

#### Emerald Ash Borer: Lessons Learned in Ottawa

**City of Ottawa Forestry Services** 



#### Outline

EAB impacts on forest cover and budget
EAB response strategy
Lessons learned
EAB key messages



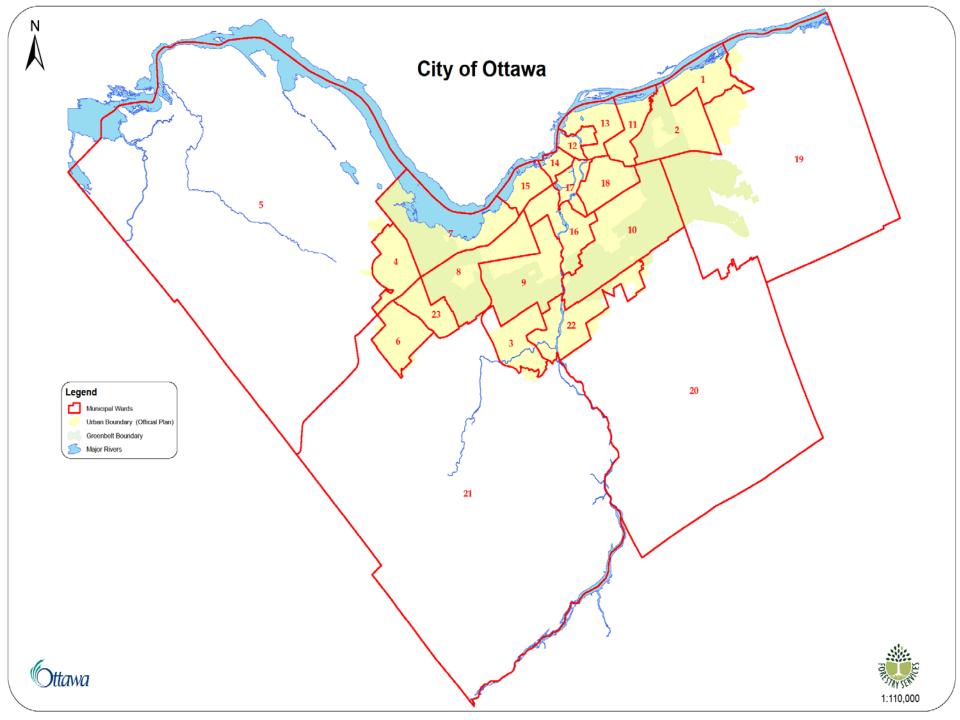
## City of Ottawa

2796 km<sup>2</sup>, population 900,000

Land base mostly rural
28% forest cover (20-25% *Fraxinus spp.*)
320,000 street and park trees
Over 10,000 ha of community forests

900 parks



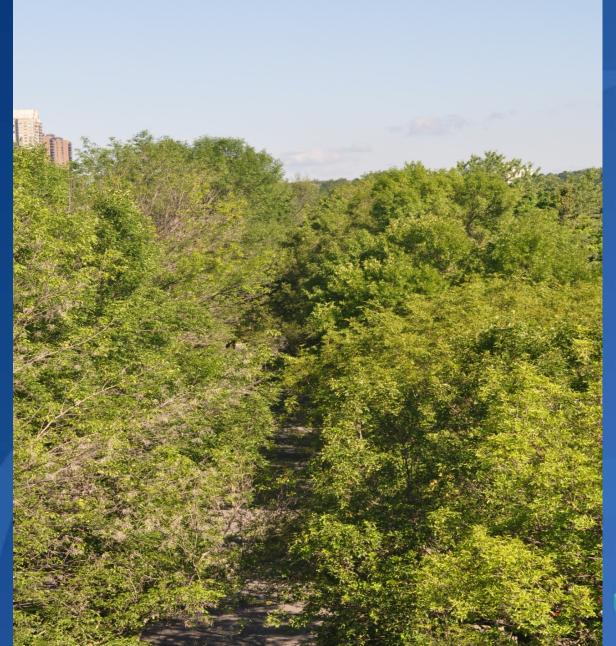


#### **Emerald Ash Borer in Ottawa**

July 2008 Discovered in Ottawa by City staff November 2008 **Report to Council** April 2009 First regulated area Winter 2010 First street tree removal

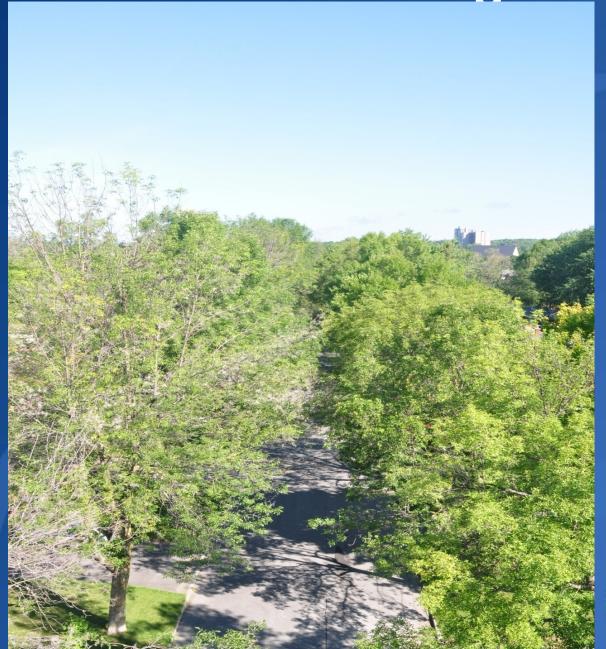


#### Claude St – Before





#### **Claude St - During**





#### **Claude St – After**



## EAB Strategy in Ottawa

Goal: Slow the spread, manage our forest cover

- Tree inventory and monitoring
- Tree planting
- Tree injection (TreeAzin)
- Tree removal
- Wood management and utilization
- Communication



#### EAB Strategy by the numbers

Tree planting (2015)

- 112,000 trees, 5000 caliper, \$1.3 M
- Tree injection (2015)
  - 2000 trees, \$400,000
- Tree removal (2015)
  - 9000 trees, \$3.5 M
- Woodlot removals (2015)
  - 7000 trees, 20 sites, \$500,000
- Wood processing (2015)
  - \$350,000
- Total annual costs \$5M



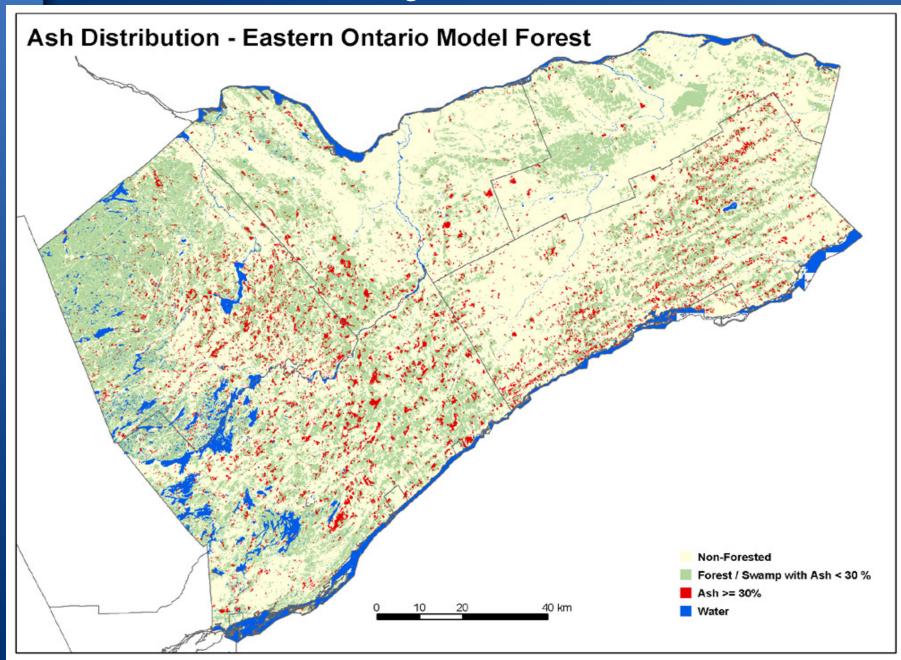
## **Tree Inventory**

Species, DBH, location
 165,000 trees inventoried
 Work is ongoing in rural ROW
 Planned future inventory work in natural areas





#### Forest Inventory - Eastern Ontario

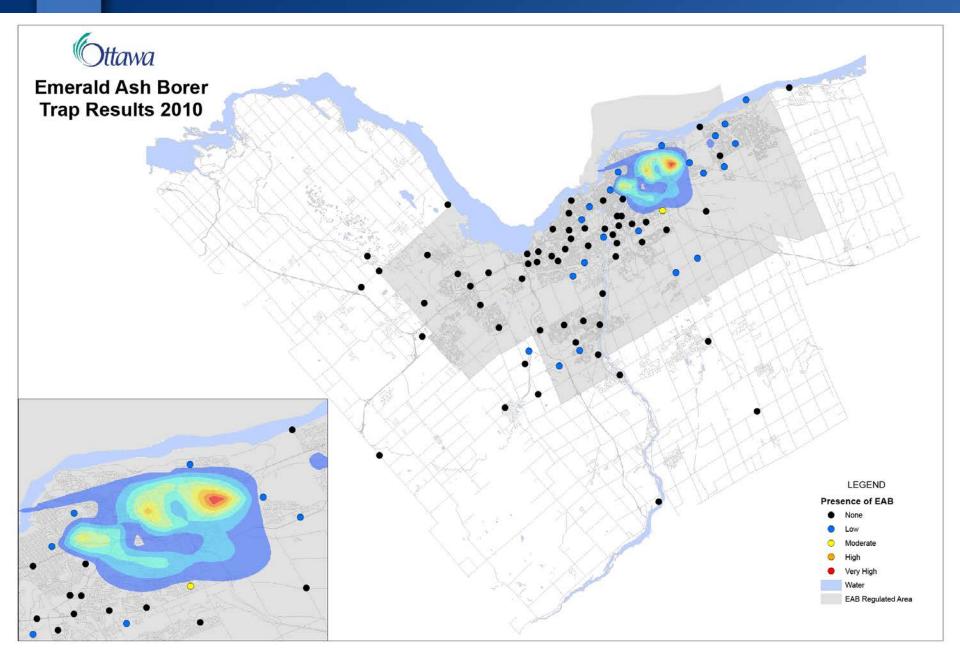


# **EAB** Monitoring

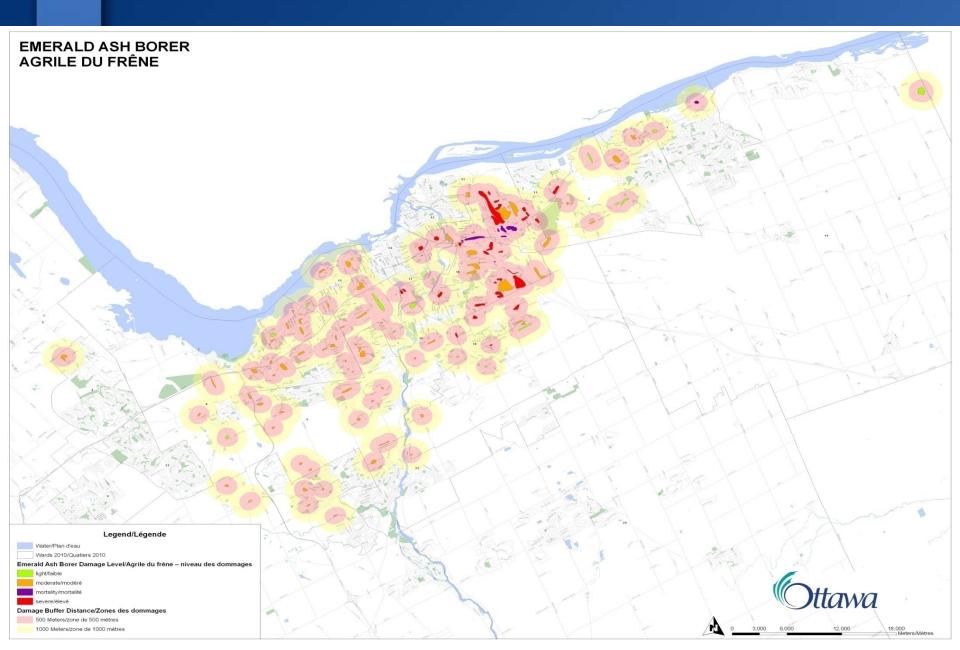
Work starting 2009 with Canadian Forest Service to evaluate trap types Limited use of EAB Branch Sampling Method (CFS) Ongoing use of EAB 'green traps' to monitor pest populations



## Ottawa 2010



#### **OMNRF** Aerial Mapping



## **Tree Planting**

- Proactive planting in advance of removal
- Replacement trees following ash tree removal
- 5000 caliper trees per year
- Goal of 125,000 trees per year for all programs



## Ash tree injection

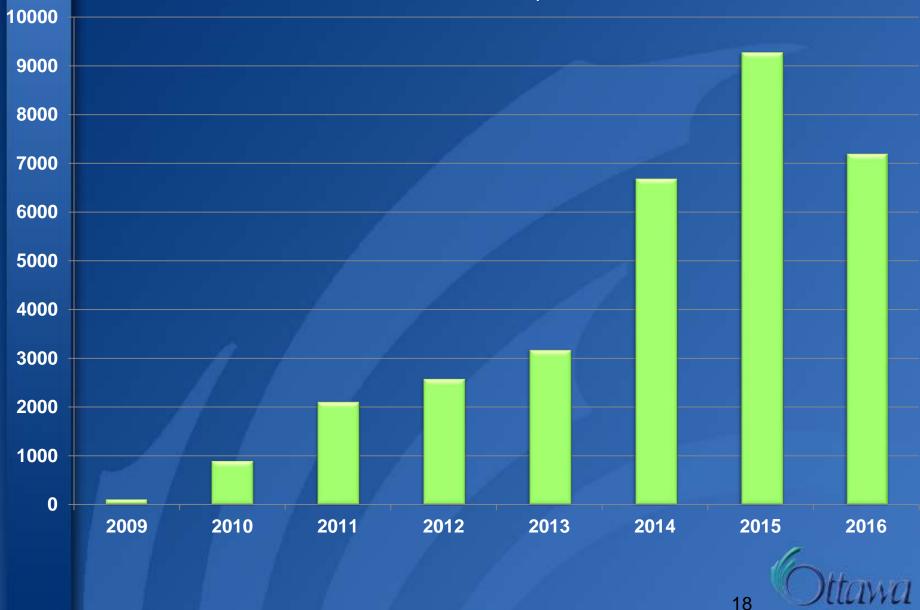
TreeAzin (2000 trees)
 Selected street and park trees
 Annual/Biennial injection required
 Demonstration sites for Ima-jet and Confidor





#### Ash Tree Removal

32,000 cumulative tree removals streets and parks (2009 - 2016)



# Ash Wood Processing



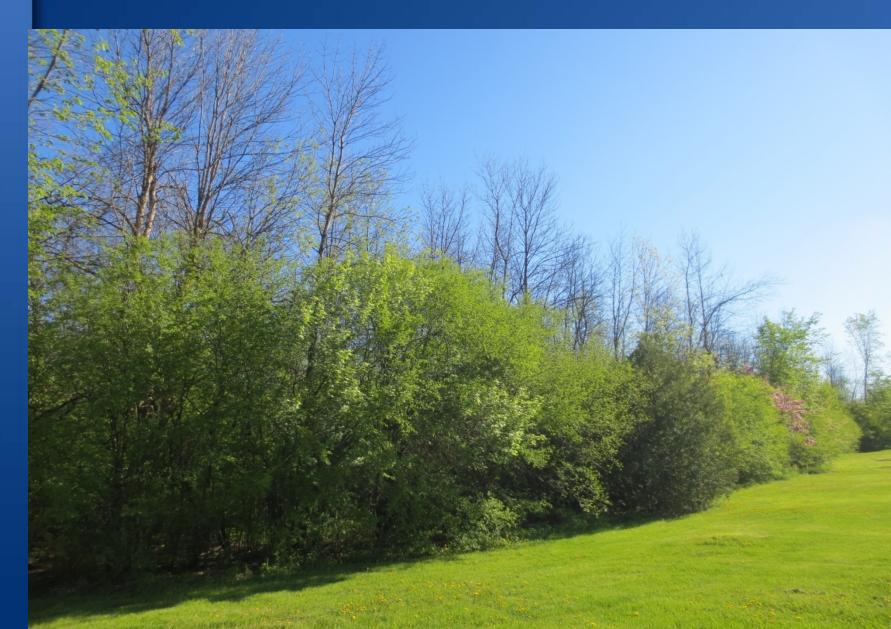




#### Ash in Urban Woodots



## Ash in Urban Woodlots



## Ash in Urban Woodlots





## Woodlot Rehabilitation







#### **Communications -** Regional Approach

#### Regional Forest Health Network

- Eastern Ontario Model Forest
- City of Ottawa, City of Gatineau, National Capital Commission, Conservation Authorities, Arboretum
- Ontario Ministry of Natural Resources
- Canadian Food Inspection Agency
- Canadian Forest Service
- Mohawk Council of Akwesasne
- L'Agence de mise valeur des forets privée outouaises



## Key messages for municipalities

- Evaluate tree inventory and tree planting programs
- Develop partnerships and establish working groups
- Clarify roles and responsibilities for government and partners (monitoring, inventory, wood use, woodlot forestry practices)
- EAB + urban forestry = opportunity
  - EAB raises (urban) forestry profile



#### Thank you to staff and partners!



26