

Members
Planning and Development Committee
Town of Caledon
PDF via e-mail



March 19, 2024

RE: 2024 Future Caledon Official

Dear Members of the Committee,

The Ontario Headwaters Institute is a registered charity that promotes watershed security in Ontario – water for people and for nature. One of our key filters for a new initiative is to ask if it enhances or threatens watershed security. This is a simple question with huge implications for your proposed official plan.

As many answers are unclear in this initiative, we ask that you to defer all aspects of the proposed official plan that relate to the rural system, such as natural heritage, hydrology, and aquatic systems, until significant further consideration.

This is imperative not just for rural areas facing the twin climate and biodiversity crises, but as “rural” watershed security is inextricably linked to overall regional ecological integrity, social wellbeing, and economic vitality, per the attached Backgrounder on Watershed Security.

While not located in the Credit watershed, we maintain extensive contacts here and much of my personal recreation occurs within or not far from Caledon. Specific questions we have include:

1. Does the proposed official plan adhere to the requirement of s 4.2 of the Provincial Policy Statement that “Planning authorities shall protect, improve or restore the quality and quantity of water by
 - a) using the watershed as the ecologically meaningful scale for integrated and long term planning, which can be a foundation for considering cumulative impacts of watershed as the ecologically meaningful scale for integrated and long term planning”, etc?
2. Does the proposed official plan acknowledge, support, and integrate where appropriate:
 - a) The natural heritage mapping and policies of the Greenbelt Plan;
 - b) The natural heritage mapping and policies of the Regional Municipality of Peel; and,
 - c) The natural heritage system mapping and policies of Credit Valley Conservation? and,
3. While the Town has done an admirable job of addressing the demands of Housing Action Plan 3.0, does the Town consider that it has performed an appropriate level of public engagement on protecting the long-term ecological integrity of regional biodiversity, natural heritage, and watershed security?

Respectfully submitted,

Andrew McCammon

Executive Director

Backgrounder on Watershed Security

March 2024 - Watershed security exists when a watershed is healthy and resilient, supporting regional ecological integrity, social wellbeing, and economic vitality.

These conditions provide water for humans and other living things, sustain biodiversity, reduce impacts from drought & flooding, serve as the foundation of a stable society, and are best protected by a commitment to integrated land use and watershed planning, supported by sound stewardship practices.

These commitments secure a watershed's core ecological features and functions, including its natural heritage, surface & groundwater flow characteristics, and water quantity & quality, maintaining the ecological goods and services that in turn sustain us.

Where ecological features and functions deteriorate, such as through poor planning or land occupancy practices, invasive species, or climate change, our social and economic wellbeing will be challenged.

Negative watershed outcomes from current policies and practices include the loss of natural heritage & biodiversity, altered surface & ground-water flows, and impaired water quality for both nature and human uses such as drinking water and water for agriculture, industry and recreation.

Unfortunately, current reports on biodiversity, climate, and our watersheds indicate that watershed security is deteriorating across much of the province, and particularly in South-central Ontario. Given increasing development and escalating climate and biodiversity crises, it may get worse before it gets better.

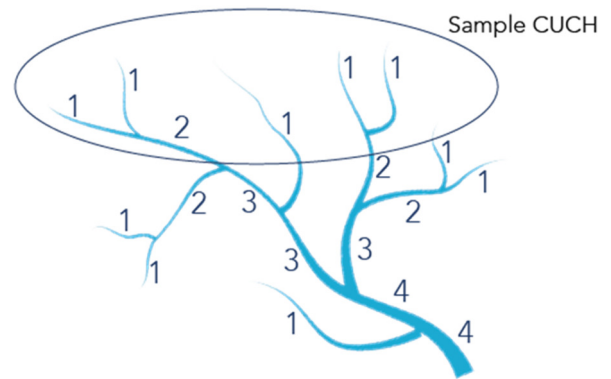
To prevent the worst projected outcomes, Ontario needs to pursue watershed security by revitalizing its approaches to watershed management, improving the integration of land use and watershed planning, and embracing a commitment to sustainable development.

Watersheds provide a practical scale for both development planning and to monitor the ecological health of a naturally-defined bio-region.

On the former, the Provincial Policy Statement (the PPS), a key aspect of the Planning Act, states in part that "Planning authorities shall protect, improve or restore the quality and quantity of water by ...using the watershed as the ecologically meaningful scale for integrated and long-term planning, which can be a foundation for considering cumulative impacts of development."

Unfortunately, Ontario has not seriously required the implementation of this directive. As a result, the lower sections of many of our watersheds across South-central Ontario have become significantly degraded, leaving upland headwater catchments for agriculture and/or as natural reservoirs of regional forests, wetlands, niche habitats, and water quality & quantity.

Now, however, a growing population and increasing development threaten these upstream sanctuaries of natural heritage, especially where low-order catchments are close together – what we call Contiguous Upland Headwater Catchments, per the drawing. Headwater streams are streams with no tributaries (first-order), second-order streams where two first order streams converge, and sometimes third order streams.



The OHI believes that if we don't significantly update our watershed management protocols and better integrate land use and watershed planning for development in the upstream areas of South-central Ontario, we will lose watershed security across most of the region.

On the second aspect of the PPS quoted above, Ontario has numerous reports from multiple agencies on water quality and quantity monitoring, as well as on the health of our watersheds and biodiversity.

Unfortunately, there appear to be few efforts to implement cumulative monitoring, and fewer to apply it to address the impact of development on the maintenance of regional ecological goods and services.

Ecological Goods & Services include:

Supporting Services: These consist of underlying natural processes, such as photosynthesis, nutrient cycling, nutrient cycling, the creation of soils, and the water cycle;

Regulating services: These moderate natural phenomena by providing benefits such as pollination, decomposition, water purification, erosion & flood control, carbon storage, and climate regulation;

Provisioning Services: This describes benefits to people that are extracted from nature, such as drinking water, food, timber, natural gas, oils, and plants that can be made into clothes and other materials; and,

Cultural Services: This includes both an individual and collective sense of well-being and creativity drawn from interactions with nature, including recreation.

Natural Capital estimates the value of these ecological goods and services, from carbon storage, flood attenuation, and health services to food, timber, and other goods grown in a defined area. Recent calculations of the annual value of natural capita are at least \$371M in the Credit watershed and \$6.2 B across the Greenbelt.

In summary, Ontario's ecological integrity, social wellbeing, and economic vitality would be well served in the pursuit of watershed security by: Revitalizing our approaches to watershed management; Improving the integration of land use and watershed planning; and Embracing a commitment to sustainable development.