



London
CANADA

P.O. Box 5035
300 Dufferin Avenue
London, ON
N6A 4L9

April 20, 2016

J.M. Fleming
Managing Director, Planning and City Planner

J. Braam
Managing Director and City Engineer, CAO Regional Water Supply Environmental and Engineering Services

I hereby certify that the Municipal Council, at its meeting held on April 19, 2016 resolved:

7. That the following actions be taken with respect to the 4th Report of the Trees and Forests Advisory Committee from its meeting held on March 23, 2016:

- a) the following actions be taken with respect to the City of London's "Design Specifications and Requirements Manual" related to climate change:
 - i) the Civic Administration BE REQUESTED to consider the proposed recommendations appended to the 4th Report of the Trees and Forests Advisory Committee Report with respect to a Climate Change Action Plan and tree planting;
 - ii) discussion with respect to additional proposed recommendations with respect to a Climate Change Action Plan BE DEFERRED to the April meeting of the Trees and Forests Advisory Committee; and,
 - iii) the presentation from A. Cantel appended to the 4th Report of the Trees and Forests Advisory Committee with respect to the Climate Change Action Plan BE RECEIVED;
- b) the Civic Administration BE REQUESTED to consider the City of London Planting Strategy appended to the 4th Report of the Trees and Forests Advisory Committee;
- c) the Civic Administration BE REQUESTED to consider the Boulevard Tree Protection By-law appended to the 4th Report of the Trees and Forests Advisory Committee; and,
- d) clauses 1, 3 to 6 and 9 to 11, BE RECEIVED;

it being noted that the Planning and Environment Committee received the attached presentations from A. Cantell, Vice-Chair, TFAC, with respect to these matters.(7/7/PEC)

C. Saunders
City Clerk
/jb

cc: J. Stanford, Director, Environment, Fleet and Solid Waste
I. Listar, Manager, Urban Forestry
S. Rowland, Urban Forestry Planner
Trees and Forests Advisory Committee
J. Nethercott, Documentation Services Representative

TREES &
FORESTS
ADVISORY
COMMITTEE

March Meeting Updates

TREE CONSERVATION BY-LAW

- ▶ **Draft to Council: Feb. 2, 2015**
 - ▶ Significant leap forward, particularly with regards to the **valuation of City-owned trees**
 - ▶ TFAC supported approval
 - ▶ Referred back with request to **make planting in boulevards easier for residents**

TREE CONSERVATION BY-LAW

- ▶ **Current wording:**
 - ▶ Only asks that they ask City permission first (sec. 3.1)
 - ▶ Minimum recommended
 - ▶ Other ideas could be developed outside of by-law framework
- ▶ Majority of requests for tree planting in boulevards occur in **new subdivisions**

TREE CONSERVATION BY-LAW

- ▶ Explored issue with staff
- ▶ Majority of requests for tree planting in boulevards occur in **new subdivisions**
 - ▶ Not infill requests, but “new” trees not planted until post-assumption
 - ▶ Many streets are built and have residents on them for years prior to the whole development being complete

TREE CONSERVATION BY-LAW

► **Urban Forest Strategy:**

- Ambitious canopy cover targets
- Trees planted today will be bigger by 2035 than trees planted in a few years

TREE CONSERVATION BY-LAW

- TFAC member Craig Linton (LDI) explored issue with the development community: found **broad support** for a process through which some trees could be planted partway through development
- Planting pre-assumption carries some (very minimal) risk if damage is caused during planting, but we believe a fair process could be agreed upon

TREE CONSERVATION BY-LAW

- Planting pre-assumption carries some (v. minimal) risk if damage is caused during planting, but we believe a fair process could be agreed upon & benefits well outweigh the risks
- Even in a worse case scenario (a development being abandoned), essentially no risk that a road wouldn't end up being a City road eventually

TREE CONSERVATION BY-LAW

► **Urban Forest Strategy:**

"2.8 Apply existing guidelines to plant new subdivisions in phases prior to assumption so that tree planting can occur in a timelier manner before the last phase of development is finished."

TFAC RECOMMENDS:

- 1) The **City Tree Protection Bylaw** be approved (and the current Boulevard Tree Protection Bylaw be repealed)
- 2) Civic Administration be requested to collaborate with the London development community to develop and **implement a process through which some street trees can be planted part-way through the development process** on streets which are already “move in ready”, so as to get trees into the community faster while substantially reducing the number of individual requests for tree planting in new subdivisions coming into City staff.

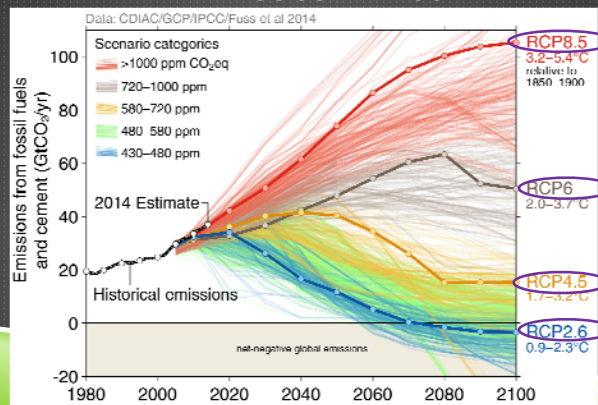
DRAFT TREE PLANTING STRATEGY

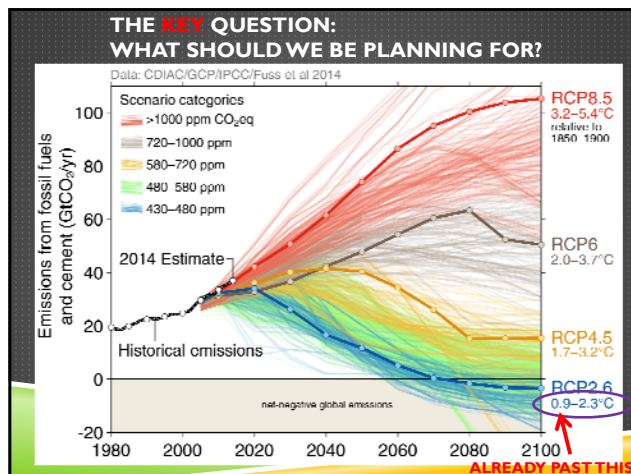
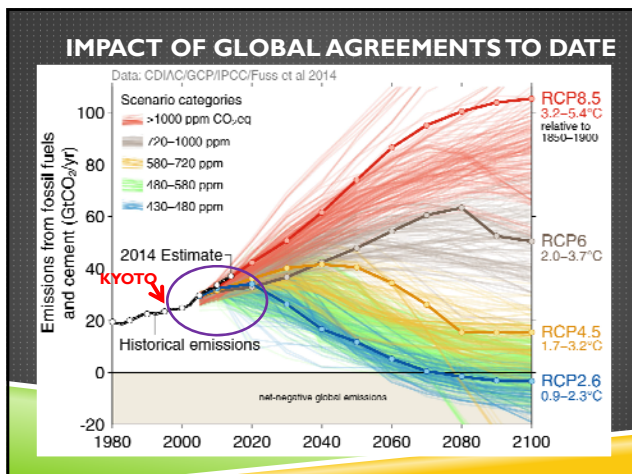
- ▶ Submitted suggested table of contents for use in upcoming strategy
- ▶ Emphasized:
 - ▶ Knowing & comparing canopy cover impact of options
 - ▶ Splitting the work among organizations over the 20 years (vs. 100% City now, 100% other later)
 - ▶ Planning for planting on private lands
 - ▶ Exploring what City can do that other partners can't

URBAN FOREST – CLIMATE CHANGE ACTION PLAN

- ▶ Working group (3 years) to develop recommendations to prepare for climate change
- ▶ Set of **13 recommendations** relevant to TPS passed last meeting
 - ▶ Additional recs being explored next mtg.
 - ▶ Track changes to Tree Planting Guidelines at May mtg.

THE IPCC SCENARIOS





REGARDLESS OF SCENARIO

Canada warms at **-2x** global average.
That means:

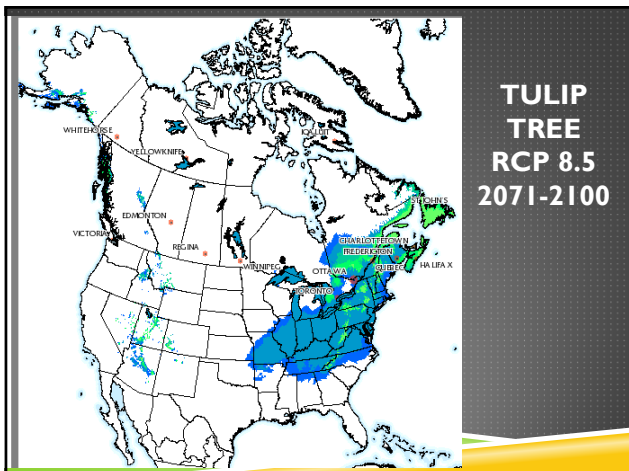
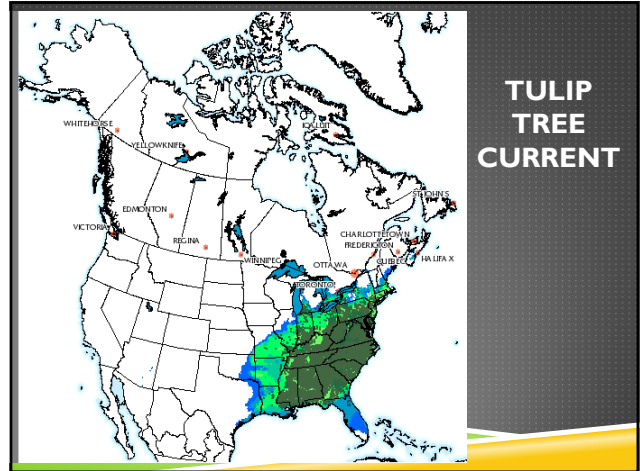
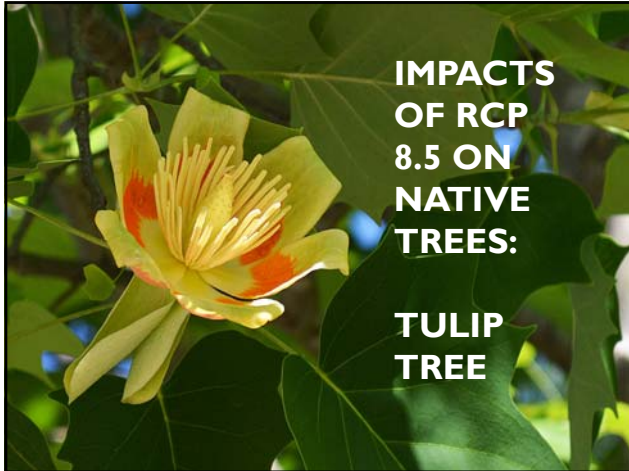
RCP 2.6 = 1.8 °C to 4.6 °C
 RCP 4.5 = 3.4 °C to 6.4 °C
 RCP 6 = 4.0 °C to 7.4 °C
 RCP 8.5 = **6.5 °C to 10.8 °C**

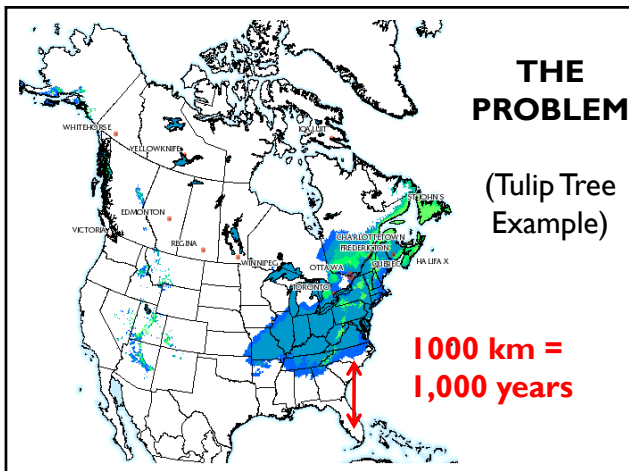
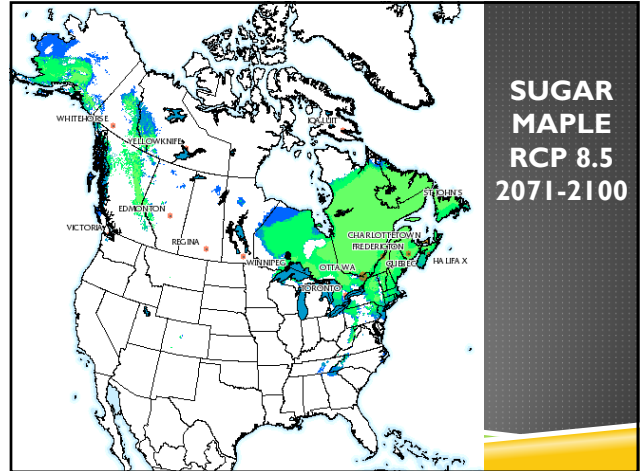
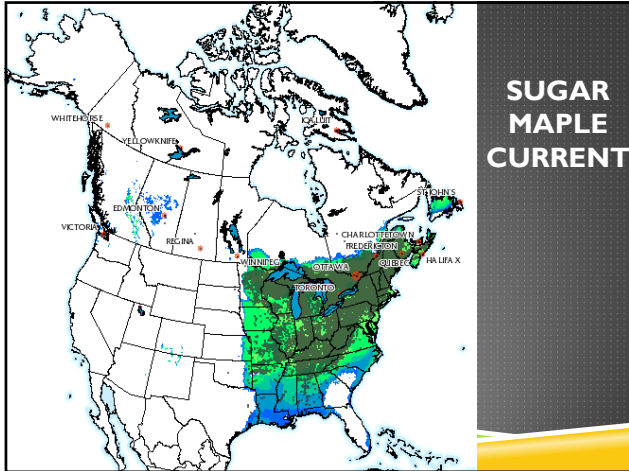
INDIVIDUAL TREES

Can't head for air conditioning or easily migrate north (like animals) when it gets too hot

Can't change how much water they need to survive

Can take up to 30 years (sugar maple) to reproduce (usually ~10-15)





CLIMATE CHANGE ACTION PLAN: KEY RECOMMENDATIONS

Rec. 1) Change approach to “native” status for plants:

- ▶ Current: Native / Non-Native / Invasive
- ▶ Proposed:
 - ▶ Native
 - ▶ Continental Non-Native
 - ▶ Non-Continental Non-Native
 - ▶ Non-Continental Invasive

CLIMATE CHANGE ACTION PLAN: KEY RECOMMENDATIONS

Rec. 2) Create a **“Non-Invasive First”** policy when it comes to planting

“The impact of invasive alien species on native ecosystems, habitats and species is severe and often irreversible, and **can cost billions of dollars each year.**” – Environment Canada

Rec. 8) Begin testing use of **additional native Ontario species** for use in roadways and parks

CLIMATE CHANGE ACTION PLAN: KEY RECOMMENDATIONS

Rec. 9) Create guidelines for **assisted migration**

Rec. 10) A **“Climate Change Sister City”** initiative be established

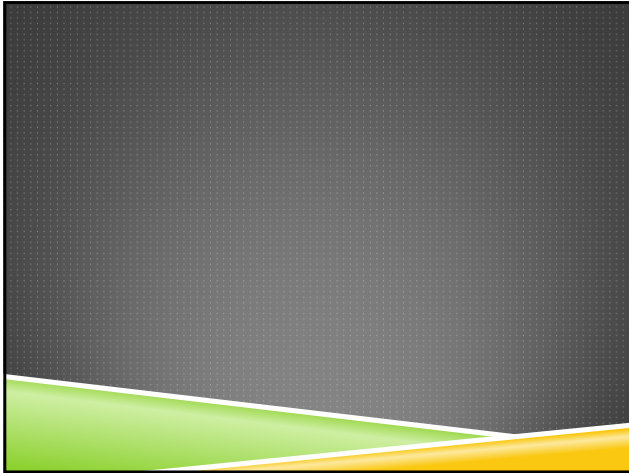
ASSISTED MIGRATION

“The movement of species within or beyond their historical range, implemented to conserve species and facilitate adaptation to predicted climate change.”

ASSISTED MIGRATION

is essentially a risk management strategy for forests under changing climate

Comes with its own risks: spread of disease, pests, which need to be weighed and planned for



RISK ARGUMENTS

▶ Risk of Disease, Pests

- ▶ True. But disease is a better gamble to take than too little water.
- ▶ Anything strongly affected by drought more likely to burn
- ▶ Ways to reduce risk from disease (using species already in Canada, using only seed, etc.)

▶ Trees can adapt to new climates (inferred: "Fast enough")

- ▶ Why aren't there sugar maples in Texas?

▶ Trees will move north fast enough

- ▶ Evidence from the end of the last ice age: Nope
- ▶ Insects & animals move much, much faster