A SOLUTION TO CLIMATE CHANGE AND BIODIVERSITY LOSS

CONSERVING OUR NEAR-URBAN NATURE

Southern Ontario Nature Coalition

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Environment and Climate Change Canada
Environnement et Changement climatique Canada

> “With the dual crises of biodiversity and climate change looming, the cost of inaction is too great.”

The importance of nature to our future has never been clearer.

Healthy natural areas are one of our greatest solutions to climate change. They provide resilience to extreme weather, important outdoor space for communities, and habitat for plants and animals. Faced with biodiversity and climate crises, governments around the world are making bold commitments to protect nature, conserve biodiversity, and help communities adapt to climate change.

- As a member of the global High Ambition Coalition for Nature and People, Canada has committed to protecting 25 per cent of its lands and waters by 2025 to set the stage for 30 per cent by 2030.
- The federal Two Billion Trees Commitment has the opportunity to use widespread tree planting to support restoration of Canada's natural areas by 2030.
- Canada and Ontario have committed to recognize and support existing Indigenous rights, responsibilities, and priorities in conservation through the One with Nature report.

These goals cannot be achieved meaningfully without a strategy to protect the ecological cores and corridors in Canada's near-urban landscapes.

Urban growth has considerable influence on biodiversity. From 1992–2000, 16 per cent of habitat lost globally was directly due to urbanization. Even greater losses are expected by 2030.

What is Near-Urban Nature? Why must we protect it?

Near-urban nature includes the forests, river valleys, wetlands, grasslands, farmlands, and other ecological features, that surround and intersect our cities. Near-urban nature provides climate resilience to nearby communities and residents, a reliable local food source, access to greenspace, and in southern Canada, sustains uniquely high levels of biodiversity.

Biodiversity is directly related to ecosystem health.

Protecting and restoring biodiversity in near-urban ecosystems makes them healthier and more resilient to climate change.

Climate-resilient ecosystems protect nearby communities from climate-impacts like flooding or extreme heat.

Proximity to expanding city boundaries and development puts near-urban nature and its benefits at high risk of being lost. Protecting nature in these areas is a challenge given highly fragmented landscapes, the cost of land, and high levels of private ownership limiting opportunities to protect large wildlife habitats. Competing visions for the use of lands means actions and investments to protect and restore nature must deliver multiple benefits including ecological, social, cultural and economic outcomes.

Conserving Connectivity; a Needed Focus in Near-Urban Landscapes

> "A Nature Conservancy of Canada report shows two **"crisis ecoregions"** in the GGH, a designation that refers to an area of high ecological value at **high-risk of being degraded or lost**."

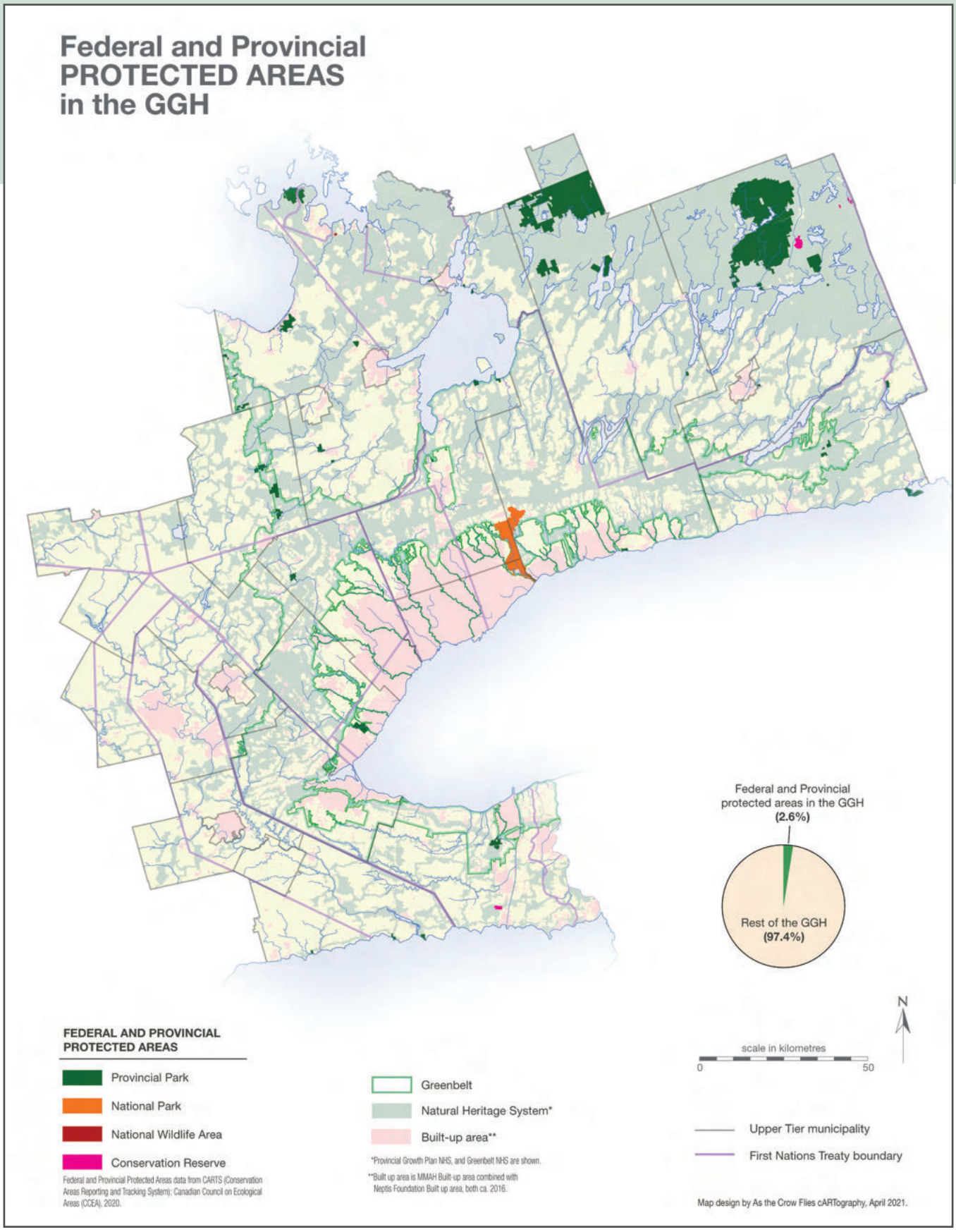
Southern Ontario's Greater Golden Horseshoe (GGH) is one of the most biodiverse areas in the country. It is also Canada's most densely populated and rapidly urbanizing region. While our governments have made progress in protecting biodiversity by conserving large wilderness areas, efforts in urbanized areas require a different approach. A Nature Conservancy of Canada report shows two "crisis ecoregions" in the GGH, a designation that refers to an area of high ecological value at high-risk of being degraded or lost.

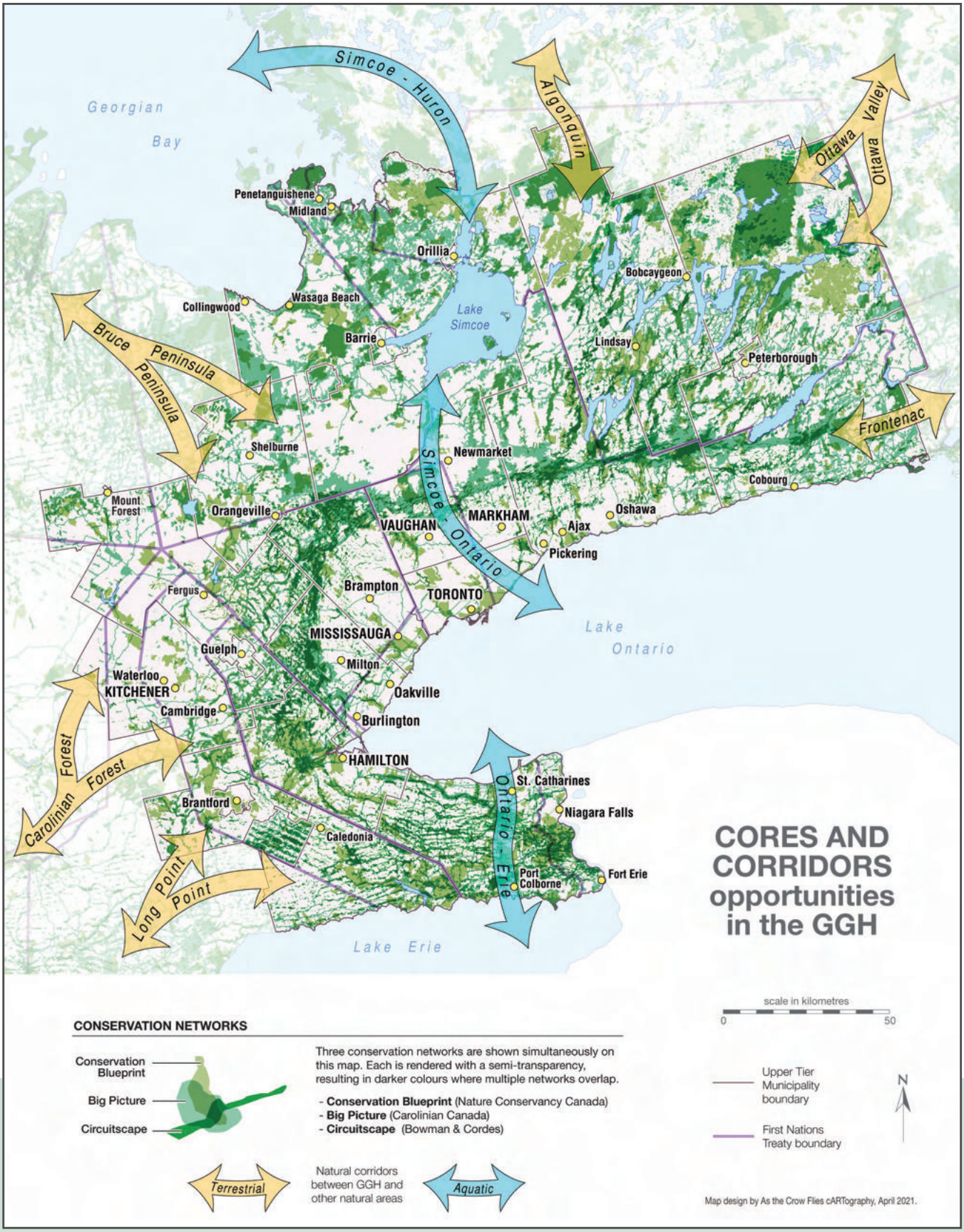
Protecting biodiversity and nature's benefits in the more urbanized regions of Southern Canada need to focus on conserving connectivity and restoration. Ontario's Greenbelt provides a framework for action.

Significant near-urban natural landscapes in this region provide essential "ecosystem services" to residents who live in urban and rural communities. Fifteen million people are expected to live in the Greater Golden Horseshoe by 2051. Services provided by wetlands, forests, and other natural features include preventing flooding, maintaining clean and abundant sources of fresh water, and helping to make the air feel up to 11°C cooler during heatwaves. These benefits will only become more important as climate change progresses.

Beyond Rouge National Urban Park and provincial parks, there are few natural areas with protected status in the region. The southern Ontario Greenbelt, including the Niagara Escarpment, Oak Ridges Moraine, agricultural lands, and 21 Greenbelt-protected urban river valleys, provides critical protection to the region's biodiversity and ecosystems. The Greenbelt achieves this through land-use policies and a network of ecological and hydrological cores and corridors across 2.1 million acres.

There is 30 per cent of natural cover left in the Greater Golden Horseshoe (GGH) but <3 per cent in Protected Areas, indicating a huge opportunity.





Building on the Greenbelt, there are important opportunities to increase ecological connectivity across the region.

Conserving connectivity is a key objective of Ontario's Greenbelt.

The Greenbelt's natural heritage and water resource systems stretch across public, private, and agricultural lands. The Greenbelt's approach to conserving connectivity is unique within Canada's urbanized areas and the best example of its kind in the world.

Urban infrastructure, such as roads, continue to pose threats to nature in the Greenbelt and beyond, and development pressures threaten to isolate the Greenbelt as an island of green. More protected areas are needed to ensure the Greenbelt remains connected. Larger east-west corridors are also needed to maintain habitat connectivity and species movement across southern Ontario. South to north connections have considerable potential as climate corridors, enabling the migration of plants and animals as they move and adapt to climate change.

A regional focus on landscape connectivity, protection, and restoration will ensure the integrity of terrestrial pathways for migrating species of plants and animals, allowing ecosystems to adapt, and become more resilient to climate change. These vital biodiversity corridors can provide multiple community benefits.

Creating a Near-Urban Nature Network

Environment and Climate Change Canada and the Government of Ontario have supported the Greenbelt Foundation in convening the Southern Ontario Nature Coalition (SONC) to outline actions needed to create a Near-Urban Nature Network in the Greater Golden Horseshoe. The network will consist of multiple, cores of natural areas protected and connected within broader ecological and hydrological corridors.

> "New tools, such as Other Environmental Conservation Measures (OECMs) and Indigenous Protected and Conserved Areas (IPCAs) can enable urban areas to contribute toward **Canada's 30 per cent protection of lands and waters** target."

Building on the Greenbelt and addressing the need for multi-faceted outcomes in urban areas, SONC identified the following opportunities:

1. Opportunities for Increasing Protection of Natural Cores and Corridors

SONC has identified hundreds of thousands of hectares as potential Protected or Conserved Areas in the GGH's Near-Urban Nature Network, along with opportunity areas for important ecological and hydrological corridors:

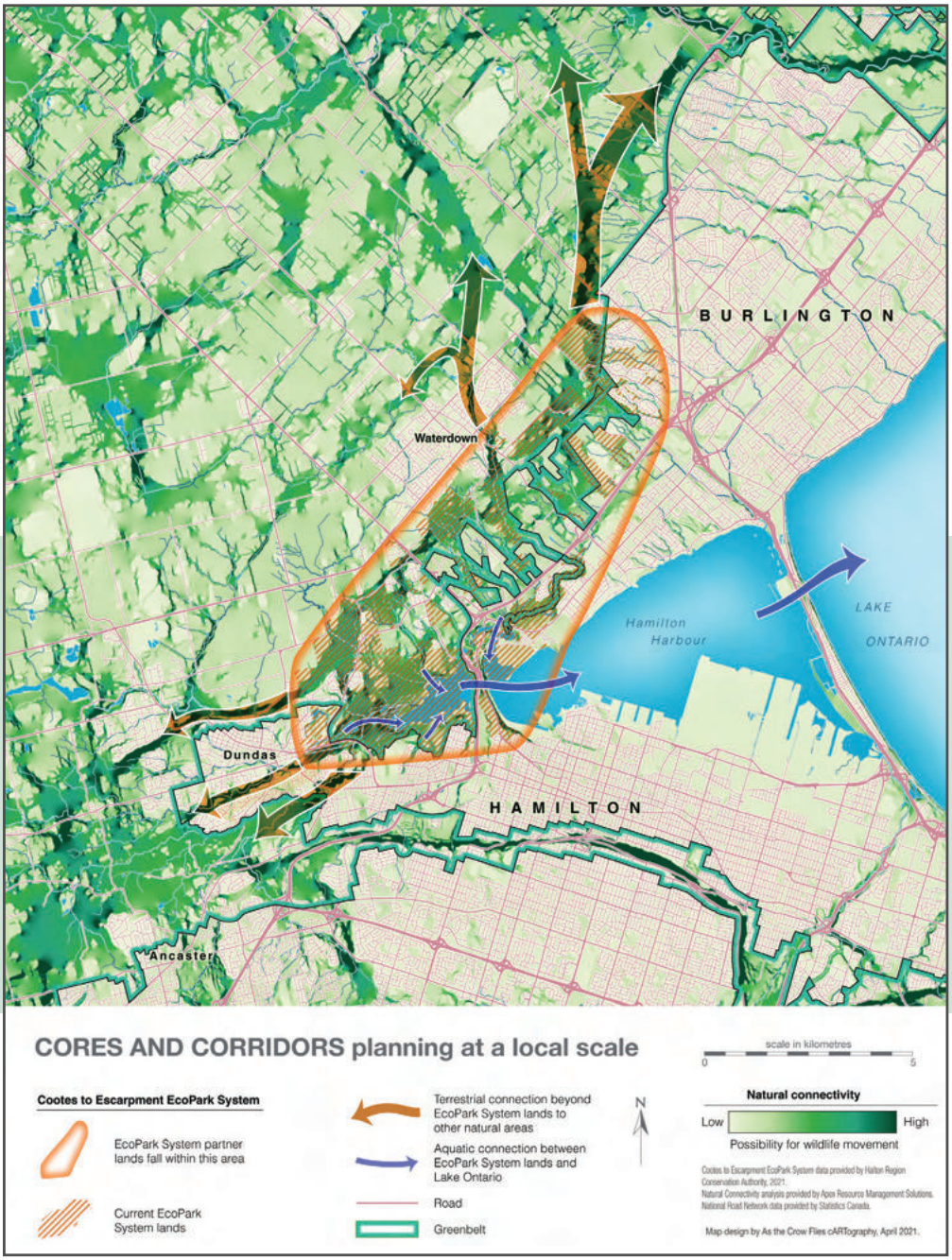
- Considerable opportunity exists to establish Protected and Conserved Areas on public lands, including Provincial Wildlife Areas, select conservation authority lands, and extensive tracts of municipal and County Forests.

- New tools, such as Other Environmental Conservation Measures (OECMs) and Indigenous Protected and Conserved Areas (IPCAs) can enable urban areas to contribute toward Canada's 30 per cent protection of lands and waters target, effectively managing biodiversity for the long-term in areas that are not "Protected Areas."

- Demand for conservation easements on private and agricultural lands in the region is growing, but capacity to support actions is insufficient.

- Provincial policy enhancements, designed to increase protection levels for Areas of Natural and Scientific Interest (ANSIs) or Provincially Significant Wetlands (PSWs), can add thousands more hectares of conserved land and maintain irreplaceable ecosystems that support biodiversity and climate resilience.

- There is an opportunity to identify priority conservation corridors that could extend Greenbelt connectivity. This can be achieved by mapping wildlife movement corridors to identify where landscape fragmentation may affect migrating wildlife at local, regional, provincial, and national scales.



Cootes to Escarpment EcoPark System's partner agencies created connectivity mapping to support biodiversity conservation and management activities in the EcoPark System.

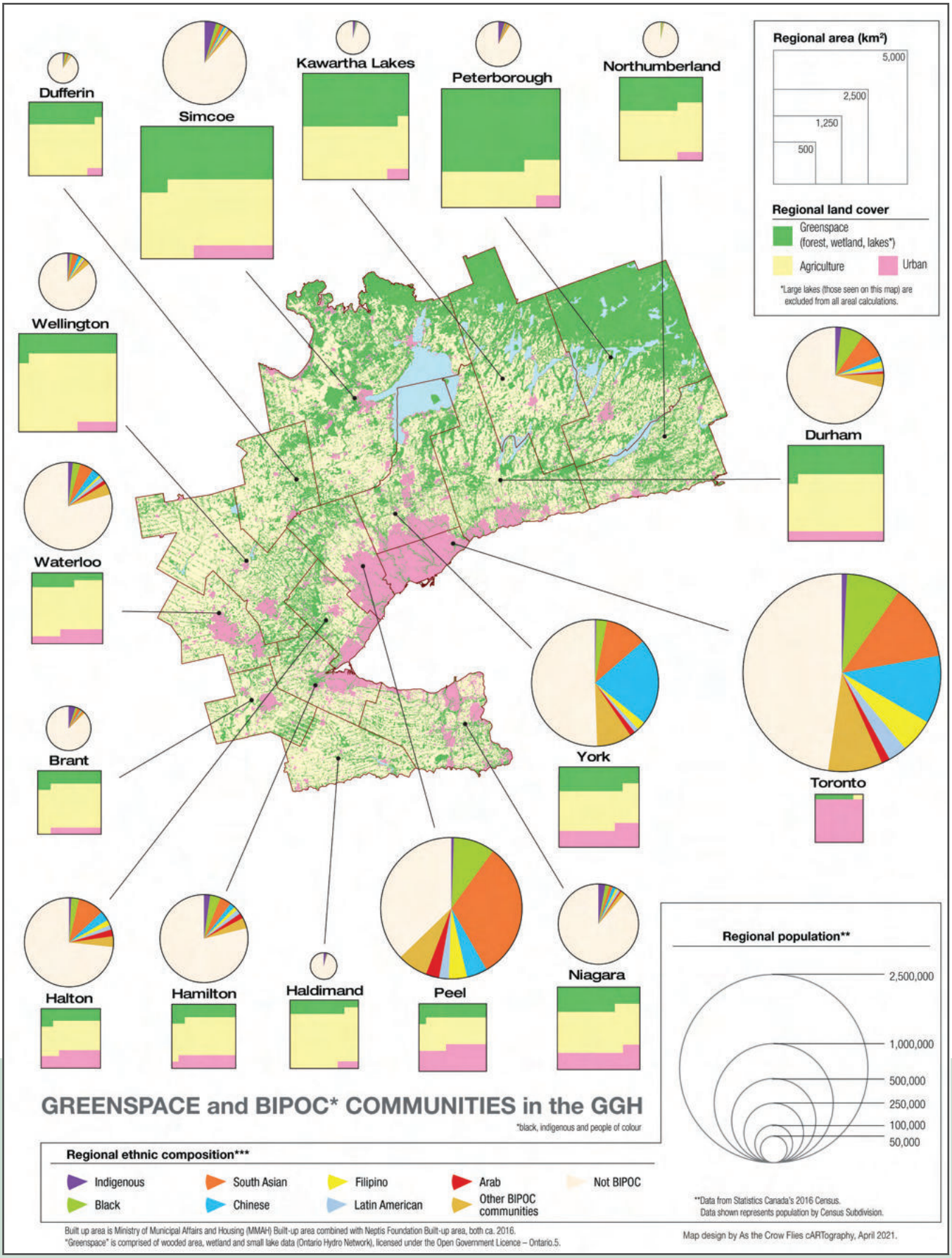
This map identifies important habitat patches and movement corridors, critical to ecological connectivity.

> “SONC estimates that **54 million trees can be planted** in the GGH to achieve a healthy 30 per cent forest cover.”

2. Opportunities for Restoring Natural Infrastructure, Climate Resilience, and Greenspace

SONC recognizes that restoration initiatives for biodiversity must also deliver on other community priorities. In the GGH, these priorities include increasing climate resilience to flooding, extreme heat, drought, and water quality vulnerabilities, while adding greenspace for recreation. Restoration of near-urban nature can also address inclusion and equity imbalances experienced by many marginalized and racialized communities in Canada’s urban areas, who research shows live in neighbourhoods with low natural cover and have decreased access to natural areas.

- The Government of Canada’s Two Billion Trees Commitment, if properly designed, can make significant contributions to conserving biodiversity and creating climate-resilient communities.
- SONC estimates that 54 million trees can be planted in the GGH to achieve a healthy 30 per cent forest cover and other ecological benefits.
- An initial list of restoration priorities for the Greenbelt can be expanded to identify and prioritize regional vulnerabilities for a climate-smart afforestation program.
- Regional greenspace-planning can improve equitable access to greenspace for all residents.
- As restoration activities increase demand for native plants, economic opportunities arise for growers of native plants, potentially strengthening a native plant industry.
- Integrating nature into municipal municipal infrastructure or asset plans and climate adaptation plans enables municipalities to make land-use planning decisions with nature’s full benefits in mind.



Census Subdivisions across the GGH with more racially diverse populations tend to have lower natural cover, highlighting an inequitable distribution of nature's benefits.

3. Opportunities for Stewardship and Public Engagement

Protecting near-urban nature starts with people.

The majority of lands in the GGH are in private ownership. Public engagement in restoration activities will increase awareness and build support for continued government leadership and action toward protecting and investing in nature.

- Greater outreach capacity and tools are needed to support voluntary actions by community members.
- Community needs must influence how near-urban nature protection happens in each area or municipality.
- Stewardship initiatives that meaningfully address community needs, including climate change adaptation, infrastructure, and economic needs, will be more successful and generate more community support.
- Greater awareness of and access to voluntary programs (e.g., provincial tax incentive programs) can increase interest in conservation activities across the landscape.

> “Indigenous Knowledge Systems and the **leadership of Indigenous Peoples** results in stronger, more effective conservation.”

Photo: Kerry-Ann Charles

4. Opportunities for Meaningful Indigenous Collaboration

Indigenous Knowledge Systems, ways of living, and the leadership of Indigenous Peoples are central to the future of conservation. The GGH is the traditional Territory of the Anishinaabe and Haudenosaunee; actions to develop the Near-Urban Nature Network should recognize Treaty Rights and amplify Indigenous Knowledge Systems.

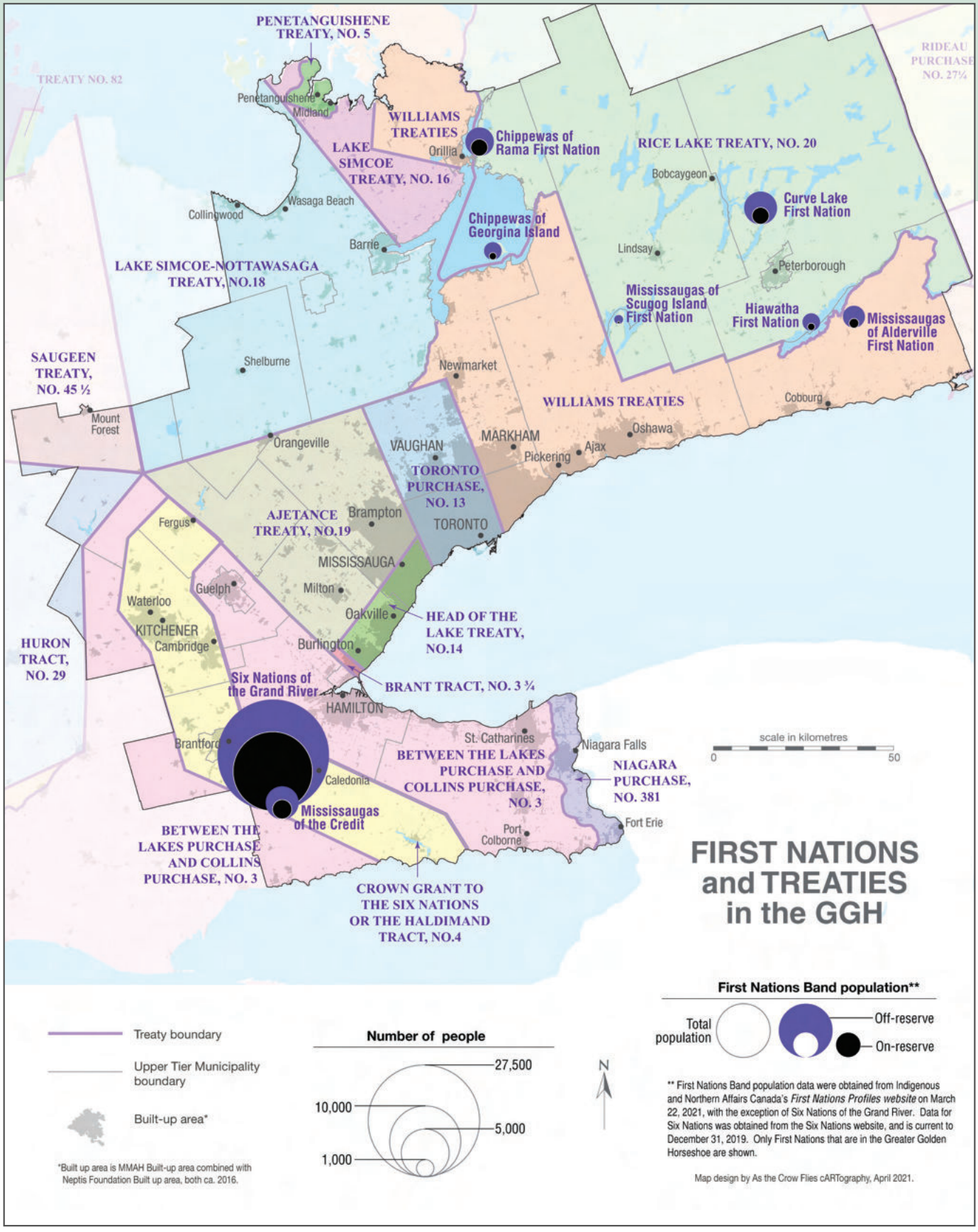
SONC is committed to engaging local Indigenous communities in accordance with community protocols. The development of ethical space will allow for all to contribute meaningfully to the Near-Urban Nature Network.

Ethical Space is “a venue for Indigenous and non-Indigenous peoples to meaningfully interact with one another in mutual respect of our distinct worldviews and knowledge systems, in order to collaborate, co-create solutions, and achieve common ground. We acknowledge we have more to learn on ethical space, though we understand it is not a new teaching. Instead, it reflects the historic way of engagement between Indigenous Peoples and settler society at the signing of the first treaties, which were founded in mutual respect and co-existence. The responsibility is on us all to re-create this shared space, which in some cases has been forgotten and undermined over the last 150 years.” [1]

SONC is currently engaging with interested Williams Treaties First Nations.

[1] This description was shared through Dr. Crowshoe’s teachings, and the insights of the Indigenous Circle of Experts (ICE) Co-chair Danika Littlechild as described in The One with Nature Report of Canada’s Federal, Provincial and Territorial Departments Responsible for Parks, Protected Areas, Conservation, Wildlife and Biodiversity.

Approximate Treaty Lands and First Nations Communities in the Greater Golden Horseshoe.



The Path Forward

SONC is releasing a full report in the spring of 2021, outlining details on developing a Near-Urban Nature Network for the GGH. To date, SONC has engaged over 200 people, including local governments, conservation authority staff, farmers, community groups, other not-for-profits, and interested First Nations to identify substantive solutions and opportunities.

Ongoing support for SONC is needed to continue this work and share insights with similar regions across Canada. The immediate actions SONC will take, which align with current federal and provincial government priorities and programs, are outlined below.

Key Early Actions

1. Provide capacity support to Indigenous Communities and Peoples so that they may participate in near-urban nature protection and exercise their responsibility to care for the land and waters, and continue cultural traditions and ways of life.

2. Map wildlife movement corridors to identify landscape fragmentation at multiple scales; identify opportunities to conserve connections between the Greenbelt, Great Lakes, and broader external landscapes.

3. Provide input into Ontario's Working Group on Protected Areas.

4. Build awareness and support action by conservation authorities, municipalities, and Indigenous Communities and Peoples interested in establishing new Protected and Conserved Areas, including Indigenous Protected Areas in the GGH.

5. Partner with the Government of Canada in implementing the Two Billion Tree Commitment, including planning to identify restoration and community climate-resilience priorities.

6. Engage public and private landowners, including farmers and other agricultural landowners, to take conservation action in their communities and on their lands.

With the dual crises of biodiversity and climate change looming, the cost of inaction is too great.

Canada's support for the Near-Urban Nature Network is a crucial step forward in protecting near-urban nature across the country, conserving biodiversity, supporting Indigenous communities in caring for the land and waters, and creating greater climate resilience for our urban communities.

Southern Ontario Nature Coalition

SONC is a partnership of experienced provincial, regional, Indigenous, agricultural, community-based organizations, and land-based policy experts and is committed to engaging Indigenous communities in accordance with community protocols and the development of ethical space for all to contribute meaningfully.

For more information, please contact: near_urban_nature@greenbelt.ca

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