this picturesque, rolling rural landscape, a diversity of rural visitor activities such as cross-country skiing and pick-your-own farms will be pursued.

Sector Specific Policies and Considerations

Transportation: Work with City to implement agreedupon tiered framework and mitigation approaches developed through the Joint Cumulative Effects Assessment Study for transportation infrastructure, including avoidance, mitigation and compensation, to prevent significant adverse environmental effects on the Greenbelt. Specific sector initiatives with early NCC engagement in the planning process include the Highway 417 widening and the Hunt Club-Innes-Walkley Connection.

Natural Resources Canada Geomagnetic Observatory:

Natural Resources Canada must be consulted and agree to any proposed uses or activities that could generate electromagnetic interference within five kilometres of the facility, due to potential impacts on the quality of geomagnetic monitoring operations.

Green's Creek Watershed: Continue efforts to improve the headwaters of Green's Creek and its tributaries, in particular the Mud Creek subwatershed, in this sector. Have regard for recommendations of existing studies, particularly those addressing erosion control thresholds. Work with the City and others to ensure protection of water quality, water quantity, ecology and fluvial geomorphology. Request best practices in stormwater management for all upstream development on nonfederal lands, and require these practices on federal lands, including agricultural lands.

A – Mer Bleue Bog Core Natural Area

Guidelines & Actions

- Limit activities (e.g. flooding, drainage, overuse) that conthreaten the bog and its natural processes.
- Monitor drainage from Navan Road landfill site and take corrective action if necessary.
- Work with the City and adjacent community to educate residents and visitors on the importance of this sensitive ecosystem and methods for its care.
- Partner with others to implement the Mer Bleue Wetlan Management Plan's objectives and actions for ecologica integrity, biological diversity, hydrology and water quality vegetation, wildlife, visitor experience, scenic quality, research and monitoring.

B – Mer Bleue Interpretation

 Maintain and promote information, visitor, and interpretation services that focus on natural history and recognition (international Ramsar site, Provincially Significant Wetland); establish programs in partnership with conservation groups for this Core Natural Area Visit Destination.

C – Greenbelt Additions – Mer Bleue Bog

 Secure identified Greenbelt additions (from 1996 Plan) partnership with landowners; designate as Core Natura Area when acquired by NCC.

D – Mer Bleue Bog South Natural Link

• Maintain a mix of forested and old field habitats to enhance biodiversity and natural link function.

E – Mer Bleue Natural Link

 Maintain and enhance the function and interpretation of this natural link that connects the Core Natural Area to natural areas west, south and east of the Greenbelt, in partnership with community and user groups.

F – Mer Bleue Southeast Ecological Corridor

 Work with City, Province, Conservation Authorities and area landowners to identify, retain/restore ecological corridor to Vars, Cumberland and Larose Forests and to South Gloucester natural areas.

G – Borthwick Creek Natural Link

 Maintain and enhance the function of this link in partnership with community and user groups.

H – Mud Creek Core Natural Area

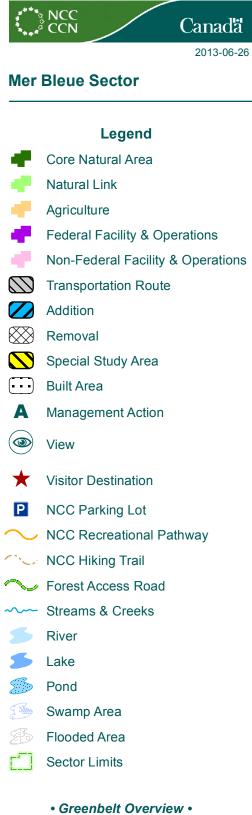
 Manage and restore habitat along Mud Creek in partnership with area commercial and farm tenants, and the City of Ottawa.

I - Mer Bleue Sector Farms

- Re-vegetate Ramsay Creek to enhance existing natural function on farmlands and at Hwy. 417.
- Work with farm tenants to achieve sustainable agricultuincluding enhanced riparian areas along streams to meet provincial and federal best management practices.

L – Hi	
	ghway 417 Capital Arrival
	 Provide welcome and wayfinding signage at this Capital Arrival entrance along Highway 417; further enhance the sense of arrival west of Anderson Road through landscap and view management (e.g. vegetation removal/addition maintenance of a buffer). Establish Gateway node of virtual (internet-based)
	promotion and interpretation information to introduce visitors to the Greenbelt and to Canada's Capital.
M - V	 isual Quality – Capital Arrival and Scenic Routes Work with City to improve visual aesthetic of industrial a utility uses west of Greenbelt edge along the Highway 42 Capital Arrival.
	 Explore potential to enhance scenic route quality along Russell, Anderson, Ridge, Ramsayville and Innes Roads a along the Innes Bypass.
N – C	 hapel Hill South Establish visitor services facilities including trails and signage.
0 – B	lackburn Station
	 Remove houses over the long term and naturalize these lands and/or re-use for sustainable agriculture.
P – N	 atural Resources Canada Geomagnetic Laboratory Limit any future buildings or expansion to the Built Area footprint.
	 Sustain isolation required for geomagnetic monitoring. Encourage naturalized facility lands for compatibility wit surrounding Core Natural Area.
Q – B	 lackburn West Institutional – Commercial Node Limit existing church and correctional centre to existing area in accordance with Chapters 5 and 6. Over time, require stormwater management retrofit measures to address fluvial geomorphological and
	geotechnical risks.Phase out buildings over time; consider as site for









This sector's diverse 1,329 ha mix of natural lands, farms, recreational uses and institutions separates Orleans from the inner urban area. The Rockcliffe Parkway provides scenic visitor access to the Capital core along the Ottawa River. Green's Creek, located along the west side of the sector, and the escarpment paralleling St. Joseph Boulevard are the sector's dominant landscape features. The Greenbelt encircles the community of Blackburn Hamlet and a privately-owned quarry. A large area of high-quality farmland supporting row crops lies north of Ottawa Road 174, and market gardens and apple orchards dominate farmland to the south of this roadway.

The Chapel Hill woodland along the western edge of Orleans borders the Royal Canadian Mounted Police (RCMP) Technical and Protective Operations Facility (TPOF) site. A number of RCMP buildings are located to the north of the TPOF site. Residences, market farms and community services are situated along St. Joseph Boulevard. The Pineview Golf Course and Hornets' Nest soccer fields border opposite sides of Green's Creek. Two churches and a provincial correctional facility are

located along Innes Road, a major transportation link between the city centre inside the Greenbelt boundary and the southern area of Orleans.

Opportunities and challenges

- Green's Creek's unique landform and the biodiversity of the Core Natural Area offer a special natural place for visitors. These features are characterized by naturally unstable stream banks, a situation which has been exacerbated by surrounding and upstream urban development.
- This sector provides an important natural separator between the communities of Beacon Hill, Orleans and Blackburn Hamlet.
- The area's diversity and accessibility from the Capital core (by vehicle, transit and the Ottawa River Pathway) and its proximity to nearby communities creates opportunities for a broad range of visitor experiences. These include cycling, in-line skating, cross-country skiing, nature interpretation, and bird watching. More intensive recreational activities also occur in this sector on sports fields, the toboggan hill and golf courses.

- The farmlands situated north of Ottawa Road 174 that do not currently support farm buildings could provide an opportunity for the establishment of a farmstead over time.
- The escarpment south of Ottawa Road 174 and lands at its base offer panoramic views of the Gatineau Hills.
- Local market gardens, a community garden and other farmland around Blackburn Hamlet provide opportunities for programming and community involvement in this area.
- Over the long term and once extraction operations are completed, the Lafarge Quarry site has the potential to become a valuable recreational and natural area addition to the Greenbelt.

Master Plan Concept

The sector supports a diverse, harmonious and easily accessible mix of environmental, agricultural, institutional, recreational and visitor-related uses. The sector's rural character distinguishes it from the urban areas that lie adjacent to and within (Blackburn Hamlet) the Greenbelt. Ecologically valuable lands along Green's Creek are protected and connected to the Ottawa River, Forest Ridge and Mer Bleue. The unique natural history of Green's Creek is revealed at a visitor interpretation site near the Rockcliffe Parkway. Lands north and south of Ottawa Road 174 are reserved for long-term farming and provide an opportunity for visitors to experience fruit, vegetable, ornamentals and crop production. Commercial uses that support the visitor experience of Greenbelt agriculture are offered on St. Joseph Boulevard. RCMP training and security activities occur in harmony with the adjacent Core Natural Area and support the evolution and function of the Natural Link at the south end of the TPOF site.

Sector Specific Policies and Considerations

Transportation: Work with City to implement agreedupon tiered framework and mitigation approaches developed through the Joint Cumulative Effects Assessment Study for transportation infrastructure,

including avoidance, mitigation and compensation, to prevent significant adverse environmental effects on the Greenbelt. Specific sector initiatives with early NCC engagement in the planning process include projects for Blackburn Hamlet Bypass widening and extension, and development of special conditions for the Ottawa Road 174 widening and the Chapel Hill Park-and-Ride projects.

Green's Creek Watershed: Continue efforts to improve the environment of Green's Creek and its tributaries in this sector. Have regard for recommendations of existing studies, particularly those addressing erosion control thresholds. Work with the City and others to ensure protection of water quality, water quantity, ecology and fluvial geomorphology. Request best practices in stormwater management for all upstream development on non-federal lands, and require these practices on federal lands, including agricultural lands.

A – Green's Creek Core Natural Area

- Engage partners (agencies, City, Conservation Authorities, interested groups and tenants) to conserve and enhance the health of the Green's Creek watershed.
- Work with partners to limit the stormwater runoff impacts of nearby development in Beacon Hill and Orleans.
- Work in partnership with others to identify and secure an ecological corridor from Green's Creek and Lower Duck Island to Upper Duck and Kettle Islands and across the Ottawa River to McLaurin Bay.

B – Chapel Hill North Core Natural Area

- Conserve features and functions of this Core Natural Area.
- Encourage RCMP maintenance and support of the Core Natural Area.

C – **RCMP** Technical & Protective Operations Facility Natural Link

- Work with RCMP to maintain Natural Link features and functions to the extent possible within the training operations area.
- Permit less intensive training activities and small-scale storage facilities.

D – Lower Duck Island Core Natural Area

Conserve habitat and function of this Core Natural Area that connects with the Ottawa River system, nearby islands and northern riverbank in the City of Gatineau.

E – Natural Link Land Addition – Blackburn Bypass

Add NCC-owned lands to the Greenbelt and designate as Natural Link to provide connection from CNA south of the Innes Bypass to Green's Creek.

F - Greenbelt Addition – Chapel Hill North Forest

 Support continued protection of this forested area, recognizing that this 1996 Greenbelt addition is City-owned and the NCC has no jurisdiction.

G – Special Study Area – Lafarge Quarry

- Explore potential with existing quarry operators regarding opportunities and means to add to or secure these lands for the Greenbelt upon closure; in the interim, work with the owner to reduce impacts of water pumping on Greenbelt lands.
- Evaluate contributions to the Greenbelt with regard to naturalized vegetation, natural linkage function, and recreation potential.

H – Farm North of Ottawa Road 174

- Work with farm tenants to achieve sustainable agriculture (diverse crops) and to implement best management practices including restoration of stream riparian areas to meet provincial and federal standards.
- Explore opportunity to establish a farmstead, as a partnership.

I – Former Tauvette Road Greenhouses & Tree Nursery

Support use of this facility for sustainable agriculture.

J – Greenbelt Addition – NCC-Owned lands

- Add lands to the Greenbelt; designate as Agriculture
- Explore expanded partnership potential for community gardens on these agricultural lands.

K - Market Gardens - 1399 & 1501 Saint Joseph Boulevard

- Support and encourage existing diversified farming and visitor attractions at Orleans Fruit Farm.
- Explore coordination of natural area and environmental education with farm programs.
- Work with farm tenants to achieve sustainable agriculture (diverse crops), and to implement best management practices, including restoration of stream riparian areas to meet provincial and federal standards.

L – Farm Fields of 1399 St. Joseph Boulevard

- Work with farm tenants to achieve sustainable agriculture (diverse crops) and to implement best management practices, such as restoration of stream riparian areas, to meet provincial and federal standards.
- Support maintenance of natural function along existing east-west creek that connects Chapel Hill Forest to the west Green's Creek tributaries.

M – Sports Fields at Blackburn Bypass

Permit continued use of lands bounded by Tauvette and Innes Roads, Blackburn Hamlet Bypass for sports fields.

N – Greenbelt Pathway Trailhead

- Improve trailhead visibility and its connection to Ottawa River Pathway.
- Promote this Green's Creek Core Natural Area Visitor Destination.

O – White Sands Golf Course / Orleans Golf Academy

- Limit buildings and parking area to existing area in accordance with Chapters 5 and 6.
- Encourage best practices that enhance natural connection across golf course lands to lowlands on adjacent farms and to Forest Ridge.

P – Pineview Golf Course

- Support the potential for a more intensive built facility, compatible with the existing recreational uses, to be established over time along Blair Road, recognizing the location of existing facilities and their proximity to light rail transit; ensure a positive impact on Natural Environment and Capital Experiences & Recreation roles in any intensification.
- Permit golf course operation on the non-federal facility and operations area.
- Work with golf course management to restore and protect Green's Creek.
- Consider long term facility phase-out and naturalization of these lands.

Guidelines & Actions

Q – Visual Quality – Scenic Entry & Routes and Greenbelt Edge

- Encourage community and partners to further enhance visual quality of Greenbelt along transportation routes and Greenbelt Edge at Blackburn Hamlet through context sensitive design and landscape management.
- Protect and enhance the visual guality of the Scenic Entry along Ottawa Road 174 and the Scenic Routes along the Blackburn Bypass and Rockcliffe Parkway.

R – Toboggan Hill

Continue partnership with City for management of toboggan hill and associated parking lot.

S – Hornets Nest Sports Fields

- Limit covered sports field ("dome") to existing footprint
- Improve visibility and accessibility of trailhead.

T – Chapel Hill North

Establish a trailhead (bulletin board, signage, outdoor toilet) at northeast corner of Innes Road and the Blackburn Bypass; enhance and rationalize area trail network.

U – RCMP Technical and Protective Operations Facility (TPOF)

- Limit buildings, parking area and intensive training area to Built Area footprint.
- Permit training activities within the Federal Facility and Operations Area.
- Encourage naturalization of facility lands for compatibility with adjacent Core Natural Area/ Natural Link.
- Support implementation of the RCMP TPOF Master Plan.

V – Saint Joseph Institutions

Limit buildings and parking area of Manoir Saint Joseph and Madonna Long Term Care Centre to existing area in accordance with Chapters 5 and 6.

W – Pepin Court Residences

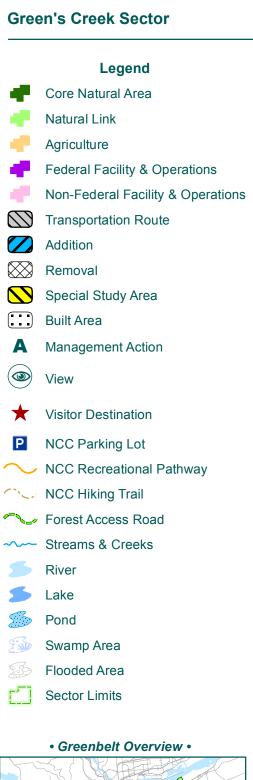
Encourage naturalization of properties to contribute to natural link function and Greenbelt visual quality.

X – City of Ottawa Water Pumping Station

Limit facility to existing area in accordance with Chapters 5 and 6.

7.7 Greens Creek Sector





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Chapter 8

8.1 Plan Administration and Monitoring

This chapter describes how the major directions and proposals of the Plan will be implemented over time, in a manner consistent with the *National Capital Act*. A number of processes and tools will aid in this regard, including:

- Approval of the Master Plan;
- Commissioning of the Master Plan;
- Land use, design and transaction approvals applicable to federal lands and projects;
- Modifications and revisions to the Plan;
- Terms and conditions of existing and future agreements; and
- Identification of priority initiatives for implementation of the Master Plan.

8.2 Effects of the *Coming into effect* of the Master Plan

The Greenbelt Master Plan comes into effect upon approval by the NCC Board of Directors. A Federal Land Use Approval, granted by the NCC, confirms the effective date for the Plan and establishes conditions accompanying the Plan's approval (see Appendix E).

The Master Plan is a planning tool that provides general guidelines to help managers implement the long-term mission for the Greenbelt. It occupies the second level in the NCC's Planning framework, after the *Plan for Canada's Capital*, and has a planning horizon of ten to fifteen years. Not all the proposals will be realized during that period; some will require more time. Resource availability will have an impact on the speed and breadth of realization of the Greenbelt Master Plan proposals; sequencing of actions will respect the priorities set out in the Master Plan and the Commissioning Plan.

8.3 Commissioning of the Master Plan

The implementation of the Plan begins with the delivery of a Commissioning Plan to the Greenbelt Director. The Commissioning Plan falls under the responsibility of the Vice-President of Capital Planning & Environmental Management, and it will be prepared in cooperation with the Greenbelt Portfolio.







Greenbelt Approval

The Greenbelt Master Plan was approved through an iterative process whereby the content for each of the four steps (A to D) were approved as the review proceeded. The Federal Land Use and Design Approval for the complete Greenbelt Master Plan was granted in November 2013 by the NCC Board of Directors.

Commissioning Plan

The Commissioning Plan is an important step that represents the official transfer of the Master Plan to the Greenbelt's managers. It sets out the roles and responsibilities of the parties that will be involved in implementing the various initiatives and proposals of the Master Plan. The Commissioning Plan also establishes priorities, a schedule for implementation and estimates of resources required for the various projects. It also clarifies certain aspects of the Master Plan, thus enabling the implementation process to proceed as smoothly as possible. The document will be completed within a year of the Master Plan's approval.

The Commissioning Plan will articulate how monitoring will occur on the progress of the Master Plan. This will inform an evaluation of the Plan, targeted for the fifth year of implementation. The requirement for this evaluation is stipulated in the NCC's planning framework policy, and evaluation results help determine whether or not a more comprehensive Plan review is required.

8.4 Greenbelt Master Plan and City of Ottawa Official Plan

The NCC will continue to work with the City of Ottawa to "harmonize" the City's Official Plan and the Greenbelt Master Plan to the extent possible, by:

- seeking amendments to the official plan and zoning by-law;
- working to resolve outstanding transportation issues; and
- encouraging compatible uses and management of private lands abutting the Greenbelt and on private properties surrounded by the Greenbelt. The NCC will provide feedback on this matter through participation in the municipal circulation and approval processes, and via various portfolio initiatives and relationships.

8.5 Approval of Land Use and Design

Proposals in the Master Plan are to be implemented in accordance with the NCC federal approvals process in accordance with Sections 12 and 12.1 of the *National Capital Act*. Federal land use, design or transaction approval must be obtained for any new land use, work or realty transaction on federal buildings or properties.

The approval process, under the coordination of the Federal Approvals & Environmental Management Division seeks to ensure that proposals comply with:

- Federal policies and guidelines, including those of the NCC;
 - The Canadian Environmental Assessment Act;
- The Plan for Canada's Capital;
- The Greenbelt Master Plan;
- Applicable Greenbelt management plans;

- Other NCC policies respecting specific planning-related matters or requirements, including the natural environment (including environmental effects analysis or impact assessments), heritage, archaeology, economic and social factors; and
- Any other requirements stipulated in regulations, related approvals, leases, easements, other land interest instruments, restrictive covenants, special agreements or other relevant documents.

Proposals for the use of Greenbelt lands that are not specifically contemplated or identified in the Master Plan may be advanced during the effective period of the Plan, either by the NCC or by other parties (including municipalities, private enterprises, non-profit organizations and individuals). All such proposals must be reviewed within the federal approval process outlined above, in order to establish their feasibility and conformity with the Plan's objectives.

8.6 Modification and Revision of the Plan

The Master Plan establishes the orientations, objectives and means required to fulfill the Greenbelt mission and ensure its sustainability. It may, however, be necessary to modify or amend certain provisions of the Plan as a result of:

- Additional special studies that give rise to advisable adjustments to the Master Plan;
- Updates to the *Plan for Canada's Capital* that necessitate amendments to the Master Plan in order to ensure conformity;
- The production of more detailed plans for parts of the Greenbelt itself; or
- Land use requests by third parties or by the NCC that are inconsistent with the Plan.

In the first two instances outlined above, the new information or direction that is identified, and requires a Plan amendment, is likely to represent beneficial change to the Master Plan that will help in achieving the Greenbelt mission and directions. Given the Plan's progressive nature, it is anticipated that amendments will, however, be the exception rather than the rule.

In cases where amendments to the Plan are required in order to approve specific initiatives, NCC staff, under the authority of the Vice-President, Capital Planning & Environmental Management, will be responsible for the review process. The project proponent will be required to prove the acceptability of the application, based on the following criteria:

- The project's relevance to the Greenbelt mission and strategic statements, and its positive and negative impacts;
- Compliance of the project with the Plan's strategic directions and planning concept;
- The project's compatibility with other implementation mechanisms (e.g., policies, strategies);



Greenbelt Master Plan Review

The Master Plan will be evaluated 5 years after its approval to determine the nature of the review process (update or comprehensive review) that will be required for the NCC's 10 to 15 year Plan review.





Harmonizing Greenbelt Goals

When facilities on Greenbelt lands have come to the end of their life cycle, a new function and facility use will be determined to implement Greenbelt goals and directions. NEW PLAN FOR CANADA'S CAPITAL GREENBELT

- The project's compatibility with and repercussions on existing and proposed adjacent uses and designations in the Greenbelt;
- The precedent to be set in the Greenbelt and for the management of the Greenbelt, if the application is approved;
- The financial repercussions for the NCC and the Capital; and
- Any other relevant factor.

If an amendment to the Plan is considered necessary, it must be approved by the NCC's Board of Directors. The amendment review and approval process provides for public consultation as appropriate in relation to the scope of the proposed amendment. The Vice-President, Capital Planning & Environmental Management, is responsible for recommending the level of consultation required.

The Greenbelt Land Designations were based on the NCC's geographic information system (GIS) data. Minor adjustments to certain designation boundaries may be required during the life of the Plan, to better reflect objectives and specifications. Minor boundary changes would not require a plan amendment. The Vice-President, Capital Planning & Environmental Management, is responsible for the final determination in this respect.

As noted above, within approximately five years of the approval of the Plan, the Vice-President, Capital Planning & Environmental Management, in collaboration with the Greenbelt Director, will assess whether or not there is a need for a review of the Master Plan. An update or full Plan review would, in any case, be initiated within ten to fifteen years after the Plan's approval, under the responsibility of the Vice-President, Capital Planning & Environmental Management.

8.7 Existing Agreements

A number of formal agreements have been signed with partners (lessees, municipalities, promoters, agencies, etc.) concerning the use of NCC-owned sites within the Greenbelt boundaries. These agreements include leases and service contracts. Currently, some of these agreements are not entirely consistent with the directions, goals and policies set out in the Master Plan.

Gradually, over time, the NCC intends to harmonize all existing service contracts, leases and other agreements with the Plan's directions, goals and policies. When one of these instruments is eligible for renewal or renegotiation, its content will be examined and adjusted where necessary to bring it into line with the Plan. This responsibility lies with Real Estate Management in the case of leases, or with the Greenbelt Portfolio in the case of service contracts. If a change in land use is proposed, the federal land use approval process must be followed. This process will be initiated by Real Estate Management in the case of leases, or by the Greenbelt Portfolio in the case of service contracts.

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8.8 Priority Initiatives for Implementation of the Master Plan

Although this aspect will be addressed in more detail in the Commissioning Plan, this chapter provides guidelines for priority initiatives. The Master Plan identifies some of the most important initiatives required in the coming years, including the:

- Consolidation of the Greenbelt territory through acquisitions and the clear establishment of its boundary;
- Completion of the Greenbelt Pathway;
- Protection and Restoration of Natural Lands and Development of Partnerships within Greenbelt;
- Development of Partnerships for Ecological Corridors outside Greenbelt;
- Implementation of Sustainable Agriculture in the Greenbelt;
- Adjustment to Visitor Services to implement a Greenbelt Interpretation Plan;
- Greenbelt Branding, Communication and Marketing Strategy; and
- Greenbelt Visual Identity at Entrances.

Focusing on these priority initiatives will ensure an efficient implementation of the Master Plan with respect to the Greenbelt as a whole, and to the three main roles of Natural Environment, Sustainable Agriculture, and Capital Experiences and Recreation.

8.8.1 Consolidation of Territory: Acquisitions and Greenbelt Limits

Lands within the Greenbelt form part of the National Interest Land Mass (NILM), and are essential to the future Capital. Although a *legal* definition of the Greenbelt limits has not been established at the date of approval of this Plan, it is anticipated that such a definition will be prepared and enacted during the lifespan of the Master Plan. A first step is the identification of the limits in the current Master Plan and its approval by the NCC Board of Directors. A second step would be the preparation of a technical description of the boundaries of the Greenbelt.

The Master Plan proposed the addition of 481 hectares of land to the Greenbelt. The NCC will acquire these lands within the limits of its acquisition budget and in compliance with Treasury Board requirements. Purchases will be the favoured means of acquisition. However, the NCC will also seek to ensure that the natural attributes of Greenbelt addition lands and ecological corridors beyond the Greenbelt are protected through exploring potential other means, such as agreements with land owners, conservation easements, eco-gifts, etc.



Expanding the Greenbelt

The 2013 Greenbelt Master Plan proposes the addition of 481 hectares of land to the Greenbelt that help to compensate for the removal of 1,347 hectares that constitute the airport operating area. The result is a Greenbelt that is 20,600 hectares in size.



8.8.2 Completion of the Greenbelt Pathway

When completed, the Greenbelt Pathway will be a continuous 56 kilometre recreational pathway extending from one side of the Greenbelt to the other. The Greenbelt Pathway connects key visitor attractions, links with other pathways in Canada's Capital Region, and adds a unique rural experience to the Capital's pathway network.

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The proposed Greenbelt Pathway route is designed to provide a continuous and varied recreational and educational experience. It will be situated in order to pass through highquality, visually evocative Greenbelt landscapes, from Shirleys Bay in the west to Green's Creek in the east. Since 2002, the NCC has completed 30 km of this pathway, including the most recent 3.7 km stretch along the east side of Woodroffe Avenue, between Fallowfield Road and Hunt Club Road (completed by the City of Ottawa in cooperation with the NCC in 2005). The only section remaining in the western half of the Greenbelt, to be completed over the next 2 years, is a 1.6 km section from Merivale Road to the Black Rapids Lockstation at Rideau River. The remaining Pathway sections in the eastern half of the Greenbelt, specifically in the Mer Bleue and Airport sectors, and the Rideau River crossing, are anticipated to be completed within the following 10 to 20 years.

8.8.3 Protection and Restoration of Natural Lands & Development of Partnerships

The NCC shall manage the Greenbelt in accordance with the principles of responsible environmental stewardship. The Natural Environment role of the Greenbelt Master Plan is to" protect and enhance natural areas which are integral to the larger natural environment of Canada's Capital Region as the primary priority, in harmony with Canadian's aspirations for a healthy and resilient environment". Natural Environment lands comprise ten Core Natural Areas and their connecting network of Natural Links.



Restoration of Core Natural Areas and Natural Links will include:

- Restoration of Natural Areas such as creeks, wetlands, forests, slopes, conservation areas, Valued Natural Ecosystems and Habitats, sand dunes and natural links;
- Restoration of riparian corridors with plantations of trees and shrubs; and
- Re-establishment of links in fragmented areas and across agricultural lands.

The NCC cannot accomplish all of the necessary protection and restoration of natural lands in the Greenbelt alone. Partnerships need to be expanded and/or developed. Potential partners in support of the Natural Environment role include the City of Ottawa, the three area Conservation Authorities, federal departments located in the Greenbelt, provincial ministries, community groups and interest groups. Establishment of a partner working group, complete with a governance structure and mechanism for setting priorities, will be key to ensuring an effective approach throughout the Greenbelt territory.

8.8.4 Development of Partnerships for Ecological Corridors Outside the Greenbelt

The Greenbelt Concept: Capital Context (Figure 3.2) identifies potential ecological corridors connecting the Greenbelt to the regional ecological network of natural areas. It is unlikely that these ecological corridors will be acquired by the NCC. Rather, easements and land stewardship partnerships will be the primary tool to protect these lands, mainly to help protect the Greenbelt's Natural Environment and to connect the Greenbelt to this regional network. Similar to the protection and restoration indicated for Greenbelt natural lands (section 8.8.3), partnerships need to be developed to protect ecological corridors. Partners could include a number of agencies, including the Cities of Ottawa and Gatineau, Conservation Authorities, conservation groups, land trusts, landowners of adjacent and regional natural features, community groups and individuals.

8.8.5 Implementation of Sustainable Agriculture in the Greenbelt

Sustainable agriculture integrates environmental stewardship, economic profitability, and social responsibility. Four strategic directions have been established in the draft *Strategy to Implement Sustainable Agriculture in the Greenbelt of Canada's Capital Region*:

- A- Encouraging the desired types of farms and agricultural practices;
- B- Protecting and expanding farm assets and built infrastructure;
- C- Engaging the right people and building partnerships; and
- D- Mobilizing internal resources for rapid and successful implementation.

Nineteen specific actions have been grouped under these strategic directions. The Greenbelt and the Real Estate Management Portfolios will work jointly to implement sustainable agriculture through these actions.



What is a Land Easement?

A land easement is an agreement whereby the landowner allows rights to a secondary party over a specified area of their property. Such an agreement can allow for the natural integrity of a parcel of land to be overseen by a secondary party, such as a Conservation Authority, to fulfill Greenbelt natural environment goals and to provide the property owner with the opportunity to reap the benefits of a natural setting. NEW PLAN FOR CANADA'S CAPITAL GREENBEL

8.8.6 Adjustment to Visitor Services and Implementation of Interpretation Plan

The Greenbelt offers great outdoor experiences on natural lands for the enjoyment of everyone. These include hiking, picnicking, bird and wildlife watching, biking, cross-country skiing and snowshoeing. Other visitor services include the two largest off-leash dog areas in Canada, tobogganing at three locations, boat launching, and access to ice fishing. Over 150 kilometres of trails and forest access roads are dedicated to recreational use in the Greenbelt. A number of issues are associated with these recreational activities, including creation of unofficial trails and shortcuts, lack of hierarchy within the trail network, and introduction of new types of recreational uses that may conflict with existing uses. Adjustment to the visitor services offered in the Greenbelt is required; this will be informed by a review of existing practices and future desired practices with a view to ensuring public safety and enjoyment while protecting natural areas.

An Interpretation Plan for the Greenbelt will soon be completed. A bridging program will be required to implement the Interpretation Plan. This will involve several groups at the NCC, including Greenbelt portfolio, interpretation and industrial design staff.

8.8.7 Branding, Communication and Marketing Strategy

The NCC will develop a strategy to identify the branding of the Greenbelt, and to promote and communicate the value and contribution of the Greenbelt to the Capital and to Canadians both in and beyond the Capital. The goal is to make the Greenbelt better known and appreciated. This strategy will also identify ways to implement the proposals, through different forms and media.



The Greenbelt is the main entrance to the Capital for people arriving along Highways 417 and 416. Currently, it is not clear when you enter or exit the Greenbelt: only small signs placed along the Greenbelt boundary identify this territory, along with wayfinding signs to the main parking lots. A symbolic introduction to the Capital through the Greenbelt and a visual indication of Greenbelt entrances must be provided. The goal of this initiative is to identify Greenbelt entrances and create a visual identity, and then to implement this visual identity at strategic locations in the Greenbelt, to reinforce its visibility and significance in the Capital.







Conclusion

This Plan establishes a renewed vision and purpose for the Greenbelt, looking toward the year 2067: a greener Greenbelt that remains a publicly-owned rural landscape in the heart of Canada's Capital. The Plan documents the necessary strategic directions, policies, guidelines and actions to ensure its effective implementation.

Over the coming decades, the Greenbelt will continue to be shaped as a distinctive and cohesive rural setting for Canada's "green" Capital. It will remain a large, connected green space comprising a continuous belt in roughly its present shape and location. The Greenbelt's diverse mix of uses and landscapes will be maintained. Areas having ecological significance and high renewable resource capability will remain protected, as will specific areas suitable for developments of Capital significance that benefit from and respect the Greenbelt's rural setting. Natural environment is the primary priority.

The Greenbelt will remain in the public domain, planned and managed for the broad public good. Federal ownership will remain the primary mechanism for ensuring achievement of Greenbelt objectives. There will be endeavours to enhance relevance of the Greenbelt to the Capital and to Canadians through public programs and facilities, and by promoting the Greenbelt as a laboratory for research on management of the natural environment, the urban/rural interface and other related topics that might emerge over the life of the Master Plan.

The NCC will seek partners to accomplish the directions of this Plan. Partnerships with other levels of government, the private sector and the public are vital for the NCC to move the Greenbelt towards the future envisaged in this Master Plan. Shared management responsibility will enable mobilization of the breadth and quantity of resources needed for a sustainable Greenbelt.

A haven for nature, wildlife and humanity, a living repository of Canadian history, traditions, technology and ecology — this national treasure will truly represent rural Canada. This Master Plan needs the commitment of our leaders and citizens, so that the Greenbelt can continue to grace the Capital for the benefit of present and future generations.



Glossary

Action

A specific initiative or program undertaken in order to address a defined management issue. An action requires proactive effort, and results in a product or outcome that contributes to meeting the strategic directions articulated through the vision, goals and policy statements.

Area of Natural and Scientific Interest (ANSI)

ANSIs are areas of land and water that represent significant geological (earth science) and biological (life science) features. Earth science ANSIs include areas that contain examples of rock, fossil and landform features in Ontario. These features are the result of billions of years of geological processes and landscape evolution. Life science ANSIs are areas that contain examples of the many natural landscapes, communities, plants and animals found in the 14 natural regions of the province. The Ontario Ministry of Natural Resources identifies ANSIs that are 'provincially significant' by surveying regions and evaluating sites to decide which have the highest value for conservation, scientific study and education.

Avoidance

The first or preferred choice, in the hierarchy of response to management of cumulative effects from transportation infrastructure upon the Greenbelt. Transportation projects will be planned to avoid the potential for impact upon core natural areas and natural links.

Biodiversity

The variety of life on earth in all its forms, including genes, species and ecosystems, and the natural processes that link and maintain them.

Buffer zone

"Natural Area Buffer" was a land designation in the 1996 Greenbelt Master Plan. In this Plan, the term "buffer zone" refers to lands that buffer natural areas from adjacent uses such as facilities, roads, etc. without referring to a specific land designation.

Built Area footprint

The area designated on the Chapter 7 sector plans for federal facilities that corresponds to the lands dedicated to buildings, parking lots, roadways and landscaped areas.

Capital Pathways

This network is comprised of the pathways that connect to each other within the Capital and to regional and national trails such as the Rideau and Trans Canada Trails. The Capital Pathways network is depicted conceptually on the Greenbelt Concept: Capital Context, Figure 3.2.

Compensation

The fifth choice in the hierarchy of response to management of cumulative effects from transportation infrastructure upon the Greenbelt. Compensation for loss of ecological features and functions is guided by the principle of no net loss. Significant adverse environmental effects that result from a transportation

project are compensated by addition or restoration of a comparable, in area and quality, natural area elsewhere.

Cultural heritage

The legacy of items and attributes of an area's ancestors, conserved and communicated for understanding and value by present and future generations. Within the Greenbelt, cultural heritage includes a mix of built structures (such as the lime kiln, the Rideau Canal, and Carlsbad Springs), farmsteads and "cultural landscapes" (combined works of nature and human intervention) of farm fields, heritage forests and natural features.

Cumulative effects

The combination and interaction of individual human activities that result in aggregate effects upon a landscape unit or ecosystem and that may be different in nature or extent from the effects of the individual activities. Ecosystems cannot always cope with the combined effects of human activities without fundamental functional or structural changes.

Ecological connectivity

Movement of organisms, minerals and materials from one place to another, primarily possible due to the existence of corridors connecting one habitat or ecosystem to another that allows for a flow of genetic material between populations.

Ecological corridor

The Greenbelt Master Plan makes a distinction between "corridors" and "links". While they effectively serve the same purpose (connecting significant natural areas to one another), references within this plan to "corridors" relate to natural land and water landscape connections that occur outside of the Greenbelt boundary.

Ecosystem management based approach

An approach to human activity and land management that considers all aspects of the landscape and ecosystem, on a watershed basis, and provides for protection of natural features and the processes that support them. The Greenbelt and its watershed are treated as an interconnected system, using best available science, consideration of cumulative impacts, and recognizing that a healthy environment is necessary for a healthy Capital community and economy.

Ecological sustainability

The ability of natural features and functions to survive, thrive and evolve indefinitely.

Edge facility

A federal or non-federal facility which is located along the Greenbelt edge and adjacent to a developed urban area, resulting in a Greenbelt facility which transitions between and interacts with both the more natural landscapes of the Greenbelt and the more intensively developed urban area. Three Edge facilities are identified in the Greenbelt: the Public Works & Government Services Canada Carling Campus (future DND headquarters), the Queensway Carleton Hospital, and the Nepean Sportsplex.

Environmental showcase

With evolution of the Greenbelt to become an environmental showcase, the range of land uses, management activities and facilities will demonstrate how humans can work, live and play in a manner that indefinitely maintains the environmental health of Greenbelt natural features and systems.

Environmentally sound

Facility management and operations approaches and practices that are intended or strive to reduce greenhouse gas emissions, recycle resources, and conserve resources.

Fragmentation

A process whereby large contiguous ecosystems are transformed into smaller patches surrounded by disturbed areas.

Goal

A destination, an aim; an action statement of strategic direction for implementing the vision and which demonstrates a commitment to broad intentions and aspirations.

Green

With respect to green spaces, green links, green roofs, etc., green is synonymous with "vegetated". Within the context of "green character" of a structure or landscape or "green setting", "green development", etc., green is synonymous with ecological sustainability.

A "green economy" refers to the collection of businesses and works that contribute to a more sustainable planet, such as renewable energy, production of goods from renewable resources or development and sharing of knowledge related to sustainability.

Guideline

A statement intended to determine a desired direction or outcome, or to provide advice on how something should be carried out.

Habitat

The place where an organism lives, and/or the conditions of that place, including the soil, vegetation, water, and food.

Heritage Forest

A stand can be an example of an Older Heritage Forest. A Forest area, either a Plantation or a Natural stand, that would resemble, in composition and size of trees, the original forests that occurred along the Ottawa River prior to settlement. The criteria for the Heritage Forest are:

- A good mixture of native species with emphasis on Red and White Pine.
- The potential, through selective forest management over a period of 30 years, to resemble the Heritage forests of the late 1800s.
- Can be distinguished and protected as a forest stand within the boundaries of the Greenbelt.

High impact recreation

Activities which disrupt natural processes or fragment habitats, cause erosion, etc., including use of motorized recreational vehicles, development of sports fields, etc.

Land designation

A geographically-based categorization that reflects the desired use and characteristics for a specified area of land.

Land stewardship

Responsible planning and management of lands to achieve a desired outcome for Greenbelt lands that is consistent with the Strategic Statements.

Land use concept

A map that serves as a visual representation of the Vision.

Landscape connectivity

The extent to which a landscape facilitates the movements of organisms and their genes.

Low impact design (LID)

The practice of taking steps during development design to minimize changes to the hydrologic cycle (runoff and infiltration after a storm). LID strategies integrate green space, native landscaping, natural and

hydrologic functions, and employ various other techniques, all in order to generate less runoff from developed land. Examples could include enhancement of ground infiltration, naturalization of stormwater ponds, rainfall harvesting, green roofs, rain gardens, etc.

Low impact recreation

Activities which do not disrupt natural processes or fragment habitats, including study, walking and crosscountry skiing, primarily on low-impact trails or boardwalks.

Major expansion

A proposed change to a federal or non-federal facility that results in significant changes to the visual aspects of the site, to the areal extent of built and landscaped area, or to the overall Greenbelt landscape.

Minor expansion

Minor modifications to an existing non-federal facility, mainly for the purpose of facility improvement or a slight increase in capacity which are considered essential to continued operations and which do not substantively change the visual appearance and quality of the facility and associated Greenbelt landscapes or negatively impact other Greenbelt roles.

Mission

The overarching purpose or objective of the Greenbelt; the reason for which the Greenbelt exists.

Mitigation

The third choice in the hierarchy of response to management of cumulative effects from transportation infrastructure upon the Greenbelt. Transportation projects that have the potential to impact upon core natural areas, natural links and agriculture will identify measures to alleviate their adverse environmental effects. Such measures could include wildlife crossing underpasses or overpasses, speed breakers, slope stabilization, etc.

Natural capital

An application of economic principles to the natural world whereby the goods and services of natural features (wetlands, forests, fields, water bodies, etc.) and functions (wood production, food, pollination, water quality and quantity, etc.) are assigned an economic value.

Natural heritage

The flora and fauna of natural areas that have been inherited from the past and conserved for present and future generations.

Natural infrastructure

The natural land and water features that comprise an area's natural heritage or natural system. In relation to human built environments, can also be referred to as green infrastructure, natural area lands for enjoyment of people, retention and cleaning of stormwater, clean air, habitat, etc.

Natural Link

Land areas, usually linear, which traverse land or follow watercourses and which provide a natural connection function between significant natural areas along which animals may travel, habitat may be provided, and genetic material of plants and animals may be exchanged. The Greenbelt Master Plan makes a distinction between "corridors" and "links". While they effectively serve the same purpose (connecting significant natural areas to one another), natural links connect significant natural features (Core Natural Areas) within the Greenbelt boundaries while "ecological corridors" refer to connections from natural areas in the Greenbelt to other significant natural areas outside of the Greenbelt.

Natural Resource Management Plan

A 5 year plan that is updated and that includes specific objectives, tasks and effectiveness indicators for advancing Greenbelt biodiversity conservation for all of the Greenbelt Core Natural Areas, their Natural Links and connecting lands.

Network of verdure

An interconnected system of green identified in the vision for the Capital of Canada in Gréber's 1950 Plan.

Non-intensive agriculture

Farming activities which are conducted in such a way as to not significantly alter the vegetation and natural processes of the area. Examples of non-intensive agriculture would include hay production and permaculture.

Policy

High-level management and planning statements that are specific to a given area or issue and that give clear direction. Policies must be followed (for example, "no new non-federal facilities will be permitted in the Greenbelt"). A course or principle of action to which an organization commits.

Preventive management practices

Use of scientifically proven practices in management of human activities and land uses so as to prevent impacts upon wildlife and plant species, natural features and functions. In choosing the preventive practices to be adopted, consideration is given to the total system or ecosystem as an integral part of developing the appropriate management approach.

Promote

Promotion of the Greenbelt refers to contributing to the growth or prosperity of the Greenbelt and to elevating the profile of the Greenbelt for enhanced public acceptance through advertising, signage and publicity.

Realignment

The second choice in the hierarchy of response to management of cumulative effects from transportation infrastructure upon the Greenbelt. Transportation projects that have the potential to impact upon areas of high ecological and amenity value will seek alternative routes that will avoid significant impacts.

Regional ecological network

The system of natural features within Canada's Capital that consist of significant natural areas (wetlands, woodlands, ravine and watercourse systems) that are connected to each other along land and water corridors and to natural features that occur beyond the boundaries of the Capital. This network is illustrated conceptually on the Greenbelt Concept: Capital Context, Figure 3.2.

Re-naturalization

Restoration of a previously disturbed or built site to a more naturally vegetated state through site preparation and planting of indigenous species matched to the soils. The plant species will establish and thrive over time to become a functioning natural feature.

Resilience

The ability of an ecosystem to recover from or easily adapt to change.

Restoration

The fourth choice in the hierarchy of response to management of cumulative effects from transportation infrastructure upon the Greenbelt. Existing transportation infrastructure that is not used or underutilized, such as abandoned road right-of-ways, shall be targeted for ecological restoration to a naturalized condition.

Roles

The roles of the Greenbelt together provide a more elaborate description of the mission, highlighting both site-specific and regional aspects of the Greenbelt's main functions.

Shelterbelt

The planting of one or more rows of trees and shrubs along farm fields to provide a windbreak.

Shelterwood

The management of a forest through thinning and/or harvesting to manage the shelter within the forest. Shelter is managed to control the amount of light that gets to the forest floor with the intent of restricting the amount of competing brush that could harm the chances for tree species regeneration. Shelterwood recommendations on field data sheets are focused on providing the right light conditions for the germination and growth of seedlings.

Significant Woodlands and Valleylands

As defined in the Ontario Provincial Policy Statement (2012) and City of Ottawa Official Plan.

Stakeholder

Any group of people, organized or unorganized, who at times may share a common interest, but always have a vested stake in a particular issue or system. A stakeholder can occupy any level or position in society, from global, national and regional down to the household or individual, and be groups of any size and aggregation.

Stand Improvement

Stand Improvement refers to a variety of potential activities that would be designed to help with both long and short term forest health. The objective of Stand Improvement is to improve conditions within the stand to aid the regeneration of native species within the stand. These activities could include; mechanical brush control; site preparation of the seed bed to encourage regeneration; tree planting; stand conversion to a composition of native tree species; and stand conversion to native grassland. On field data sheets, areas that are recommended for stand improvement are focused on providing light and room for the regeneration of seedlings within the plantation.

Strategic statements

The set of high-level statements that provide the main directions for the Greenbelt. These statements, as presented in Chapter 4, include the Vision, Mission, Goals and Roles for the 2067 Greenbelt.

Sustainability

The capacity of a thing, action, activity, or process to be maintained indefinitely.

Sustainable agriculture

Sustainable agriculture integrates environmental stewardship, economic profitability, and social responsibility.

Thinning

A partial removal of the overstory of the stand. Generally it means a 30 to 40% removal of the standing trees with the smaller or less dominant trees being the trees that are targeted for this action. Within the Greenbelt there are three major reasons for thinning. One, either the trees are growing too close together and the better trees do not have room to develop. Two, the major species of the plantation are off-site (the conditions of soil and moisture are not suited to that species) and it would be best over time to let another species like white pine or bordering hardwoods take over the site. Three, the area has been thinned two or three times and it is now time to open up the plantation to provide light and room for the area to regenerate to native species.

Vision

A vivid, imaginative statement describing the desired long term future of the Greenbelt.

A NEW PLAN FOR CANADA'S CAPITAL GREENBELT

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Appendix A

Summary of the Strategic Environmental Assessment for the 2013 Greenbelt Master Plan

Introduction

The NCC conducts strategic environmental assessments (SEA) of its plans as part of ensuring comprehensive environmental consideration throughout individual plan processes. The framework for SEAs is provided by the federal government *Cabinet Directive on the Environmental Assessment of Policy, Plans and Program Proposals*, updated by the Privy Council Office and Canadian Environmental Assessment Agency in 2010 to align with the federal government's commitment to sustainable development. The purpose of the SEA is to identify the scope and nature of likely environmental effects that will result from the plan's implementation, using this information to enhance the positive impacts and mitigate or eliminate the identified negative effects. Environmental considerations are part of the analysis of each of the plan direction and policy options with the final decisions on plan directions based on the SEA results. Stakeholders and the public are important contributors to this assessment process.

A summary follows of the Strategic Environmental Assessment process conducted for the 2013 Greenbelt Master Plan and its results. The complete report is available on the NCC website.

The SEA has been prepared in compliance with the following documents:

- 1. Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals (2010)
- 2. The Plan for Canada's Capital (1999)
- 3. The NCC's Environmental Strategy (2009)
- 4. A Plan for Sustainability and Resilience in Canada's Capital Region (2012).

Benefits to the Greenbelt Master Plan from the SEA process include:

Optimizing positive environmental effects;

- Minimizing or mitigating negative environmental effects of the Plan proposals;
- Considering potential cumulative environmental effects;
- Implementing the Federal Sustainable Development Strategy (FSDS);
- Achieving cost-effectiveness by identifying potential liabilities from environmental clean-up or other unforeseen concerns;
- Streamlining some aspects of project-level environmental assessment by addressing them at the plan stage;
- Promoting public accountability and credibility; and
- Contributing to broader governmental policy commitments and obligations.

1. Methodology

The SEA conducted for the Updated Greenbelt Master Plan followed the process of:

Step 1: Conduct Preliminary Scan

- 1. Identify direct and indirect outcomes of all plan proposals; these are the individual strategic direction and policy statements within the Greenbelt Master Plan;
- Assess whether the outcomes of each proposed plan statement is likely to have an important effect or change on the environment¹, either positive or negative;
- 3. Evaluate whether the outcomes of each proposed plan statement contribute to achievement of:
 - a. Federal Sustainable Development Strategy goals and targets,
 - b. NCC Environmental Strategy objectives within key action areas and
 - c. Strategies of A Plan for Sustainability and Resilience in Canada's Capital Region.

Step 2: Further Analysis of Identified Important Environmental Effects

For proposed plan statements with outcomes that will result in important positive or negative environmental effects, further analysis was conducted to define those effects in terms of:

- 1. Scope and nature of potential effects
- 2. Need for mitigation or opportunities for enhancement
- 3. Scope and nature of residual effects
- 4. Follow-Up

¹ Environment is defined as all components of the earth, including land, water and air, all organic and inorganic matter and living organisms and the interacting natural systems.

5. Public and stakeholder concerns

Assessment of the potential environmental effects at this step also included consideration of each effect's **frequency and duration**, **location and magnitude**, **timing**, **risk** and potential for **irreversibility** or to be **cumulative** with other effects.

Step 3: Documentation of the SEA

The process and results of the analyses conducted under the Preliminary Scan and SEA process are documented in a publicly available report.

A conceptual analysis of the likely environmental effects that would result from the plan component outcomes evaluated the likely effects to all aspects of the environment. This included a determination of the likely environmental effect of each plan statement upon the biological, physical and cultural and socio-economic components of the environment.

The identified plan components were also evaluated as to whether their outcomes would contribute to the directions and targets of three higher level strategic plans for Canada's Capital. The directions of each of these plans/strategies have a strong environmentally focus.

2. Strategic Environmental Assessment Results

The following sections summarize the results of the strategic environmental assessment for each of the four Greenbelt roles, the overall Greenbelt, the contribution of this Master Plan to strategic Capital Plans and the resulting cumulative and residual effects and how these are addressed.

2.1 Natural Environment

Although it is acknowledged that the full suite of policy directions in the Master Plan will take some time to be realized (i.e. much of the 54 year term that has been set for the Greenbelt vision and concept), it is expected that the implementation of all of these policies will accomplish a significant, positive and long-term environmental effect for the Greenbelt and the Capital's natural environment. It is also hoped that these positive environmental effects of the Greenbelt Master Plan will be cumulative with the actions and outcomes that will occur through implementation of other Capital plans and strategies.

2.2 Sustainable Agriculture

The Master Plan sets a long-term aim to achieve viable and sustainable agriculture on the farmsteads and agricultural research facilities within the Greenbelt. Environmental stewardship and implementation of best management practices forms part of the policy directions for Greenbelt agriculture. As with achievement of natural environment policies, sustainable agriculture accomplishment will also take longer than the 10 to 15 year horizon of this Master Plan. In the shorter term interim, while progress continues towards the envisioned sustainable agriculture that is in harmony with natural features and processes, there continues to be the potential for negative environmental effects from agricultural activities upon some aspects of the biological and physical environment, such as introduction of contaminants or nutrients to surface water, interference with wildlife connectivity and impact upon the health of flora and fauna. These potential negative effects, however, are expected to decrease in occurrence and extent over time, with a future state whereby the contributions of agriculture to the surrounding environment are either neutral or positive. Policies in support of sustainable agriculture and which will mitigate potential environmental effects of farm operations include: encouraging best management practices to conserve soil and water resources, promoting biodiversity while ensuring farm productivity, allowing natural forces to predominate in contribution to sustainable agriculture, promoting crop diversity and shelterbelts contributing to natural systems, and supporting the maintenance and establishment of farms that are economically, environmentally and socially viable.

Positive cumulative effects are also expected through the delivery of Greenbelt sustainable agriculture. These would include the research and demonstration of best management practices upon Greenbelt farms that would be promoted through the diversity of local food products that will be provided for the Capital, and as case studies for farms within and beyond the Greenbelt. Promotion of local food is also a component of the Capital's Sustainability and Resilience Plan and contributes to the Greening Government Operations goal within the Federal Sustainable Development Strategy.

2.3 Greenbelt Promotion, Capital Experiences and Recreation

Some of the Master Plan policies within these thematic policy areas aim to promote and reinforce the importance of a healthy natural environment. They are also intended to raise awareness of the best management practices in place amongst the various Greenbelt facilities, and of opportunities for recreation. The promotion of positive environmental effects and the importance of natural systems and participatory environmental stewardship by all will also contribute to overall positive environmental effects. Policies encouraging development of Greenbelt environmental stewardship and Capital experiences include striking partnerships with outside authorities to provide and promote low-impact recreational activities and experiences as well as prohibiting activities and events that increase the existing human activities footprint. The contributions of these policies to positive environmental effects will be progressive over a long period of time resulting in long-lasting impacts.

Leadership and promotion of environmental stewardship are also important aspects of all three Capital strategic plans - the NCC's Environmental Strategy, the Federal Sustainable Development Strategy and the Capital Sustainability and Resilience Plan. The overall positive environmental effects from environmental leadership and promotion should therefore also be cumulative.

2.4 Federal and Non-Federal Facilities

Expansion of existing Greenbelt facilities is one of the two main areas for potential negative environmental effects that could arise from implementation of the Master Plan policies. These effects could impact a range of environmental components – biological, physical, cultural or socio-economic – as a result of construction of built structures to support facility operations. A project-specific environmental assessment would more specifically scope the potential impact of any future proposed development on the federally-owned lands of the Greenbelt. This process to identify, mitigate and remove the potential for negative environmental effects of the proposed project, along with implementation of the full suite of proposed Greenbelt policies related to facility development and environmental protection is expected to mitigate the potential for negative environmental effects. Policies that aid in environmental protection in association with facility development include: limiting facilities to defined areas or footprints; prohibiting new facilities on new sites; requiring that facility uses do not impact negatively upon Greenbelt roles but complement the neighbouring Greenbelt land functions and character; requiring a Federal Facility Master Plan prior to expansion or development with such master plan components demonstrating consideration to facility integration with the Greenbelt and encouraging environmental stewardship and best management practices in facility design and management; and exploration of opportunities for voluntary facility phase-out to enable ultimate site re-naturalization.

There may be short-term impacts during a project's construction, such as the potential for air, noise or soil disturbance; however, the long term impact should be neutral to positive through implementation of Greenbelt policies and a project environmental assessment.

The directions of the three Capital strategic plans also help to reinforce and result in a neutral and possible positive cumulative environmental effect as part of facility development through the directions for renewable energy, LEED certification, zero waste generation and demonstration of model biodiversity.

2.5 Neighbouring Urban Areas

Due to the fact the Greenbelt lands are part of several subwatersheds which extend beyond the Greenbelt boundaries, there is significant potential for negative environmental effects upon the Greenbelt from land uses outside its boundaries. The types of environmental effects that could occur from adjacent urban development include degraded water quality, changes to water quantity flows to Greenbelt lands, decreased air quality and introduction of invasive species. All of these effects could in turn impact upon Greenbelt habitat, biodiversity, flora, fauna and the overall health of terrestrial and aquatic systems. The potential for these effects will be reduced through implementation of the Master Plan policies for coordinated partnership efforts, NCC participation in a comprehensive approach to integrated planning for the Capital, and infrastructure policies that require low impact design for stormwater management, stream restoration and avoidance of downstream effects. The success in reducing and eliminating the potential for these environmental effects from adjacent urban development will require monitoring and follow-up to modify land use practices beyond the Greenbelt.

2.6 Transportation and Infrastructure

Development of transportation infrastructure within and adjacent to the Greenbelt is identified as a main contributor to potential negative environmental effects. The Master Plan policies aim to maintain the focus upon a healthy natural environment as a first priority for the Greenbelt, however, the potential remains for environmental effects such as fragmentation, reduced vegetation and biodiversity, degraded water and air quality, noise, and loss of habitat from existing, expanded and new transportation infrastructure. Other types of regional infrastructure development (energy transmission, water mains, sewer mains, communication towers and stormwater management facilities) also have the potential to negatively impact upon environmental components. Generally, these effects tend to be longterm in nature and have the potential for significant local and broader geographic impact.

Policies supporting the sustainable development of transportation and infrastructure dictate the application of context sensitive design best practices to projects that conserve Greenbelt natural and visual resources incorporating ecological principles, and mitigation measures for existing and new infrastructure projects that include on-site or off-site restoration to offset fragmentation effects.

The proposed plan policies aim to limit the amount of new transportation and infrastructure development that would occur within the Greenbelt as well as reverse some of the negative effects of existing facilities and appropriately mitigate the potential effects of future transportation and infrastructure development. It is

not possible to predict whether these policies will accomplish the desired neutral and ideally positive long term effects upon the Greenbelt environment. Monitoring, research and adaptive management to help implement successful mitigation measures, particularly for transportation, and will be important to achieve the desired outcome of reduced to neutral effects.

2.7 Contribution of Greenbelt Master Plan to Achievement of Directions within Capital Strategic Plans

The Greenbelt Master Plan components as a whole contribute significantly and in an overall positive way to the majority of the directions in each of the strategic plans for the Capital. Due to the fact that these three plans are mainly focused on a healthy and sustainable Capital and sustainable development within federal facilities, the contribution of the Greenbelt Master Plan components to these directions is similar to that of the assessment of likely environmental effects. The Master Plan contributes in a significant and positive way to all the strategic plan directions that relate to ecosystem health and environmental stewardship and leadership. There are also indirect contributions to improving quality of life within the Capital and contribution to a sustainable economy through the Greenbelt Plan's directions for agriculture and research and demonstration of sustainable and environmental best practices.

The potential for negative effects upon strategic plan directions derives from a similar source to those for potential negative environmental effects, namely the development of facilities, transportation or infrastructure. In the case of impact upon the Capital strategic plans, the potential for negative effects occurs mainly in respect of the ecosystem and greening government related goals and targets of the Federal Sustainable Development Strategy.

2.8 Cumulative Effects Assessment

As part of the Master Plan review process, the NCC and the City of Ottawa completed a joint study to assess the cumulative effects of existing and proposed transportation projects on the Greenbelt. The purpose of this study was to determine the level of potential environmental effects that would occur from a set of future transportation infrastructure projects together with existing transportation infrastructure that occurs within, crosses or impacts upon Greenbelt lands. The study assessed each project on the level of cumulative negative effect that would result upon a defined landscape unit. With this analysis, the 30 proposed future transportation projects were categorized according to the degree of cumulative effect they would cause and how the projects would be managed. Some projects will require special conditions prior to their implementation while others were deemed to be not acceptable to proceed as proposed. The assessment framework developed through this study will be applied by the NCC and the City in consideration of future transportation projects.

2.9 Residual Effects

There is potential for residual effects to occur through implementation of the policies that permit facility expansion, infrastructure establishment or expansion, and transportation infrastructure. These are expected to be mitigated through the implementation of supporting policies that focus on implementation of sustainable and best practices. In addition, the no net loss policy for the Greenbelt natural environment requires compensation of equivalent natural features and functions when negative impacts from development cannot be avoided. Overall, there should not be any residual effects that result from implementation of the full suite of Greenbelt Master Plan directions and policies.

Conclusion

Overall, the anticipated environmental effects that will result through implementation of the proposed Greenbelt Master Plan components will be significant and positive for the Greenbelt and for Canada's Capital Region. The updated Master Plan places the Natural Environment as the primary role within the Greenbelt and the full suite of proposed plan directions substantively supports the protection and enhancement of the Natural Environment. This Master Plan, and the recent and developing strategic plans for Canada's Capital Region all rely upon increased partnership efforts to better integrate the planning and delivery of land and resource initiatives within the Capital. With the common recognition of collaboration as a necessity, the Greenbelt Master Plan should contribute significantly to a healthy and sustainable Capital natural environment.

The potential for negative environmental effects from implementation of the updated Greenbelt Master Plan does not arise from the proposed plan components themselves but in the way that the policies aim to accommodate human activities. The mitigation for preventing negative environmental effects is built into the full suite of Greenbelt policies. As a result, the expectation is that the Master Plan components working together will accomplish an overall positive environmental effect. This effect will be long term and should also be cumulative in its positive nature and scope when combined with the environmental effects that result from partner implementation of the other strategic plans for Canada's Capital Region.

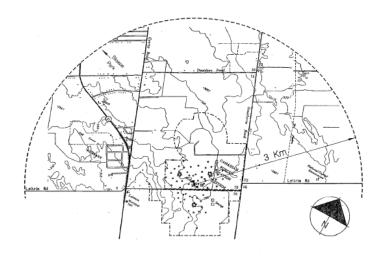
Appendix B



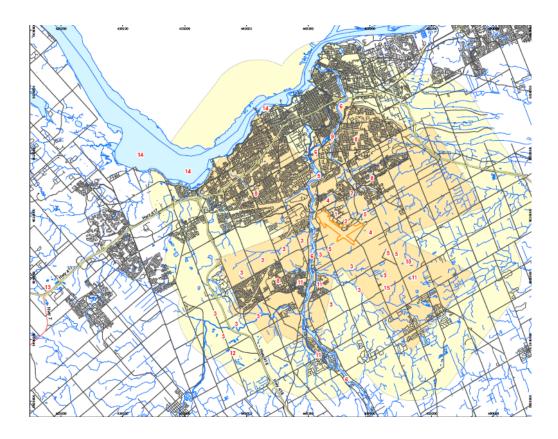
Requirements of Greenbelt Facilities and of the Ottawa Macdonald-Cartier International Airport

The sector plans define sector-specific policies that protect the operations of sensitive Greenbelt federal facilities and of the Ottawa Macdonald-Cartier International Airport. Plan users should consult with Natural Resources Canada early in the planning process for proposed developments that may impact upon the Natural Resources Canada facilities in the Stony Swamp and Mer Bleue Sectors. Proposed developments that fall within three kilometres of the National Defence Leitrim CFS are also requested to consult with National Defence early in their planning process. The diagram below illustrates the 3 km buffer requested for this facility. The Airport has also defined the areas of land beyond their operations area boundary upon which restrictions on development are in force in order to ensure safe flight operations. The map on the following page demonstrates the areas where restrictions apply. More detail can be obtained from the Airport Authority and the City of Ottawa Official Plan.

> CFS Leitrim Electromagnetic Interference Buffer Area within the National Capital Greenbelt



Source: Department of National Defence



Appendix C

Joint Study to Assess Cumulative Effects of Transportation Infrastructure on the National Capital Greenbelt

The following table and map summarize the results of the NCC and City of Ottawa study to assess cumulative effects of the City's proposed 30 transportation projects¹ that have the potential to cause effects upon the Greenbelt.

	Project Name	LMU Location	CNA Location	NCC/City Review ⁱ
1	Hunt Club Extension (Hawthorne-417)	Pine Grove		Include
2	Fallowfield Road Widening (Greenbank Westerly)	Southern Farm/Pinhey		Include
3	Hunt Club-Innes-Walkley Connection	Mer Bleue		Include
4	Carling Ave Rail Underpass Widening	Shirley's Bay		Include
5	Prince of Wales Drive Widening	Southern Farm/Pinhey	Black Rapids Creek	Include
6	Brian Coburn Road Widening	Mer Bleue	Greens Creek	Include
7	Brian Coburn Road Extension	Mer Bleue		Include
8	Ottawa Route 174 Widening	Greens Creek	Greens Creek	Include
9	Fallowfield Road (Woodroffe Easterly)	Southern Farm/Pinhey		Include
10	Hope Side Road Richmond – Moodie [*]	Stony Swamp	Stony Swamp	Not include
11	Hope Side Road Moodie – Hwy 416 [*]	Stony Swamp	Stony Swamp	Not include
12	Airport Pkwy Widening/ Twinning	Pine Grove		Include
13	New Crossing of Rideau River (Fallowfield - Leitrim)	Pine Grove		Include
14	Leitrim Road Realignment (South of Airport)*	Pine Grove		Not Include
15	West Hunt Club widening 416 to west of Merivale Rd	Southern Farm/Pinhey		Include
16	Hunt Club from 4 to 6 lanes Riverside to Uplands	N/A (Airport)		Include
17	Hunt Club from 4 to 6 lanes at Airport Pkwy	Pine Grove		Include
18	Riverside Widening Hunt Club to River Rd	N/A (Airport)		Include
19	Leitrim Road (from River to realignment)	Pine Grove		Include
20	Lester Road Widening (Airport to Bank)	Pine Grove	Lester Wetlands	Include
21	Transitway (Bayshore-Baseline)	Southern Farm/Pinhey		Include
22	Cumberland Transitway	Greens Crk/Mer Bleue		Include
23	Chapel Hill Park & Ride	Mer Bleue		Include

¹ Transportation projects are identified within the City of Ottawa 2008 Transportation Master Plan.

	Project Name	LMU Location	CNA Location	NCC/City Review ⁱ
24	Western Transitway (Bayshore to Moodie)	Shirley's Bay		Include
25	Leitrim Park & Ride*	Pine Grove		Not include
26	Airport LRT Connection (from N-S LRT to airport)	Pine Grove		Include
27	N-S LRT (north and south of Lester)	Pine Grove	Lester Wetlands	Include
28	N-S LRT Maintenance and Storage Yard*	Pine Grove	Lester Wetlands	Not Include
29	Hwy 417 widening from Hunt Club Road Extension to Greenbelt near Walkley Road	Mer Bleue		Include
30	Leitrim Road Realignment (at CFS Leitrim)	Pine Grove		Include

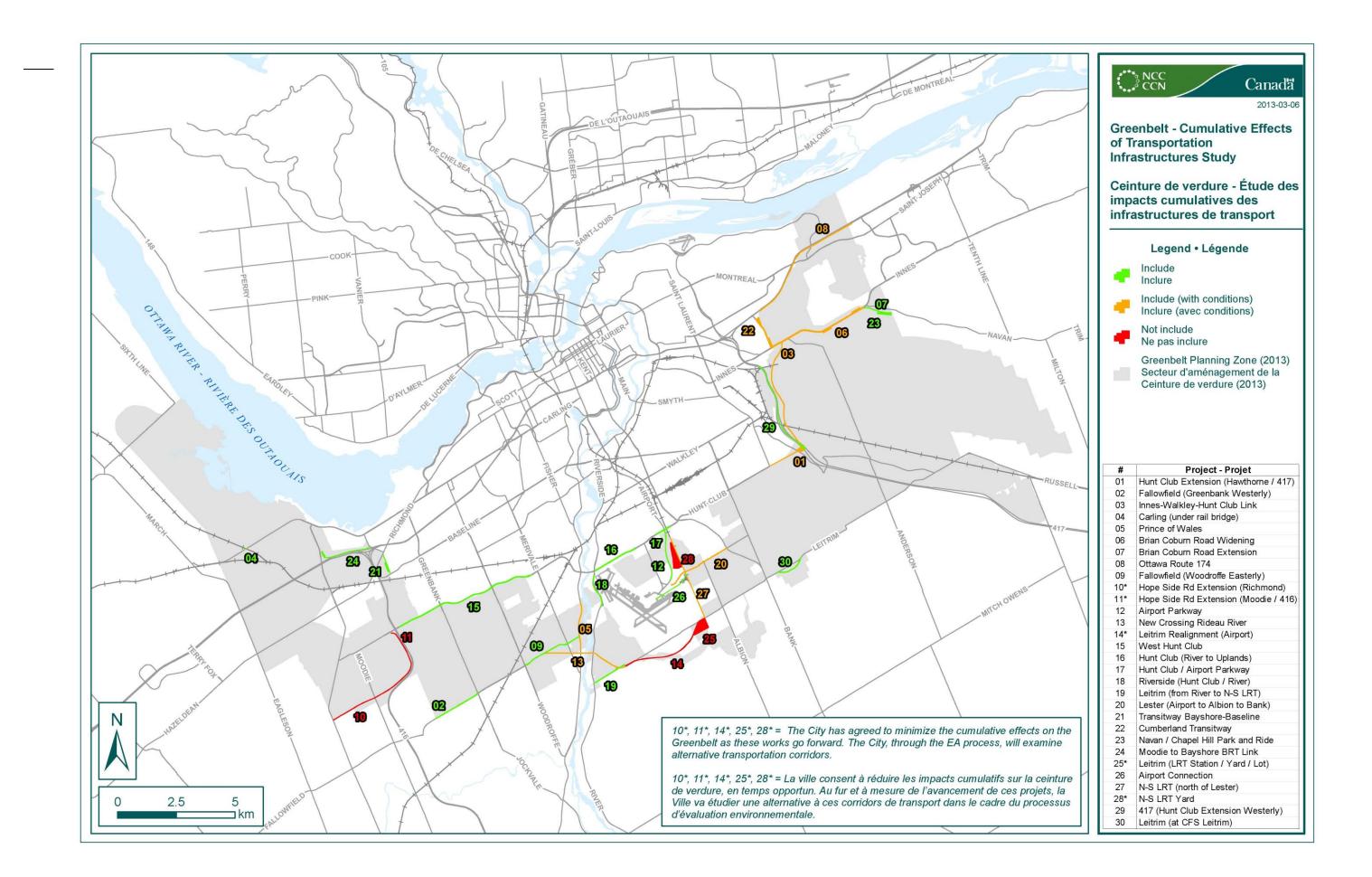
Not Include in the Greenbelt Master Plan with the requirement to determine alternative locations outside CNA's and NL's to avoid adverse cumulative effects.

Include in the Greenbelt Master Plan and subject to measures that minimize, compensate or offset contributions to cumulative effects on the Greenbelt, with the possibility of designation as "Not Include" in cases where specific mitigatitive conditions cannot be implemented satisfactorily.

Include in the Greenbelt Master Plan and will be subject to the standard design, review and review processes and mitigations determined by the necessary Environmental Assessment.

The 30 projects assessed and categorized by the CEA Study have been reviewed by the NCC and City to determine inclusion in the Greenbelt Master Plan, taking into account the CEA Study results together with other considerations including but not limited to project specific EA status, previous GBMP policies, past NCC and City commitments, latest project updates, and approved Vision and Concept for the draft Greenbelt Master Plan.

10*, 11*, 14*, 25* and 28*: The City has agreed to minimize the cumulative effects on the Greenbelt as these works go forward. The City, through the EA process, will examine alternative transportation corridors.





Appendix D

The Public Advisory Committee Members

Organization	Last Name	First Name
Bells Corners Business Improvement Area	Lewis	Alex
Canadian Organic Growers	Strachan	Lloyd
CARAD Community Action for Reasonable Analysis and Decisions	Brammer	Jane
Citizens for Safe Cycling	Moor	Hans
City of Ottawa	Karanikollas	Steve
Conseil régional de l'environnement et du développement durable de l'Outaouais (CREDDO)	Lalonde	Annie
Conseil régional de l'environnement et du développement durable de l'Outaouais (CREDDO)	Provencher	Gaetan
Country Place Community Association	Cabral McGuire	Cindy
Crystal Bay Community Association	Hall	Trudy
Crystal Beach/Lakeview Community Association	Kingston	Harry
Friends of Mer Bleue	Grant	Derek
General Public	Caron	Louis
General Public	Dugal	Albert W.
General Public	Farouk	Anwareen
General Public	McAlpine	Andrew
General Public	Pegrum	Scott
General Public	Renaud	Paul
General Public	Ruiter	Peter
General Public	Wellman	Mari
Glens Community Association	Warda	Agnes
Gloucester Allotment Gardens	Bushell	George
Greenbelt Coalition	Shuster	Sol
Greenbelt Farm Tenants Association	Henrie and Melissa Larocque	Paul
March Rural Community Association	Busby	Chris
March Rural Community Association	Makin	Judy
Navan Community Association / L'Association des résidents de Navan	Vetter	Ray
Old Ottawa South Community Association	Lascelles	Mike
Ottawa Carleton Wildlife Centre	DuBreuil	Donna
Ottawa Forests and Greenspace Advisory Committee (OFGAC)	Coffey	Ann
Ottawa Rural Council	Knox	Sterling
Responsible Dog Owners of Canada (RDOC)	O'Connell	Candice
Riverside South Community Association	McLeod	Chris
Royale Equestrian Centre	Patterson	Dawn
Transport 2000	Beltzner	Klaus
Vélo-Services	Marchand	Maurice

Appendix E Federal Land Use Approval



November 20, 2013

File No.: CP 2110-33-01A IAMIS Agreement No.: 15439

Attn: Lucie Bureau, Chief, Planning and Transportation, NCC

FEDERAL LAND USE APPROVAL FOR THE 2013 GREENBELT MASTER PLAN FOR THE NATIONAL CAPITAL GREENBELT, OTTAWA

The 2013 Greenbelt Master Plan (the "Master Plan") replaces the 1996 Greenbelt Master Plan. The 2013 Master Plan is a planning tool that sets out the Greenbelt's long-term vision, land use concept, land designations, policies and sector plans, for the planning and stewardship of lands within the Canada's Capital Greenbelt limits.

The Master Plan applies to all federal lands within the Greenbelt and is intended to form the basis for all decisions relating to the Greenbelt over the 10-year period that begins with Plan adoption. The Master Plan Review process led by the NCC consulted with federal public, non-federal public, and private land owners. The NCC has worked with and will continue to collaborate with stakeholders to ensure the integration of this Greenbelt Master Plan into their own plans, policies and programs, which apply to non-federal public lands and private lands.

The role of the Federal Land Use Approval is to formally approve the Master Plan according to the NCC's Federal Land Use and Design Approval process, clearly indicate its effective date, and request all participants in its development to their collaboration and assistance in its implementation over time.

TODAY'S GREENBELT

The Greenbelt comprises forests, wetlands, farms and streams, representing a predominantly natural environment that hosts over 3.5 million visits per year for various recreational activities. The Greenbelt's crescent shape covers approximately 20,600 hectares (206 square kilometres), equalling the area it surrounds and ranges in width from two to ten kilometres, spanning a distance of 45 kilometres,.

In 2011, approximately 540,000 people lived in the inner urban area encompassed by the Greenbelt, up from 492,000 in 1991. However, the number of residents living within the three outer urban communities more than doubled, from approximately 139,000 to 291,000. One-third of NCC-owned lands are leased to tenants for a variety of uses ranging from farms to municipally-run recreational facilities. Over 12,000 people work in the Greenbelt at federal facilities. The Greenbelt is also home to over 1,000 people living in 280 leased houses and on 56 farms.

THE 2013 MASTER PLAN

The vision of what the Greenbelt should become anchors the Master Plan. Based on the existing strengths of and the threats faced by the Greenbelt, the NCC focused on looking fifty years into the future to develop a long-term vision for the stewardship of the Greenbelt. This Master Plan represents the planning orientations for the first decade of this 50-year horizon.

The Vision for the 2067 Greenbelt is that:

The Greenbelt will forever protect natural systems, agriculture and opportunities for outdoor recreation and education that will inspire Canadians and contribute to the sustainability and quality of life in Canada's Capital Region.

The vision is supported by an **updated Mission statement** and includes a revised set of **Fundamental Premises** and **Roles** for the Greenbelt.

The Mission states:

The Greenbelt contributes to the identity and enhancement of Canada's Capital through its provision of a natural and rural setting, valued ecological and cultural resources, sustainable agriculture, support for selected federal facilities, and a diversity of uses, activities and experiences for Canadians.

The **Fundamental Premises** for the 2067 Greenbelt do not change substantively from those in the 1996 Plan. The updated premises maintain the concepts of the Greenbelt as a large, contiguous, rural green space that is predominantly publicly-owned, supports federal facilities with specialized locational needs and continues to play a national research role. The updated premises enhance the emphasis on Greenbelt stewardship through partnerships, Greenbelt education and promotion of its features, and connection of the Greenbelt to the region beyond. These premises maintain that cultural resources will be protected, that the Greenbelt will be a recognizable and valued feature of the Capital, and that it will be an environmental showcase demonstrating sustainable practices through the activities, facilities and land uses that occur within its boundaries.

The 1996 Greenbelt Master Plan outlined five distinct roles for the Greenbelt; after considerable review, the roles have been streamlined into four, with a primary focus placed on the Natural Environment role, followed by Sustainable Agriculture, Capital Experiences and Recreation, and a tertiary role created for facilities. The hierarchy of roles is new and is the result in part of public consultations during which the NCC heard of the importance of the natural environment. These four roles are supported by a number of specific **Goal Statements**. This change mirrors similar changes seen in the 2005 Gatineau Park Master Plan.



A new, **Greenbelt Land Use Concept** builds on the approved vision for the Greenbelt, details the scope of land uses for the future Greenbelt, and provides the framework for how the NCC and its partners will proceed to accomplish the vision. This Master Plan looks at both short-term (1 to10-year) and long-term (50-year) goals. It envisions a Greenbelt that is **connected**, **strengthened**, **evolving**, **known and understood**, **and benefits from shared stewardship**.

Greenbelt **land designations**, **policies** and **sector plans** comprise the main content of the Master Plan, and include a number of changes from the 1996 Plan. :

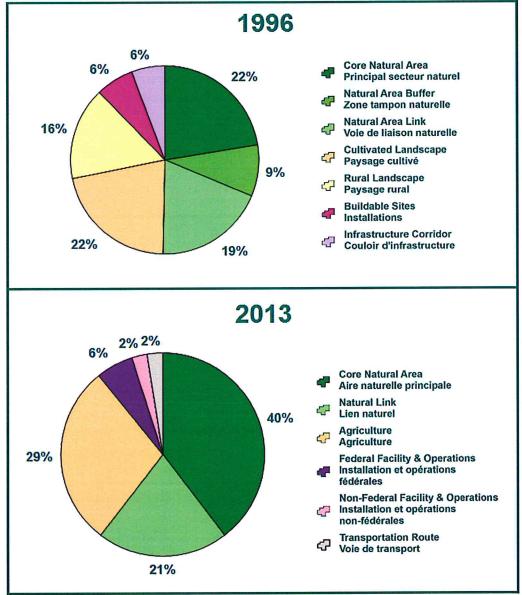
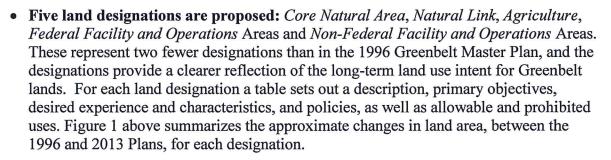


Figure 1 - Change in Land Designations in the Greenbelt



- Implementation of the Greenbelt Land Designations, Roles and Goals is further supported by Greenbelt-wide **policies** that are based on specific themes: Capital Experiences and Recreation, Natural Environment, Cultural Resources, Greenbelt Profile and Environmental Leadership, Greenbelt Limits, Ecological Corridors beyond the Greenbelt, Transportation Infrastructure, Infrastructure, and Residences.
- Augmented protection for the Greenbelt Natural Environment is a feature of the 2013 Master Plan, to be achieved through stricter policies for permitted uses and activities within *Core Natural Areas* and *Natural Links* and direction for partnership efforts to strengthen ecological connections from the Greenbelt to regionally significant natural features beyond the Greenbelt limits;
- A different shape has emerged for the central portion of the Greenbelt, resulting from the withdrawal of some of the Ottawa Macdonald-Cartier International Airport operating lands as a result of their intensive land uses that are incongruous with the Greenbelt Vision and Roles and the inclusion of the Provincially Significant Leitrim Wetland and an enhanced Greenbelt Natural Link in compensation for the removal of some of the Airport operating lands.
- Increased emphasis is placed on accomplishing Greenbelt stewardship goals through partnerships, with facility managers and owners, tenants, agencies and community groups. These efforts will support a range of stewardship actions such as natural environment restoration, Greenbelt promotion, sustainable agriculture, visual quality enhancement, recreational activities and connectivity of the Greenbelt to the Capital Ecosystem Network and the Capital Pathway System.
- Seven sectors are defined within the Greenbelt, fewer sectors than in 1996, with each sector described by recognizable landscape features and bounded by major physical features, such as highways, rail lines, etc.

The seven sectors are: Shirleys Bay, Stony Swamp, Southern Farm / Pinhey Forest, International Airport, Pine Grove, Mer Bleue, and Greens Creek

• Specific directions for the sectors, with the aid of aerial photographs, provide a descriptive visual of the Greenbelt lands and guidelines for their stewardship by the NCC and its partners.

NCC



ANALYSIS

In its analysis, the NCC has taken into account that:

- The Proposal is compatible with the policies of the 1999 Plan for Canada's Capital;
- The Proposal fulfils part of the NCC's mandate under sections 10 and 11 of the National Capital Act;
- The entirety of the Greenbelt is within the National Interest Land Mass (NILM);
- The Master Plan is consistent with the previous decisions of the NCC's Board of Directors and corresponding approvals for all of the content of the Master Plan, this through the review and acceptance of submitted reports at the key milestones of:
 - Step A June 29, 2010: Existing Conditions Assessment;
 - Step B November 24, 2010: Development of 50-Year Vision for the Greenbelt
 - Step C January 25, 2012: Greenbelt 2067 Land Use Concept & Strategic Statements
 - Step D April 24, 2013: Land Designations, Policies and Sector Plans; and
- A Strategic Environmental Assessment was completed and concluded that the implementation of the Master Plan "will be significant and positive for the Greenbelt and Canada's Capital Region".

In consequence:

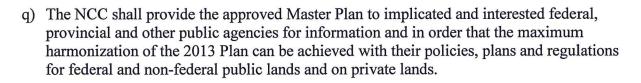
FEDERAL LAND USE APPROVAL FOR THE 2013 NATIONAL CAPITAL GREENBELT MASTER PLAN IS HEREBY GRANTED, PURSUANT TO THE NATIONAL CAPITAL ACT (SECTIONS 10, 12 AND 12.1), SUBJECT TO THE FOLLOWING CONDITIONS:

1. Land Use Conditions

- a) The 1996 Greenbelt Master Plan is hereby revoked and replaced by the 2013 Greenbelt Master Plan and its constituent sector plans;
- b) Within the Greenbelt boundary, the 2013 Greenbelt Master Plan shall be the guiding planning document for all federal public lands, as defined in the *National Capital Act*, and others lands where federal partners and agencies lease, occupy, or carry out works or undertakings on non-federal lands;
- c) All lands that are newly included or reintroduced within the Greenbelt's planning boundary will be considered part of the National Interest Land Mass, including transportation corridors;
- d) The withdrawal of certain Transport Canada lands leased to the Ottawa Macdonald-Cartier International Airport Authority from the Greenbelt is subject to and dependent on the continuous successful implementation of bilateral agreements between the NCC and the OMCIAA, including a sublease for the Greenbelt Natural Link connecting public lands to the west and east of the airport;
- e) A Capital Arrival point and route to and from the Ottawa Airport, including the main terminal building, the Canada Reception Centres, and the RCMP Air Services building, will continue to remain within the National Interest Land Mass;



- f) The 2013 Master Plan supersedes land use designations in existing approved Area Plans. However, in terms of policy direction, the existing approved Area Plans will continue to remain in effect but with the renewed guidance of the 2013 Master Plan. The Area Plans listed in Schedule "A" remain in effect. In case of any inconsistencies or contradictions between the area plan and the Master Plan, the Master Plan shall prevail;
- g) The land use designations in the 2013 Master Plan supersede the OMCIAA's 2009 Land Use Plan and 2008 Airport Master Plan for areas remaining within and added to the Greenbelt. The NCC's 2008 Federal Land Use Approval of the Airport Master Plan continues to be in effect for areas where the Federal Land Use and Design Approval process, or any similar approved process, is to be implemented. In case of any inconsistencies or contradictions between these documents and the Greenbelt Master Plan, the 2013 Greenbelt Master Plan shall prevail;
- h) For those lands withdrawn from the Greenbelt, the OMCIAA's 2009 Land Use Plan and the 2008 Airport Master Plan will continue to be the guiding land use document. The NCC's 2008 Federal Land Use Approval of the Airport Master Plan continues to be in effect for areas where the Federal Land Use and Design Approval process, or any similar approved process, is to be implemented;
- i) The NCC shall recommend to the OMCIAA to amend or revise its 2009 Land Use Plan to harmonize with the revised Master Plan designations;
- j) Existing development plans and site organizations concepts, listed in Schedule "A" will inform the review of proposals for Federal Land Use and Design Approvals, should their principles and direction be consistent with the 2013 Master Plan;
- k) Any federal lands removed from the Greenbelt planning boundary will be identified as to be removed from the NILM unless future planning exercises, such as the Capital Urban Lands Master Plan, conclude otherwise;
- Any NCC and non-federal proposals for amendments to the Master Plan must be submitted to the Vice-President, Capital Planning and Environmental Management for review. Any such proposed amendments to the Master Plan will also require approvals that respect the NCC's administrative by-laws and any policies on public engagement, as amended from time to time;
- m) Federal partners will only be required to respect their own policies on public engagement, and not the NCC's policy, should any federal partners propose an amendment to the Master Plan;
- n) All proposals requiring a Federal Land Use Approval will be reviewed for conformance with the Master Plan. The Master Plan will be used as an integral document; however, in particular the principles, role statements (including their prioritisation), policies, guideline and action statements shall all guide the NCC's review of proposals within the Greenbelt, prior to the granting of Federal Land Use Approvals;
- o) The NCC's participation in provincial and municipal planning processes will be consistent with the vision, roles and policies of the Master Plan; and
- p) The NCC shall provide the approved Master Plan to the City of Ottawa for information and in order that the maximum harmonization of the 2013 Plan can be achieved with the City's policies, plans and bylaws on non-federal public and on private lands; and



2. Design Conditions

a) All proposals requiring a Federal Design Approval will be reviewed for conformance with the Master Plan. The Master Plan will be used as an integral document; however, in particular the principles, role statements (including their prioritisation), policies, guidelines and action statements shall all guide the NCC's review of proposals within the Greenbelt, prior to the granting of Federal Design Approvals.

3. Transportation and Infrastructure

a) The Master Plan will be used as an integral document; however, in particular the principles, role statements (including their prioritisation), and policies, shall guide the NCC's review of transportation and infrastructure proposals within the Greenbelt as well as the pertinent findings and recommendations of the NCC-City of Ottawa Joint Study to Assess Cumulative Effects of Transportation Infrastructures on the National Capital Greenbelt.

4. Environmental Conditions

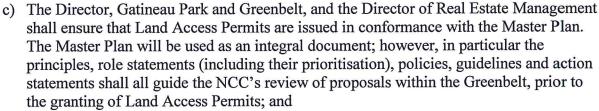
- a) Within the Greenbelt and where applicable, the *Canadian Environmental Assessment Act*, 2012, will be implemented during the review of proposals; and
- b) Other federal acts and policies will continue to be implemented including, but not limited to, *The Federal Policy on Wetland Conservation*, the *Species at Risk Act*, the *Fisheries Act*, and the *Migratory Birds Convention Act*, 1994.

5. Heritage and Archaeological Conditions

- a) As part of the Federal Approval review process, the NCC will implement federal policies on federal heritage buildings, as amended from time to time, and seek advice from the Federal Heritage Building Office (FHBRO) when required;
- b) As part of the Federal Approval review process, the NCC will ensure that best practices regarding archaeological and other cultural resources, and palaeontological resources are considered; and
- c) On NCC lands and for NCC projects, NCC corporate policies and guidelines regarding heritage buildings, archaeology and other cultural resources will be implemented.

6. Monitoring and Land Access Permits

- a) For NCC lands, monitoring of these conditions will be the responsibility of the Director, Gatineau Park and Greenbelt, and the Director of Real Estate Management in their respective portfolios, with technical support and expertise to be provided as needed by the Director of Design and Construction;
- b) The Chief of Planning must prepare a commissioning plan to implement the Master Plan for delivery to the Director, Gatineau Park and Greenbelt;



d) Other federal departments and agencies will be responsible for monitoring the implementation of the Master Plan on their lands.

7. Real Property Transactions

NCC

- a) As described in section 12.1 of the National Capital Act, as amended from time to time, all federal departments and agencies must submit all proposals for dispositions of the control and management of federal land to the NCC for review;
- b) All proposals requiring a Federal Transaction Approval will be reviewed for conformance with the Master Plan. The Master Plan will be used as an integral document; however, in particular the principles, role statements (including their prioritisation), policies, guidelines and action statements shall all guide the NCC's review of proposals within the Greenbelt, prior to the granting of Federal Transaction Approvals; and
- c) All NCC realty proposals, such as leases and licences of occupation will be reviewed for conformance with the Master Plan. The Master Plan will be used as an integral document; however, in particular the principles, role statements (including their prioritisation), policies, guidelines and action statements shall all guide the NCC's review of proposals within the Greenbelt, prior to the granting of approvals according to internal procedures.

AUTHORIZED SIGNATURE

JEAN-FRANÇOIS DRÉPANIER CHIEF EXECUTIVE OFFICER

20.11.2013 DATE

Attachments: Minutes of the previous decisions of the Board of Directors (November 2010, January and June 2012 and April 2013)

c.c. Stephen Blight Marie Boulet François Cyr Fred Gaspar

Roland Morin Claude Robert Mary Ann Waterston Marco Zanetti



Schedule A List of Approved Area Plans and their amendments in the Greenbelt

2009 - Queensway Carleton Hospital Area Master Plan – approved by the NCC Board in 2010

November 16, 2005 – Federal Land Use Approval, *RCMP Technical Protective Operations* Facility - Campus Master Plan, (CP2264-14A)

January 7, 2002 – Federal Land Transaction Approval for an Exchange of Land Between the NCC and Nortel Networks and for a Release and Abandonment of an Existing Easement and the Grant of a New Easement, CP2115-274-04

May 13, 1999 - Federal Land Use and Design Approval, Greenbelt Plan Amendment – *Nortel Master Plan*, Developed Building Design and Site Development Plans, Nortel Campus at Moodie Drive and Carling Avenue (the *1997 Nortel Networks: Ottawa Expansion: Carling Campus Master Plan*, CP2215-274, CP4250-8-5).

October 22, 1997 – Federal Land Use and Design Approval, Nortel Master Plan Amendment and Phase 1 Concept, Carling/Moodie Drive Site

Ottawa Macdonald-Cartier International Airport (OMCIAA)

2008 Airport Master Plan and revised 2009 Land Use Plan approved by the Minister of Transport Canada on May 25, 2009. The 2009 Land Use Plan is superseded by the 2013 Greenbelt Master Plan for those lands remaining within the Greenbelt. For those lands withdrawn, the 2009 Land Use Plan and the 2008 Airport Master Plan will continue to be the land use document in effect.

July 25, 2008 Federal Land Use Approval - *Ottawa Macdonald-Cartier International Airport, International Airport Authority Land Use Plan.* This Approval remains in effect on lands within the Greenbelt where the Federal Land and Design Approval process, or any similar approved process, is implemented. For lands withdrawn from the Greenbelt, the NCC's 2008 Federal Land Use Approval of the Airport Master Plan continues to remain in effect for areas where the Federal Land Use and Design Approval process, or any similar approved process, is to be implemented. Certain conditions regarding urban design have been fulfilled by the *Ottawa Macdonald-Cartier International Airport, Airport Urban Design Plan, Design Guidelines,* May 2013.

2010 Amendment to the Airport Master Plan and 2009 Land Use Plan

List of approved and existing development concepts and site organization concepts

September 23, 2003 – Federal Land Use and Design Approval, Amendment to the Shirley's Bay Research Centre Development Plan (CP2263-55, CP4250-58-04)



March 12, 1999 - Federal Land Use Approval for an Amendment to the Shirley's Bay Research Centre – Development Plan (*Communications Research Centre Campus, Shirleys Bay, Ottawa, 1998 Master Plan Amendment*, dated December 1998). An update of the *Shirleys Bay Research Centre, Nepean, Ontario, Site Development Plan, 1991 Update*, dated March 31, 1992.

August 27, 1998 – Federal Land Use and Design Approval, Shirleys Bay Research Centre, New Facility and Plan Amendment (CP2263-55A, CP4250-58-2)

May 2013 Ottawa Macdonald-Cartier International Airport, Airport Urban Design Plan, Design Guidelines – The design guidelines were completed but the secondary structure plan concepts are superseded by the 2013 Greenbelt Master Plan and any joint NCC-OMCIAA agreements for areas within the Greenbelt. For areas removed from the Greenbelt, the secondary structure plan concepts are purely for illustrative purposes and do not represent land use designations.

CFS Leitrim Development Concept, National Defence



Schedule B – NCC Board of Directors Meeting Minutes





Public

Public



National Capital Commission Meeting No. C-201008 Tuesday, June 29, 2010 40 Elgin Street, Ottawa PUBLIC MEETING EXCERPT of the MINUTES

2010-P41e - Greenbelt Master Plan Review -Vision Statement (D)

Having considered a recommendation by François Lapointe, Executive Director, Capital Planning, on a motion of André Rioux, seconded by Richard Aubry, IT WAS AGREED that:

- a) the Vision Statement be approved in principle;
- b) the project proceed to the next step of the review, "Land Use Concept Options"; and
- c) the revised vision statement be presented during the November meeting, taking into account the comments provided.

Commission de la capitale nationale Séance n° C-201008 Le mardi 29 juin 2010 40, rue Elgin, Ottawa SÉANCE PUBLIQUE EXTRAIT du PROCÈS-VERBAL

2010-P41f - Révision du Plan directeur de la Ceinture de verdure – Énoncé de vision (D)

Ayant pris en considération une recommandation de François Lapointe, directeur exécutif, Aménagement de la capitale, sur une proposition d'André Rioux, appuyée par Richard Aubry, IL EST CONVENU que :

- a) l'énoncé de vision proposé soit approuvé en principe
- b) le projet passe à la prochaine étape de la révision du Plan directeur de la Ceinture de verdure, soit les « Concepts d'aménagement proposés »; et
- c) l'énoncé de vision révisé soit présenté lors de la rencontre du mois de novembre, en tenant compte des commentaires offerts.

General Counsel and Commission Secretary MARK DEHLER Avocat general et secrétaire de la Commission

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Chief, Commission Secretariat

CHANTAL BÉDARD

Chef, Secrétariat de la Commission

Committee Secretary

NCC C-201008

CCN C-201008



Public Document



National Capital Commission

Meeting No. C-201008

Wednesday, November 24, 2010

40 Elgin Street, Ottawa

PUBLIC MEETING

EXCERPT of the MINUTES

The Board of Directors approved these minutes on April 6, 2011.

2010-P41e - Greenbelt Master Plan Review - Vision Statement (D)

Having considered a recommendation by François Lapointe, Executive Director, Capital Planning, on a motion of Jason Sordi, seconded by Robert Tennant, IT WAS AGREED UNANIMOUSLY that the Board of Directors approve the Greenbelt Vision Statement.

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Document public

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Commission de la capitale nationale

Séance nº C-201008

Le mercredi 24 novembre 2010

40, rue Elgin, Ottawa

SÉANCE PUBLIQUE

EXTRAIT du PROCÈS-VERBAL

Le conseil d'administration a approuvé ce procès-verbal le 6 avril 2011.

2010-P41f - Révision du Plan directeur de la Ceinture de verdure – Énoncé de vision (D)

Ayant pris en considération une recommandation de François Lapointe, directeur exécutif, Aménagement de la capitale, sur une proposition de Jason Sordi, appuyée par Robert Tennant, IL EST CONVENU À L'UNANIMITÉ que le conseil d'administration approuve l'énoncé de vision de la Ceinture de verdure.

Chef, secrétariat de la Commission

CHANTAL BEDARD Chief, Commission Secretariat

Secrétaire de comités

CAROLINE BIED Committee Secretary 2013-10-09

C-201008

NCC-CCN 2010-11-24



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National Capital Commission

Meeting No. C-201201

Wednesday, January 25, 2012

40 Elgin Street, Ottawa

PUBLIC MEETING

MINUTES

The Board of Directors approved these minutes on April 18, 2012.

2012-P41e - Greenbelt Master Plan Review -Recommended Land Use Concept (D)

Having considered a recommendation by François Lapointe, Vice-President, Capital Planning Branch, on a motion from Brent Stefanson, seconded by Richard Jennings, the recommended land use concept for the Greenbelt WAS APPROVED UNANIMOUSLY.



Commission de la capitale nationale

Séance nº C-201201

Le mercredi 25 janvier 2012

40, rue Elgin, Ottawa

SÉANCE PUBLIQUE

PROCES-VERBAL

Le conseil d'administration a approuvé ce procès-verbal le 18 avril 2012.

7 2012-P41f – Révision du Plan directeur de la Ceinture de verdure – Concept d'aménagement recommandé (D)

Ayant pris en considération une recommandation de François Lapointe, vice-président, Direction de l'aménagement de la capitale, sur une motion de Brent Stefanson, appuyée par Richard Jennings, le concept d'aménagement recommandé EST APPROUVÉ À L'UNANIMITÉ.

Chief, Commission Secretariat

CHANTAL BÉDARD Chef, Secrétariat de la Commission

Committee Secretary

CAROLINE BIED Secrétaire des comités 2013-10-09

C-201201

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Public



Public



National Capital Commission

Meeting No. C-201304

Wednesday, April 24, 2013

40 Elgin Street, Ottawa

PUBLIC MEETING

EXCERPT of the MINUTES

2013-P41e - Greenbelt Master Plan Review – Summary Report: Land Designations, Policies and Sector Plans (D)

Having considered a recommendation by François Lapointe, on a motion of Richard Jennings, seconded by Eric MacKenzie, IT WAS AGREED UNANIMOUSLY that:

- the revised 2067 Greenbelt Land Use Concept Plan be approved;
- the recommended land designations, policies and sector plans be approved.

Canada

Commission de la capitale nationale

Séance n° C-201304

Le mercredi 24 avril 2013

40, rue Elgin, Ottawa

SÉANCE PUBLIQUE

EXTRAIT du PROCÈS-VERBAL

2013-P41f - Ceinture de verdure, Révision du Plan directeur – Rapport sommaire : affectations de terrains, politiques et plans de secteurs (D)

Ayant pris en considération une recommandation de François Lapointe, sur une proposition de Richard Jennings, appuyée par Eric MacKenzie, IL EST CONVENU À L'UNANIMITÉ que :

- la version révisée du Plan conceptuel d'aménagement de la Ceinture de verdure en 2067 soit approuvée;
- les affectations de terrains, les politiques et les plans de secteurs soient approuvés.

General Counsel and Commission Secretary MARK DEHLER Avocat général et secrétaire de la Commission

Chief, Commission Secretariat

CHANTAL BÉDARD Chef, Secrétariat de la Commission

C-201304

NCC-CCN 2013-04-24

CP 2110-33-01A



