

March 6, 2018

## Greenbelt Expansion - 12 Questions

### EBR #013-1661- Protecting Water for Future Generations: Growing the Greenbelt in the Outer Ring

(<http://bit.ly/2D8eTZi>)

#### 1. Are there additional “building blocks” features that should also be considered for addition to the Greenbelt to protect water?

Yes, additional “building blocks” features that should be considered for addition to the Greenbelt to protect water include but are not limited to: key watershed recharge areas; flat terrain groundwater drainage divides; important discharge zones; streams with reduced baseflow due to urbanization; “building blocks” recognized after studying the additional data sets in Question #2.

#### 2. Are there additional data sets or types of analysis that should be considered?

Yes, additional data sets that should be considered include but are not limited to: more detailed topographic information; more granular information on soil types and infiltration rates; more information on key recharge areas; identification of former glacial lake shorelines; baseflow characteristics; discharge rate contributions for cold water tributaries; assessment of all Source Water Protection Plan characterization studies; regional groundwater modeling; conservation authority data; and water quantity analysis through the Permit To Take Water (PTTW) process.

In detail:

- More detailed topographic information which would allow identification of hummocky terrain or “knobs and kettles” (a key characteristic of moraines) as not all portions of a moraine contribute the same amount of infiltration/ground water recharge. Hummocky terrain provides significantly more recharge than the slopes of a moraine.
- More granular information of soil types and infiltration rates (sand and gravel deposits near or at surface provide more infiltration than areas with tills overlain on sands/ gravels).
- More information on key recharge areas on a watershed/subwatershed basis (in the Duffins Creek watershed, the TRCA watershed study showed that 9% of the watershed contributed upwards of 30% of all recharge).

*Our individual efforts might seem a drop in the ocean ... “what is an ocean but a multitude of drops?”*

- Identification of former glacial lake shorelines, and specifically former Lake Algonquin –whose former shoreline is a locally/regionally significant and important discharge zone (the shoreline can clearly be seen west of Orillia and Barrie where this discharge forms the headwaters of the coldwater streams in those areas).
- Baseflow characteristics of the streams in the study area and the western/southwestern part of the GGH writ large (ie. amounts, documentation or reduction of flows from historic levels). This can help identify the streams currently most impacted by reduced baseflow arising from urbanization.
- Discharge rate contributions for cold water tributaries. Some areas contribute proportionally more baseflow to these tributaries and are thus of more importance to protect. More information on such key areas along with more granular mapping of “discharges zones” will help inform the exercise.
- Assessment of all Source Water Protection Plan Characterization Studies should be undertaken to determine if there is additional data/information to inform the identification of feature and functions and the subsequent overall analysis.
- Regional Groundwater Modeling - With respect to additional analysis, work is underway between the Province (Ontario Geological Survey, Ministry of Environment and Climate Change) and the Geological Survey of Canada (Federal Department of Natural Resources) in preparing regional ground water flow models for parts of the western/southwestern GGH. The steering group on that initiative needs to be engaged and collaborated with in relation to its ongoing work.
- Oak Ridges Moraine Conservation Authority Coalition - This group has an excellent data base with respect to the ORM and it should be ensured that its data with respect to Simcoe County is inputted.
- Disjointed Study Areas - The 7 Study Areas appear like they were developed independently of each other – despite some of them being in the same watershed. This does not make sense in relation to how water flows within a watershed and needs to be reconsidered from a more holistic, watershed perspective. Additionally, there are some obvious gaps between the Study Areas which run counter to comprehensive watershed based planning and management practices. For instance, there is a large “bay or inlet” between Area 2 and Area 1 north of Halton (ie. between the Speed and Eramosa Rivers). This type of gap behooves explanation as the edge of these two watersheds is a common line. Further, a chunk of the Eramosa River is not even within Study Area 1. Similarly, there is a notable gap/hole southwest of Base Borden, including a skinny little inlet running west from Alliston, encircled by Study Areas 5 and 7. These lands are part of the Nottawasaga Watershed and leaving this area out seems inexplicable. Given the state and projected worsening of Lake Simcoe, it also is hard to fathom the reason for leaving lands west of Bradford or along the shoreline north of Barrie out of the study area.

- **Missing Features/Building Blocks:** Overall, it is simply unclear why these areas are left out given the water resource features and functions, the land speculation and development pressures, and given the fundamentals of comprehensive, integrated watershed based planning/management.
  - o **Moraines/Sand and Gravel Deposits** - There are a number of moraines and sand and gravel deposits that are not included in the Study Areas and it is unclear why and yet these features could play important roles both locally and regionally. For instance, there are both types of deposits in Clearview but they are not included in any study area. As well the sand/gravel deposits northeast of Barrie are excluded. The entire Grand Valley area with both a moraine and sand and gravel is not included and yet anyone familiar with the land understands the hilly terrain around Grand Valley and its associated role as a key recharge and discharge area. This equally applies to the area between Waterloo and Elora/Fergus which has both a moraine and significant sand and gravel deposits. Both of these are key areas within the Grand River watershed which is facing challenges/constraints with both assimilative capacity and drinking water supplies.
  - o **Cold Water Streams/Wetlands** - Similar to moraines/sand and gravel deposits, there are clearly concentrations of cold water streams and wetlands not in any study area. For instance, large areas west of the Escarpment in Dufferin and Wellington. The entire area of Clearview north of Study Area 7 is left out despite many streams flowing off the Escarpment and yet there are significant development plans and pressures around Stayner, Collingwood and Wasaga Beach. This holds true for the area from Waterloo to Fergus and for areas west of Brantford where there is substantial land speculation and development pressure.

**3. Of the seven areas, are there some that are more or less important?**

All water areas are equally important. It is the government's responsibility to protect water as a public trust, and to ensure water is unspoiled and freely available for the people, today and for the future.

**4. Are there areas beyond the study area that you think should be considered for potential Greenbelt expansion?**

Yes, there are a number of areas beyond the study area that should be considered for Greenbelt expansion not the least of which is the east side of the Greater Golden Horseshoe (GGH). The Greenbelt should be expanded to protect the entire GGH. Such areas include but are not limited to: Township of Melancthon farming plateau (comprised of the lands of the former proposed mega quarry); the Alliston aquifer; Waverley Uplands (containing Tiny Township's pristine groundwater encompassing French's Hill and the former North Simcoe Landfill Site 41); Wye Marsh; Minesing Wetlands; Pickering Airport farm lands; forest land targeted for the proposed "Hidden Quarry" between Rockwood and Acton; 2,700 additional acres proposed by Wellington Water Watchers for Greenbelt expansion; Great Lakes water and ecosystems (protection from the proposed Deep Geologic Repository Project, etc.)

The Greenbelt should be allowed to include discontinuous tracts of land.

**5. Should the province consider adding rivers that flow through urban areas as Urban River Valleys in the Greenbelt?**

Yes, the province should consider adding rivers that flow through urban areas as Urban River Valleys in the Greenbelt. Water is a necessity of life and Ontario's water will be in high demand as local and global populations expand, and parts of the world find water in short supply. We must establish a structure to protect our water from contamination, and manage it responsibly and sustainably for all.

Urban River Valleys should include all land and not just publicly-owned lands.

**6. With the range of settlement areas in the GGH, how should the province balance accommodating future urban growth with protecting water resources?**

The province should balance accommodating future urban growth with protecting water resources by:

- Realizing that protecting water resources is crucial. Without water, there is no future for urban growth. Our water resources are finite, irreplaceable and invaluable. Their protection clearly trumps and takes priority over any settlement expansion in the outer ring.
- Recognizing that we already have strong precedents for limiting settlement expansions where important provincial interests exist. For instance, the Greenbelt Plan precludes settlement expansions in our specialty crop lands. Both the Greenbelt and Growth Plans preclude settlement expansions into our Natural Heritage Systems – within the Greenbelt NHS and proposed Growth Plan NHS respectively (noting that that non-Greenbelt NHS can be reduced to accommodate settlement expansion under the Growth Plan). Lastly, and specific to water, the Oak Ridges Moraine Conservation Plan precludes any further settlement expansion within its boundaries in order to protect the water resources and functions found there. Having said that, there is already more than enough land designated in the outer ring settlements to accommodate growth to 2041 and beyond. Further, if additional land is needed, there will undoubtedly be sufficient potential locations for expansion of a good number of settlements (not protected for water resource purposes) that could accommodate growth beyond 2041.
- Prioritizing clean potable water ahead of sand, stone, and gravel demands especially when clean potable water is a result of the filtration of aggregate deposits. #ProtectOurWater
- Encouraging innovation and technology. For example requiring buildings to differentiate levels of contamination of water (storm water, grey water, sewage, etc.) and route it for best purpose accordingly. Human waste could be handled at higher concentrations with less waste of potable water. Think outside the box: permeable pavements, green rooftops, solar windows, organic farming, contamination mitigation, plastics management, etc.

- Monitoring and managing water as a resource of value, mapping and understanding quality, quantity, how it flows, how much is being drawn, who/what is using it, impact of use, etc. Currently the Permit To Take Water (PTTW) process does not take big picture (limits) or drought response into account.

## **7. What are other key considerations for drawing a potential Greenbelt boundary around settlement areas?**

Other key considerations for drawing a potential Greenbelt boundary around settlement areas include:

- Assimilative capacity of water bodies – It is absolutely critical to document the assimilative capacity as well as the other water related information cited in Question 1 above. In particular, rivers/streams, downstream lakes like Lakes Simcoe and Couchiching, and nearshore areas of the Great Lakes (e.g. Wasaga Beach outfall of Nottawasaga River, Severn Sound, north shore of Lake Erie). Essentially every river/stream to which inland settlements in the west/southwestern GGH discharge sewage has no remaining assimilative capacity to accept further sewage effluent (at least without very expensive improvements to install more sophisticated treatment systems – see northern York Sanitary Sewer scheme). Alliston, Tottenham, Beeton, Angus, Orangeville, Shelburne and Grand Valley are but a few. Lake Simcoe is already at its limits with provincially imposed caps on effluent discharges from the 13 plants that drain into it and the LSRCA has indicated that the amount of currently approved urbanization cannot proceed without further degradation of the lake. Lake Couchiching into which Lake Simcoe flows is similarly degraded (with stressed assimilative capacity) or worse as it will receive further degraded water from Lake Simcoe. The Grand River already has 13 sewage treatment plans on it – while also providing a source of drinking water for some communities along the way including some of the supply for Kitchener/Waterloo.
- Existing sewage treatment plants/effluent management – This needs to be augmented by data on the existing capacity and allocation of capacity within all existing sewage treatment plants. This is critical for concepts have already been floated for major inland sewage pipelines within Simcoe County and the Grand River basin. Any consideration of future settlement expansions needs to take a holistic look at both assimilative capacity and existing treatment capacity – and the implications of any potential pipeline schemes (noting a sewer pipe has already been approved from Stayner to Wasaga Beach).
- Inland Aquifers – a number of the inland aquifers in the Outer Ring are already vulnerable or being mined. As such, information on the state of all aquifers in the Study Area and the capacity of water taking and treatment infrastructure also needs to be documented and considered in the analysis. Orangeville and Guelph are two examples of significant and important settlements facing constraints in drinking water supplies from groundwater. Again, pipelines need to be considered as there is already one in Simcoe County running from Collingwood to Alliston and there have been other concepts floated in the Grand River basin and in extending water from Lake Ontario via Peel up to Orangeville.
- Drought response – what are the backup sources if primary water sources fail?

- Flood management – assuming land is cheaper, more functional with greater aesthetic than maintaining man-made ditches, reservoirs and other flood and filtering infrastructure, how much land surrounding the settlement area(s) is required to absorb/filter flood water?
- Run-off management – how to mitigate/stop water contamination from paved/impervious areas, farming (pesticides), sewage (livestock, urban areas), large-scale fill operations?
- Wildlife corridors
- Recreation/tourism corridors – such as trail systems (snowmobiling, ATVing, walking, riding, skiing, etc.).

#### **8. How should the province determine which settlement areas become Towns/Villages or Hamlets, if included in a potential Greenbelt?**

The province should determine which settlement areas become Towns/Villages or Hamlets according to existing standards. Any settlement with municipal sewage and water should be a Town/Village. Any others should be a hamlet – or a “rural settlement” in an official plan that is not allowed to expand beyond what is delineated in the plan.

#### **9. Once the Agricultural System and Natural Heritage System under the Growth Plan are finalized, how should they be considered as part of potential Greenbelt expansion?**

Once the Agricultural System and Natural Heritage System under the Growth Plan are finalized, they should be included along with water, food, forests and wildlife as necessary and integral parts of the Greenbelt. They should be protected under the best possible long-term protections.

Protection of discontinuous tracts of land should be allowed in the Greenbelt and Bluebelt systems.

It is an unfortunate reality that decades of good decisions can be wiped out with the stroke of a pen. Ontario’s agricultural and natural heritage systems must be protected for future generations, and therefore be given the best legal protection possible. Additionally, ensure that the protections under either the Provincial Official Plan or the individual Municipal Official Plans that are the most stringent take precedence.

#### **10. How should other provincial priorities or initiatives, such as mineral aggregates and infrastructure, be reflected in potential Greenbelt expansion?**

Other provincial priorities/initiatives such as mineral aggregates and infrastructure should be reflected in potential Greenbelt expansion by recognizing that the current Greenbelt Plan is not restrictive enough when it comes to resource extraction. The goal of the Greenbelt is to prevent urban development and sprawl on agricultural land, in addition to protecting environmentally sensitive, rural, ecological and hydrological features, and heritage sites. The intent of the Greenbelt is to preserve the land for future generations and not for commercial resource extraction purposes.

Current Greenbelt policy prevents included municipalities from establishing regulations that are more restrictive regarding aggregate extraction than those detailed in the Greenbelt Plan. Since municipalities are more likely to be in tune with their local area, they should be allowed to legislate accordingly. Municipal by-laws, zoning and official plans should prevail when there are more stringent protections of soil and water in place than provincial policy. The legislation that best protects the Greenbelt lands for future generations must take precedence.

**11. What other priorities or initiatives do you think the province should consider?**

Other priorities/initiatives that the province should consider are: protection of Greenbelt, Oak Ridges Moraine, Niagara Escarpment, Natural Heritage System and Agriculture System areas from large-scale commercial fill as priorities. Additionally, no oil and gas hydraulic fracturing (aka “fracking”) should take place near residences, schools, on farmland, or in source water areas. Offshore oil and gas extraction should not be allowed due to the likelihood of spills and damage to the Great Lakes. The province should encourage technological innovation re: alternative energies/renewables, internet communications, remote work, better water management, better electrical use management.

**12. Do you wish to provide any additional comments?**

Thank you for this opportunity to comment.

Food and water are necessities of life. We, each one of us, have a moral and ethical responsibility to protect the world's environment, food, water and species for the future. The next generations are entitled to grow up with the same diversity of life as we have enjoyed.

To that end, North Dufferin Agricultural and Community Taskforce (NDACT) supports in principle the expansion of the Greenbelt and establishment of a “Bluebelt”.

NDACT's volunteers work steadily to protect Ontario's prime farmland and source water regions. We are rural and urban citizens who understand that our province's rare agricultural soils and water resources provide us with a great bounty that must be preserved. We encourage the Ontario government to adopt a Food & Water First policy so our vital agricultural sector and source water regions are given priority in land-use planning.

Helping to shape the future of the Greater Golden Horseshoe (GGH) by opining on Greenbelt/Bluebelt policy is just one facet of NDACT's multi-faceted approach striving to protect the people of Ontario for today and tomorrow.

The fact that Ontario's population is expected to increase significantly (GGH population is projected to grow almost 50% to 13.5 million by 2041), is rarely associated with the recognition that people must eat and drink as well. Protecting farmland, farming operations, and source water are crucial for the entire province.



Additionally, as global populations increase and climate change leaves a wake of uncertainty, Ontario's agricultural industry and related businesses are better than the proverbial "gold mine". Food security, employment and economic benefits of the agricultural industry are renewable and sustainable!

Now is the time to protect prime farmland and source water for future generations. The decisions we make today are our legacy.

**#FoodAndWaterFirst #ProtectOurWater #ProtectPrimeFarmland #IdleNoMore #Greenbelt #Bluebelt #FarmersFeedCities #GrowTheGreenbelt**

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