

Green Infrastructure Policies and Guidelines in Toronto



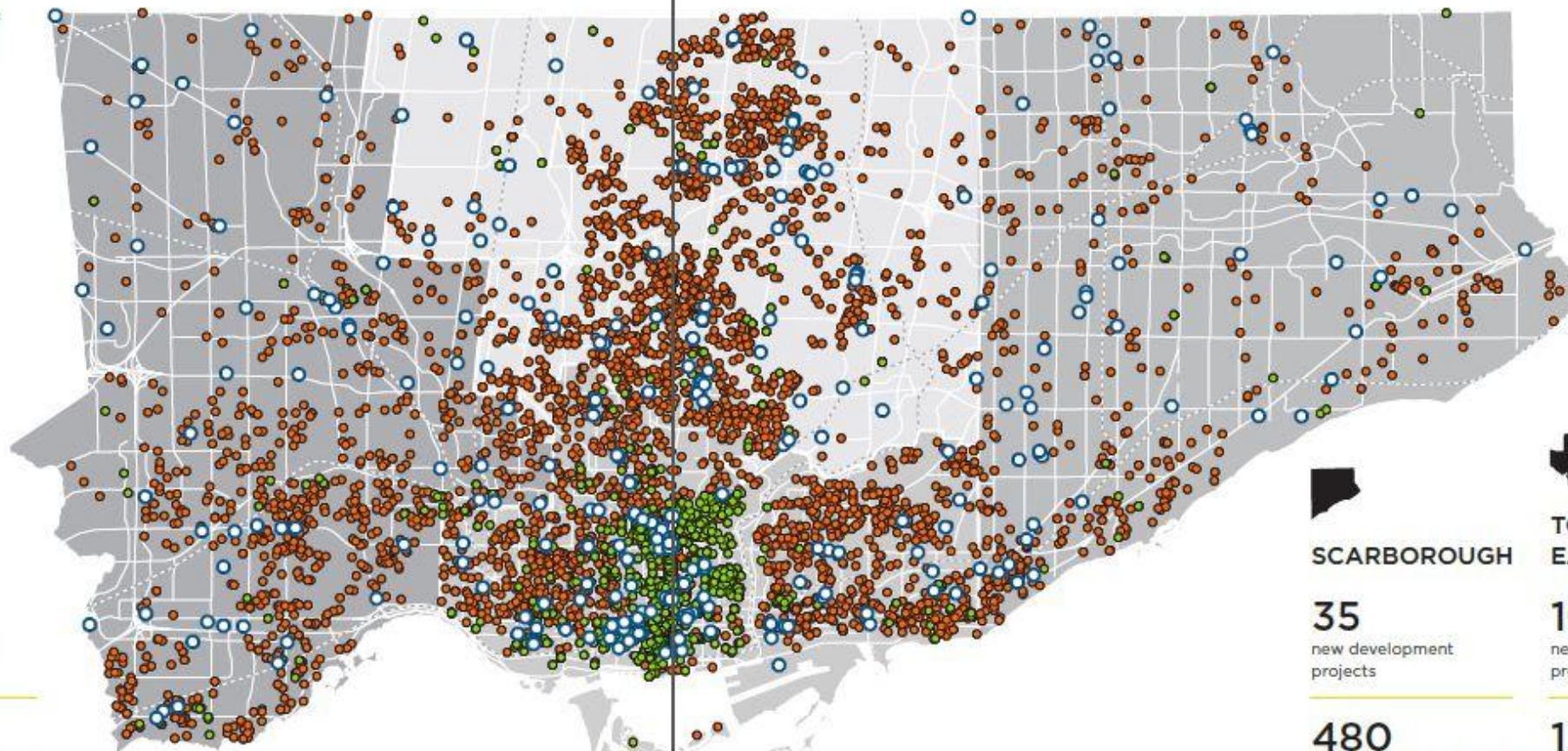
TORONTO



2016 DEVELOPMENT REVIEW

This development map highlights the City's new projects, Committee of Adjustment applications and heritage permits over the past year across each of our four Planning Districts.

- new development projects
- committee of adjustment
- heritage permits



**ETOBICOKE
YORK**

71

new development projects

1,087

committee of adjustment applications

110

heritage permit applications



**NORTH
YORK**

69

new development projects

1,239

committee of adjustment applications

123

heritage permit applications



SCARBOROUGH

35

new development projects

480

committee of adjustment applications

35

heritage permit applications



**TORONTO
EAST YORK**

103

new development projects

1,388

committee of adjustment applications

1,989

heritage permit applications

Toronto's **Future Weather**



**DAILY
TEMPERATURE
MAXIMUM**

44°
celsius

2040-50

37°

2000-09



HOT DAYS

66
above 30°

2040-50

20

2000-09



**EXTENDED
HEAT WAVES**

2.5
per year

2040-50

0.6

2000-09



**DAILY
RAINFALL
MAXIMUM**

166
millimetres

2040-50

66

2000-09

***Poor water quality, heat impacts,
stresses on critical infrastructure, local
food insecurity, damaged natural
systems...***

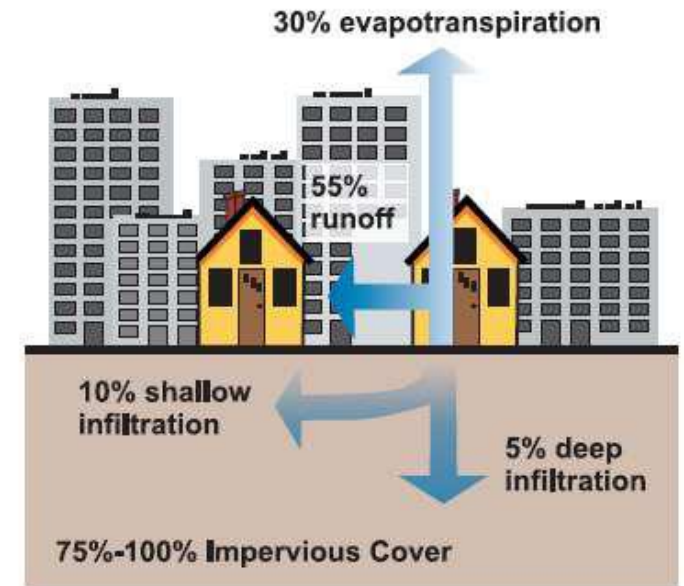
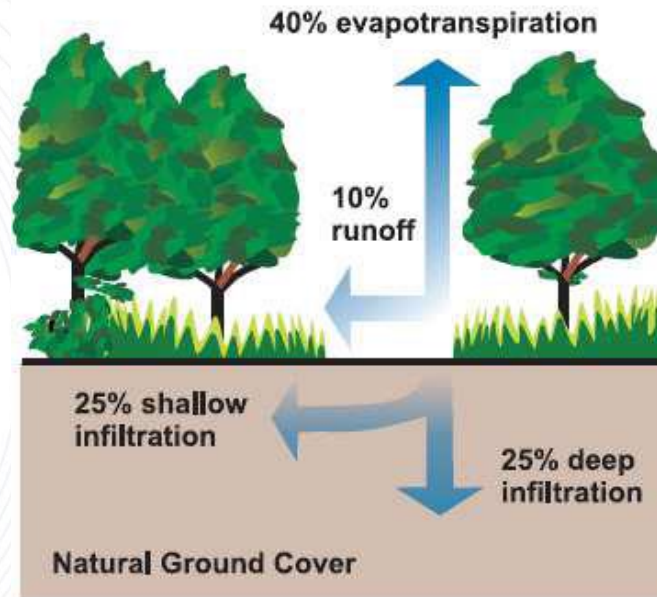


We want to be a Sustainable (resilient, low carbon, greenest) City ...

Moving to Grey + Green

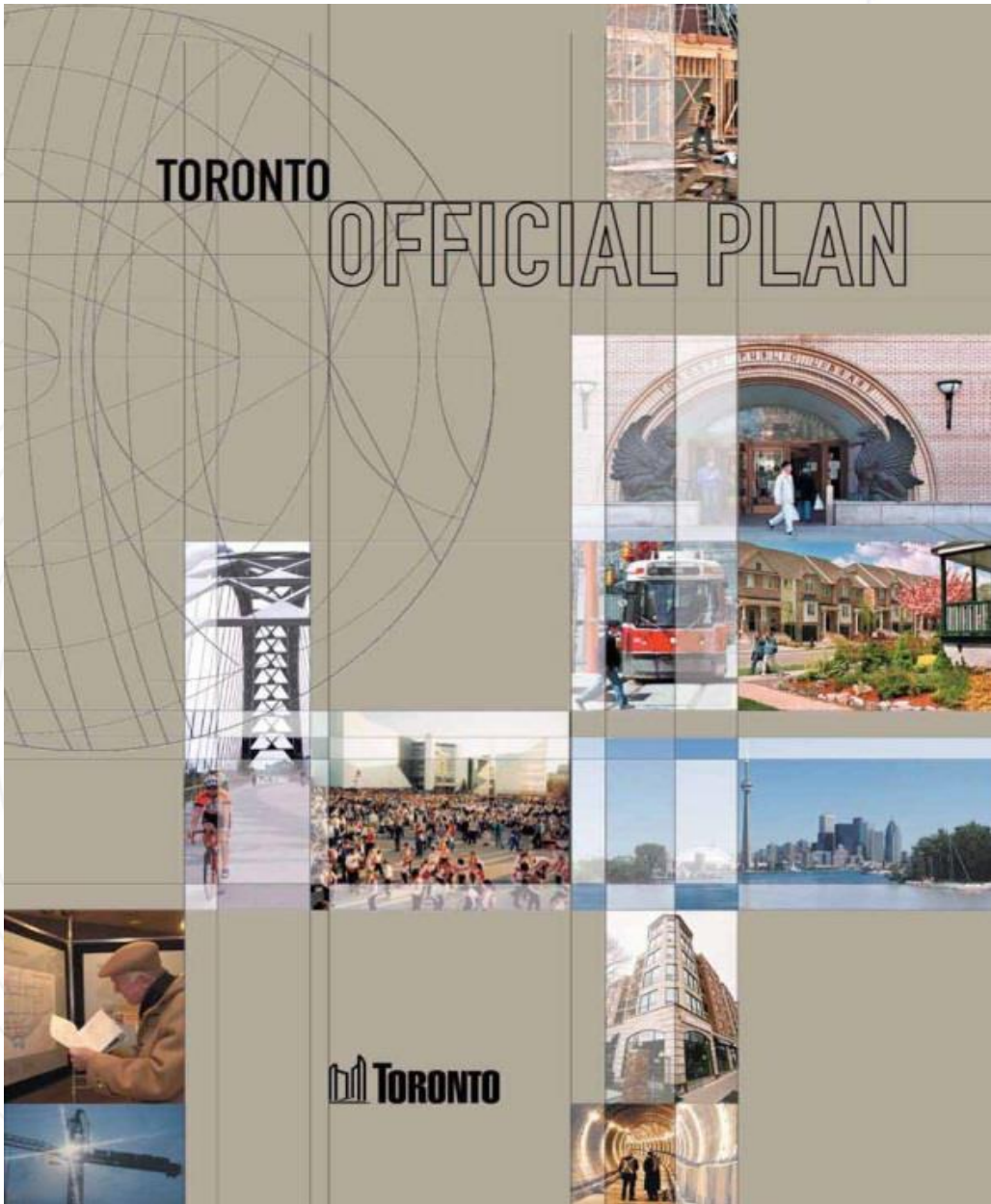
Green Infrastructure can help manage stormwater by:

- Reducing volume;
- Reducing Peak Flow;
- Improving Water Quality;
- Delaying flows;
- Extending the lifespan of existing infrastructure



Grey + Green can also ...

- Enhance the extent and health of the urban forest;
- Mitigate the urban heat island effect;
- Enhance air quality;
- Support biodiversity/pollinators;
- Create habitat connections
- Create new community spaces;
- Create jobs;
- Calm traffic; and
- support mental and physical health



"Green Infrastructure:

Green infrastructure means natural and human-made elements that provide ecological and hydrological functions and processes. Green infrastructure may include components such as natural heritage features and systems, parklands, stormwater management systems, street trees, urban forests, natural channels, permeable surfaces, and green roofs."

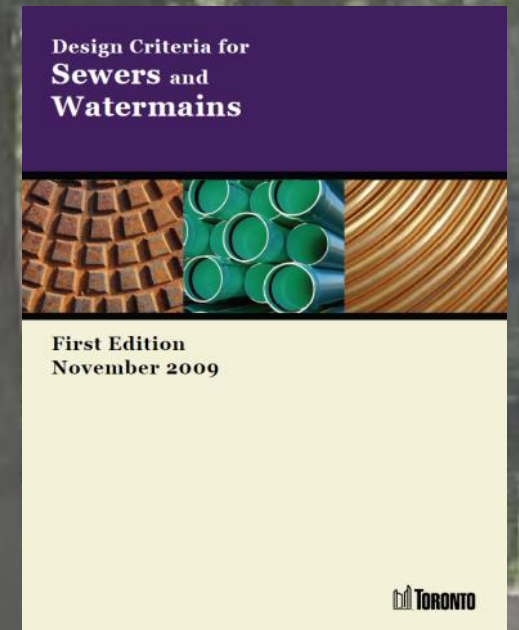
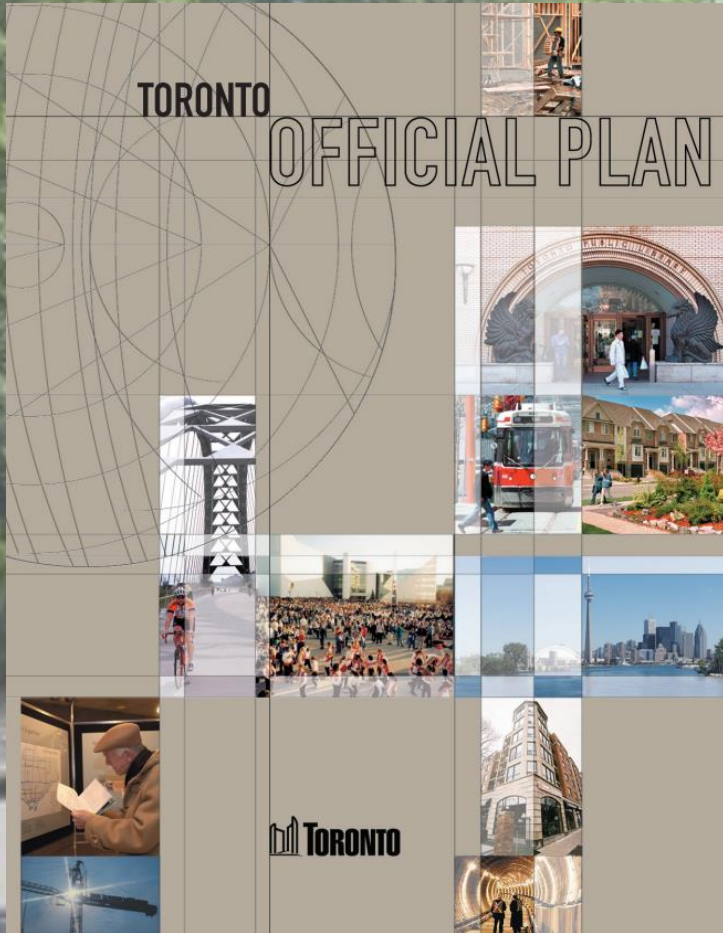
OPA 262: Chapter 3: Natural Environment

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

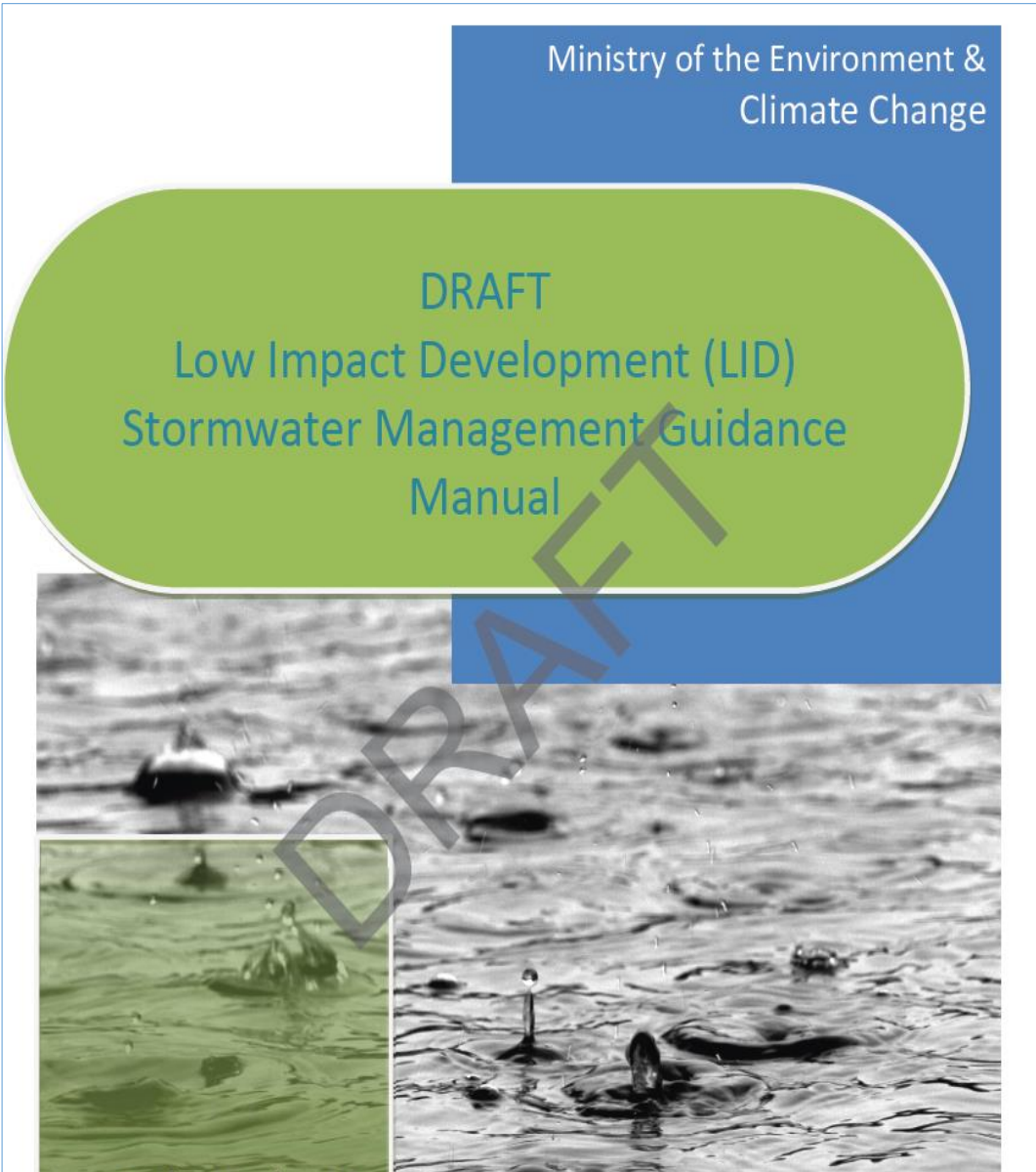
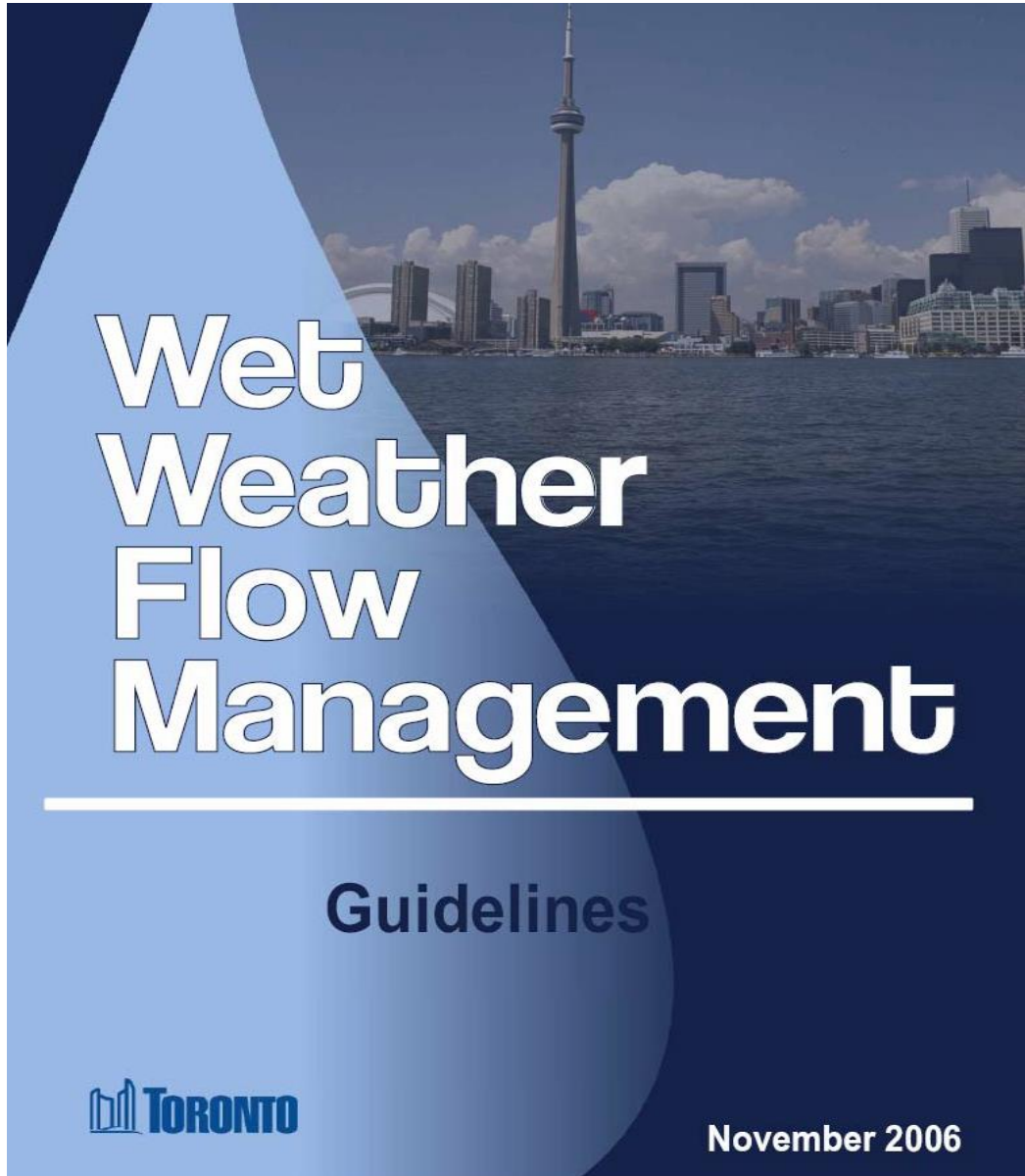
- impacts of climate change on biodiversity and ecosystem health
- reduce greenhouse gas emissions
- consider impacts of climate change that may increase risk associated with natural hazards
- **promote green infrastructure to complement infrastructure**



POLICY



Changing Stormwater Management Guidance





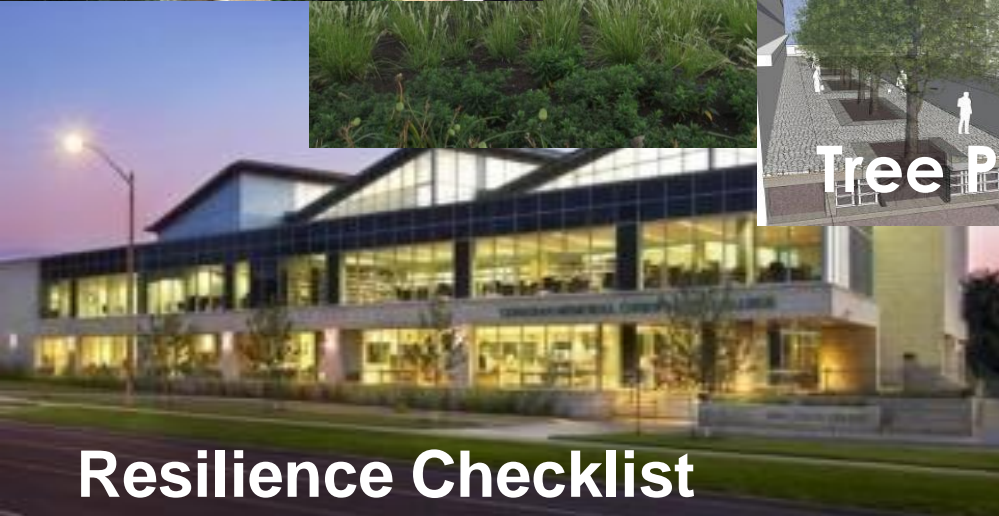
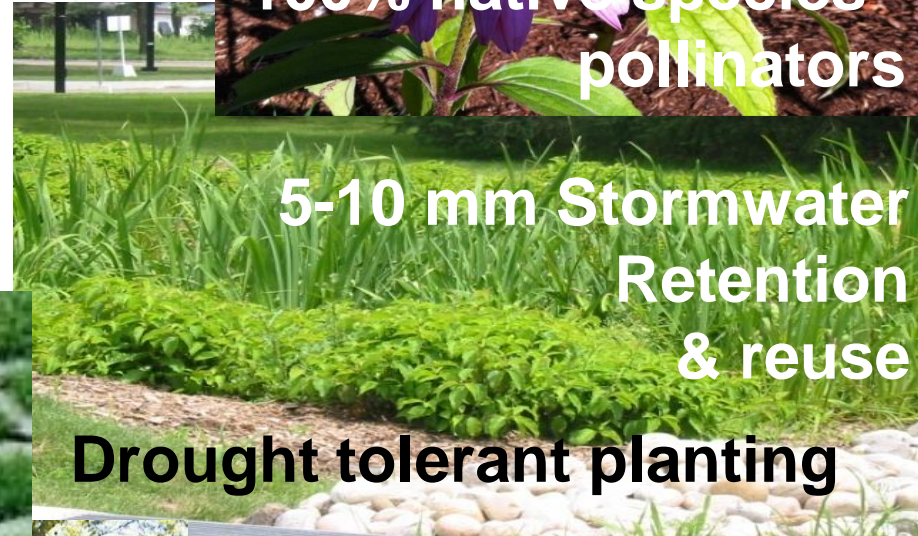
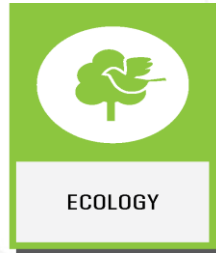
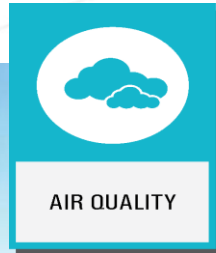
Toronto Green Standard

Sustainable performance for new development

The image shows the cover of the 'Toronto Green Standard v3' document. At the top left is the Toronto logo. The title 'TORONTO GREEN STANDARD v3' is prominently displayed in blue and green. Below the title are five icons representing different sustainability categories: Air Quality (clouds), Greenhouse Gas Emissions/Energy Efficiency (sun), Water Quality/Quantity & Efficiency (water drop), Solid Waste (house with recycling symbol), and Ecology (leaf). Below these icons is the text 'SUSTAINABILITY REQUIREMENTS FOR NEW DEVELOPMENT IN TORONTO' and a grey box labeled 'City Facilities'. At the bottom right is the '3-1-1' logo with the tagline 'toronto at your service'.

- 2010- TGS V1.0 & TGS Development Charge Refund
- TGS 2014- V2.0 Update
- TGS 2018- V3.0 Update
- Green Infrastructure is a tool to achieve multiple performance objectives in the TGS

Toronto Green Standard Version 3





Toronto Green Standard Version 3



Bayside, Tridel

- **Tier 1** required through planning process
- **Tier 2** voluntary higher performance incented through DC refund.
- **New Tier 3:** energy, water, waste
- **New Tier 4** energy & GHG targets



TORONTO

GREEN STREETS TECHNICAL GUIDELINES

Version 1.0



NOVEMBER 2017

Schollen & Company Inc.
Urban Forest Innovations
TMIG
DPM





PLANNING A GREAT CITY
TOGETHER