



City of Toronto Official Plan Climate Change Policies

Clean Air Partnership Official Plan and Climate Change Integration Workshop

February 24, 2021

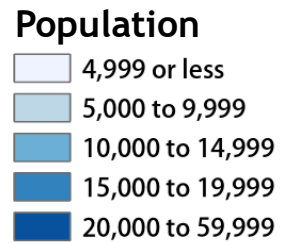
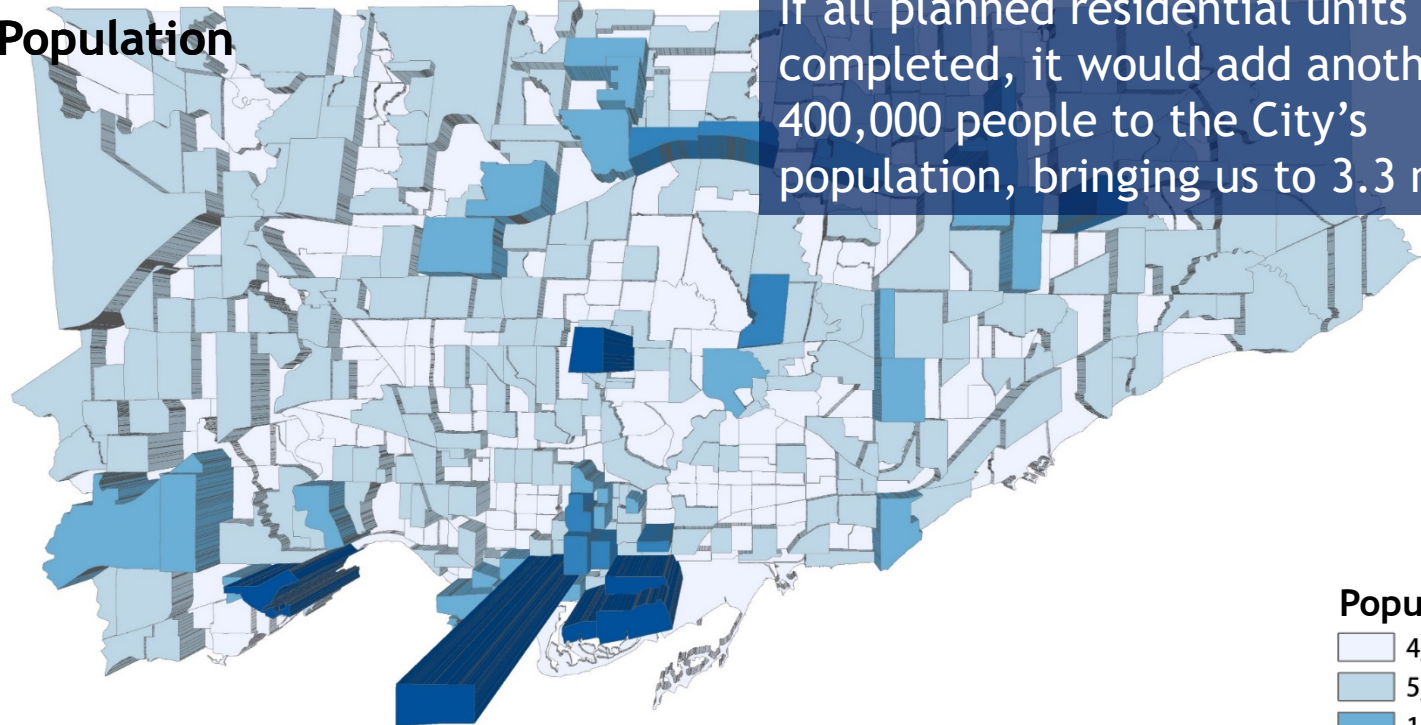
Jane Welsh, Project Manager, SIPA, Toronto City Planning



Toronto's population could reach 3.3 million

**Future
Population**

If all planned residential units are completed, it would add another 400,000 people to the City's population, bringing us to 3.3 million



Planning a Resilient city

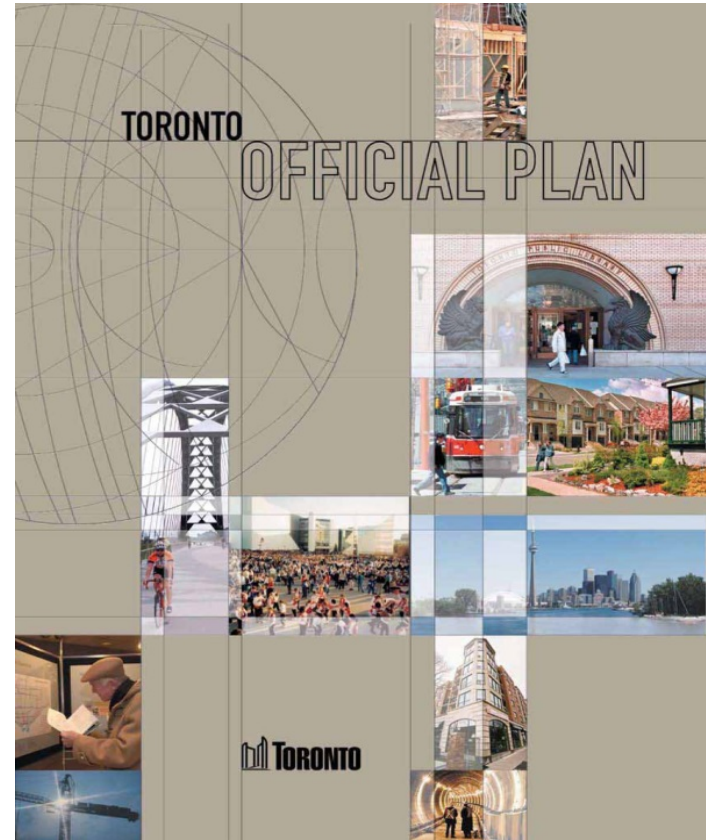
Statutory document; Binds future councils and decisions making

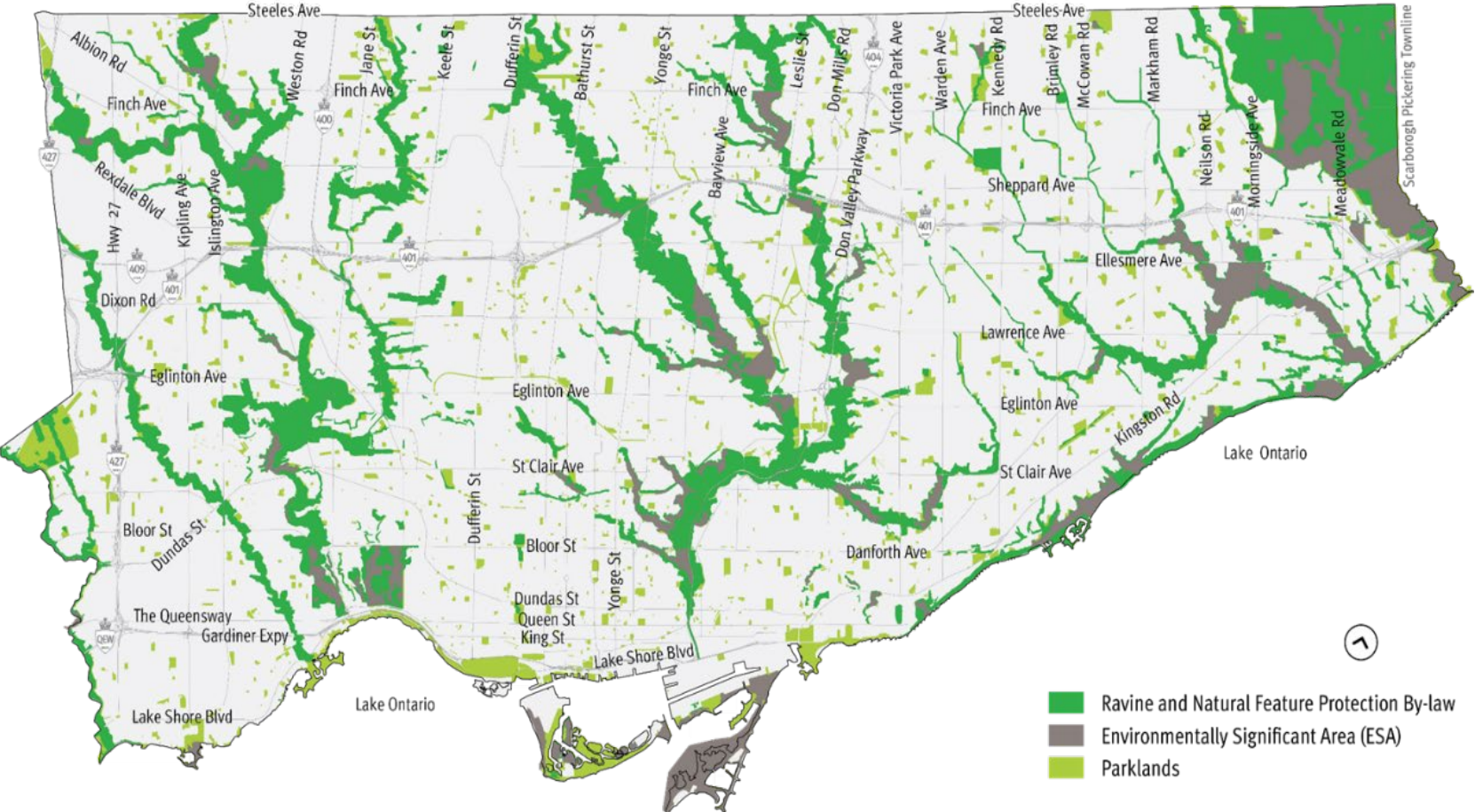
Sustainable choices about how we grow

Integrate environmental, social, economic perspectives

Meet needs of today without compromising ability of future generations to meet their needs

A city with ... infrastructure and socio-economic systems that are **resilient to disruptions and climate change**





OPA 262: Chapter 2: Shaping the City

2.3.2 Green Space System and Waterfront



Show Greenbelt
Protected Countryside

Recognize Greenbelt
River Valley
Connections

Enhance lands along
waters edge

OPA 262: Chapter 3: Building a Successful City

3.4 Natural Environment

Strong communities need a healthy natural environment



opportunities for habitat
in the built environment

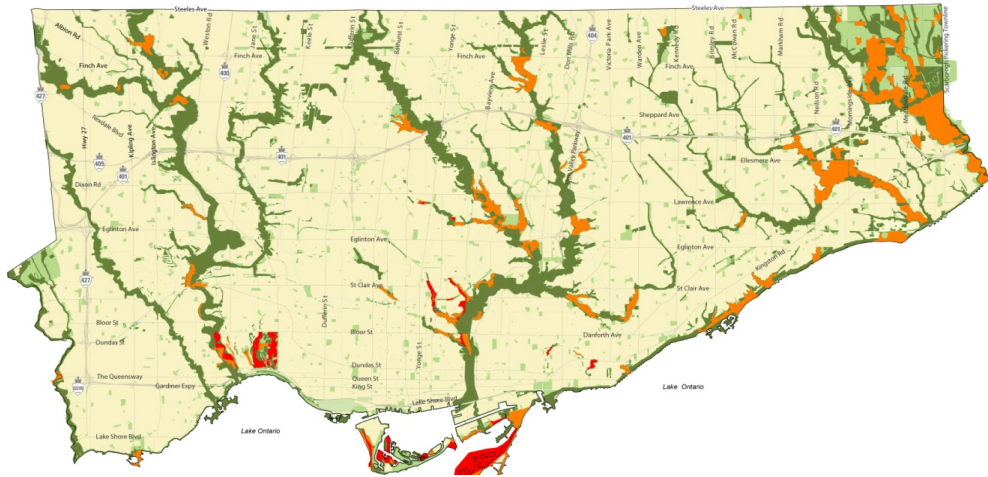
mitigate light pollution



seasonal movements
of migrating species

OPA 262: Chapter 3: Building a Successful City

Environmentally Significant Areas



- Enviroir
- Propos
- Natural
- Parklar



Natural Heritage System
Development is generally not permitted, natural heritage impact study may be required.



Environmentally Significant Areas
contain habitats for rare species, unusual landforms, habitats of large size or unusually high diversity.

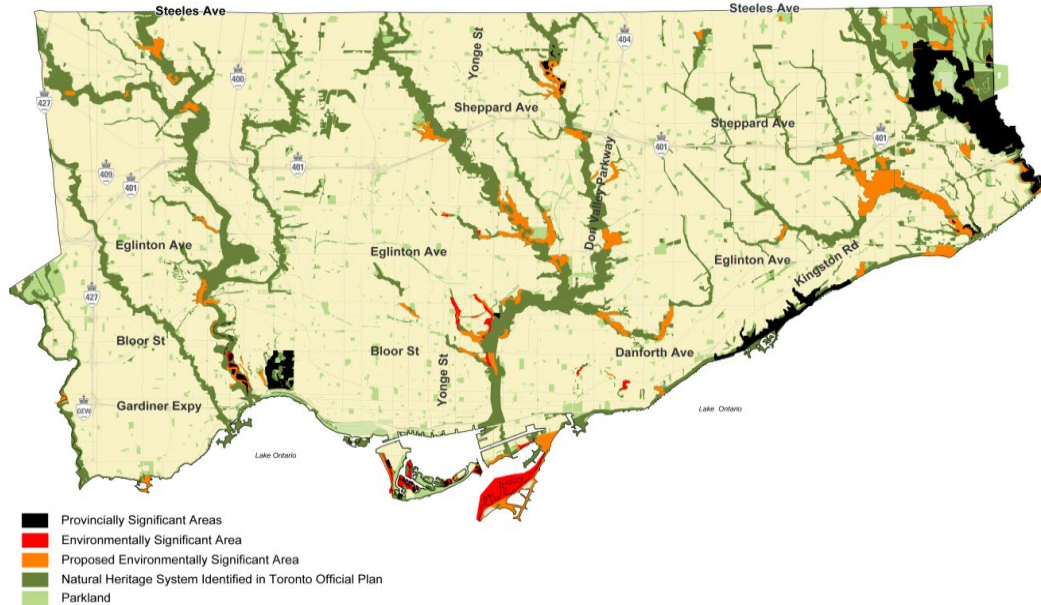
designate 68 new ESAs

expand 14 existing ESAs

enhance protection

OPA 262: Chapter 3: Building a Successful City

Provincially Significant Areas

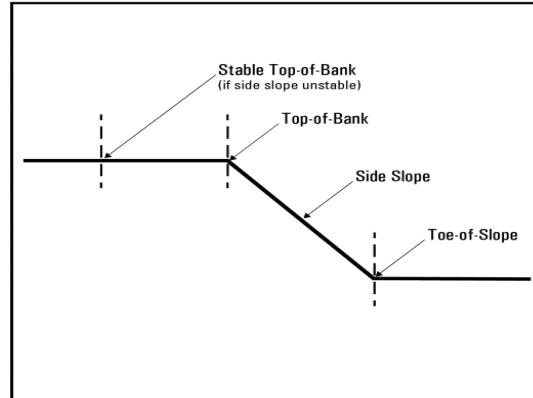
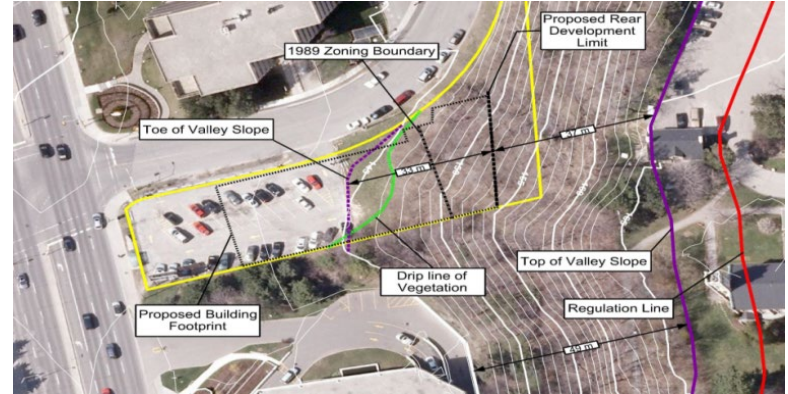


- Provincially Significant Areas to be shown on Map
- refinements to study requirements for adjacent development

OPA 262: Chapter 3: Building a Successful City

Natural Hazard

- 10 m setback from toe of slope
- Alteration of existing slope to accommodate new development not permitted



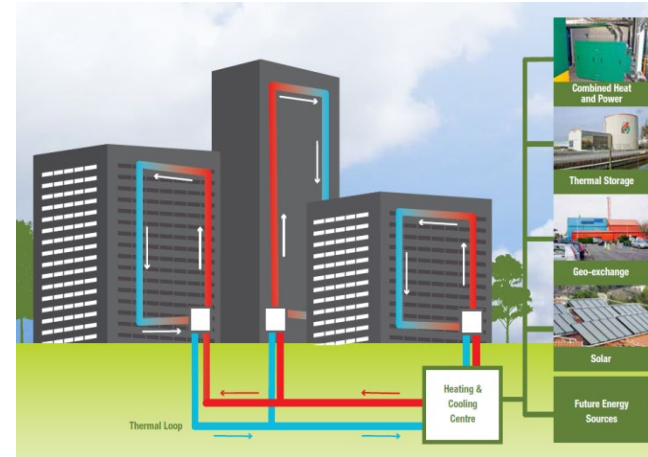
OPA 262: Chapter 2: Shaping the City

Energy

2.2.2. Centres- Vital Mixed Communities

Secondary Plans for Centres will assess opportunities for:

- Energy conservation including peak demand reduction
- Resilience to power disruptions
- Small integrated energy solutions e.g. renewables, district energy & CHP
- New sidebar Community Energy Planning (CEP)



OPA 262: Chapter 3: Building a Successful City

*Policy 3.4.1: To supporting strong communities...
public and private city building activities...will be environmentally
friendly...*

- impacts of climate change on biodiversity and ecosystem health
- reduce greenhouse gas emissions
- consider impacts of climate change that may increase risk associated with natural hazards
- promote green infrastructure to complement infrastructure



OPA 262: Chapter 3: Building a Successful City

Policy 3.4.18: Innovative energy producing options, sustainable design and construction practices and green industry will be supported and encouraged:

- Advanced energy conservation and efficiency technologies and processes that contribute towards an **energy neutral built environment** including: district heating and cooling; renewable energy; small local integrated energy solutions; active and passive design; back up power to improve resiliency



OPA 262: Schedule 3: Application Requirements

Energy Strategy

Energy Strategy required for OPA, ZBL, Plan of Subdivision for:

- Large development (over 200,00 m²)
- Development in a Community Energy

To date 200 energy strategies reviewed

FIRST GULF DON VALLEY LIMITED
EAST HARBOUR DEVELOPMENT
**EAST HARBOUR COMMUNITY
ENERGY PLAN**



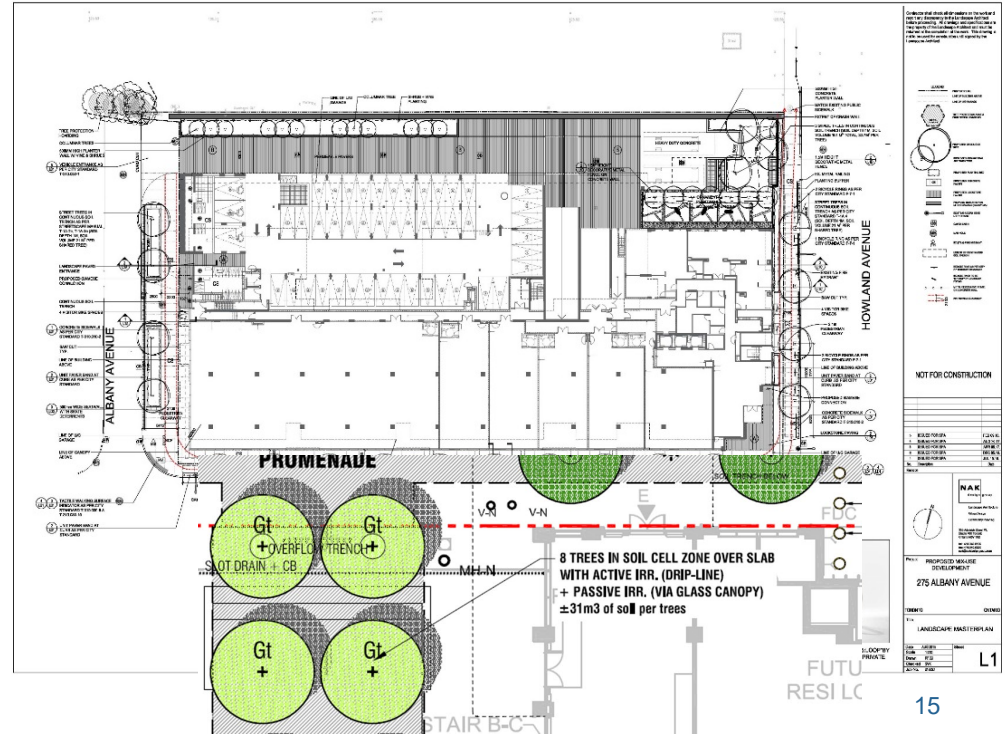
FIRST GULF | **wsp**



Chapter 5: Implementation: Making Things Happen

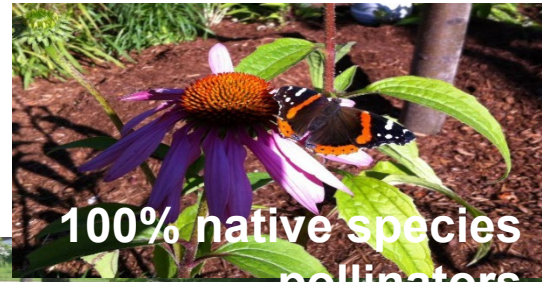
Site Plan Control

5.1.3.3 to help achieve environmentally sustainable development, the city may use sect 114 .COTA to secure ..sustainable design features



Toronto Green Standard minimum requirements

Biodiverse
green roofs



No invasive Species



+ 15% Energy Efficiency above OBC

Cycling Infrastructure



Toronto Green Roof Bylaw

Authority Section 108 COTA

Since 2010:

- Over 844 green roofs
- Annual benefits:
 - 222 million litres stormwater retention
 - 225 tonnes carbon sequestration
- TTC largest green roof owner (100,00m²)



Tools for Resilience

Zoning Bylaw 569-2013

Requirement - 75% soft
landscaping

Buildings to be setback
from 10 from stable top of
bank



OPA 479: Schedule 3: Application Requirements

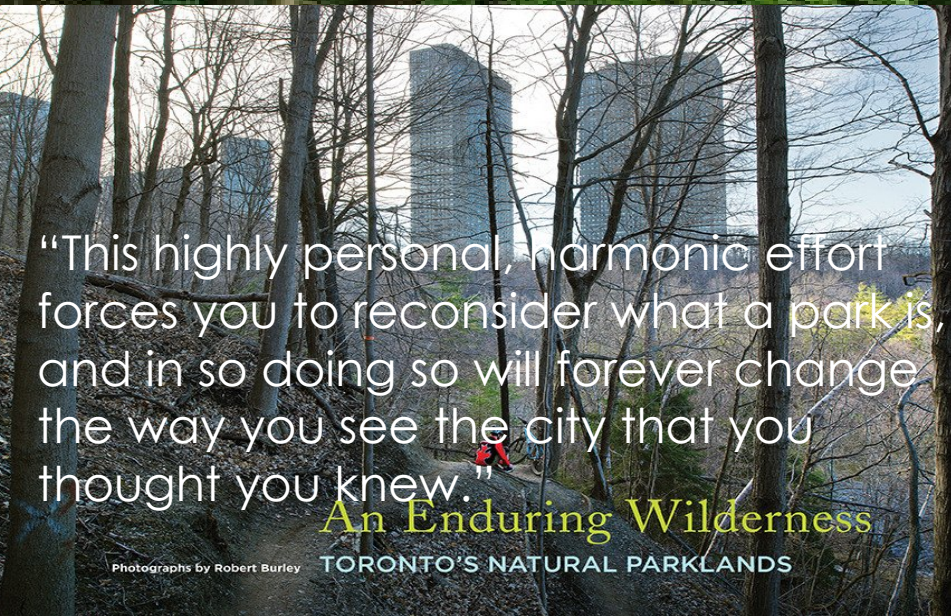
Soil Volume Plan

New (OZ, SB, SA and Consent)

Required for all properties.

Plan and section drawings with information such as below grade slab elevations and building setbacks, demonstrating that adequate soil volume suitable to support plant growth is being **provided on site**, and is being accommodated in the building structure.

Invest: Communication



What's next? Conformity with Growth Plan (2019)

Guidance on where and how to grow – sets growth targets MTSA's (PMTSA's)

Requires municipalities to develop OP polices:

- to reduce GHG emissions and address adaptation
- based on conservation objectives related to water, energy, air quality improvement, integrated waste management, and stormwater master plans
- Identify water resources including wetlands, key hydrologic features

A Place to Grow

Growth Plan for the Greater Golden Horseshoe

Climate Change in Toronto: Wetter, Hotter, Unpredictable



July 2013: ~ \$1 billion flood damages
August 2018: \$80 million

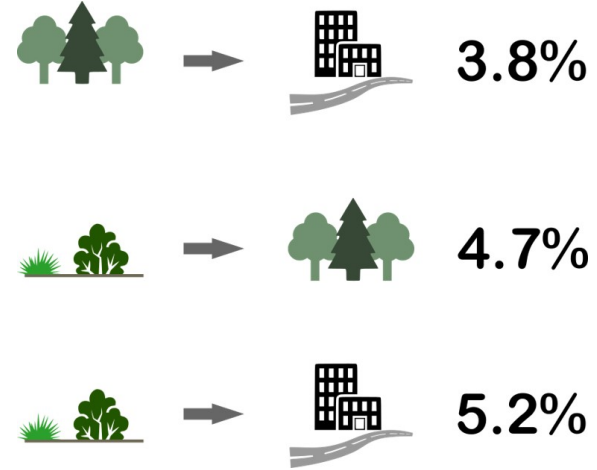
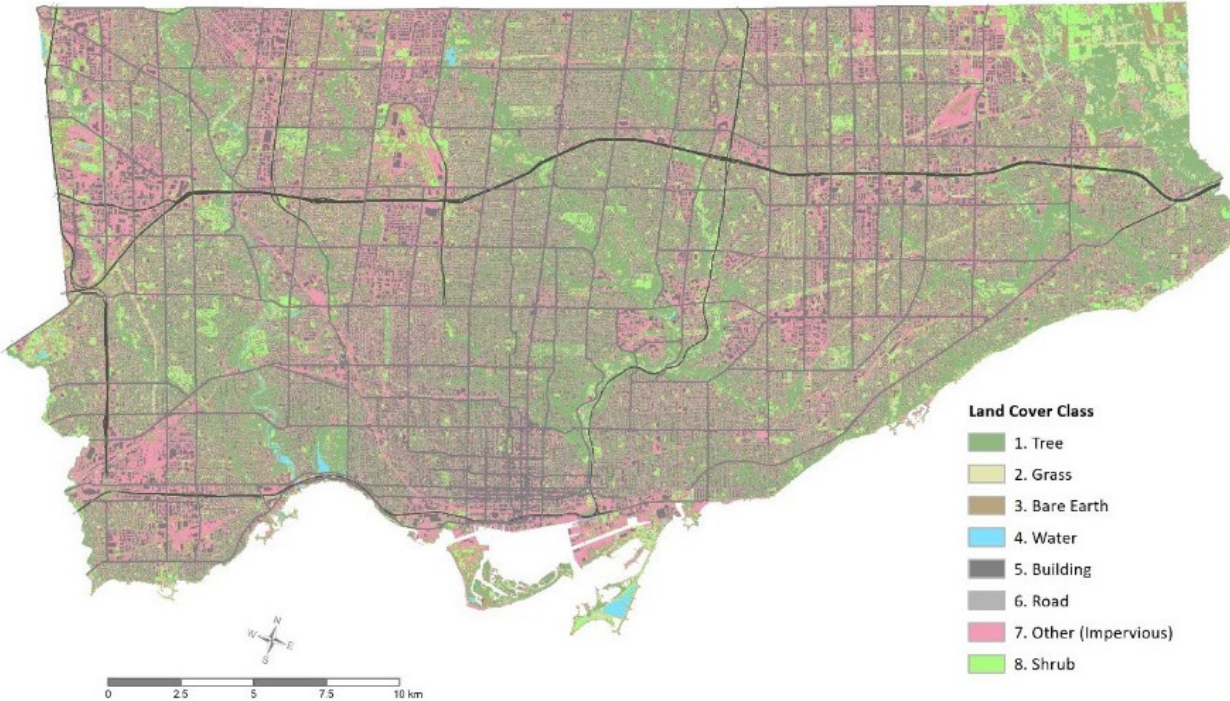
(Frank Gunn / The Canadian Press)



30 days/year of 30°C+ heat
(12 days/year 1976-2005)

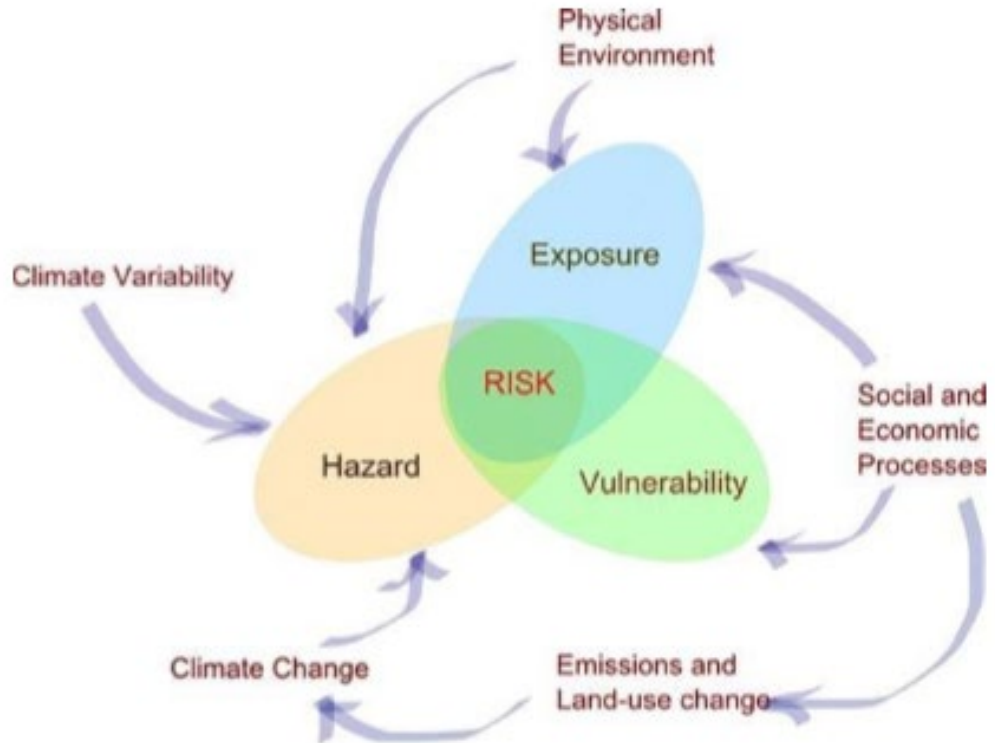
Land Cover & Change Detection

City of Toronto's
2018 Automated Land Cover Classes



Climate Resilience & Land Use Planning Workshop

What role can planning play in making us more resilient to climate?



Resilience Workshop – Principles

1. Growth that considers the **human experience**
2. Think **inter-generationally** (make hard decisions now that will benefit future generations)
3. Build a **city able to withstand and thrive** in face of climate change
4. **Build nature into the city**
5. Take **leadership** on climate resilience try new things **experiment**
6. Systems thinking – ask **how each project will make city more resilient**



Resilience Strategy: Action B2.2

Integrate resilience into development and land use planning processes

- Review policies and tools to identify where climate resilience can be further advanced
- Initiate' training for C of A members on climate resilience (storm water management, protection of natural heritage)

ACTION B2.2

Integrate resilience into development and land use planning processes

THE CHALLENGE

It is critical that municipalities use land use planning to drive action on climate resilience. Land use planning policies, like the Official Plan and Secondary Plans set out the vision and direction for how Toronto should grow. Planning implementation tools like zoning bylaws have a formative impact on development and the delivery of housing, transit, energy, parks, water, and other infrastructure, all of which can build climate resilience.

This is particularly important in the face of significant growth. Toronto has more buildings planned or under construction than almost any other city in North America, and, as noted on page 46 of this document, more than Chicago, Los Angeles, and San Francisco combined.

For Toronto, land use planning has already shaped resilience in the city:

- **Ravines:** The devastating impact of Hurricane Hazel in 1954 led to additional responsibilities given to the Toronto and Region Conservation Authority and a regional approach to flood control and water management in Ontario. The relatively natural character of Toronto's ravines today is due in large part to these protections. Today, the City's ravine system represents 11,000 hectares (public and private land) that is enjoyed and protected through various layers of environmental policy.
- **Green development:** The Toronto Green Standard sets sustainable performance requirements for new private development and the City's agency-, corporation-, and division-owned developments. The City's Green Roof Bylaw was the first in North America to require and govern the construction of green roofs on large new developments.

RESILIENCE CHALLENGES



EQUITY



CLIMATE AND ENVIRONMENT



COMMUNITY AND NEIGHBOURHOODS



MOBILITY

BENEFITS

Future development and land use decisions in the city more fully take into account a changing climate

LEAD

- City Planning (City of Toronto)

KEY PARTNERS

- Resilience Office (City of Toronto)
- Environment and Energy (City of Toronto)
- Parks, Forestry and Recreation (City of Toronto)
- Toronto Water (City of Toronto)
- Toronto and Region Conservation Authority

FUNDING

No funding is currently required.

What Will Future Toronto Look Like?



Questions?

