

Staff Report

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Report To: General Government Committee

Date of Meeting: March 21, 2022 Report Number: PWD-007-22

Submitted By: Stephen Brake, Director of Public Works

Reviewed By: Mary-Anne Dempster, CAO Resolution#: GG-144-22, C-087-22

File Number: By-law Number:

Report Subject: LEAF Backyard Tree Planting Program 2022

Recommendations:

1. That Report PWD-007-22 and any related communication items, be received;

- 2. That Council receive the LEAF Backyard Tree Planting Program Interim Report Dec 2020 (Attachment 1) for information;
- That Council approve a new backyard tree planting pilot program at the Municipality of Clarington;
- 4. That a sole source contract for the delivery of the Backyard Tree Planting Program be awarded to Local Enhanced Appreciation of Forests (LEAF) for 2022, in the amount of \$15,000;
- 5. That the 2022 cost, in the amount of \$15,000, be funded from the existing approved 2022 Public Works Department tree planting budget;
- That Council direct staff to enter into a one-year program agreement with the Region of Durham, LEAF and participating Local Area Municipalities to deliver the backyard tree planting program in 2022, with terms and conditions satisfactory to the Chief Administrative Officer, Director of Public Works; Director of Financial Services and the Director of Legal Services;
- That Council direct staff to review the performance of the LEAF Backyard Tree Planting program in 2022 prior to the 2023 budget cycle to consider whether the program should be continued in 2023; and
- 8. That all interested parties listed in Report PWD-007-22 and any delegations be advised of Council's decision.

Report Overview

This report provides an overview of the LEAF Backyard Tree Planting program, its costs and benefits to the community, and recommends the implementation of the program as a one-year pilot in Clarington. The LEAF Backyard Tree Planting program launched in Durham 2020 as a joint program between LEAF, the Region of Durham, the Town of Whitby, City of Oshawa, City of Pickering, Township of Scugog and the Town of Ajax. The program subsidizes a portion of the costs to deliver a full-service tree-planting program for residents in each of these communities, in addition it provides access to shrubs, native plant kits and several educational opportunities. Over the two-year period the LEAF program has been in operation in Durham Region it has shown itself to be a valuable tool for growing urban tree canopy in urban private properties, where municipalities have no ability to plant trees.

1. Background

- 1.1 Literature suggests that an urban canopy cover between 30-40% is an indicator of a sustainable community. The Region of Durham's Official Plan highlights a target of 30% tree canopy cover. Currently, Clarington's urban areas have a canopy cover of approximately 5-15%.
- 1.2 A healthy and resilient urban forest provides many benefits that allow the Municipality to be a "safe, vibrant, healthy and prosperous environment", the vision identified within the 2018 Clarington Official Plan.
- 1.3 Municipal Council endorsed the Durham Community Climate Adaptation Plan in 2017, including the objective "To enhance natural capital and build climate resilience in the natural environment."
- 1.4 The majority of plantable space within Clarington's urban and suburban areas is located on privately owned residential property, which is not within the control of the Municipality.
- 1.5 A backyard tree planting program will significantly contribute to the growth of urban Canopy in Clarington. Trees can advance three pillars of sustainability environmental, social and economic and minimize the impacts of climate change. This is because:
 - trees are one of the only carbon sinks within our community and can absorb climate causing greenhouse gas emissions by removing and storing the carbon while releasing oxygen back into the air;
 - trees can reduce the heat island effect by cooling urban areas by up to 12°C by shading homes and streets;

- established trees on well-planted properties or streets can raise property values by as much as 15 percent;
- trees reduce stormwater runoff and improve water quality by breaking rainfall. By absorbing water they can dramatically reduce stormwater runoff and they can act like a sponge and can filter water before it enters natural waterways;
- tree-lined waterways help prevent erosion as they slow water runoff and hold soil in place;
- trees help improve air quality by absorbing odours, pollutant gases and filter particulates out of the air by trapping them on their leaves and bark;
- trees can reduce energy needs for air conditioning by up to 50 percent when placed strategically around a home;
- studies show that a tree-lined street can help slow traffic, enough to allow the drivers to look at the storefronts;
- trees can reduce exposure to harmful UV rays by about 50 percent.
- 1.6 Larger trees provide the greatest benefit to the community. Planting to establish a mature canopy within an urban and suburban environment requires consideration of many factors to ensure that they grow healthy while minimizing risk to infrastructure.

2. LEAF Backyard Tree Planting Program

- 2.1 In 2020, the Region launched the LEAF Backyard Tree Planting program in partnership with the Town of Whitby, City of Oshawa, City of Pickering, Township of Scugog and the Town of Ajax.
- 2.2 The LEAF Backyard Tree Planting Program offers municipalities and residents an affordable turn-key program for obtaining new trees and shrubs for residential properties including single detached homes, townhouses and multi-residential units.
- 2.3 The goal of the program is to ensure the right tree is planted in the right place. LEAF works directly with the homeowner to evaluate site conditions such as available space, light and soil. These considerations help ensure the establishment of large-growing native trees whose dense canopies can provide maximum environmental, economical, and social benefits.
- 2.4 Through the LEAF program, homeowners purchase native species, which will help to beautify their yards and enhance overall urban canopy coverage. The price that program participants pay is subsidized to reduce barriers to participation.
- 2.5 Multi-unit residential buildings and businesses with adequate planting space may also participate in the program.

2.6 The program subsidizes the cost of a full-service tree-planting program on private residential, multi-residential and commercial property, and also provides the community with access to native shrubs, native plant kits and several educational opportunities.

3. Participation in the LEAF Program

- 3.1 Residents who participate in the program follow these steps:
 - Complete an online application and pre-visit questionnaire to ensure that the
 property owner qualifies for the program has adequate space to plant, has realistic
 expectations and is committed to long term tree care;
 - Receive an on-site consultation at the application residence with an ISA certified arborist from LEAF to determine appropriate species and planting locations;
 - ISA certified arborist plants a 5-8 ft. tall tree in the spring or fall;
 - Receive a Tree Care Guide to assist with the ongoing care of the tree;
 - Follow-up questionnaire to assess participant satisfaction and/or follow-up visits to assess tree health.

4. Benefits of Urban Backyard Trees

- 4.1 There are many benefits to the program including:
 - It targets planting on the most available space residential property;
 - It ensures trees are planted in suitable locations that allow for their growth while minimizing risk to infrastructure;
 - It promotes the planting of native species to ensure maximized environmental benefits:
 - It provides relief for homeowners who have lost trees on private property due to Emerald Ash Border or the 2013 ice storm;
 - It leverages local seed material as much as possible, including from tree nurseries in Clarington and across the Durham Region. Doing so enables LEAF to provide participants with genetically appropriate stock, which makes for trees that are more resilient and able to withstand the harsh conditions of urban environments.

5. Financial Consideration

5.1 The residents who participate in the program fund the remaining cost for the program.

The costs vary depending on the tree species that are selected and are between \$180 - \$220.

- 5.2 The total cost to deliver the LEAF Backyard Tree Planting Program in Clarington is \$30,000 per year of which, the Municipality will provide \$15,000.
- 5.3 The Region of Durham will contribute \$80,000 annually to the operation of the LEAF program in participating Durham Area Municipalities.
- 5.4 This cost covers the subsidy to plant the trees and everything required to make the program operational including marketing, education, staffing and the trees themselves.
- 5.5 LEAF may provide additional services when they are successful in securing additional funding (for example, they are funding a community tree plant in the fall).
- 5.6 Subject to Council approval of this report, as the program is set to resume in June 2022, it is recommended that the \$15,000 required for this program in 2022 be funded from the existing approved 2022 Public Works Department tree planting budget.

6. Public Engagement

- 6.1 The delivery of the LEAF Backyard Tree Planting program includes the development of comprehensive communications planning to deliver a consistent region-wide campaign to promote the program. The Municipality of Clarington logo will be included on all region-wide materials.
- 6.2 Communication materials will be developed by LEAF including social media messaging, website content and print material advertisements. The Municipality's Communications Department will deliver these materials through the Municipality's communication channels.
- 6.3 The LEAF Backyard Tree Planting program includes the development of comprehensive communications planning to deliver a consistent region-wide campaign to promote the program.
- 6.4 Communication materials will be developed by LEAF including social media messaging, website content and print material advertisements. The Municipality's Communications Department will deliver these materials through the Municipality's communication channels.

7. Conclusion

- 7.1 As noted in sections 1.5 and 4.1 above, trees provide numerous benefits to urban areas that contribute to the wellbeing of residents.
- 7.2 Since it was launched in Durham Region 2020, the LEAF program has received greater than 100% participation (more demand than available trees).

7.3 Over the two-year period the LEAF program has been in operation in Durham Region the LEAF program has shown itself to be a valuable tool for growing urban tree canopy in urban private properties, where municipalities have no ability to plant trees.

Staff Contact: Doran Hoge, Project Manager - Energy and Climate Change Response, 905-623-3379, ext. 2429 or Dhoge@clarington.net

Attachments:

Attachment 1 - 2021 LEAF Annual Report

Interested Parties:

The following interested parties will be notified of Council's decision:

Frank Filippo, BILD Durham Chapter
Central Lake Ontario Conservation Authority
Peter Cohen, Climate Justice Durham
Alyssa Scanga, Climate Justice Durham
Stacey Hawkins, Durham Region Homebuilders Association
Ganaraska Region Conservation Authority
Erin MacDonald, Local Enhancement and Appreciation of Forests (LEAF)
Ian McVey, Regional Municipality of Durham
Kate Potter, Smooth River Consulting
Valleys 2000
Susan Elston
Libby Racansky







Planting with LEAF



We planted **1,630** native trees and shrubs through the **Backyard Tree Planting Program** with over **625** property owners.



WE PLANTED IN...

Ajax • Aurora • East Gwillimbury • Georgina • King • Markham Newmarket • Oshawa • Pickering • Richmond Hill • Scugog Toronto • Vaughan • Whitby • Whitchurch-Stouffville

CLIENT SURVEY HIGHLIGHTS:

- 91% of Toronto respondents said their species choice was influenced by LEAF
- 53% of Durham Region respondents said they would have planted fewer or no trees/shrubs without LEAF
- 100% of York Region respondents said LEAF staff courtesy and professionalism was excellent or good





"My garden has never looked better since discovering the LEAF program with their excellent selection of trees/shrubs. LEAF's service is compared to none. I'm hooked!"

"We couldn't believe how easy it was to access this program, how knowledgeable the arborist was, and how professional all of the staff were." We increased habitat in our service area by distributing 80 Native Garden Kits.





GARDEN KITS

- Butterfly Kits, with meadowsweet, black-eyed susan and more
- Songbird Kits, with serviceberry, wild bergamot and more
- Native Bee Kits, with bee balm, common snowberry and more
- Shade Thriving Kits, with great blue lobelia, ostrich fern and more

We helped residents create wildlife-friendly yards through 3 educational campaigns that highlight native species: Backyard Biodiversity, Bees Love Trees and Project Swallowtail.



BACKYARD BIODIVERSIY

This campaign offers useful tips to ensure peaceful co-existence with the urban wildlife that live in or visit our yards. We spread the word on how to maximize #BackyardBiodiversity through blogs, factsheets and more.

THE TORONTO COMMUNITY HOUSING (TCH) PLANTING AND STEWARDSHIP INITIATIVE aims to increase urban forest canopy cover and achieve environmental and quality of life benefits for TCH tenants by planting trees and engaging the local community in their stewardship. Highlights from 2021:

- 99 new trees planted
- 205 native shrubs distributed
- 21 TCH properties engaged
- 12 tenant-led Tree Care Teams





Local Enhancement and Appreciation of Forests

We distributed over **1,300** free, **native shrubs** in Toronto, York Region and Durham Region to promote planting native species on private property.

Shrubs were offered to individuals who participated in our educational and volunteer activities.





SPECIES OFFERED IN 2021

- 1. American hazelnut
- 2. Common ninebark
- 3. Common snowberry
- 4. Eastern redbud
- 5. Meadowsweet
- 6. Pagoda dogwood
- 7. Purple flowering raspberry
- 8. Red osier dogwood
- 9. Serviceberry
- 10. Spicebush



Volunteering with LEAF

Together, our **461** active **LEAF volunteers** dedicated over **5,100** hours participating in planting events, providing stewardship, raising awareness online and more! This year, We held **6** online volunteer orientations, where we gained **221** new volunteers.





SOCIAL MEDIA OUTREACH VOLUNTEERS

COVID-19 limited our ability to connect with community members face-to-face. In response, we launched the Social Media Outreach Team to engage the public in urban forest issues. This team of **13** specially trained LEAF volunteers helped amplify our messages and broaden our reach.

PLANTING IN YORK REGION:

We held 6 planting events in Richmond Hill and 3 in King Township. In total, LEAF volunteers dedicated over 700 hours to plant over 2,100 native trees and shrubs on public lands in York Region.





STEWARDSHIP IN YORK REGION

We want the trees we plant to survive and thrive! That's why we hosted **3** stewardship events in York Region, where LEAF staff and volunteers dedicated over **150** hours to weed and mulch naturalization sites. Together, we removed **54** bags of invasive species and mulched over **1,400** newly planted native trees and shrubs.

COMMUNITY PLANTING IN DURHAM REGION

We held our first ever community planting events in Durham Region. Joined by LEAF volunteers and community members, we greened **0.267** hectares of public land with over **750** native trees and shrubs at **3** planting events.



We planted **250** species in Central Park with the help

of 53 volunteers.

OSHAWA



WHITBY
We planted 266
species in Rosedale
Park with the help
of 50 volunteers.



PICKERING
We planted 241
species in Pine
Creek with the help
of 43 volunteers.

THE URBAN FOREST DEMONSTRATION GARDENS

These gardens showcase the beauty of native species, demonstrate the possibilities of naturalized spaces in urban areas and provide an opportunity for residents to play an active role in improving their communities. Following preventative health guidelines, our dedicated volunteers kept these biodiverse spaces beautiful and inviting all year.

The LEAF Learning Garden at Wychwood Barns Park and our Urban Forest Demonstration Gardens were cared for by 46 volunteer garden stewards.





Learning with LEAF

42 individuals graduated from our **Tree Tenders Volunteer Training** course. Lessons included:

- Tree biology and functions
- Tree identification
- Tree planting, care and maintenance
- Municipal bylaws and policies





"Tree Tenders was amazingly educational, fun, and eyeopening, and the team at LEAF was amazingly kind, thorough, and knowledgeable."

"Learning from passionate, knowledgeable professionals was inspiring, and I'm amazed at the content we were able to cover in so short a time. I can't wait to get my hands dirty and put this information to good use!" Our **Young Urban Forest Leaders** program provided four months of virtual training and mentorship to youth. Highlights from 2021:

- 21 program participants
- 11 virtual workshops
- 5 guest speakers
- 4 public webinars led by program participants
- 320 webinar attendees



WORKING WITHIN THE COMMUNITY

Over the course of the program, participants identified priorities for planting and stewardship within their own neighbourhoods and sparked awareness of the urban forest through targeted outreach. This year's participants also helped promote the native shrub giveaway in their communities.



We launched a new, free, fourpart training program: **Young Ravine Leaders**. Joined by **24** Toronto youth, we explored the City's ravines through a mix of virtual and in-person activities.

YOUNG RAVINE LEADERS aims to empower the next group of ravine advocates in the City of Toronto! Participants had the chance to:

- Learn from ravine experts
- Network with industry professionals
- Explore career and volunteer opportunities
- Solidify online learnings through a guided ravine walk



We hosted 21 virtual learning events with over 900 live attendees. To complement virtual learning, we developed 6 activity sheets to facilitate safe and fun outdoor exploration.





LEARNING WITH LEAF

Educational events highlighted tree identification, benefits of the urban forest, the value of biodiversity and more. Highlights from 2021:

- 15 Presentations, including Discovering Richmond Hill's Biodiversi-tree
- **3 Workshops**, including a session for the City of Toronto's Community Stewardship Program
- **3 Tours**, including the Alex Robertson Park Tree Tour



Capacity Building within LEAF

The Psychological Health and Safety Committee works to build a strong work culture that encourages a healthy work-life balance, resilience and positive mental health.





2021 ACHIEVEMENTS:

- 1. Helped implement permanent employee contracts
- 2. Helped increase paid sick days for employees
- 3. Developed the LEAF Workplace Culture Goals
- 4. Provided staff with work from home tools and resources

2021 ACHIEVEMENTS:

- Developed an action plan detailing short, medium, and long-term actions
- 2. Met regularly throughout 2021 to work on implementing actions
- 3. Commemorated the first annual National Truth and Reconciliation Day
- 4. Coordinated antioppression and anti-racism training for LEAF staff and Board Members

In 2022, the RAAR Committee will continue to learn from racialized communities and experts and work collaboratively to develop tangible goals.

The Reconciliation and Anti-Racism Committee aims to facilitate anti-racist organizational change and reconciliation work. The committee is a collaborative effort between LEAF staff and Board Members.



THANK YOU TO OUR SUPPORTING PARTNERS



































