

Barbara Sander

Tree preservation on private property,
June 14, 2022

One generation plants the trees, another gets the shade. (Chinese proverb)

The true meaning of life is to plant trees under whose shade you do not expect to sit. (Nelson Henderson)

The best time to plant a tree was 30 years ago, the next best time is now. (Chinese proverb)

In favor of protecting mature trees on private property

Most of Edmonton's 'forest' is on private land

Mature trees (trees that are 40 + years old) provide the bulk of ecosystem services: removal of air pollutants, cooling, reduction of runoff, carbon storage and carbon uptake, habitat,

A replanted tree (sapling) will take decades (40 + years) to reach the same level of function/service

Trees on private lands have been lost over the past decades, e.g. when expanding the cities into forested and agricultural areas or when mature trees are removed for infill development, they are 'in the way'

Canopy data from the city is > 10 years old likely overestimated by now

My block this week



Lost 6 mature trees, including well maintained apple trees
(still visible on google maps)
Replanting would be with saplings



My block
5-7 year old infills

- Lost several mature trees planted when original bungalows were build
- No replanting of trees in either front or backyard
- Who is responsible?
Original developer or current home owner?










City tree,
planted last summer

What to do?

- What we currently have does not seem to work well
- Communication campaign
 - Who would be the target audience? Developers and builders, home owners?
 - How effective have past communication campaigns been and over what time frame? Do we have decades left in which to educate while trees are being lost?
 - No accountability, no measurements
- Zoning and Bylaws
 - Who would be affected? Developers and builders, home owners?
 - Accountability easier to monitor, only worthwhile if followed up upon?
 - Who are we planning for? Spend little money now (e.g. permitting) or lots of money later when dealing with of cleaning up after "once a hundred year" rainfall events, heat domes etc.

Landscaping Bylaw 17672 (June 2016)

- requiring new residential home builds to have new trees planted on lots
- Not sure if this applies to infills as many infills on my block and in my neighborhood are not complying
- Does the city have any data on the effectiveness of the bylaw?

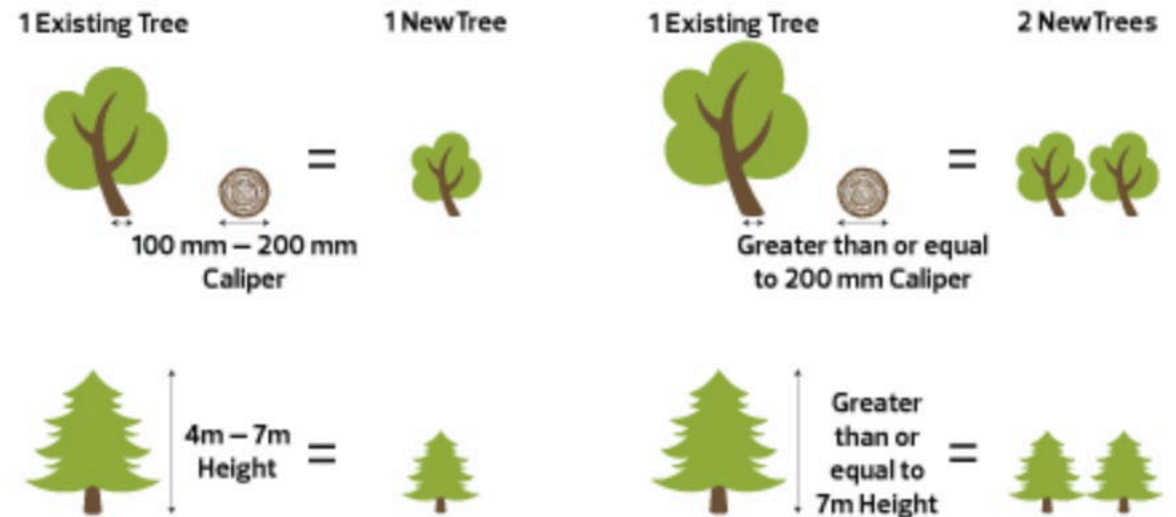
Site Width	Single Detached Housing	Semi-Detached Housing and Duplex Housing (per Dwelling)	Row Housing and Stacked Row Housing (per Dwelling)
Less than 10.0 M			
10.0 – 13.0 M			
Greater than 13.0 M			
Legend:	 = One Deciduous Tree (50 mm caliper)	 = One Coniferous Tree (2.5 m height)	 = One Shrub (300 mm height, 450 mm spread)

Source : City of Edmonton

https://www.edmonton.ca/city_government/urban_planning_and_design/tree-and-shrub-planting-requirements

Landscaping Bylaw 17672 (June 2016)

- Incentive program on retaining trees
- Economics:
 - new tree (5 cm) = \$ 300-400,
 - Mature tree (replacement value) increases with diameter = \$1,000 to \$ 10,000+
- Retaining trees is a cost to a developer (less efficient on site)
- How successful is this bylaw: How many trees have been retained as a consequence?



Source : City of Edmonton

https://www.edmonton.ca/city_government/urban_planning_and_design/tree-and-shrub-planting-requirements

Overall

- "Communication" is unspecific, no hard targets, no individual accountability
- The effectiveness of mature tree protection through zoning or landscaping bylaws is questionable, as long as there is no enforcement or accountability of builders and owners.
- A mature tree protection bylaw would be more specific, could be checked on using google maps for crown size.
- No true incentive programs have been looked at
 - credit for 'public service' private trees provide, reducing of air pollution, cooling, stormwater reduction etc.
 - e.g. a \$100 property tax credit for each mature tree on a property to cover maintenance costs of trees.
 - Carbon credits for mature trees
- In favor of any additional **effective** private tree protection that is not "tree-washing" the status quo