

Growing the Greenbelt to Protect Vulnerable Water Resources in the Greater Golden Horseshoe Region

The proposed expansion areas were identified through consultations with community organizations, Conservation Authority staff, professional ecologists/hydrologists, and elected officials. Over 100 community groups across the region support growing the Greenbelt and shaping future growth to protect critical drinking water sources, healthy watersheds and rivers, and an abundant supply of clean water for agriculture and other businesses. Three quarters of residents in the region feel it's important to continue to grow the Greenbelt and nearly all agree that protecting our water resource systems is important to them¹.

The proposed expansion areas:

- are highly valued by the public² as sources of clean drinking water and are critical to a healthy agricultural industry and biodiversity in the region;
- align with existing criteria developed by the province to grow the Greenbelt³;
- respond to continued concerns over growth pressures on important sensitive environmental lands and the continuation of sprawl in select regions⁴; and,
- are located outside of current urban boundaries needed to accommodate growth to 2041, and likely beyond⁵.

Specifically,

1. Expansion areas are hydrologically and ecologically significant and are high value natural capital assets

The proposed expansion areas include headwaters, moraines, recharge and discharge areas, valleylands and provincially significant wetlands.

They play a critical function in water supply and quality (filtration). Their groundwater resources supply drinking water directly to nearly one million residents and contribute to a clean, potable water source for another 6 million residents in the region

¹ Environics (2013). Greenbelt Foundation Awareness *Measurement*: Friends of the Greenbelt Foundation.

² Ibid.

³ Ontario Ministry of Municipal Affairs and Housing (MMAH). *Growing the Greenbelt Criteria, 2008* and *Greenbelt Plan Amendment No. 1, 2013*. Public document,

⁴ Stevens, C. (March 20, 2014). Ontario community feels expansion is a step back, *Global News*

⁵ Understanding the Fundamentals of the Growth Plan. Neptis Foundation. March 20, 2015.

Covering an area of almost 1.6 million acres, these wetlands, forests and grasslands collectively have a natural capital value of more than \$3 billion annually. These eco-assets store and filter runoff, while also minimizing flooding downstream at a fraction of what it would cost to invest in hard infrastructure. They further sustain an \$11 billion agricultural industry which relies on an abundant source of clean water to thrive. Maintained as natural spaces, they can provide physical and mental health benefits to rural and urban residents.

Interconnected hydrological and natural heritage features, these lands feed rivers and creeks throughout the Greater Golden Horseshoe (GGH) and provide rich habitats for a wide variety of fish, mammals and birds. Extending permanent protection to the region's most significant and vulnerable features will ensure we maintain biodiversity and a robust natural system as the impacts of climate change intensify.

2. Expansion areas meet the vision and goals of the Greenbelt and Growth Plans

The Greenbelt Plan and Growth Plan work together to connect and protect the region's natural systems and foodlands and shape growth—supporting a sustainable and prosperous region now and for the future.

While the Growth Plan envisions “a healthy natural environment with clean air, land and water [in] the GGH”,⁶ the Greenbelt Plan specifically protects water resources “to sustain healthy aquatic and terrestrial ecosystems and human water consumption”, including “primary recharge, headwater and discharge areas, together with major drinking water aquifers.”⁷

Though the identified expansion areas are currently outside designated urban areas (with the exception of urban river valleys), and many are identified in municipal Official Plans, they are still experiencing development pressures as the planning framework strains to control sprawl in the region. Greenbelt designation would ensure greater and permanent protection to these important and vital resources.

3. Expansion areas are adjacent to or demonstrate a functional relationship to the Greenbelt's natural heritage and water resource systems

Proposed expansion areas have direct physical and functional relationships with the Greenbelt's natural system, including the Lake Simcoe Watershed, which partially lies inside the Greenbelt today; the Humber and Rouge headwaters which begin in the Oak

⁶ Ontario Ministry of Public Infrastructure Renewal (MPIR) (2008). Growth Plan for the Greater Golden Horseshoe, 2006. Public document Section 1.2.1.

⁷ Ontario Ministry of Municipal Affairs and Housing (MMAH) (2005). Greenbelt Plan, 2005 Section 3.2.1.

Ridges Moraine; rivers and streams that flow from the Niagara Escarpment into the Nottawasaga Valley watershed; and, the south slope of the Oak Ridges Moraine which drains into the Lake Iroquois Plain. Many species of plants, animals and migratory birds move through the Greenbelt's protected landscape and the proposed expansion areas.

Under numerous policies and plans⁸ the province acknowledges the importance of protecting water resources and the region's natural system on a Great Lakes scale. Through river valleys corridors, wetland complexes, moraines and other features, the areas identified for expansion further create stronger connections between the Greenbelt and three Great Lakes—Ontario, Erie and Huron (via Georgian Bay)—along with Lake Simcoe. Strong natural connections at this scale are a key component to the long-term health of the region, and ensure biodiversity and resiliency.

4. Expansion areas are vulnerable or directly threatened by development pressures and human activities

The Growth Plan intends to protect a regional natural system that extends from the Greenbelt. However, its protection policies are weaker and in some cases municipalities still lack robust natural heritage system mapping and strategies. Sub-area assessments, recommended in the Growth Plan to identify a regional-scale natural system for the GGH and features requiring additional protection, were never conducted.

Flaws in the Growth Plan and subsequent amendments have allowed (or forced) municipalities to adopt density targets below Growth Plan objectives and encouraged developers to build urban sprawl. These problems are compounded in communities that have less capacity to cope with pressures from developers.

The proposed expansion lands face immediate development pressures, perhaps most fiercely in Simcoe County and headwater areas south of the Greenbelt. While Waterloo Region and the Township of Oro Medonte (Simcoe County) have taken steps to increase protection of their moraines, these features remain vulnerable to challenges by developers, sustained political will and encroachment. A Greenbelt designation offers greater protection to these vulnerable and threatened features and will help guide sustainable growth patterns in the GGH.

⁸ Most notably the recently passed Great Lakes Protection Act. Other examples include the Great Lakes Strategy, Lake Simcoe Protection Plan, Clean Water Act, and Ontario Biodiversity Strategy

5. Local support exists in each expansion area

During, and prior to, the province's Coordinated Land-Use Review many elected officials, community groups and concerned citizens expressed support for growing the Greenbelt in these areas. Active support is strongest in areas facing the greatest development pressures; and, in lower-tier municipalities that stand to lose the most in the form of costly infrastructure, higher debt, and loss of natural capital, if development on these proposed expansion lands proceeds.

Proposed Greenbelt Expansion Areas: Rationale and Community Support

1. Key Headwater Features of Carruthers Creek, the East and West Humber, and the Rouge River

Rationale

Healthy watersheds are essential to building a healthy region and communities. Headwater features are central to the overall health of our watersheds. They recharge and filter water supplies, including the bulk of flow to our rivers (70-90%) and deliver needed food, sediment, and nutrients to aquatic systems downstream. Headwater areas are extremely sensitive, greatly influencing water quality and quantity across the watershed, the degree of flooding, and habitats for native plants and animals.

As development approached the headwaters of our larger river systems, the provincial government stepped in to create the Oak Ridges Moraine and Greenbelt *Acts*. Yet a portion of headwater catchment areas for the Humber River in Peel (Caledon) and York (Northern Vaughan)—almost entirely surrounded by Greenbelt lands, are at risk of urbanization. Recently, the Toronto and Region Conservation Authority (TRCA) monitored a declining trend in surface water quality in the Humber due to urban runoff.⁹

Protecting these 'donuts' would ensure healthier aquatic ecosystems downstream and a more robust natural heritage system for the watershed.

Groundwater recharge lands in a portion of the headwaters of the Rouge River Watershed are located in a highly urbanized area (Peel Plains in Markham). Enveloped on three sides by the Greenbelt, protection and enhancement of these lands can provide important natural connections in this highly fragmented watershed and help reverse a decline in water quality downstream.

⁹ Toronto Region Conservation Authority (TRCA), Humber River Watershed Report Card 2013

Carruthers Creek headwaters in Durham Region are largely outside the boundary of the Greenbelt, crossing Pickering and Whitby. The Creek flows downstream through Ajax, where neighbourhoods already experience flooding. The headwaters provides coldwater habitat for fish, including the endangered Redside dace, and serves an existing agricultural community

Durham Region has proposed developing more than 50% of the approximately 2,300 hectares of Carruthers Creek headwater lands,¹⁰ adding employment and residential areas and 30,000 new people to an already stressed area. Citing the Growth Plan and lack of existing servicing in the proposed area, the province ruled against Durham Region in 2010. An Environmental Assessment produced by Ajax found that upstream development of the headwaters would increase downstream flooding in Ajax, directly affecting more than 1,000 residents, and causing an increase in flood speed and levels of up to 132 percent.¹¹ Floodplain management would involve large costs to the Town, and is constrained by existing development, infrastructure and topography.

Community Support

Greater protection of headwater catchment areas is widely supported by ENGOs across the Region. In Durham, the Town of Ajax has formally requested the province to protect the headwaters “by adding it in its entirety to the Greenbelt Plan through this Coordinated Review”.¹² Three councillors from Pickering also support this action: former Deputy Mayor Jennifer O’Connell (Ward 1 and Regional Council), Ian Cumming (Ward 2), and Bill McLean (Ward 2 and Regional Council). Sierra Club Durham Group is also supporting expansion to protect Carruthers Creek headwaters.

2. Significant Groundwater Recharge Areas, Including the Paris-Galt, Waterloo, and Orangeville Moraines

Rationale

The trio of moraines largely contained in the Grand River Watershed are highly sensitive groundwater recharge and discharge features, and supply drinking water to nearly 800,000 residents in Guelph, Kitchener, Waterloo, Cambridge, Brantford and Brant County (more than four in five residents). They are responsible for supplying base flow to the Grand River and adjacent watersheds. A large, local agricultural community relies on these water resources for irrigation.

¹⁰ Durham Region (2009). Regional Official Plan Amendment No. 128

¹¹ Town of Ajax (2012). ROPA 128 Impact Report

¹² Town of Ajax (May 21, 2015). Comments on Environmental Bill of Rights Registry Posting 012-3256.

The Waterloo Moraine is a primary source of drinking water for nearly half of the Region of Waterloo. At 400 square kilometres, it contains more than 70 provincially significant wetlands, and supports a number of important coldwater fisheries. The Paris-Galt Moraine, which stretches for 560 square kilometres from Brant County to Caledon, supports municipal water supplies and coldwater fisheries including the Grand River. While these two moraines are impacted by development pressures, connections between all three moraines will improve their natural system functions.

While the Region of Waterloo has acted to limit development and increase protection of sensitive moraine lands, these features remain vulnerable to growth in adjacent cities/counties; and, to encroachment and political will.

Community Support

There is tremendous support to permanently protect moraines in the GGH. The Environmental Commissioner of Ontario (ECO) has argued that current protections and policies for the moraines are piecemeal, which risks “leaving environmentally significant areas vulnerable or under protected, compromising the entire landscape”.¹³

A number of community groups, including Wellington Water Watchers, Nature Guelph, and the Council of Canadians (Guelph Chapter) support growing the Greenbelt in Wellington County and Guelph. In 2004, Guelph MPP Liz Sandals and former Mayor of Guelph Karen Farbridge submitted an application to the Environmental Bill of Rights requesting a review of the need for new policies to protect the Paris-Galt Moraine. This included a Private Members’ Motion calling for the identification and protection of moraines through provincial policy.¹⁴

In Brant County and the City of Brantford, support exists from several municipal leaders to expand the Greenbelt: Councillors David Neumann, Richard Carpenter and Brian Van Tilborg (Brantford) and Councillor David Miller (Brant County), and several community groups.¹⁵ A Sustainable Brant petition signed by 1,500 residents was presented at the Brantford provincial town hall in May 2015.¹⁶ Brant County was asked by Minister of Municipal Affairs Ted McMeekin to identify areas for Greenbelt

¹³ Environmental Commissioner of Ontario. (2010). Pushing for Natural Heritage Planning on the Waterloo and Paris-Galt Moraines. Redefining Conservation, ECO Annual Report, 2009/10. Toronto, ON. Environmental Commissioner of Ontario. 145-149.

¹⁴ Sandals, L. (December 9, 2004). “Water Supply”. Legislative Assembly of Ontario, Private Members’ Public Business

¹⁵ Sustainable Brant, the Langford Conservancy, Grand Erie Kairos, Concerned Citizens of Brant, Tutela Heights Phelps Road Residents Association, Environment Hamilton, Escarpment Biosphere Conservancy

¹⁶ Marion, M-A. (August 14, 2015). [Group wants Greenbelt on Grand River](#), *Brantford Expositor*

expansion.¹⁷ County staff is currently consulting on expansion opportunities in Brant, and are expected to deliver a report to Council.

Waterloo Region's recently approved Regional Official Plan follows (OP) six years of negotiation with the development industry, the community, province, and the Ontario Municipal Board. The new OP includes stronger protections for groundwater and the environment, through Protected Countryside and Regional Recharge designations, and a Countryside line to establish a long-term development boundary.¹⁸ Community groups including Smart Growth Waterloo support the expansion of the Greenbelt to align with these designations and add permanence to existing protections.

3. Gibson Lake in Niagara Region

Rationale

Gibson Lake supplies drinking water to half of Niagara Region, including St. Catharines and Niagara-on-the-Lake, with an estimated 150,000 residents dependent on these supplies. The Lake also supplies flow to coldwater streams, many with brook trout populations and provides habitat for water birds such as herons. Largely forested, the area connects short Hills Provincial Park and the Welland Canal.

Community Support

Thorold Council and Niagara Region have formally requested the province to expand the Greenbelt in this area.¹⁹ Community support is also high with active engagement by the Friends of Mel Swart Park and Sierra Club Niagara Group.

4. Simcoe County's Rich Water Resource Systems

Rationale

At 4,841 square kilometers, Simcoe County is one of the largest regions in the GGH and dominated by a rich and interconnected water resource system that is critically important to residents, agriculture and businesses within the County, and beyond. Simcoe County's main watersheds, the Nottawasaga and Simcoe Basins, contain:

¹⁷ Marion, M-A. (August 26, 2015). [Brant County told to consider Greenbelt locations](#). *Brantford Expositor*

¹⁸ Region of Waterloo (June 18, 2015). Ontario Municipal Board approves new Regional Official Plan [Press release]. Retrieved from <http://www.regionofwaterloo.ca/en/newslist/index.aspx?corpId=58cynQlfgqiAYQyTLmpurQeQuAleQuAl&newsId=NX6lsWyFObm9QOzJN5j8vweQuAleQuAl>

¹⁹ Region of Niagara, Report to Planning and Development Committee, May 13, 2015

- Lake Simcoe and its watershed, the largest freshwater body in the GGH, which supports a coldwater fishery and extensive forests and wetlands. It is already partially protected by the Greenbelt;
- Recharge areas and groundwater supplies, relied on by most of the County through wells and replenishing surface waters in Lake Simcoe and Georgian Bay;
- The Oro Moraine that provides drinking water to 20,000 residents and groundwater to the Minesing Wetland;
- Globally (Minesing wetland) and provincially significant wetlands;
- Watershed forests that form a natural corridor/linkage extending from the Niagara Escarpment north to the Canadian Shield and south to the Oak Ridges Moraine;
- Important migratory bird sites and corridors (i.e. shorelines);
- Other significant headwater and groundwater recharge areas, including the Dundalk Till Plain, Peterborough Drumlin Field and Simcoe Uplands;
- Significant kilometers of shoreline tied to the local and provincial tourism economy.

The County is also the fastest growing outer ring municipality, attracting large-scale development that continues to spur low-density sprawl. Driven by growth in areas lacking adequate groundwater supplies, new water pipeline proposals will continue to drive destructive land-use patterns across the County. Two-thirds of planned new growth for the City of Barrie is consuming greenfield areas, rather than intensifying and revitalizing its urban core.²⁰

The latest Watershed Health Report Card from the Nottawasaga Valley Conservation Authority shows that current (2013) conditions are good but declining. Encroachment into the Oro Moraine and Minesing wetland and development on large swaths of recharge lands risks accelerating this decline.

The province's exemplary commitment to protect Lake Simcoe (through the Lake Simcoe Protection Act currently aimed at reducing pollution loads) can be enhanced through Greenbelt protection and complete the watershed's natural heritage system currently confined to the Greenbelt.²¹ A significant effort to grow the Greenbelt in Simcoe County would preserve its rich water resources, important to the GGH and beyond; and, profoundly shape the development of compact communities in the County.

²⁰ Birnbaum L, Nicolet L, & Taylor Z. (2004). *Simcoe County: The New Growth Frontier*. Neptis Foundation

²¹ Environmental Commissioner of Ontario. 2010. "A Watershed Moment? Ontario Introduces the Lake Simcoe Protection Plan." *Redefining Conservation, ECO Annual Report, 2009/10*. Toronto, ON: Environmental Commissioner of Ontario. 101-108.

Community Support

The Simcoe County Greenbelt Coalition, a coalition of 18 local community, agricultural and environmental groups, has met with David Crombie to propose growing the Greenbelt, along with a number of changes to the Growth Plan. Receiving support from the Municipal Leaders for the Greenbelt, the group continues to meet with local elected officials, including MPPs and municipal or county councillors, to continue building support for Greenbelt expansion.

More than 45,000 members of the public signed a petition to call for stronger protection of the Minessing Wetlands and prime agricultural land around Midhurst, in Springwater Township.²² Approximately 1,200 local residents submitted comments as part of the Coordinated Review to call for greater protection from sprawl in Simcoe County.

3. The Lake Iroquois Shoreline and South Slope of the Oak Ridges Moraine

Rationale

The Greenbelt Plan identifies the Lake Iroquois Shoreline as an important external connection and encourages connectivity and enhancement of its key natural and hydrologic features.²³

The Lake Iroquois shoreline, or “beach”, is important for groundwater recharge and discharge, which supports a number of drinking water wells in Northumberland County. The groundwater resources also maintain stream base flow in drought periods and moderate stream temperatures, keeping waters cool for species such as brook trout. It contains coastal marshes and provincially rare Great Lakes Beach Strand and dune communities.

The Shoreline is also a major east/west corridor along Lake Ontario, similar to the Oak Ridges Moraine and supports extensive forests and wetlands. A number of agencies, including the Canadian Wildlife Service (CWS), Nature Conservancy Canada, and Central Lake Ontario Conservation Authority, have highlighted the local, regional and national importance of the Lake Iroquois Shoreline. The area is one of the most important biodiversity habitats in the Mixedwood Plain Ecozone in Southern Ontario, for

²² Midhurst Ratepayers' Association (2013). Save our farms and rare wetland from mega-development. [Change.org petition]. Retrieved from https://www.change.org/p/premier-wynne-save-our-farms-and-water-sources-from-mega-development?alert_id=xvnBLxpRNU_9gypGnMXvj659a37UzsOwz%2FjEV5Zisu6bsnJnYpFMYej5U4OrplElypeafNbvvMz&utm_campaign=92740&utm_medium=email&utm_source=action_alert

²³ Ontario Ministry of Municipal Affairs and Housing (MMAH). Greenbelt Plan, 2005 Section 3.2.5

its diverse habitats (including coastal wetlands, forests, valleys and beaches) and important staging ground for migrant birds (including 57 Federal species at risk.²⁴) The Lake Iroquois Shoreline also contains an abundance of fertile agricultural soil which supports a thriving local farming sector.

The Shoreline and South Slope located in Durham Region already forms part of the Greenbelt's natural heritage system. The portion in Northumberland County continues to face threats and degradation from human activity. A 2009 Environmental Assessment for the Highway 407 East Extension noted that "further paving of the surface could disrupt groundwater upwelling and lead to increased local stream temperatures during precipitation events".²⁵ The aquifers below this area are shallow and susceptible to surface contamination.²⁶

Community Support

Local environmental organizations supporting Greenbelt expansion in this area include the Prince Edward County Field Naturalists, Sustainable Cobourg, Northumberland Land Trust, and Willow Beach Field Naturalists.

4. Urban River Valley Connections

Rationale

Urban River Valleys (URVs) provide important physical, ecological and hydrological connections between the Greenbelt, Oak Ridges Moraine, and Great Lakes. Containing large habitats that enable the movement of plants and animals, rare and endangered species, and fish habitat, the Greenbelt Plan references URVs as a "key component of the long-term health of the Greenbelt's natural system."²⁷

Already highly regulated areas, a Greenbelt designation would outline a permanent boundary, likely reducing development and encroachment in the valley and adjacent lands; encourage a high standard of preservation of their natural features and functions; and, renew support for restoration and enhancement. Urban River Valleys also offer an opportunity to integrate the rural Greenbelt into cities across the GGH, connecting with over 6 million urban residents.

²⁴ Canadian Wildlife Service (2011). Federal Priorities for Biodiversity Conservation in the Mixedwood Plains Ecozone of Ontario

²⁵ Ontario Ministry of Transportation (August 2009). 407 East Individual Environmental Assessment (IEA) and Preliminary Design Study: Natural Environment Existing Conditions Technical Report

²⁶ Conservation Authorities Moraine Coalition, personal communication, May 24, 2015

²⁷ Ontario Ministry of Municipal Affairs and Housing (MMAH). Greenbelt Plan, 2005

Community Support

Several urban municipalities and associated conservation authorities have expressed interest in growing the Greenbelt along their river valleys including Niagara, Hamilton, Oakville, Mississauga, Brampton, Toronto and Ajax.