

**BUILDING A  
GREENER  
CAPITAL**



National Capital Commission

**ANNUAL  
ENVIRONMENT  
REPORT**

2011–2012



## **NATIONAL CAPITAL COMMISSION**

202-40 Elgin Street, Ottawa, Canada K1P 1C7

Telephone: 613-239-5000 • Toll-free: 1-800-465-1867

TTY: 613-239-5090 • Toll-free TTY: 1-866-661-3530

Fax: 613-239-5063

Email: [info@ncc-ccn.ca](mailto:info@ncc-ccn.ca)

[www.canadascapital.gc.ca](http://www.canadascapital.gc.ca)

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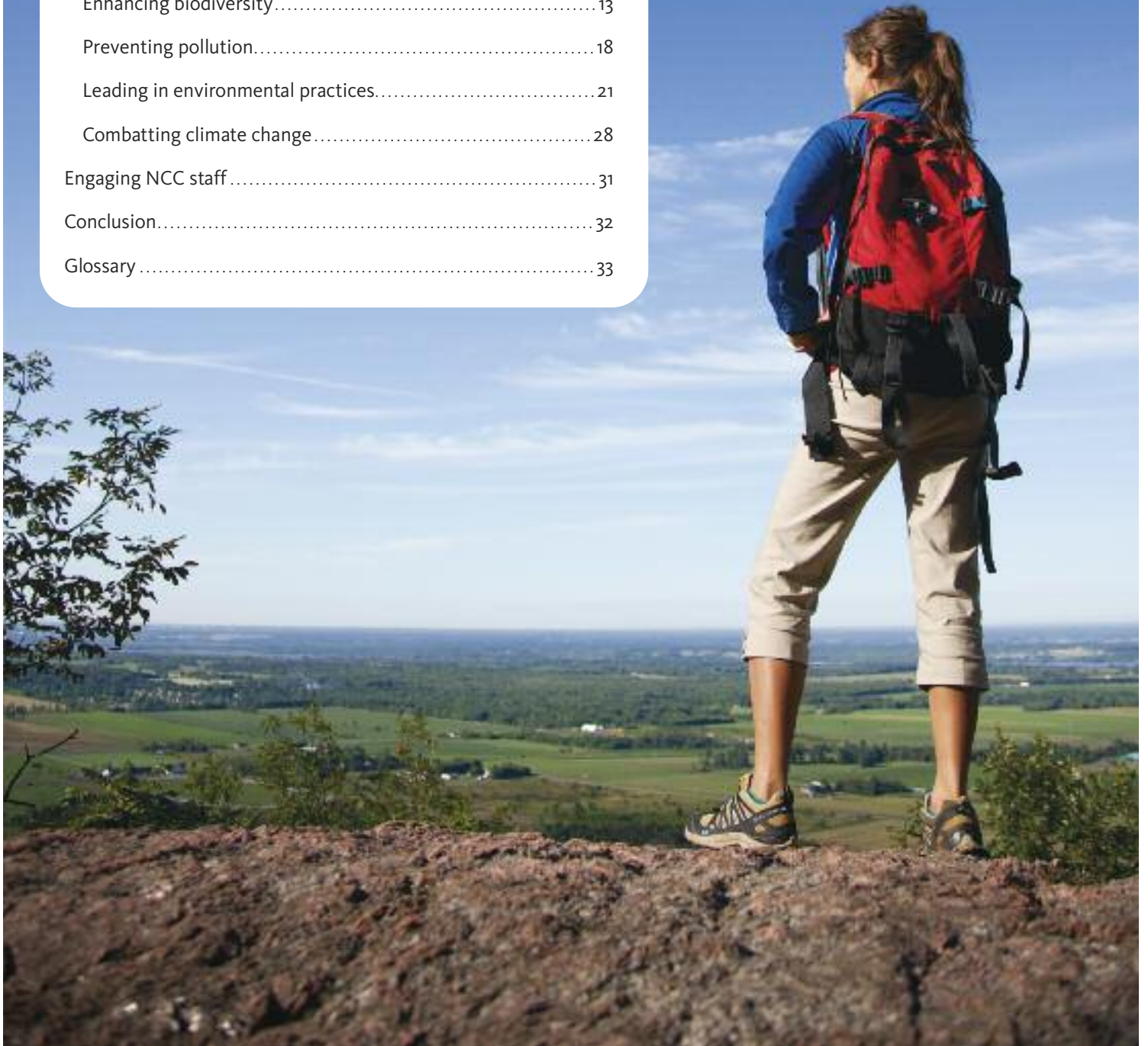
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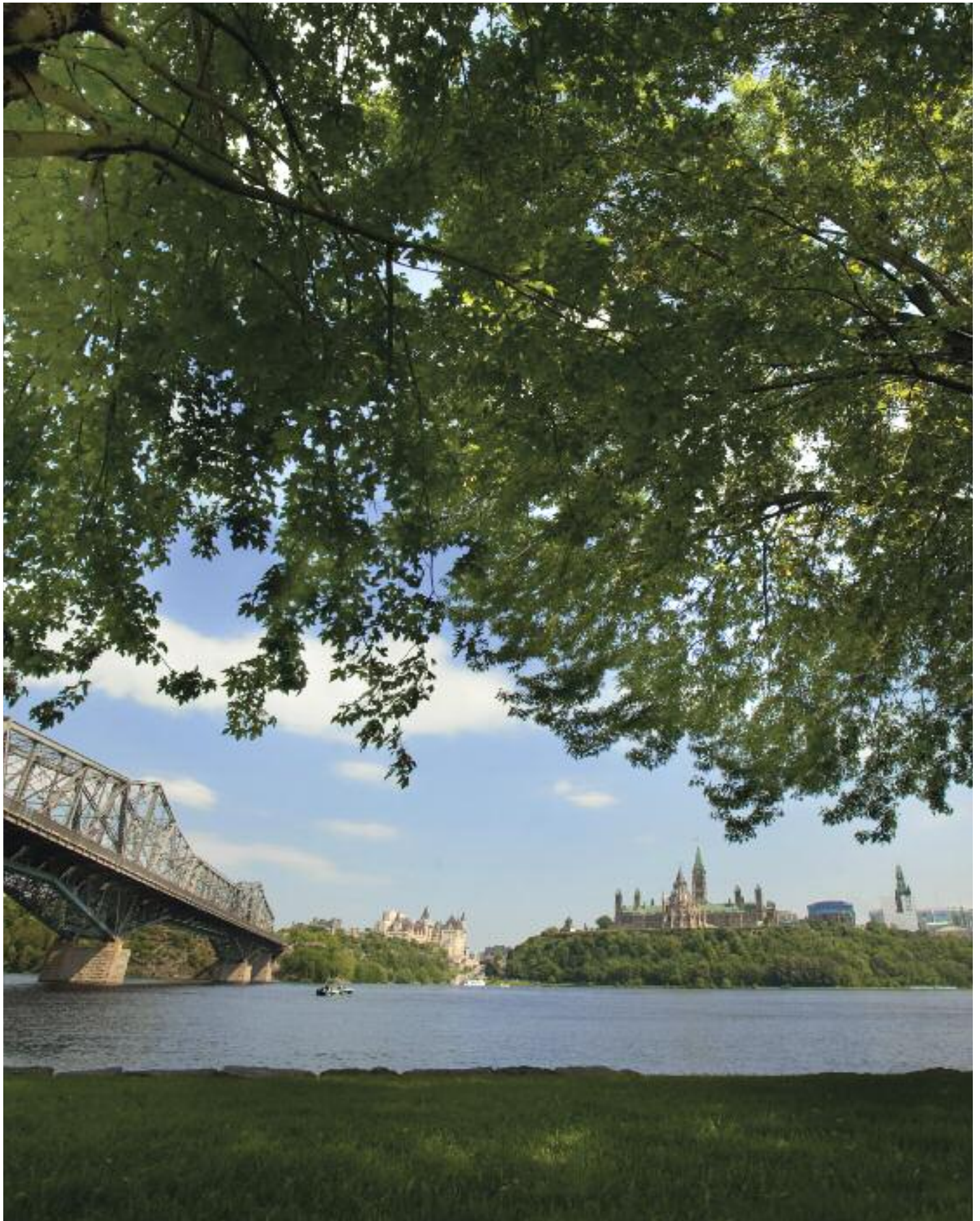
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## 1. MESSAGE FROM THE CHIEF EXECUTIVE OFFICER

I am delighted to present the National Capital Commission's (NCC) environment report for the 2011–2012 fiscal year.

This is the third annual report of its kind since we launched the NCC's environmental strategy, *Building a Greener Capital*, in June 2009.

It is indeed gratifying to see some of the tangible results of our work. Our emphasis is shifting from measuring baselines and planning, to implementing focused, concrete activities to meet the targets that we established three years ago.

We have made progress across the board in all the areas that we set as priorities for action. We have made great strides in reducing waste going to landfill during Canada Day, Winterlude and the Rideau Canada Skateway season. We have made yet another one of our programs, Christmas Lights Across Canada, carbon neutral, and we successfully launched the first season of the highly popular Capital BIXI bike share service.

This year, the NCC also worked with the Office of the Secretary to the Governor General to establish a Green Team at Rideau Hall. Modelled on the NCC's corporate Green Team, its purpose is to spearhead environmental initiatives at Rideau Hall.

I am especially proud of the high level of engagement NCC staff have shown toward environmental stewardship. It is their enthusiastic participation in the NCC's environmental strategy that has contributed in large part toward the NCC's being selected as one of Canada's Greenest Employers for 2012 by Mediacorp, the editors of Canada's Top 100 Employers.

The success stories highlighted in this report are just a few examples that illustrate the commitment of NCC staff at all levels to our environmental strategy. We are committed, and we will continue to work hard, both internally and in cooperation with our partners, to meet our environmental priorities and objectives, so that we can all live in a cleaner, greener capital.



Marie Lemay, P.Eng., ing.  
Chief Executive Officer  
National Capital Commission

## 2. INTRODUCTION

On June 4, 2009, the National Capital Commission (NCC) launched its first comprehensive environmental strategy, known as *Building a Greener Capital*. This eight-year plan mapped out five key action areas, each with one priority objective and a focused set of secondary targets.

*Building a Greener Capital* continues to guide the NCC's environmental management across all its core business areas — from organizing major festivals and events, to maintaining buildings, to protecting federal lands in Canada's Capital Region.

This annual report — the third of its kind since the strategy was launched — provides members of the NCC's Board of Directors and the public with a detailed account of the corporation's environmental performance in the 2011–2012 fiscal year. It builds on the previous reports to present a detailed picture of the progress that the NCC has made toward meeting its objectives in all of the priority action areas. The report also describes how the NCC has managed important environmental regulatory compliance risks and issues during the year.

For more information about the NCC's environmental stewardship, including the previous annual reports and the full strategy itself, please visit the NCC's website:

[canadascapital.gc.ca/planning/environmental-strategy](http://canadascapital.gc.ca/planning/environmental-strategy).

### **BUILDING A GREENER CAPITAL ACTION AREAS:**

- Reducing waste
- Enhancing biodiversity
- Preventing pollution
- Leading in environmental practices
- Combatting climate change

## 3. ENVIRONMENTAL STRATEGY PERFORMANCE OVERVIEW

The following summary charts provide an overview of the status of the NCC's progress toward meeting the objectives of its environmental strategy over the past two years. They highlight accomplishments and key environmental indicators, as well as areas where the NCC has encountered obstacles or challenges. Further details are provided throughout the report.

## Winterlude 2012 Green Squad

**28** volunteers helping the public with sorting waste

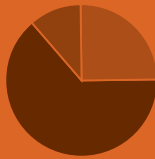
**5X** green demolition projects

**92.5%** of material diverted

**70%** diversion of NCC Headquarters server waste

2011–2012 Canada Day, Rideau Canal Skateway and Winterlude waste profile

**4.5** tonnes composted



**10** tonnes recycled

**25.6** tonnes sent to landfill



**197** species at risk found on NCC lands

**12** ecological corridors to Gatineau Park identified

**14** major invasive plant species impacting NCC lands

**9** high-value ecosystems and habitats designated as conservation lands to date

Christmas Lights Across Canada 2010–2011

**22** tonnes

Canada Day 2011

**292** tonnes

**NCC CARBON NEUTRAL EVENTS**

**10%** cycle  
**13%** walk  
**14%** drive  
**STAFF COMMUTING HABITS**  
**13%** carpool  
**42%** public transit

**2** LEED® buildings being certified on NCC lands

**CAPITAL BIXIS**

**21,658** trips in 2011

**32** environmental assessments on NCC lands

Reducing Waste

Enhancing Biodiversity

Preventing Pollution

Leading in Environmental Practices

Combating Climate Change

**5 ACTION AREAS**

**8 of 10** underground storage tanks compliant

**235** contaminated sites  
**48** secured

**6** minor spills all cleaned up





















**1284** NCC buildings




**9%** remaining to be assessed

**48%** not at risk

**43%** with designated substances

**TABLE 1: SUMMARY OF PERFORMANCE ON ENVIRONMENTAL STRATEGY**

OBJECTIVES	HIGHLIGHTS OF ACCOMPLISHMENTS	STATUS <sup>1</sup> (2010–2011)	STATUS <sup>1</sup> (2011–2012)
<b>Reducing Waste</b>			
By 2013, the NCC will reduce the waste going to landfills from the activities associated with Canada Day, Winterlude and the Rideau Canal Skateway, by 50 percent against a 2009–2010 baseline.	A total of 6.3 tonnes, 10.3 tonnes and 9.0 tonnes were sent to landfill for Canada Day 2011, Rideau Canal Skateway and Winterlude 2012, respectively. The NCC's objective for Canada Day is 5 tonnes; for Rideau Canal Skateway, 11.1 tonnes; and for Winterlude, 6.8 tonnes.		 See page 8
The NCC will achieve 70 percent waste diversion (through reducing, reusing, recycling) for all NCC business areas by 2017.	A new office waste management program was rolled out across NCC offices. The program includes recycling, composting and waste stations. A one-day waste audit indicated that NCC headquarters at 40 Elgin Street, in Ottawa, is making an important contribution by diverting 70 percent of the waste from its serveries.		 See page 11
The NCC will challenge partners hosting events on NCC lands to achieve a 50 percent waste diversion target.	The NCC will include this challenge in new event partnership agreements in 2012.		
The NCC will develop green procurement guidelines for implementation in 2010, which will include low waste as an important criterion.	Green procurement guidelines have been developed, and they are now available to NCC staff via the intranet.		 See page 9
The NCC will implement green demolition practices by 2010, which place a strong emphasis on waste diversion and resource conservation.	A total of 92.5 percent of the material coming from five green demolition projects was diverted from landfill. Habitat for Humanity was able to reuse material from three additional properties.		 See page 11
<b>Enhancing Biodiversity</b>			
The NCC will ensure that all 28 high-value ecosystems and habitats found within the Greenbelt and Gatineau Park and on urban lands in the region are designated as conservation lands by 2012.	The high-value ecosystems and habitats in Gatineau Park are designated as conservation lands in the Gatineau Park Ecosystem Conservation Plan. Master plans for the Greenbelt and the Capital's urban lands are currently under development. The appropriate designations for high-value ecosystems and habitats found in both land portfolios will be incorporated in these two master plans.		 See page 13
The NCC will implement new recovery plans for federally and provincially listed species at risk on NCC lands, within one year of finalization.	The management plan for the Louisiana waterthrush in Canada is now effective, and its applicable measures have been implemented in the Gatineau Park Species at Risk Protection Plan.		 See page 14
The NCC will protect all critical habitats identified on NCC lands under federal or provincial law for species at risk, within one year of designation.	In December 2011, Environment Canada published a draft recovery strategy for the least bittern in Canada. La Pêche Lake in Gatineau Park, which is already protected, was identified as a critical habitat for this species.		 See page 14
The NCC will develop a thorough understanding of the biodiversity on NCC lands through the NCC's Natural Resources Research Program.	Two major studies have been completed: the identification and characterization of ecological corridors adjacent to Gatineau Park, and the identification of potential habitat for legally protected species at risk.		 See page 15
The NCC will reduce the amount of NCC urban land infested by aggressive invasive plant species by 10 percent against a baseline by 2014.	Preliminary work to identify priorities and management techniques for 14 important invasive plant species have been grouped under a joint request for proposals with the development of the management plan for the NCC's high-value ecosystems and natural habitats. A final report is required by November 2012.		 See page 14

-  The objective is on track or achieved.
-  There is some delay in achieving the objective.
-  There are significant delays, and the objective may not be met.



OBJECTIVES	HIGHLIGHTS OF ACCOMPLISHMENTS	STATUS <sup>1</sup> (2010–2011)	STATUS <sup>1</sup> (2011–2012)
<b>Preventing Pollution</b>			
All contaminated sites on NCC lands will be secured by 2017.	Five sites are currently under ongoing remediation, and 48 contaminated sites have been secured.		See page 18
The NCC will identify and remove or repair all problem underground storage tanks on NCC property by 2011.	There are 10 underground storage tanks on NCC lands. All but two are compliant with the federal fuel storage tank regulations.		See page 19
The NCC will adopt a policy to confirm the elimination of the cosmetic use of pesticides on NCC lands by 2010.	A draft has been developed and is being circulated within the NCC for approval.		See page 19
<b>Leading in Environmental Practices</b>			
All new building construction on NCC lands, for buildings over 250 square metres, will be certified LEED® (Leadership in Energy and Environmental Design) Gold by 2013, and all major building renovations will meet LEED® certification standards.	The Dome Building at Rideau Hall is expected to obtain LEED® Silver certification, and the Wakefield Mill expansion project is expected to obtain LEED® Gold certification.		See page 21
The NCC will use green building practices for the construction of all buildings under 250 square metres.	Green practices are incorporated in NCC capital projects. Environmental criteria are used to prioritize projects.		See page 21
The NCC will integrate environmental education into all NCC activities, where appropriate.	A Green Squad created from NCC volunteers informed site users about NCC waste, recycling and compost programs during Winterlude 2012.		See pages 9 and 23
The NCC will strengthen environmentally sensitive practices in all maintenance contracts.	Environmental guidelines have been integrated into all major maintenance contracts.		See page 24
The NCC will provide and promote environmentally sustainable transportation alternatives.	The Capital BIXI bike share service offered 10 stations and 100 bikes during the 2011 season. Public consultation for the Gatineau Park Sustainable Transportation Plan took place in 2011–2012.		See page 23
The NCC will lead the effort to engage partners in improving the water quality of key watersheds in Canada's Capital Region, with the Ottawa River as the first priority.	Waterway and shoreline protection and stormwater management guidelines have been completed and are available on the Internet.		See page 23
The NCC will integrate a green urbanism approach into the 2013 Plan for Canada's Capital.	Phases 2 and 3 (vision, goals and principles) of the plan review are under way, and are integrating the principles of green urban planning.		See page 23
<b>Combatting Climate Change</b>			
The NCC's signature events and programs will become carbon neutral, starting with Canada Day 2010.	Canada Day and the Christmas Lights Across Canada program are now carbon neutral events. The carbon footprint for Canada Day 2011 and Christmas Lights Across Canada 2010–2011 were established at 292 tonnes of carbon dioxide (CO <sub>2</sub> ) equivalent and 22 tonnes of CO <sub>2</sub> equivalent, respectively. High-quality carbon offsets have been acquired.		See page 28
The NCC will reduce its overall carbon footprint by 30 percent by 2017, based on a 2011–2012 baseline.	A consultant has been hired to help staff determine the carbon footprint of all of the NCC's operations for 2011–2012.		See page 29
The NCC will seek renewable sources of electricity. By 2013, 25 percent of all NCC electricity purchases will be from renewable sources.	Analyses are under way to better understand the proportions of power consumed by the NCC that currently come from renewable sources, and to examine options.		See page 29
The NCC will advance public understanding of climate change impacts on Canada's Capital Region.	The NCC is currently investigating the possibility of updating the 2005 study <i>Climate Change: A Long-Term Strategic Issue for the NCC — Implications for Recreation-Tourism Business Lines</i> .		

## 4. PROGRESS AND PRIORITIES: SUMMARY BY ACTION AREA

### 4.1 Reducing waste

#### **PRIORITY OBJECTIVE:**

By 2013, the NCC will reduce the waste going to landfills from the activities associated with Canada Day, Winterlude and the Rideau Canal Skateway, by 50 percent against a 2009–2010 baseline.

This year, the NCC made a concerted effort to reduce waste in two main areas: its three signature events and related facilities, and NCC offices and workplaces.

#### **SIGNATURE EVENTS AND FACILITIES**

With respect to signature events and facilities, the NCC placed emphasis on increasing waste diversion from landfill. Building on previous years' actions, this year's efforts included establishing public composting, improved signage for waste stations, separation of recyclable materials and a volunteer Green Squad pilot project.

For the past three years on the Rideau Canal Skateway, and last year for Winterlude and Canada Day, the NCC implemented a composting program for the concessionaires to divert food and other compostable waste from landfills. This year, the NCC implemented a compost program for the public during Winterlude and along the Rideau Canal Skateway. Through unique partnerships, the cities of Ottawa and Gatineau provided the bins to collect the material, as well as collected and processed the material free of charge.

This year, a Green Squad made up of enthusiastic volunteers was deployed during the three Winterlude weekends to interact with the public and show people how to make the best use of the NCC's waste-diversion facilities.





### INTRODUCING . . . A NEW BREED OF VOLUNTEERS AND A PUBLIC COMPOSTING PROGRAM

If you visited Jacques-Cartier Park or Confederation Park, or skated on the Rideau Canal during Winterlude this year, you might have noticed individuals wearing lime green vests standing by the waste bins. They were the NCC's brand new team of volunteers, the Green Squad, dedicated to helping achieve the NCC's waste diversion objective for events. Their task was to engage the public in effective waste management and assist them in sorting compostable and recyclable items from real garbage. Equipped with green vests for identification, lists of acceptable materials for each waste stream, a series of quick waste facts for striking up conversations and a smile despite the cold weather, 28 volunteers contributed a total of 196 hours of their time on Winterlude weekends.



These new efforts appear to have paid off. Table 2 summarizes the waste reduction results the NCC achieved from Canada Day, the Rideau Canal Skateway and Winterlude.

Recycling and composting rates for Canada Day are improving, with the amount of waste sent to landfill during Canada Day 2011 decreasing to 6.3 tonnes (down from 9.9 tonnes in 2009 and 7 tonnes in 2010), despite the increased number of people at the three main sites. For Winterlude, the total amount of waste sent to landfill decreased by 0.4 tonnes between 2011 and 2012, even with an increase of 2.7 tonnes of material collected. The NCC attributes these good results mainly to the new facilities and public engagement initiatives the corporation established this year.

For the Rideau Canal Skateway, there was a huge reduction of waste sent to landfill — dropping to 10.3 tonnes from 30.7 tonnes in 2011. While the NCC is very pleased that its 50 percent reduction target was met this year, the corporation recognizes that the total amount of waste sent to landfill varies according to the number of skating days (*see Table 3*). Indeed, meeting the overall waste target in 2012 was in part made possible due to the mild winter and the resulting very short skating season. However, the amount of waste sent to landfill per skating day was down markedly in 2011, indicating that the measures established this year seem to have made an appreciable difference as well.

**TABLE 2: SIGNATURE EVENTS AND FACILITIES WASTE RECYCLING AUDIT RESULTS, 2009–2012<sup>1</sup>**

MEASURED RESULTS	Canada Day			Rideau Canal Skateway			Winterlude		
	2009	2010	2011	2010	2011	2012	2010	2011	2012
Total material collected	12.3	9.0	12.0	24.1	33.1	14.1	17.4	11.4	14.1
Total amount recycled	2.4	2.0	3.4	1.9	2.3	2.8	3.8	2.0	3.8
Total amount composted	0	0	2.2	0	0	1	0	0	1.3
Total sent to landfill	9.9	7.0	6.3	22.2	30.7	10.3	13.6	9.4	9.0
<b>NCC 2013 targets<sup>2</sup> for waste sent to landfill</b>		<b>5.0</b>			<b>11.1</b>			<b>6.8</b>	

1. Figures in metric tonnes and rounded to one decimal place.

2. The 2013 targets represent 50 percent of the waste sent to landfill for each event in the 2009–2010 fiscal year.

**TABLE 3: RIDEAU CANAL SKATEWAY STATISTICS**

	2010	2011	2012
Number of skating days	36	53	26
Total sent to landfill <sup>1</sup>	22.2	30.7	10.3
Tonnes of waste to landfill per skating day	<b>0.61</b>	<b>0.58</b>	<b>0.40</b>

1. Figures in metric tonnes.

### NEW NCC OFFICE WASTE DIVERSION PROGRAM

This year, the NCC implemented a comprehensive overhaul of its office waste-management systems at its six main office locations. This involved deploying some 70 new stations, better signage, a new composting program, and full alignment with existing municipal and commercial recycling and composting programs that were already in place for NCC workplaces.

A limited waste audit undertaken in January 2012 revealed that the NCC is diverting about 70 percent of all the waste generated in the serveries on all floors of the corporation's head office, at 40 Elgin Street in Ottawa. This is a measured improvement over 2010, when the NCC did its first audit. The NCC will be undertaking a comprehensive waste audit in mid-2012 to provide a more comprehensive picture of how it is doing and to identify targeted areas for improvement going forward.

### GREEN DEMOLITION

The NCC undertook five green demolition projects in 2011–2012. Overall, 92.5 percent of the demolition waste from these five projects was diverted from landfills, through aggressive reuse and waste diversion. Moreover, the NCC donated materials from three houses to Habitat for Humanity National Capital Region — a volunteer-based, non-profit, non-governmental organization that builds simple, decent homes for low-income working families.

## NEW WASTE STATIONS IN NCC OFFICES

In September 2011, the NCC launched a new waste program for its office buildings, complete with a new set of receptacles, clear signage and an employee education plan. The new waste stations enable the collection of five waste streams: garbage, paper recycling, mixed recycling (glass, plastic and metal), compost and batteries.

An audit conducted in January 2012 at 40 Elgin Street in Ottawa — the NCC's headquarters, where the majority of the workforce is located — found that the NCC currently diverts 56 percent of its office waste from landfill. This represents an increase of nine percent from the waste audit conducted two years earlier. From the serveries alone, 70 percent of waste is being diverted.

Why a new waste management program? The former system was out of date, and no longer aligned with current municipal and commercial programs. For example, it required separating fine paper from regular paper, when this is no longer necessary. In addition, the new waste program takes advantage of the composting programs that are now available to commercial and institutional buildings. As well, batteries were previously collected at only one location for the entire building, but now there is a receptacle to collect used batteries on every floor.

The NCC's new receptacles are located in all service areas, and there are smaller ones for paper and garbage located in all meeting rooms. The new office waste management program is a key initiative that will help the NCC meet one of its important secondary objectives of achieving 70 percent waste diversion from all NCC business areas by 2017.



**BUILDING A  
GREENER  
CAPITAL**

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CAPITAL  
PLUS VERDE**

## 4.2 Enhancing biodiversity

### **PRIORITY OBJECTIVE:**

The NCC will ensure that all 28 high-value ecosystems and habitats found within the Greenbelt and Gatineau Park and on urban lands in the region are designated as conservation lands by 2012.

As the owner of 11 percent of the land in Canada's Capital Region, which straddles the Quebec–Ontario border, the NCC is the chief steward of federal lands in the region. Its rural, urban and wilderness lands are characterized by a high level of biodiversity.

Last year, a large property of 84 hectares in the Greenbelt was acquired to help protect the Mer Bleue Bog, and two properties, together making up about 1.3 hectares, were acquired within Gatineau Park to help protect the ecological integrity of the Park.

### **HIGH-VALUE ECOSYSTEMS AND NATURAL HABITATS**

The NCC's priority objective in this area is to ensure that all high-value ecosystems and habitats found within the Greenbelt and Gatineau Park and on its urban lands are designated as conservation lands by 2012. A total of nine have been designated as conservation lands. These include the eight high-value ecosystems and habitats in Gatineau Park, as well as the Mer Bleue Bog, located in the Greenbelt. In addition, the Lester Wetland in the southern Greenbelt has been identified as a high-value ecosystem and habitat.

In 2011–2012, the NCC continued to work toward achieving this core objective. The review of the Greenbelt Master Plan and the development of the first Capital Urban Lands Master Plan are progressing. The appropriate designations for the high-value ecosystems and habitats found in those two land portfolios will be incorporated in these master plans. The Greenbelt Master Plan and the Capital Urban Lands Master Plan are expected to be completed in 2013. The conservation designations are expected to follow the framework of protected area management categories developed by the International Union for the Conservation of Nature.

In a related initiative, the NCC is proceeding with including its conservation lands in the Conservation Areas Reporting and Tracking System (CARTS), managed by the Canadian Council on Ecological Areas. CARTS allows standardized, consistent tracking and reporting on the status of all of Canada's protected areas. By adding the NCC's information to CARTS, the NCC's conservation lands will be officially recorded and added to the total number of hectares of protected land across Canada.

### **SPECIES AT RISK**

In 2011–2012, NCC lands provided habitat for 197 species at risk (*see Table 4*). Since last year, updates and technical revisions to the federal and provincial lists of species at risk, as well as work by the NCC to determine their presence, has led to changes in the inventory of species at risk on NCC lands. In particular, three upland plants and one aquatic plant were added to the Gatineau Park list.

**TABLE 4: SPECIES AT RISK PROTECTED IN GATINEAU PARK, IN THE GREENBELT AND ON NCC URBAN LANDS**

Portfolio	Gatineau Park	Greenbelt	Urban Lands
Number of species at risk <sup>1</sup>	<b>150</b>	<b>104</b>	<b>86</b>
Mammals	11	5	0
Birds	19	25	23
Fishes	7	1	11
Amphibians	3	1	2
Reptiles	8	6	9
Invertebrates	7	1	1
Flora	95	65	40
Total species at risk on NCC lands <sup>2</sup>		<b>197</b>	

1. The term “species at risk” used in this report refers to plant and animal species with special status at the federal and/or provincial levels. It also includes the species listed by the Committee on the Status of Endangered Wildlife in Canada and those on the provincial lists of species likely to be designated as threatened or vulnerable.

2. Since a species at risk can be found in more than one land portfolio, the total for the NCC is not the sum of the species identified in Gatineau Park, in the Greenbelt and on the NCC’s urban lands.

### SPECIES AT RISK RECOVERY PLANS AND CRITICAL HABITATS

No new recovery or management plans for species at risk have been finalized under federal or provincial legislation. However, there are two draft management plans under the federal *Species at Risk Act* (SARA) involving two bird species known to breed in Gatineau Park: the Louisiana waterthrush and the least bittern. In addition, a draft recovery strategy under SARA and Quebec’s Ministère du Développement durable, de l’Environnement et des Parcs for the blunt-lobed woodsia fern has been circulated. NCC staff have been involved in all three of these plans.

Two critical habitats have been identified in the Park for the least bittern. Further, the Eardley Escarpment in Gatineau Park has been identified in the Recovery Strategy for the Blunt-lobed Woodsia as a site containing critical habitat for this species.

NCC staff are also participating on the recovery teams of two herpetile species at risk that are found on NCC lands: the Blanding’s turtle, and the western chorus frog.

### INVASIVE PLANT SPECIES AND HIGH-VALUE ECOSYSTEMS AND HABITAT MANAGEMENT PLANS

Invasive plants can out-compete native species, and negatively affect ecosystems and local species diversity. The NCC has taken concrete steps to improve the management of invasive species on NCC lands. A wide-ranging plan to develop management objectives



and action plans for high-value ecosystems and habitats on Greenbelt and NCC urban lands and in Gatineau Park was launched in March 2012. As part of this work, the NCC is undertaking a study to identify the locations and extent of infestation of urban lands by 14 high-impact invasive plant species. Once this work is complete, the NCC will take action to reduce the acreage of infested urban lands.

Meanwhile, the NCC has added new requirements to annual maintenance contracts for urban lands to reduce exotic invasive plant species. For example, additional mowing has been added in some areas to control the spread of dog-strangling vine and buckthorn.

### **EMERALD ASH BORER**

Unfortunately, the emerald ash borer continues its march across the regional landscape. While not yet found in Gatineau Park, the insect is widespread in Ottawa and parts of Gatineau, and has been found in the Gatineau area outside of the zone controlled by the Canadian Food Inspection Agency. Because only three percent of the tree cover in Gatineau Park is ash, the impact of this exotic insect on the Park should be relatively limited. However, actions to slow down the arrival of the insect include bans on the use of firewood brought into the Park by campers.

The proportion of ash in the Greenbelt and on NCC urban lands is much higher. On urban lands, about 260 ash trees were cut, with a total of about 500 or more trees expected to be removed during 2012. In addition, over 200 large-diameter ash trees were treated to prevent damage from the emerald ash borer, and about 150 maples, oaks and other non-ash native trees were planted to replace current and future losses of ash trees.

The main management action in the Greenbelt has been to monitor for the presence of the insect. The NCC has not undertaken cutting or replanting to date in the Greenbelt.

### **GEESE MANAGEMENT**

In 2007, the NCC, along with the City of Ottawa and Ville de Gatineau, launched the campaign “Keep the Wildlife Wild.” For the NCC, this has involved a series of actions aimed at reducing the impact of large numbers of Canada geese on urban lands. Elements of this strategy included discouraging people from feeding geese, monitoring geese numbers and habits, installing fences in strategic areas, and modifying habitat by planting shrubs and allowing shoreline vegetation to grow. Geese like to feed in areas with short grass near water, and the measures taken are known to make areas less appealing to geese. In 2011, the NCC determined that the number of goslings and adult geese on NCC urban lands sites had dropped significantly from 2009. The NCC plans to continue the program through 2012. Similar habitat-modification actions were taken to discourage geese from frequenting several Gatineau Park beaches.

### **CORPORATE NATURAL RESOURCES RESEARCH PROGRAM**

Several important studies were undertaken in 2011–2012, through the NCC’s Natural Resources Research Program. These included identifying potential habitat for species at risk and taking an inventory of beaver populations in Gatineau Park and on urban lands. Significant work was also undertaken to better understand the impact of recreational rock climbing on the delicate Eardley Escarpment ecosystem.

## GREENBELT: PARTNERS IN CONSERVATION

Partnerships are fundamental for the NCC to achieve its environmental objectives. The NCC recently signed an agreement with Carleton University to mark the beginning of a multi-year partnership combining education and research on aquatic biota and their associated habitats within Watts Creek. More than 70 percent of Watts Creek is contained within the Greenbelt, traversing through the Shirleys Bay area, a provincially significant wetland, and the largest marshland in the Greenbelt.

This partnership will help the NCC enhance its stewardship of the creek, coordinate research efforts among local government agencies and prioritize restoration requirements. It will also improve community awareness of aquatic resources in the Greenbelt and will engage students directly in a way that embeds learning and builds a connection to nature. Undergraduate and graduate biology students will study the creek, conduct aquatic research and undertake hands-on restoration activities that will directly benefit creek biodiversity for years to come.



## WILDLIFE CONNECTIONS

In the spring of 2012, the NCC completed a study to identify and characterize ecological corridors adjacent to Gatineau Park.

Ecological corridors are swaths of land that physically connect areas inhabited by plant and wildlife species. Urban growth puts considerable pressure on green spaces, leading to habitat fragmentation and degradation, as well as loss of biodiversity. Creating linkages between natural areas makes larger areas available to wildlife species, enabling them to access additional food resources, move more securely across the landscape to different seasonal habitats and take advantage of unoccupied areas. These connections also reduce isolation among populations by providing the opportunity for interbreeding, which increases the diversity and hardiness of the genetic stock. In addition to their ecological benefits, natural corridors enhance the quality of life of nearby residents, and present an opportunity to diversify local recreational and tourism opportunities.

The NCC study identified 12 potential corridors connecting Gatineau Park to shoreline habitats along the Ottawa and Gatineau rivers (south and east of the Park) and other habitats to the north and northwest of the Park. Over the next two years, the NCC will work with partners, including municipalities and environmental organizations, toward the conservation of these important linkages.



### 4.3 Preventing pollution

**PRIORITY OBJECTIVE:**

All contaminated sites on NCC lands will be secured by 2017.

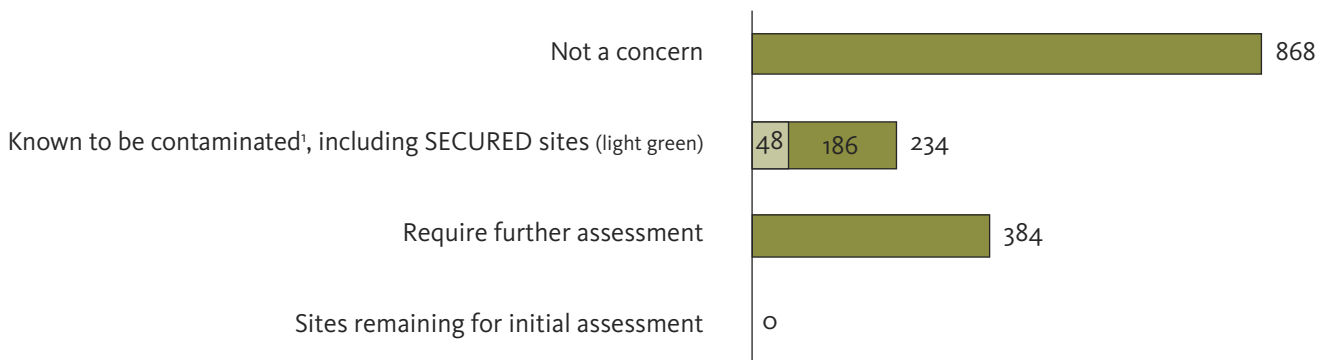
**CONTAMINATED SITES**

The NCC actively identifies, assesses and manages contaminated sites located on its lands in order to reduce risks to human health and the environment. Because of the uncertain availability of federal funds for managing contaminated sites last year, the NCC focused on conducting 40 high-priority assessments, undertaking the remediation of a small number of key contaminated sites and planning the large remediation project at LeBreton Flats. As a result, only one additional site has been secured. However, now that federal funding will be in place for the next five years, securing existing contaminated sites will again become a priority for the NCC in 2012–2013. Figure 1 provides information on the numbers and status of contaminated sites.

Active remediation was undertaken at five sites during the past year. Some of these initiatives were continued from 2010–2011. At Stanley Avenue Park, following the project to provide a clean cover for areas contaminated with lead and other contaminants, another sector of the park is now under examination (Stanley Avenue at Sussex Drive). Monitoring and ongoing site maintenance took place at the Ridge Road former landfill site. At the NCC’s Bayview property, a long-term project to remediate groundwater for trichloroethylene continued. At Hurdman North, new remediation strategies are being developed for the site, while the pumping and treating of free phase petroleum hydrocarbons is ongoing. At Richmond Landing, the new location of the Royal Canadian Navy Monument, soil and groundwater remediation were undertaken at the same time as the monument construction.

Remediation of the NCC’s six-hectare north section of property on LeBreton Flats is scheduled to begin in fall 2012, and is expected to take approximately 18 to 24 months to complete. The objective of this major project is to remediate the lands to residential standards in order that they can be used for mixed-used redevelopment in the short- to mid-term future.

**FIGURE 1: STATUS OF CONTAMINATED SITES, 2011–2012**



Over the past year, the NCC reported an audited liability cost of \$42.5 million, \$0.15 million less than the value reported in the previous year (\$42.65 million). The NCC also reported a decreased contingent liability cost of \$465 million in 2011–2012, down from \$467.2 million reported for the 2010–2011 fiscal year.

### **FUEL STORAGE TANKS**

At the end of the 2011–2012 fiscal year, there were 57 tanks on NCC lands subject to the federal petroleum products storage tank regulations. In 2011, the majority of these tanks were inspected to monitor progress made toward meeting the compliance requirements.

Seven of the 57 regulated tanks are owned by the NCC, and five of the seven are compliant. The NCC sent letters to the owners of all the other regulated tanks in June 2009 and again in March 2012 to remind them of their responsibilities under the regulations.

There are 10 underground storage tanks on NCC lands. At the beginning of June 2012, all but two were compliant with federal fuel storage tank regulations. One non-compliant underground storage tank is located at a rented residence that is involved in a legal process. The other is located in Gatineau Park and is scheduled for replacement during the summer of 2012.

### **PESTICIDES MANAGEMENT**

The NCC has prepared a draft policy for pesticides management, which is being circulated internally for approval. The draft policy is expected to be presented to the Executive Management Committee for approval in July 2012. Until the formal policy is established, the NCC will continue to follow the Ontario and Quebec pesticide management policies, both of which are modern and anchored by provincial legislation.

### **DESIGNATED SUBSTANCES**

The NCC owns 1,284 buildings in active use, and is implementing a program to identify and assess buildings where designated substances such as asbestos and lead-containing paint may be found. This is required under the *Canada Labour Code*, Part II. In 2011–2012, surveys were completed at 269 buildings, 185 of which were high-priority buildings, and an additional 84 were lower-priority buildings, which were assessed because of their proximity to the high-priority ones.

To date, the NCC has determined that 618 buildings are not likely to pose a risk, and another 558 buildings revealed the presence of designated substances. Work on buildings with designated substances is advancing on a case-by-case basis, primarily under the direction of the various NCC portfolios. In 2011–2012, three buildings were remediated. Of the 108 priority buildings left to be inspected, a minimum of 30 are slated for inspection during 2012–2013. The rest will be scheduled for assessment over the next several years. (See Table 5 on page 20.)

**TABLE 5: STATUS OF REVIEW OF NCC BUILDINGS FOR DESIGNATED SUBSTANCES, MARCH 31, 2012**

Building Status	2009–2010 Results	2010–2011 Results	2011–2012 Results
<b>Buildings in active use</b>	<b>1,322</b>	<b>1,296</b>	<b>1,284</b>
Buildings determined to be not at risk	727	714	618
Buildings with designated substances	248	289	558
Buildings remaining to be assessed	347	293	108
<i>Scheduled for assessment in 2012–2013<sup>1</sup></i>	<i>N/A</i>	<i>N/A</i>	30

1. The buildings scheduled for assessment in the next fiscal year are also included in the buildings remaining to be assessed.

#### HAZARDOUS MATERIALS MANAGEMENT / SPILLS AND EMERGENCY RESPONSE

The NCC has drafted new guidelines on hazardous materials and hazardous substances, detailing how NCC employees should deal with these materials and substances. The new guidelines, which are specific to the NCC, were drafted in 2012 and will be ready for completion in 2012–2013.

It is to be noted that Health Canada’s Workplace Hazardous Materials Information System (WHMIS) is scheduled to be replaced in 2012 by the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), an international standard. GHS is a system that defines and classifies the hazards of chemical products, and communicates health and safety information on labels and material safety data sheets. The implementation of this new system is expected to have minimal impact on the NCC.

The NCC documented six minor spills on its lands in 2011–2012. Five were petroleum product spills, and one was a release of stones and clay when a coffer dam at a construction site in Gatineau Park failed. Only two of those necessitated reporting to the provincial authorities. As of March 2012, all had been cleaned up.

#### FEDERAL PCB REGULATIONS

Owners of equipment containing polychlorinated biphenyls (PCBs) are required to comply with the federal PCB regulations, which came into effect in 2008, and are part of the *Canadian Environmental Protection Act, 1999*. These regulations include reporting requirements, labelling and record-keeping requirements, as well as end-of-use dates by which PCB-containing equipment must be removed from service and destroyed. One key date is December 31, 2025. All PCB-containing equipment, including fluorescent light ballasts, must be removed by this date.

In order to become fully compliant with the PCB regulations, the NCC is gradually compiling information to complete an inventory of PCB-containing equipment. Some of the information is collected when designated substances and hazardous materials surveys are completed.

#### **OZONE-DEPLETING SUBSTANCES**

The NCC owns equipment containing ozone-depleting substances, which are subject to the federal Ozone-Depleting Substances Regulations. In 2011–2012, Environment Canada completed nine inspections of NCC equipment, and found that there were several incidents of non-compliance with the regulations. These included two leaks of refrigerant between 10 kilograms and 100 kilograms in early 2011, which should have been reported, but were not. Procedures have since been established to ensure future compliance with the regulations.

#### **WATER QUALITY**

The NCC is responsible for overseeing the quality of water for drinking and swimming at a number of locations on its lands. No beach closures due to outbreaks of cyanobacteria were required in the summer of 2011. In 2011–2012, the NCC decommissioned 13 water wells, which can become a source of groundwater contamination, and rehabilitated one.

### **4.4 Leading in environmental practices**

#### **PRIORITY OBJECTIVE:**

All new building construction on NCC lands, for buildings over 250 square metres, will be certified LEED® (Leadership in Energy and Environmental Design) Gold by 2013, and all major building renovations will meet LEED® certification standards.

#### **BUILDINGS**

The NCC has 1,284 buildings in active use on its lands. According to the Canada Green Building Council, buildings in Canada account for 37 percent of all primary energy use, and are responsible for 30 percent of greenhouse gas emissions. Higher standards of construction will help conserve energy, reduce the carbon footprint of buildings, and enable more efficient use of water and other resources.

To accelerate the pace of moving to high-performance sustainable building construction, the NCC has made a commitment to LEED® standards. LEED® is a third-party certification program administered by the Canada Green Building Council for the design, construction and operation of high-performance green buildings.

During 2011–2012, the NCC completed work on the Dome Building, a heritage building on the grounds of Rideau Hall. The NCC has applied for LEED® Silver designation for this major rehabilitation project, and is expected to receive certification in 2012–2013.

In Gatineau Park, the expansion of the facilities at the Old Mill near Wakefield (known as the Wakefield Mill) is complete. Constructed by a private business on NCC lands, it was built to meet LEED® Gold standards.

Green construction features were designed and built into many other building projects undertaken by the NCC in 2011–2012. For example, the Official Residences Division has embarked on an energy efficiency retrofit program which includes projects such as the following:

- the replacement of more than 350 light bulbs with LED equivalents, yielding an estimated life cycle savings of \$40,000 and 225,000 kWh
- the drilling of a 150-metre-deep test well at Rideau Hall to evaluate the feasibility of using geothermal heating and cooling for the governor general's workplace and residence (upon completion of the well, renewable energy will provide 100 percent of the cooling requirement and up to 35 percent of the heating requirement for the main residence at Rideau Hall).

Sustainable initiative reports are generated for projects undertaken at the official residences that have an energy- or water-saving component. These reports are designed to provide management and stakeholders with simple, quantitative information about economic and environmental benefits.

## PLANNING

As part of the review of the Plan for Canada's Capital, the NCC set out on a unique and ambitious public consultation exercise, which boldly aimed to reach as many Canadians from one end of the country to the other and gather their thoughts, ideas and aspirations for the future of Canada's Capital. Through its National Engagement Strategy and a partnership with The Royal Canadian Geographical Society, the NCC heard from close to 24,000 individuals. The breadth and depth of the response exceeded expectations, and confirmed that Canadians care about their capital and want to have a say in its future. Moreover, it also confirmed that Canadians wish their capital to be sustainable, as this was a recurring theme in the ideas gathered. For example, some ideas expressed the desire to see the Capital as a model of sustainability and a leader in encouraging active transportation.

In addition, Choosing Our Future, a joint initiative launched in 2008 by the City of Ottawa, with the participation and support of the NCC and Ville de Gatineau, reached its conclusion. In February 2012, the final results of the joint planning initiative were received by Ottawa City Council, specifically the Sustainability and Resilience Plan, the Energy and Emissions Plan, and the Risk Prevention and Mitigation Plan. The final plans propose strategies that position the region to thrive in a changing world.

The results of the Sustainability and Resilience Plan will be important to the new Plan for Canada's Capital, Horizon 2067. Goals related to topics such as connectivity and mobility, culture and identity, as well as biodiversity and ecosystem health, which are now shared by the three project partners, will be expressed in the context of the Capital in the new plan.



For the Capital Urban Lands Master Plan, in 2011–2012, a strategic framework incorporating important environmental thematic concepts was developed. This master plan is expected to be finalized before the end of 2013.

The Greenbelt Master Plan has a new vision which now places primary significance on the natural environment, and raises the importance of sustainable agriculture. Further, the Greenbelt is being positioned as being an environmental showcase for Canada's Capital, balancing favourable ecological, social and economic factors; demonstrating leadership in environmental stewardship; and facilitating the use of best practices in environmental management in all activities, facilities and land uses. This master plan is expected to receive final approval before the end of 2013.

In 2011–2012, the NCC developed the Ottawa River Shoreline Initiative to enhance visitor experience by providing greater access to shorelines, while ensuring the protection of healthy shoreline ecosystems.

## **CYCLING**

Cycling in Canada's Capital Region makes an important contribution to reducing urban air pollution and greenhouse gas emissions, and plays a key role in making the region a sustainable urban area. The region is home to one of North America's largest networks of recreational pathways: the Capital Pathway network. About 236 kilometres of recreational pathways link natural areas, parks, gardens, museums and attractions across the region.

In 2011, the NCC launched the first season of the Capital BIXI bike share program, with 10 stations and 100 bikes located in the core of the region. This 24-hour-a-day, seven-day-a-week service generated 21,658 cycling trips, stemming from 173 monthly and yearly subscribers and 7,384 distinct occasional users. In 2012, the service has been expanded to 25 stations and 250 bikes, through collaboration with the Ville de Gatineau, Canadian Museum of Nature and City of Ottawa.

Other cycling initiatives that took place in 2011–2012 include the following:

- A new 1.2-kilometre recreational trail was constructed at Moore Farm, linking Saint-Raymond and Taché boulevards in Gatineau.
- A new map of the full Ottawa–Gatineau cycling network was developed as a joint project by the NCC and the cities of Ottawa and Gatineau.
- A pilot project was implemented to make 10 NCC parking areas on the periphery of the urban core available for people to park their cars and commute into the city by bike.

## **ENVIRONMENTAL EDUCATION**

The NCC has many opportunities to interact with the public on topics related to the environment. In 2011–2012, environmentally themed educational activities were important elements of NCC programming. The following presents some of the highlights of this work.

- Twenty-two groups of newcomers to Canada, representing over 700 participants, took part in the snowshoe guided tours in Gatineau Park. This activity allowed newcomers to discover a natural environment in winter and to learn more about Gatineau Park's biodiversity.
- In 2011–2012, 21 school classes participated in the activity “A Gathering of Gatineau Park Animals!” This pilot project increased students' interest in wildlife conservation, and encouraged them to practise environmentally friendly recreation.
- The NCC organized the third edition of Eco Art, a nationwide photographic arts contest for Canadian youth aged 14 to 24, inviting them to submit their creative and original views on the environment. Forty winning environmental photos were displayed at outdoor exhibits presented to residents and visitors to the Capital during Winterlude and over the summer season.
- Five new lesson plans on environmental themes linked to Canada's Capital were developed in collaboration with *Canadian Geographic*. These plans, available on the Canadian Council for Geographic Education website for teachers across the country, help students to better understand the natural and physical characteristics of Canada's Capital Region.

#### **MAINTENANCE OPERATIONS**

A new agreement has been reached with the Central Experimental Farm to accept grounds and greenhouse compostable materials from Rideau Hall. The wood chips, spent potting soil and other plant waste material are composted at the Farm, then used as a soil amendment. From June to November 2011, approximately 168 cubic metres (220 cubic yards) of material were sent to the Central Experimental Farm.

In 2011–2012, a study was undertaken with University of Ottawa students to identify the optimal period for cutting grass in some areas on urban lands in order to reduce the impact on birds and butterflies. Staff are evaluating the results of this study for potential application in 2012.

In Gatineau Park, a new service was established in 2011 by Services récréatifs Demsis inc., the contactor that manages the camping program for the NCC. In the evening, a small electric vehicle circulated in the campground offering campers firewood and collecting recyclable materials, reducing the amount of waste sent to landfill from the campground.

#### **ENVIRONMENTAL ASSESSMENT**

In compliance with the *Canadian Environmental Assessment Act*, the NCC reviewed over 100 project files this year to determine whether the Act applied and an environmental assessment was required. The NCC participated in approximately 32 environmental assessments as a responsible authority this fiscal year.

The NCC continues to be engaged in environmental assessment work related to Ville de Gatineau and City of Ottawa transit projects, including the environmental assessment of the City of Ottawa Light Rail Project and the Ville de Gatineau Rapibus. The NCC and

Parks Canada are also conducting an environmental assessment on a project related to stormwater management under the Lansdowne Park redevelopment proposal.

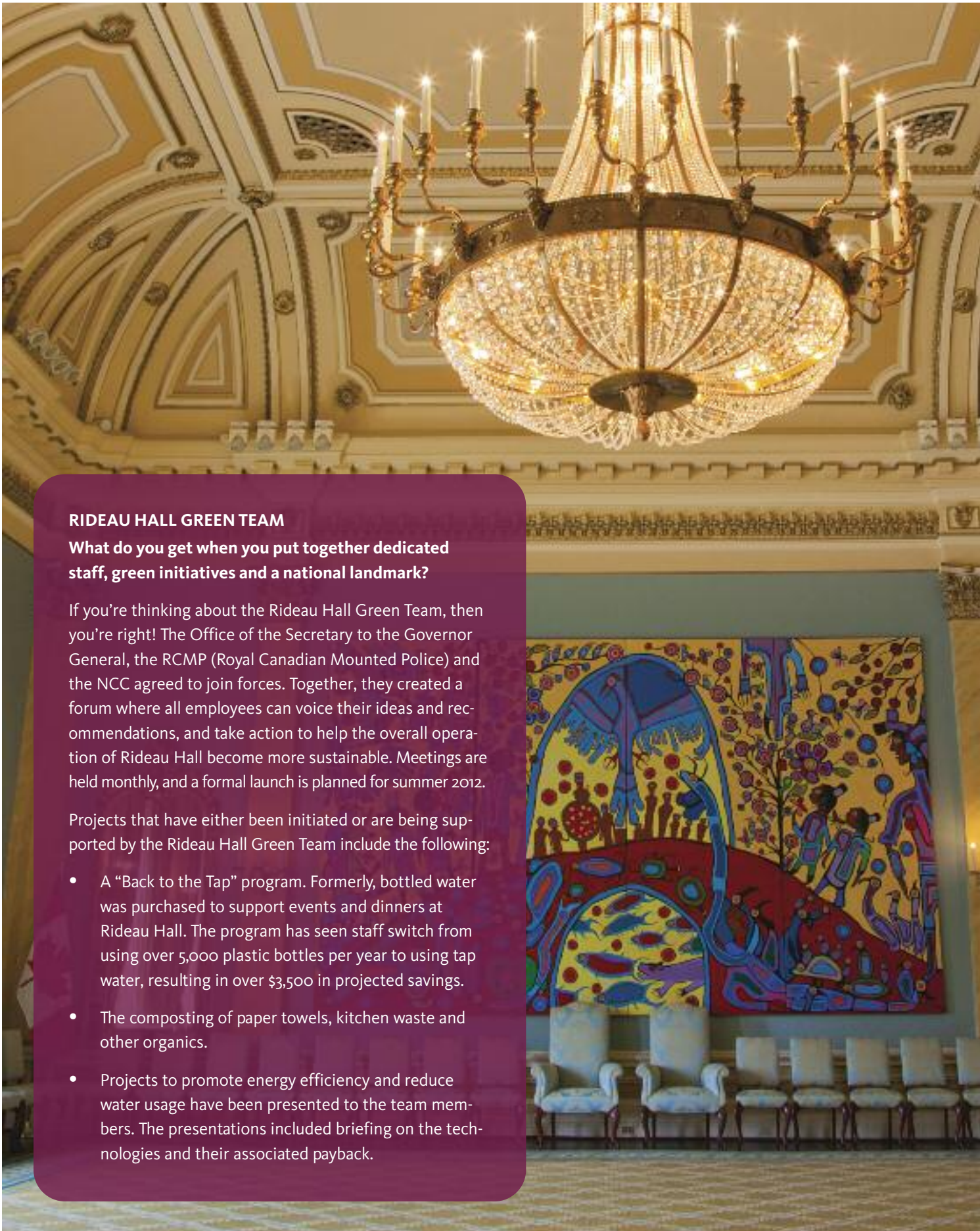
The NCC is also involved in the environmental assessment of the Province of Quebec's Highway 5 extension. The second phase of the environmental assessment was completed in January 2011, with follow-up requirements ongoing this year and for the next two years.

The NCC continues as project manager of a joint federal–provincial (Ontario and Quebec) environmental assessment study for future interprovincial crossings. The second round of public consultation on this project is expected to take place in June 2012, with the choice of the preferred corridor being made by the federal–provincial evaluation committee in fall 2012.

The NCC, jointly with the Canadian Environmental Assessment Agency, is pursuing the development of a class screening report for green demolition projects located in Gatineau Park and the Greenbelt. The public consultation phase of this process will take place in spring 2012.

Changes to the federal environmental assessment regime were announced in the March 29, 2012, federal budget, and staff are assessing the possible implications of these changes on the NCC.





### RIDEAU HALL GREEN TEAM

#### What do you get when you put together dedicated staff, green initiatives and a national landmark?

If you're thinking about the Rideau Hall Green Team, then you're right! The Office of the Secretary to the Governor General, the RCMP (Royal Canadian Mounted Police) and the NCC agreed to join forces. Together, they created a forum where all employees can voice their ideas and recommendations, and take action to help the overall operation of Rideau Hall become more sustainable. Meetings are held monthly, and a formal launch is planned for summer 2012.

Projects that have either been initiated or are being supported by the Rideau Hall Green Team include the following:

- A "Back to the Tap" program. Formerly, bottled water was purchased to support events and dinners at Rideau Hall. The program has seen staff switch from using over 5,000 plastic bottles per year to using tap water, resulting in over \$3,500 in projected savings.
- The composting of paper towels, kitchen waste and other organics.
- Projects to promote energy efficiency and reduce water usage have been presented to the team members. The presentations included briefing on the technologies and their associated payback.

## GREEN STAMP FOR CANADA DAY 2012

Canada Day has been carbon neutral since 2010. But, this year, it reached another major green milestone: EcoLogo® certification for the three official Canada Day sites — Parliament Hill, Major's Hill Park and Jacques-Cartier Park. Created by Environment Canada, and now managed by Terra Choice, EcoLogo® certifies sustainable leadership. While it is mostly known for its sustainable products certification, it launched its standards for events in 2009. Canada Day is the third event to obtain the certification, after Toronto's Canadian National Exhibition and the Ottawa Dragon Boat Festival.

The standard lists a number of green practices for the event organizer to implement, and each practice is worth a number of points. There are three categories of practices: waste, materials and energy, and carbon and transport. The applicant must score a minimum number of points in each category, ensuring that the greening efforts touch on all of the event areas.

How did the NCC score its points? In many instances, the green practices that the NCC put forward for EcoLogo® certification were practices that had been in place for a few years. For instance, the NCC provided water stations, where event-goers can refill their water bottles for free, and installed valet bike parking to encourage people to cycle to the event sites. Other points were earned for implementing a recycling and composting program, using paper products made of recycled materials, and measuring and offsetting carbon emissions.

The EcoLogo® mark celebrates all of the efforts that the NCC has invested in making Canada Day a green celebration for Canadians and visitors alike!

## 4.5. Combatting climate change

### **PRIORITY OBJECTIVE:**

The NCC's signature events and programs will become carbon neutral, starting with Canada Day 2010.

The NCC is committed to reducing its carbon footprint. Like many other business and government organizations in Canada and around the world, the NCC has made it a priority to render its signature events and programs carbon neutral (i.e. having a net zero carbon footprint). This will be achieved by reducing emissions through curbing waste, increasing energy efficiency and taking other positive environmental stewardship initiatives, coupled with offsetting residual emissions.

### **CARBON NEUTRAL SIGNATURE EVENTS AND PROGRAMS**

In 2010–2011, two events first became carbon neutral — Canada Day and Christmas Lights Across Canada. During the 2011–2012 fiscal year, they were joined by two new carbon neutral facilities and events: the Rideau Canal Skateway and Winterlude. Once the calculations have been completed, high-quality offsets will be acquired for all residual emissions.

Table 6 shows the NCC's progress in meeting its carbon neutral goals for its signature events. It also indicates the carbon footprint for each event. The carbon footprint for Canada Day 2011 is less than for the 2010 celebrations. The NCC believes that reasons for the lighter footprint in 2011 include the fact that emission factors have been updated, and more local factors were available for the calculations.



**TABLE 6: PROGRESSION OF NCC SIGNATURE EVENTS AND PROGRAMS TOWARD CARBON NEUTRALITY<sup>1</sup>**


NCC Event or Program	Carbon Neutral Year	Calculation of Emissions to Offset	Offsets Acquired by NCC	Carbon Footprint (tonnes)
Canada Day	2010	✓	✓	415
	2011	✓	✓	292
Christmas Lights Across Canada	2010–2011	✓	✓	22
	2011–2012	Under way, 2012	2012	N/A
Rideau Canal Skateway	2012	Under way, 2012	2012	N/A
Winterlude	2012	Under way, 2012	2012	N/A
Fall Rhapsody	2012	2013	2013	N/A
Sunday Bikedays	2013	2013	2014	N/A

1. A check mark indicates that this step has been completed. A year indicates when it will be completed. N/A means not yet available.

#### OTHER CLIMATE CHANGE INITIATIVES

This year, the NCC plans to evaluate options available for meeting the renewable energy objectives of the environmental strategy. An NCC objective is to have, by 2013, 25 percent of all NCC electricity purchases from renewable sources. Preliminary information on costs and availability of green electricity was gathered in 2011.

In 2011–2012, the NCC started work on calculating the carbon footprint of all its operations for the first time. The objective of this project is to measure the emissions from NCC operations in the 2011–2012 fiscal year. This figure will then serve as a baseline, with a view to reducing these emissions by 30 percent by 2017. As a first step, the NCC has defined the boundaries of the footprint and developed a data collection strategy. The project will be completed in the 2012–2013 fiscal year. Over the short term, data availability and reliability will be a major challenge to getting an accurate picture of the NCC's overall carbon footprint.



### **GOING CARBON NEUTRAL ONCE, GOING CARBON NEUTRAL TWICE!**

Two of the NCC's signature events and programs are now carbon neutral. After Canada Day 2010, the 2010–2011 edition of Christmas Lights Across Canada became carbon neutral. The NCC purchased 22 tonnes of CO<sub>2</sub> equivalent in high-quality carbon offsets from two projects located in Canada: a social housing retrofit project in Montréal, Quebec, and a landfill gas capture and utilization project in Niagara, Ontario.

The 2011 edition of Canada Day was also carbon neutral. The event's greenhouse gas emissions were offset through the purchase of 292 carbon offsets from a landfill gas capture and flaring project in Fredericton, New Brunswick, and an international project to replace traditional inefficient cooking practices with hyperefficient cookstoves. The credits were purchased from a reputable offset vendor, and meet the very high quality standards established by the NCC. The international project generated the first Gold Standard offsets acquired by the NCC.



## 5. ENGAGING NCC STAFF

The NCC believes that engaging staff across the organization is fundamentally important to achieving the objectives set out in its environmental strategy. The following are some highlights of the activities that the NCC undertook to engage staff over the course of 2011–2012.

- An environmental information session was held on reducing waste to introduce staff to the newly implemented waste and recycling systems within NCC offices.
- The Earth Day Eco-Conference was held in April 2011. Presentations, workshops and kiosks provided staff, building occupants and others with tips and other information about green practices at home and in their communities.
- On April 30, an NCC volunteer team participated in the City of Ottawa's Spring Cleaning the Capital event. A team of 21 volunteers, including NCC staff, along with their friends and families, came out to the NCC's Old Quarry Trail property. The day was a great success — the team picked up over 360 kilograms (a total of 800 pounds) of garbage!
- To encourage staff to ride their bicycles to work during Bike to Work Month (May 2011), workshops were offered by Ottawa's EnviroCentre to NCC staff on bicycle safety and basic bicycle maintenance.
- The 2011 NCC annual staff recognition picnic once again featured composting and recycling stations, reusable plates and cutlery, and water bottle refill stations. Staff were encouraged to bring their own water bottles (there were no disposable cups on site) and a bicycle procession was arranged to encourage staff to ride to the picnic together. Over 400 NCC staff participated in the picnic, and less than one bag of waste was produced!
- During Canadian Environment Week (June 5–11, 2011), NCC staff were invited to "Take a Walk in the Park!" Led by a nature interpreter from the Friends of Gatineau Park, NCC staff were welcomed to discover the Park's diverse and interesting wildlife.
- An information technology waste program was implemented at NCC headquarters at 40 Elgin Street in Ottawa. The program, a partnership with Think Recycle, is intended to collect employees' unwanted laptops, cell phones, digital cameras, MP3 players and ink cartridges for proper recycling or refurbishment. Because these items are eligible for rebates, this program will also raise money for the Government of Canada Workplace Charitable Campaign.

## 6. CONCLUSION

Over the course of 2011–2012, the NCC once again made measurable environmental progress. Reaching important milestones in its environmental strategy, ensuring compliance with government regulatory requirements, engaging staff and the public in environmental conservation, and taking action on environmental priorities across the organization were key priorities for the NCC this year.

The NCC is pleased with the progress it has made so far. However, at the end of three years in the implementation of an eight-year environmental strategy, it also recognizes that there is still work to be done. In the coming year, the NCC will forge ahead by developing and implementing new ways to meet its objectives, measuring progress and continuing to make a meaningful, positive impact on the environment. The NCC looks forward to further engaging staff, suppliers, regional partners and the public in working together to build a greener capital and a better environment for all.



## 7. GLOSSARY

**Biodiversity:** The full range of animals, plants and other living things, and the places where they live on the planet.

**Carbon dioxide (CO<sub>2</sub>):** A greenhouse gas produced in part by human activities, whose emissions are largely responsible for climate change.

**Carbon footprint:** The total set of carbon-containing emissions (mainly CO<sub>2</sub>) caused directly and indirectly by an individual, organization, event or product.

**Carbon neutral:** Having a net zero carbon footprint by balancing the greenhouse gas emissions created with an equivalent amount sequestered or offset.

**Carbon offset:** An investment in a project or activity elsewhere that reduces greenhouse gas emissions, or sequesters carbon from the atmosphere, that is used to compensate for unavoidable greenhouse gas emissions created by one's own activities.

**Conservation land:** Land specially designated by federal, provincial/territorial or local bodies to protect fragile ecosystems, habitats and species at risk.

**Contaminated site:** Areas of land that contain chemical substances (e.g. heavy metals or petroleum products) that may pose a hazard to human health or the environment, or that exceed the levels set out in policies and regulations.

**Critical habitat:** The habitat that is necessary for the survival of a species at risk and that is identified under law in a recovery strategy or action plan for that species.

**Ecosystem:** A unit of interdependent organisms that share the same habitat.

**Energy efficiency:** Refers to how effectively energy is being used for a given purpose. For example, performing a similar function or providing a similar (or better) level of service with less energy consumption on a per unit basis is considered an improvement in energy efficiency.

**Greenhouse gas:** Emissions of gases such as nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>) and especially carbon dioxide (CO<sub>2</sub>) that accumulate in the atmosphere and act to retain atmospheric heat, thus contributing to climate change.

**High-value ecosystem or habitat:** An ecosystem or habitat that is considered important for the maintenance of biodiversity because it has some combination of the following characteristics: a large diversity of species, habitat for species at risk and/or migratory species, and intact natural processes likely to support increased genetic diversity.

**LEED®**

**(Leadership in Energy and Environmental Design):**

A third-party certification program administered by the Canada Green Building Council for the design, construction and operation of high-performance green buildings.

**Secured site:** A contaminated site where all necessary study, remediation and other risk management actions have been taken, consistent with the designated use of the site.

**Waste diversion:** The reduction, reuse and recycling of waste, leading to a reduction of waste being sent to the landfill.

*Capitale* 

CANADA'S CAPITAL REGION  
LA RÉGION DE LA CAPITALE DU CANADA

National Capital Commission  
2011–2012 Annual Environment Report  
Catalogue number: W91-4/2012E-PDF  
1928-8190