

**Application For Review: need for including sustainability principles
in the definition of infrastructure**
Section 61, *Environmental Bill of Rights*

1. We request a Review of existing policy.

We request that the Ministry of Agriculture, Food and Rural Affairs, the Ministry of Infrastructure (MI), the Ministry of the Environment (MOE), the Ministry of Municipal Affairs and Housing (MMAH), the Ministry of Natural Resources, and the Ministry of Transportation (MTO) review their definitions of infrastructure, to ensure that infrastructure development in Ontario happen in a manner that facilitates Ontarians' quality of life and positions the province as a leader in the field. To contrast the current definitions of infrastructure (commonly called "grey infrastructure"), we recommend using the following definition:

Living Green Infrastructure

Natural or engineered ecological processes or structures, that process, capture, and direct water, stormwater, and wastewater in a similar manner to grey infrastructure, yet have multiple societal benefits. Living green infrastructure includes:

- urban forests,
- natural areas,
- greenways,
- streams and riparian zones,
- meadows and agricultural lands,
- green roofs and green walls,
- parks, gardens and landscaped areas,
- rain gardens,
- bioswales,
- engineered wetlands and storm water ponds, and
- other green open spaces.

Living green infrastructure also includes soil, in volumes and qualities adequate to sustain leafy green infrastructure and absorb water, as well as technologies like porous paving, rain barrels, cisterns and structural soils. Living green Infrastructure functions on a site-specific scale, and on a regional scale as an interconnected network of spaces.

There is a lack of clear definition and different infrastructure approaches among the various ministries, which prevent uniform treatment and implementation of policies and funding to promote sustainable and complete communities. We request that the Ministries work together to review the need to incorporate sustainability principles in the definition of infrastructure.

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**2. We believe the ministries should undertake this Review to protect the
environment for the following reasons:**

Currently, the way we design, plan and build our communities has resulted in water quality degradation, unsustainable water use, infrastructure deficit that is overwhelming and mounting, planning and development decisions made in a way that overpower environmental protections, unsustainable development, risks to water supply and infrastructure capacity from projected climate change impacts. Around the world, living green infrastructure is gaining attention as a tool to address environmental concerns such as:

- Water quality
- Green spaces
- Urban forest cover
- Urban “heat island” management
- Air quality
- Climate change mitigation
- Climate change adaptation
- Biodiversity
- Flood risk management

Living green infrastructure also serves a number of social functions:

- Green jobs
- Walkable, livable communities
- Sports and leisure
- Health and well-being
- Landscape character
- Property value
- Education
- Cultural heritage

Incorporating sustainability principles into the definition of infrastructure is consistent with the MOE's Statement of Environmental Values (SEV); in particular, the Ministry's commitments to adopting an ecosystem approach, considering cumulative effects, intergenerational equity, pollution prevention, employing a precautionary, science-based approach, and continuous improvement.

Incorporating sustainability principles into the definition of infrastructure is consistent with the MMAH's SEV; in particular the following three commitments:

The Ministry of Municipal Affairs and Housing will support a land use planning system that promotes **sustainable communities** by

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effectively directing growth, preserving green space, and ensuring wise management and use of resources.

The Ministry of Municipal Affairs and Housing will support a regulatory system that enhances **environmental sustainability** and energy efficiency in buildings and regulations to support alternative energy sources such as the use of wind and solar energy.

The Ministry of Municipal Affairs and Housing will provide municipal governance tools and structures for **environmentally responsible** decision making by municipal governments on matters that can have environmental implications.
[emphasis in original]

Incorporating sustainability principles into the definition of infrastructure is consistent with the MTO's SEV; in particular the following two commitments:

The ministry will continue to research and develop environmentally-compatible transportation technologies and methods.

The ministry will continue to develop environmentally-sensitive design, construction and maintenance techniques.

We are also aware that the MI is in the process of developing a 10-year Long-Term Infrastructure Plan. This Plan would benefit greatly from incorporating sustainability principles into the definition of infrastructure because living green infrastructure can often be less costly than new or expanded grey infrastructure.

3. The following is a summary of the evidence that supports our Application For Review.

Commission for Architecture and the Built Environment (2009) <i>Grey to Green: How We Shift Funding and Skills to Green Our Cities</i>	Tab 1
Deborah Martin-Downs, Toronto and Region Conservation Authority (2010) <i>ONE WATER: Supporting Watershed Management and Green Infrastructure in Ontario Policy</i>	Tab 2
Ecojustice Canada (2008) <i>Green Cities, Great Lakes: Using Green Infrastructure to Reduce Combined Sewer Overflows</i>	Tab 3
City of Portland Bureau of Environmental Services (2010) <i>Portland's Green Infrastructure: Quantifying the Health, Energy, and Community Livability Benefits</i>	Tab 4
TEEB (2010) <i>The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB</i>	Tab 5

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Marbek (2010) <i>Assessing the Economic Value of Protecting the Great Lakes: Rouge River Case Study for Nutrient Reduction and Nearshore Health Protection</i>	Tab 6
Philadelphia Water Department (2009) <i>A Triple Bottom Line Assessment of Traditional and Green Infrastructure Options for Controlling CSO Events in Philadelphia's Watersheds</i>	Tab 7

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Date Received: Date Received:

Ministry Submitted To:

Date Acknowledgement:

Date Submitted to the Ministry:

Letter Sent to Applicant:

Reference Number: Reference Number: