

Elm Wood Disposal Pilot

BACKGROUND

An Elm Disposal Pilot was approved by City Council in 2021, with the goal of identifying and eliminating barriers to proper disposal of elm wood for residents. The pilot was informed by a survey and focus group to identify the main barriers to proper elm wood disposal. The Pilot was conducted in the Buena Vista neighbourhood from mid-October until end of December 2022.

METHODOLOGY

The Elm Disposal Pilot was created using Community-Based Social Marketing (CBSM) theory. CBSM is a behavioural science technique to foster sustainable behaviour change and includes identifying barriers that prevent community members from engaging in a desired behaviour, as well as applying tools that will remove these barriers. Barriers that were discovered through the survey included:

- 1) Cost of proper disposal;
- 2) Lack of transportation to the landfill;
- 3) Inability to identify elm wood; and
- 4) Uncertainty around the provincial regulations.

Interventions were developed cross-departmentally and included the following:

- 1) Voucher for free elm wood disposal at the landfill that expired October 31, 2022;
- 2) Voucher for \$50 maximum fee for elm wood disposal at the landfill that expired October 31, 2022;
- 3) Optional Yard Sweep from a Parks employee, where the employee would offer to identify and remove any stored elm wood in the resident's yard;
- 4) Special Collection Service that the resident could request the City pickup elm wood from October 24-28, 2022; and
- 5) Control – only an Educational doorhanger was given to the resident.

The Buena Vista neighbourhood was chosen because it has many City elm trees and a community profile representing the entire city. The previous areas where there had been cases of Dutch elm disease were avoided since previous interactions with City staff may have already impacted the knowledge or behaviour of those residents. Approximately five hundred homes in this neighbourhood were chosen and further designated into five intervention areas of around 100 homes each. Each intervention group was separated by a block to reduce neighbour bias.

On weekdays from October 17-28, two Parks and three Sustainability employees delivered the interventions by canvassing door to door during daytime hours. At each house, education was provided on proper disposal of elm wood and an explanation of the intervention the resident was receiving. If the resident was not at home, a doorhanger would be left along with the voucher or letter explaining the intervention. City employees made note of all residents that were talked to and how many doorhangers, vouchers, sweeps, and collection services were offered and distributed.

Weights of elm wood disposed and collected were also recorded for interventions 1 through 4.

In the last phase of the pilot, a QR code link to an online survey was delivered to the homes. This survey was open from November 28 to December 21, 2022. Information sought via the survey included whether the resident could identify proper elm disposal methods, if the resident disposed of elm wood during the period of the pilot (if so, were they prompted by the intervention to do so), if the resident did not dispose of elm wood and why, and if residents had any suggestions to help the City encourage residents to properly dispose of elm wood.

RESULTS

Results recorded the number of homeowners that were home and their reception of City employees, the number of interventions used, the weight of elm wood disposed of due to interventions used, and survey results.

For the control (doorhanger), vouchers, and special collection service interventions the percentage of homeowners at home during canvassing was consistent between all interventions. About 75% of homeowners were not home during canvassing, 5% were home but were busy or not interested in the education, and 20% were home and interested in learning more about elm wood disposal. The homes found within the sweep intervention had more residents home (approximately 35%), 62% not home, and 3% of residents were home but not interested in the education or sweep. This data implies that most residents want to learn more about elm disposal to protect the urban forest and are willing to change their behaviour to accomplish this.

The table below outlines the number of vouchers used, collection service registrations, and sweeps that found and disposed of elm wood, and the weight of elm wood disposed of using those interventions.

Intervention	Number of interventions that brought elm wood to the landfill	Weight of elm wood disposed of at landfill
Sweep	2	180kg
Voucher – free	3*	140kg
Voucher - \$50 maximum	0	0
Special Collection Service	2	160kg

*Two free vouchers were used within the pilot timeline, one voucher was brought to the landfill on November 3, 2022. The amount of elm wood from this voucher was not weighed or included in this table.

Of the 568 surveys that were sent out, there were 41 respondents. The majority of respondents identified proper disposal techniques which are: having a tree company dispose of it or taking it to the City landfill. There were a couple of respondents that believed storing, burning, and taking elm wood to the City compost site are proper methods of disposal. However, the knowledge of proper elm disposal from the pilot survey increased from the initial statistically representative survey done in the spring of 2022. See table below for comparison.

Identified by respondents as a proper disposal method	Previous elm wood survey	Elm wood pilot survey
Burning elm wood	58%	17.5%
Storing elm wood	57%	2.5%
Composting elm wood	No evidence	12.5%
Taking it to the City landfill	30%	75%

Of the survey respondents, only one had disposed of elm wood during the pilot. This resident was prompted by the education and used the collection service intervention. The common responses from residents for not disposing of elm wood during the pilot were:

- Having no elm to dispose of;
- Not sure if they had elm wood on their property;
- Did not have time within the pilot timeframe; and
- Only having a small amount of elm wood to dispose of.

The final question on the survey was open ended and allowed residents to let the City know what could be done to better encourage proper disposal of elm wood. The answers ended up being consistent in the following three categories: free elm wood disposal at a certain location, education on identifying elm trees, and having crews pick up elm wood.

CONCLUSION

The elm disposal pilot showed us that most residents are interested in learning more about elm and how to properly dispose of it to protect our urban forest. The free voucher, special collection service, and sweep were utilized by residents to dispose of their elm wood. Residents responding to the survey gave positive feedback about the pilot and had many suggestions for the City to encourage proper elm disposal. These options included removing the barriers of expense, transportation, and identification. The City will use these pilot results to further communications and education in 2023, and to develop options for 2024-2025.