



ECOSYSTEM SERVICES PROVIDED BY MISSISSAUGA'S GREEN SYSTEM

Mississauga's Green System includes the Natural Heritage System and the urban forest, as well as natural hazard lands, parks and open space, and other green infrastructure elements. Together, these provide what are called "ecosystem services", a term used to describe the processes of nature needed to support the health and survival of humans. Ecosystem services are required and used by all living organisms, but the term is used to capture their value (quantified or not) to humans.



Researchers at Columbia University have found that for every additional 343 trees per square kilometer, asthma rates drop by 25% in young children.

... [P]hytonicides (essential oils derived from trees) may exert a preventative effect on cancer generation and development.

A Healthy Dose of Green (2012)

ENVIRONMENTAL SERVICES

- Climate change mitigation: Mississauga's trees store +200,000 tonnes of carbon
- Air quality improvements: Mississauga's trees remove +290 metric tonnes of air pollution annually valued at \$4.8 million savings / year
- Reductions in local temperatures on hot days (2 to 5 °C) and related heat island effects
- Provision of habitat for plants and wildlife

COMMUNITY BENEFITS AND SERVICES

- Better quality of life
- Supportive of active living and community building
- Supportive of education and recreation
- Contributes to traffic calming

ECONOMIC BENEFITS AND SERVICES

- Increased property values
- Reduced heating and cooling costs
- Supportive of tourism
- Reduced demand on engineered storm water management

PHYSICAL AND MENTAL HEALTH SERVICES

- Protection from cancer-causing ultraviolet radiation
- Stress reduction
- Improved focus and mental responsiveness
- Supports physical activities outdoors