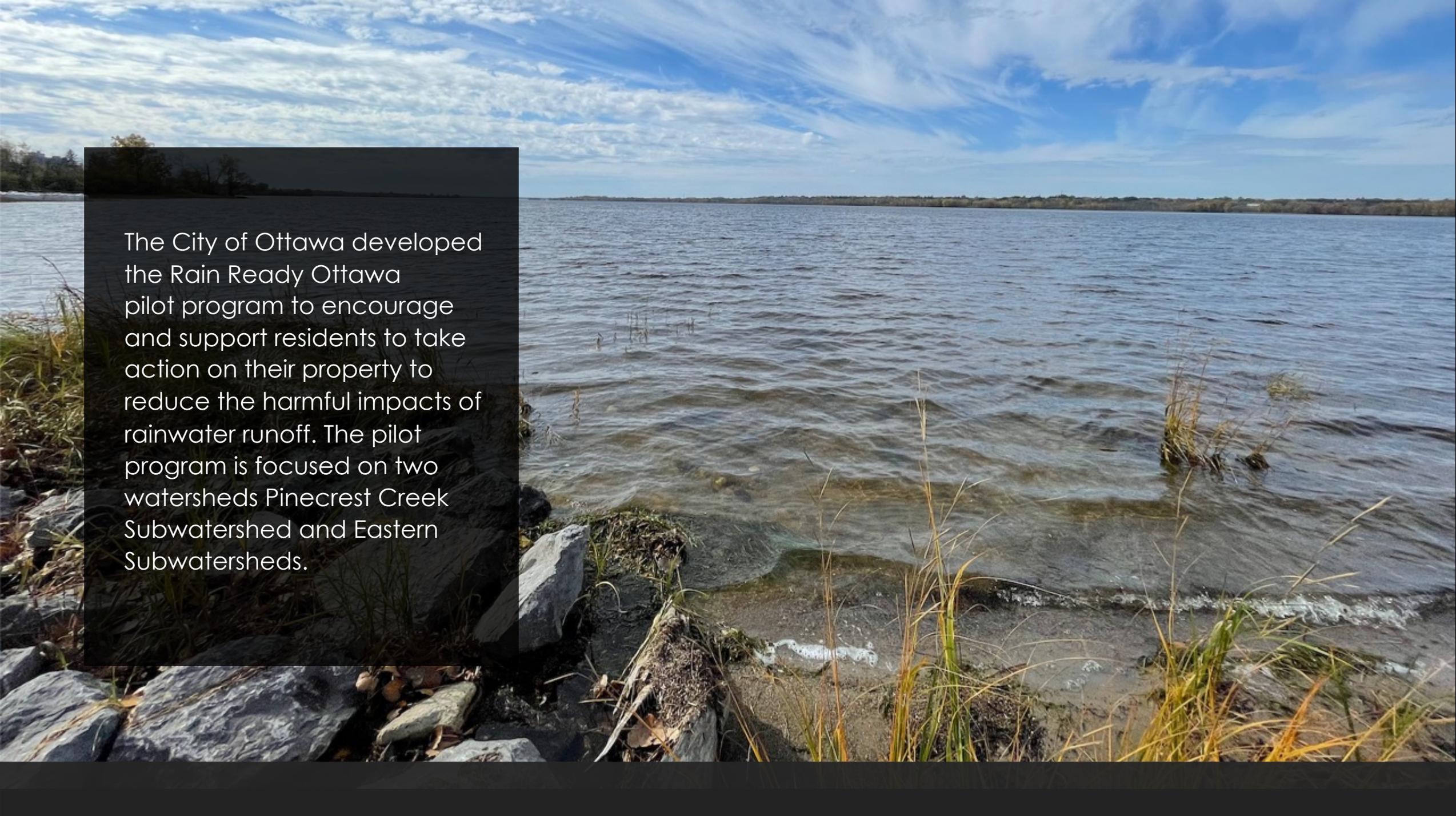


## Case Study: Manordale-Woodvale Community Centre Rain Garden

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LEAD ORGANIZATION: THE CITY OF OTTAWA

COORDINATED BY: ENVIROCENTRE



The City of Ottawa developed the Rain Ready Ottawa pilot program to encourage and support residents to take action on their property to reduce the harmful impacts of rainwater runoff. The pilot program is focused on two watersheds Pinecrest Creek Subwatershed and Eastern Subwatersheds.

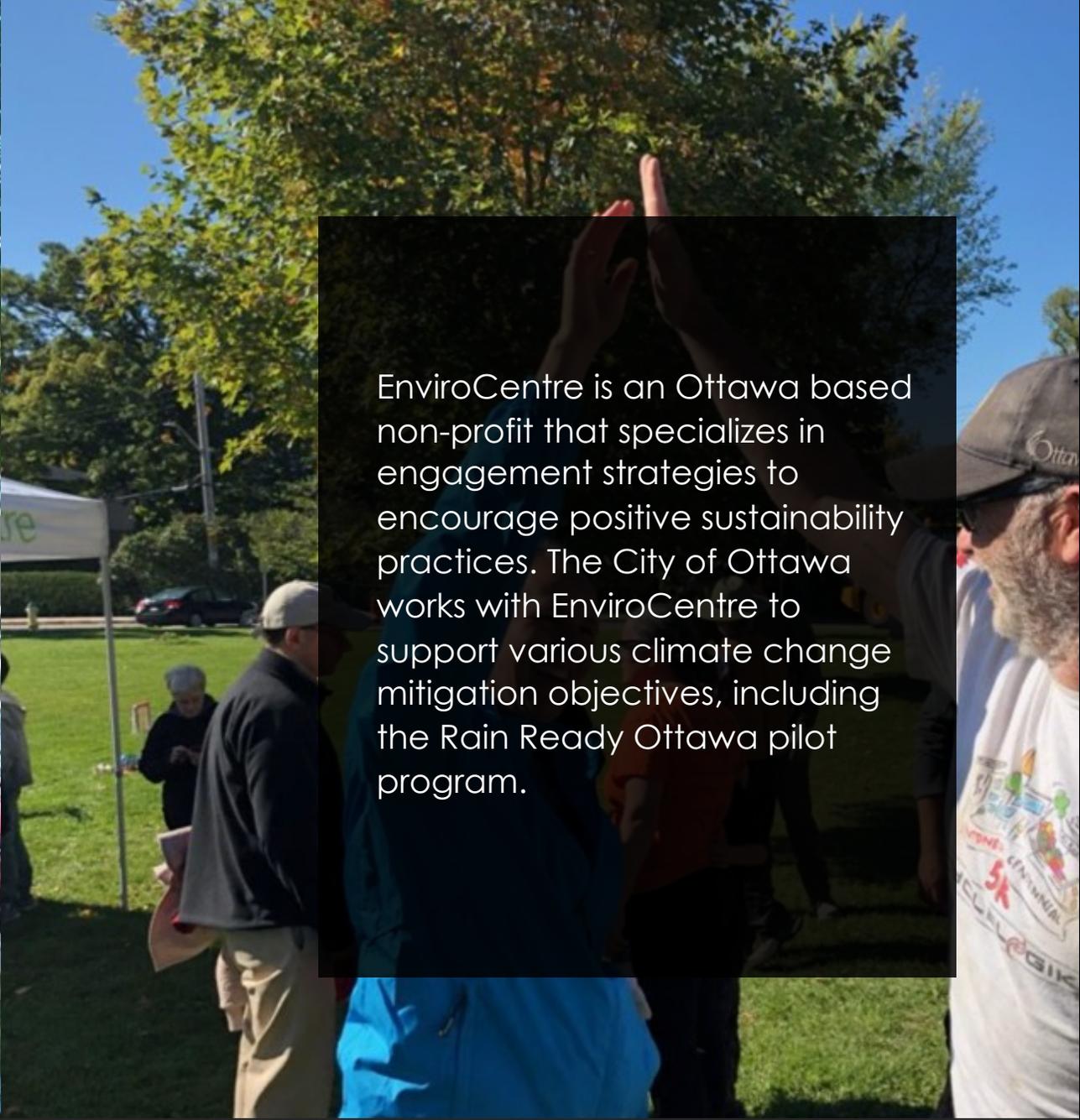


# envirocentre

Bringing environmental change to life

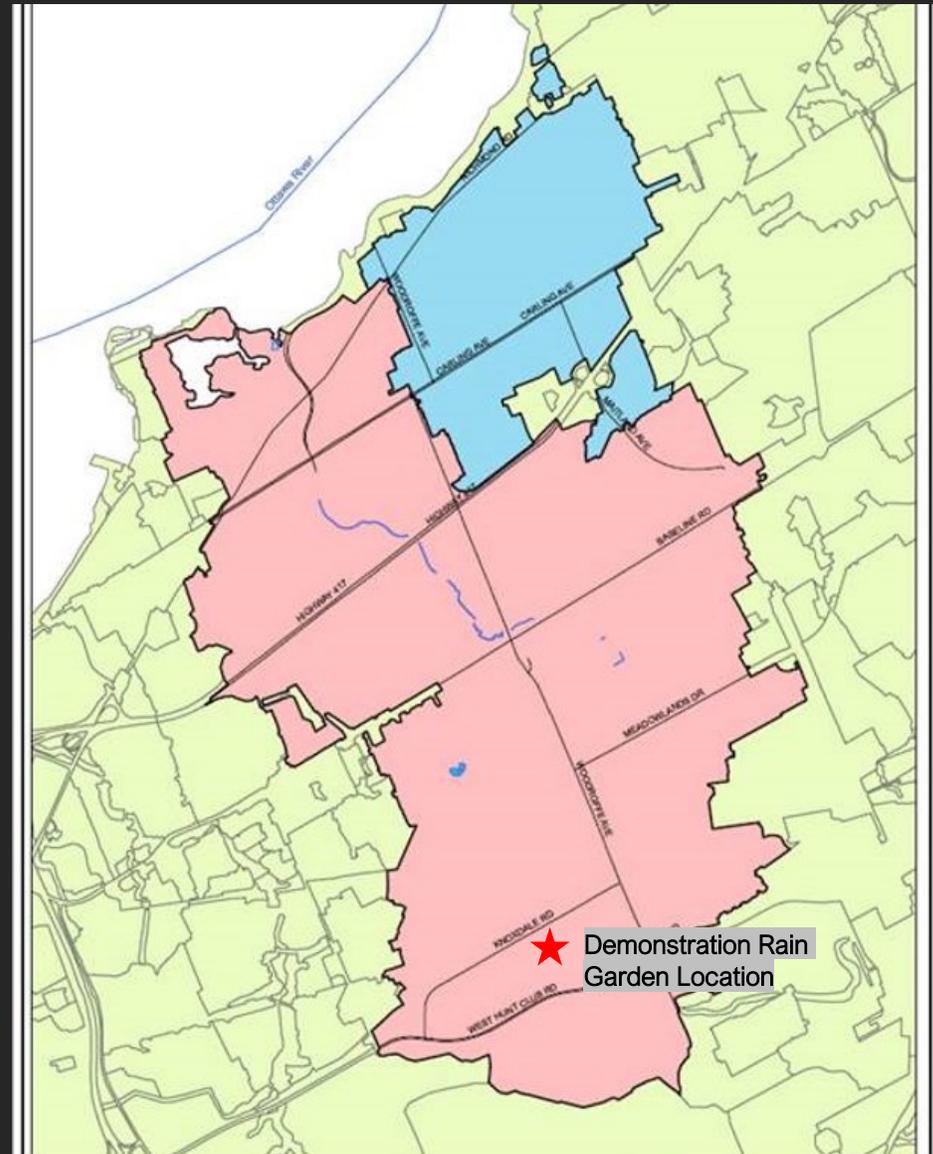
## 10 Easy Steps to Live Lighter

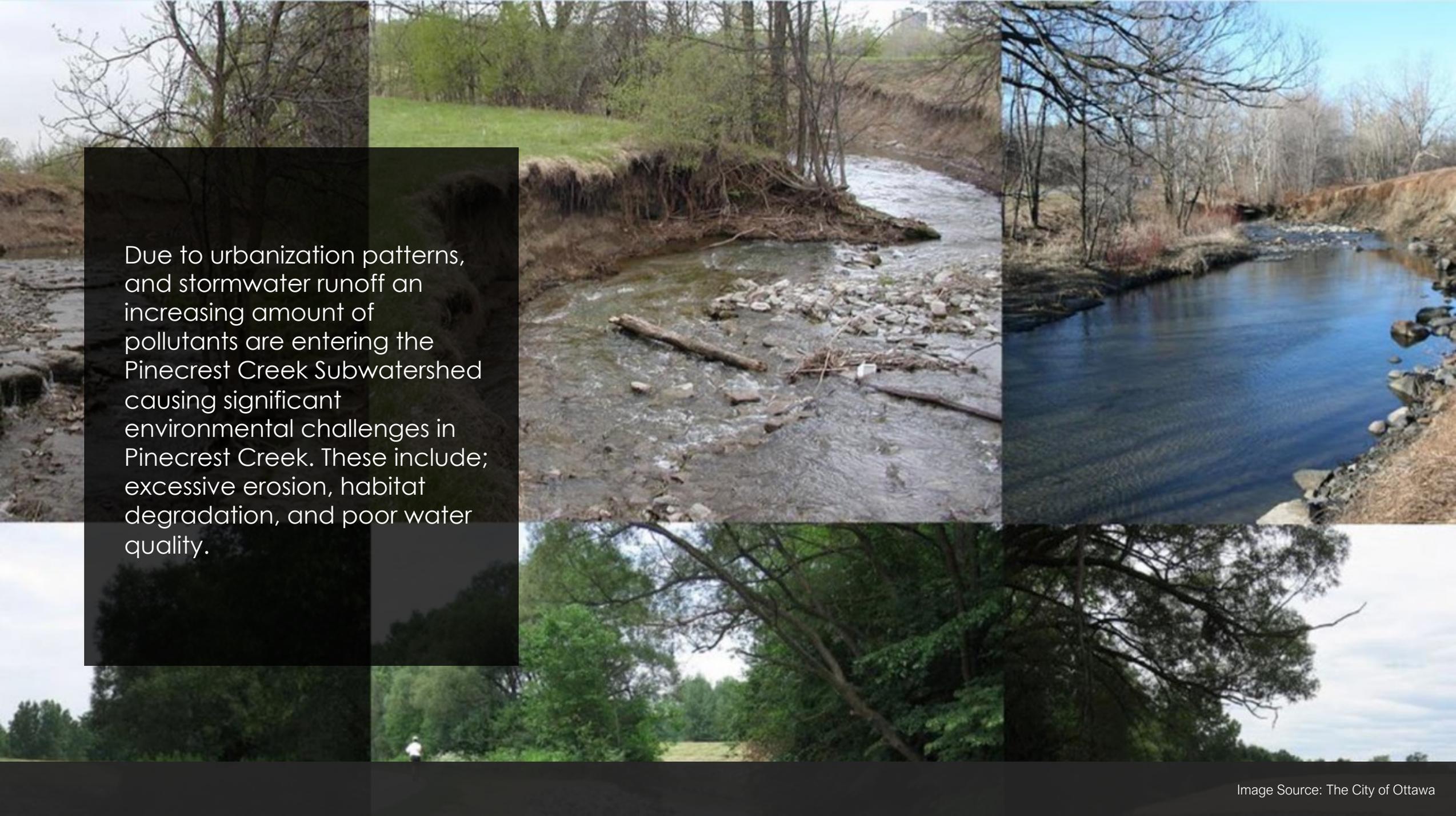
1. Know your impact
2. Be aware of the choices you can make
3. Drive less
4. Buy less
5. Shop local
6. Eat less meat & off-season produce
7. Renovate your home with purpose
8. Use the energy you need
9. Reduce, reuse, recycle
10. Focus on changes that fit your lifestyle



EnviroCentre is an Ottawa based non-profit that specializes in engagement strategies to encourage positive sustainability practices. The City of Ottawa works with EnviroCentre to support various climate change mitigation objectives, including the Rain Ready Ottawa pilot program.

The Pinecrest Creek sub-watershed is located in the West End of the City of Ottawa and drains 17.1 square kilometers of land into the Ottawa River.

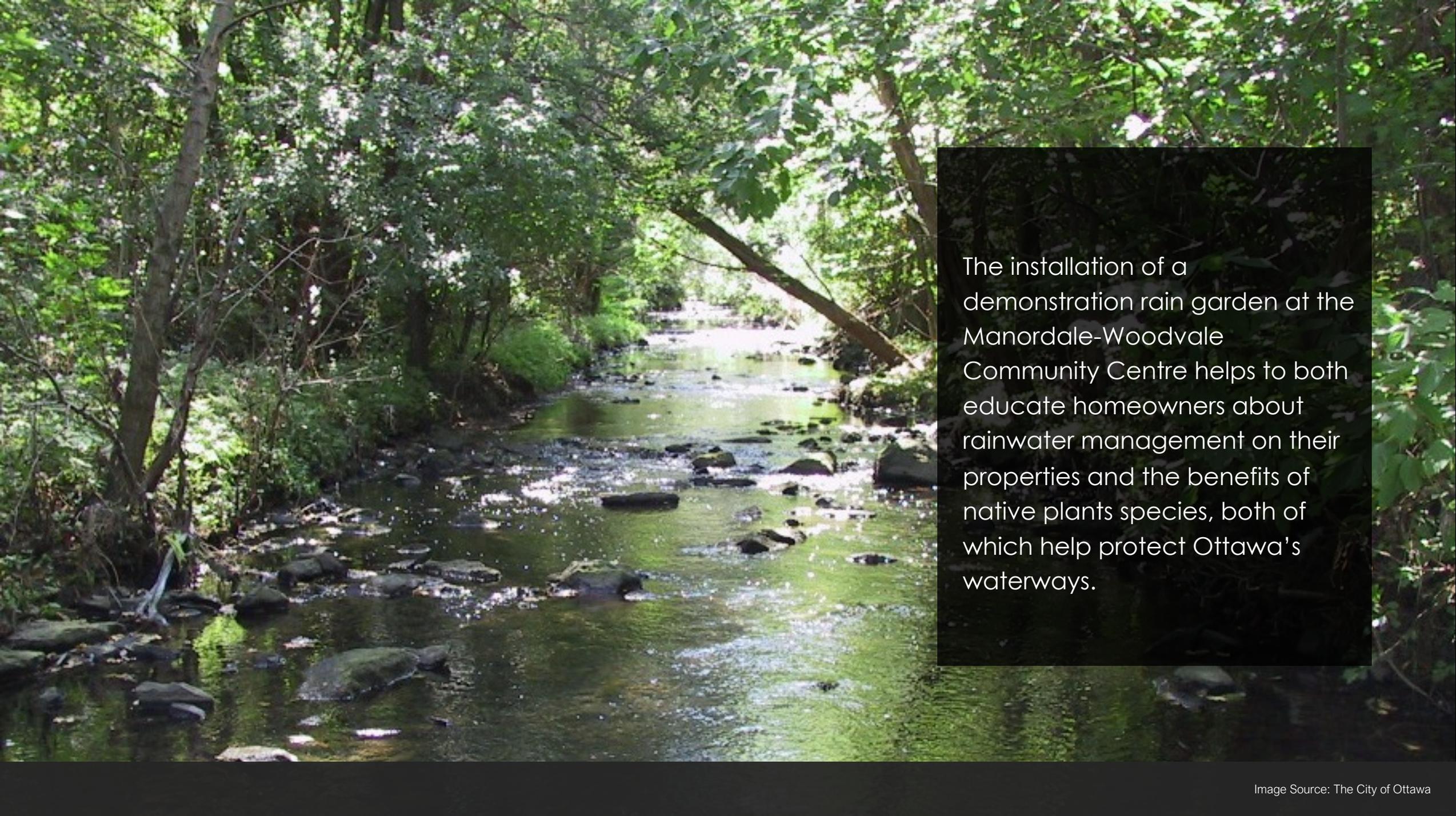




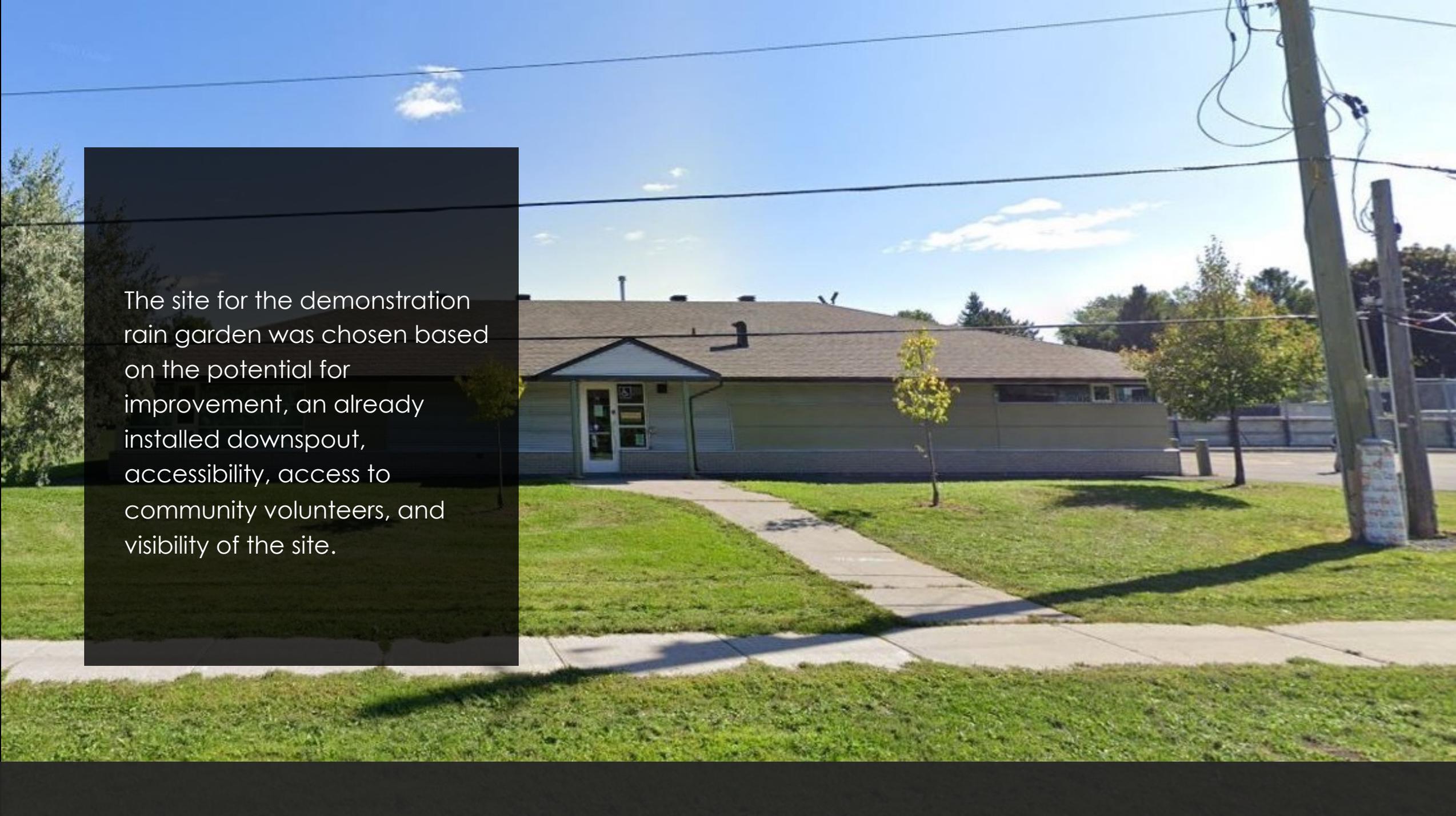
Due to urbanization patterns, and stormwater runoff an increasing amount of pollutants are entering the Pinecrest Creek Subwatershed causing significant environmental challenges in Pinecrest Creek. These include; excessive erosion, habitat degradation, and poor water quality.

Rain gardens play an essential role in protecting our river ecosystems and help build Ottawa's climate resiliency. Rainwater that falls on our roofs and driveways often flows into the storm sewers, and directly into Ottawa's waterways untreated. This runoff can collect pollutants from roads and driveways, cause erosion, and flooding.





The installation of a demonstration rain garden at the Manordale-Woodvale Community Centre helps to both educate homeowners about rainwater management on their properties and the benefits of native plants species, both of which help protect Ottawa's waterways.



The site for the demonstration rain garden was chosen based on the potential for improvement, an already installed downspout, accessibility, access to community volunteers, and visibility of the site.



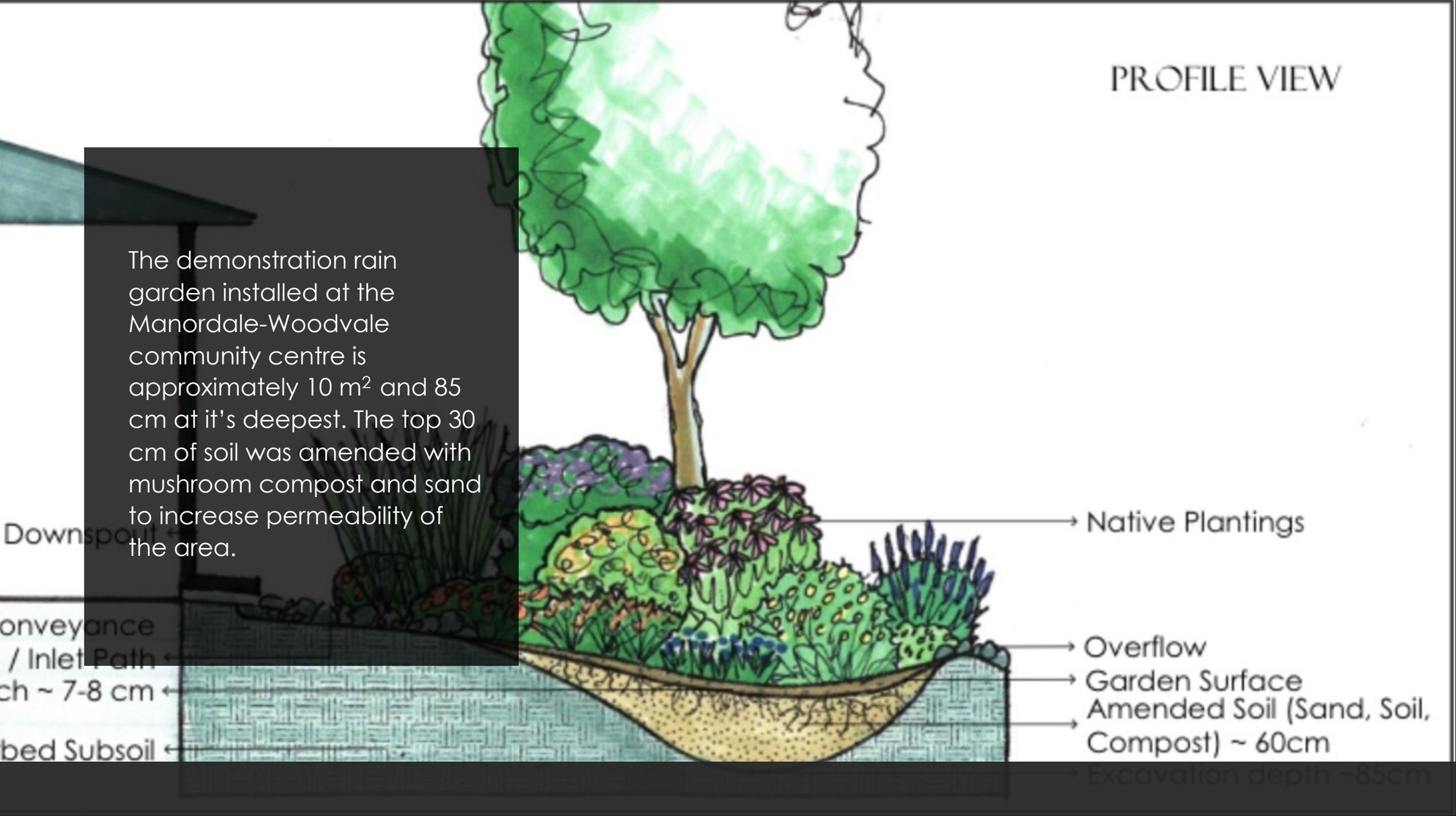
There were several important steps taken in order to ensure a successful installation:

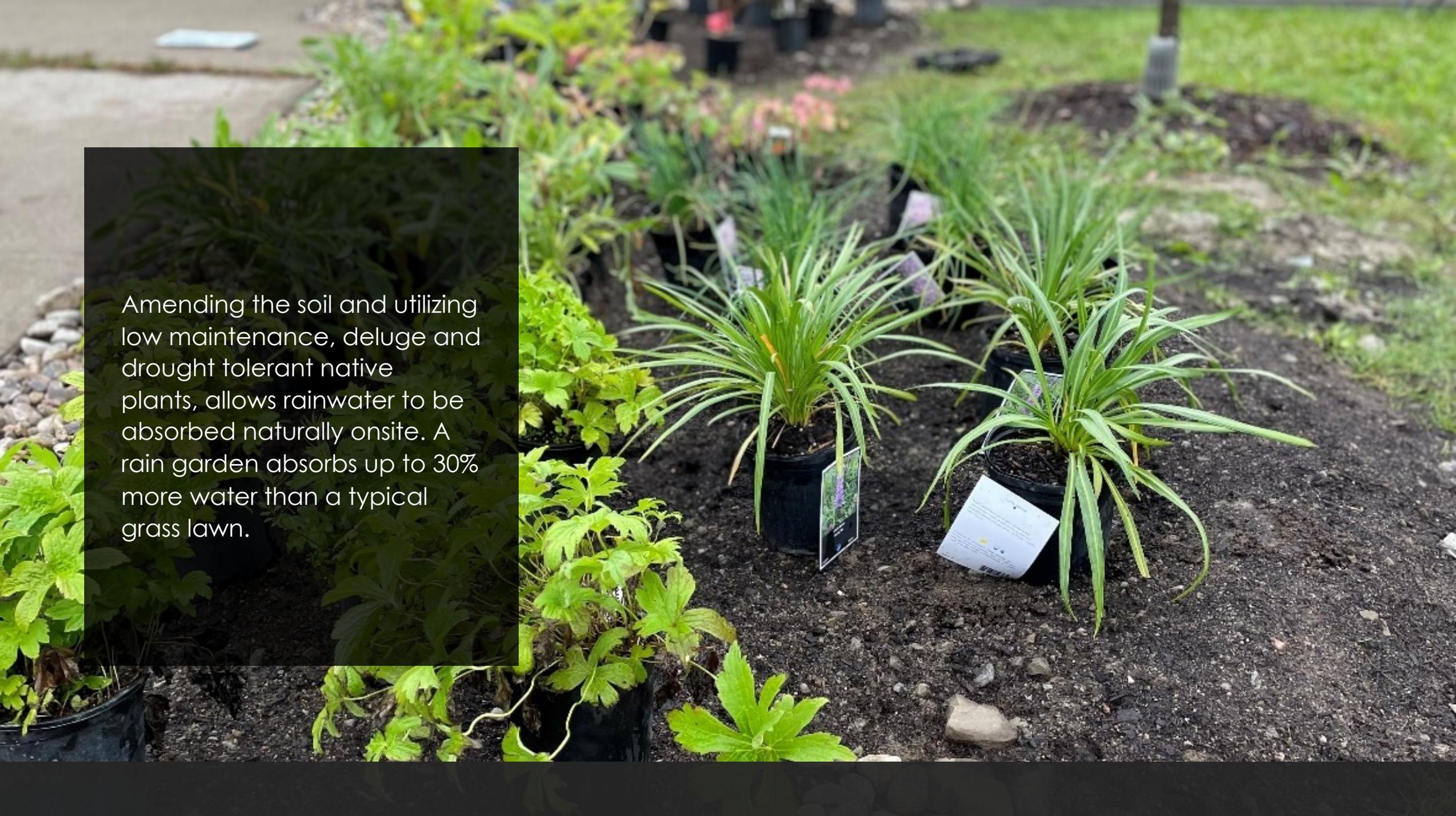
- roof and drainage calculations were taken to determine an appropriate size for the rain garden
- a soil drainage test was done to inform about the current permeability of the area
- a budget for plants, materials and supplies was developed
- the site was inspected by Ontario OneCall to ensure the area was safe to dig and had all the appropriate permits to do so.



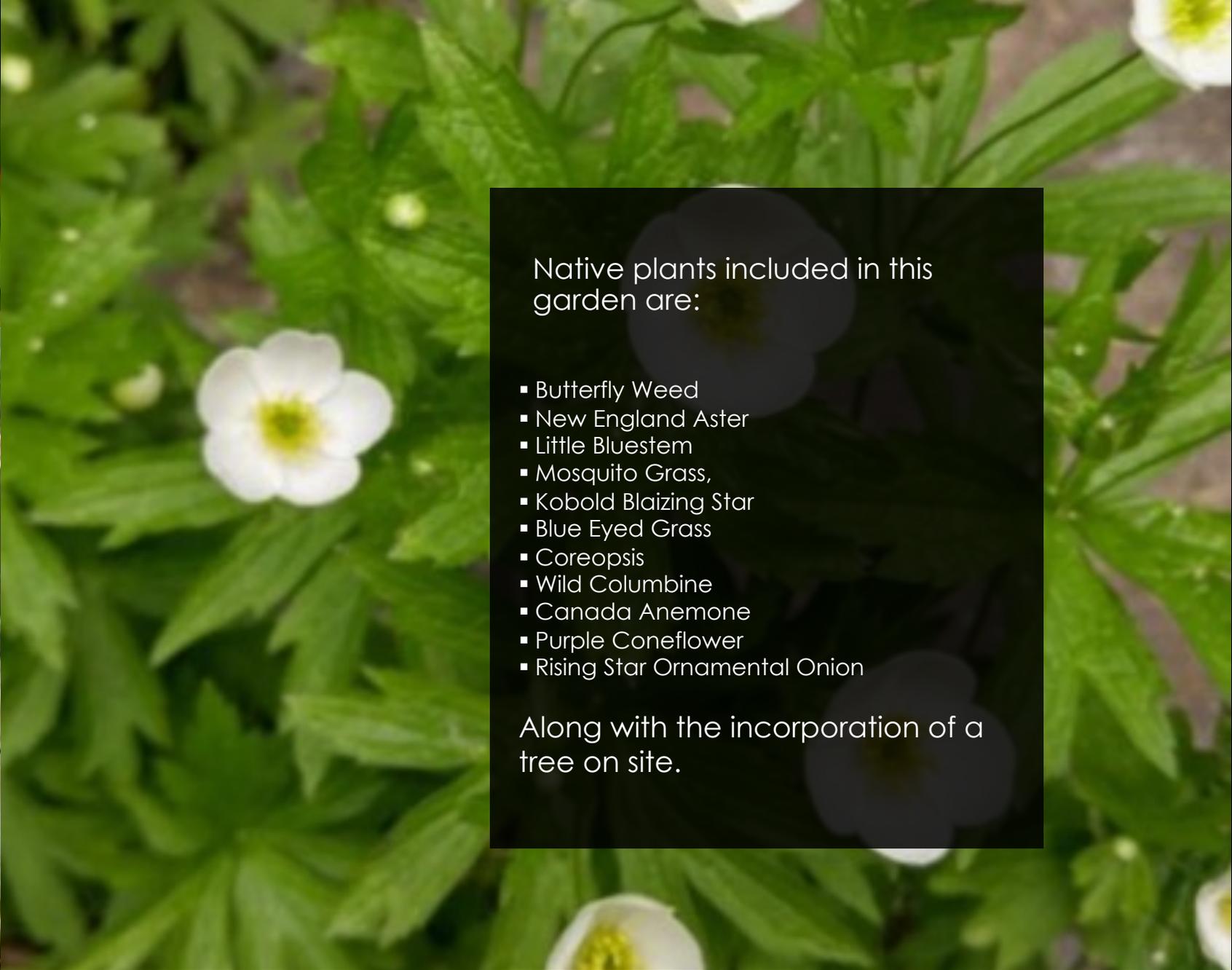
# PROFILE VIEW

The demonstration rain garden installed at the Manordale-Woodvale community centre is approximately 10 m<sup>2</sup> and 85 cm at its deepest. The top 30 cm of soil was amended with mushroom compost and sand to increase permeability of the area.





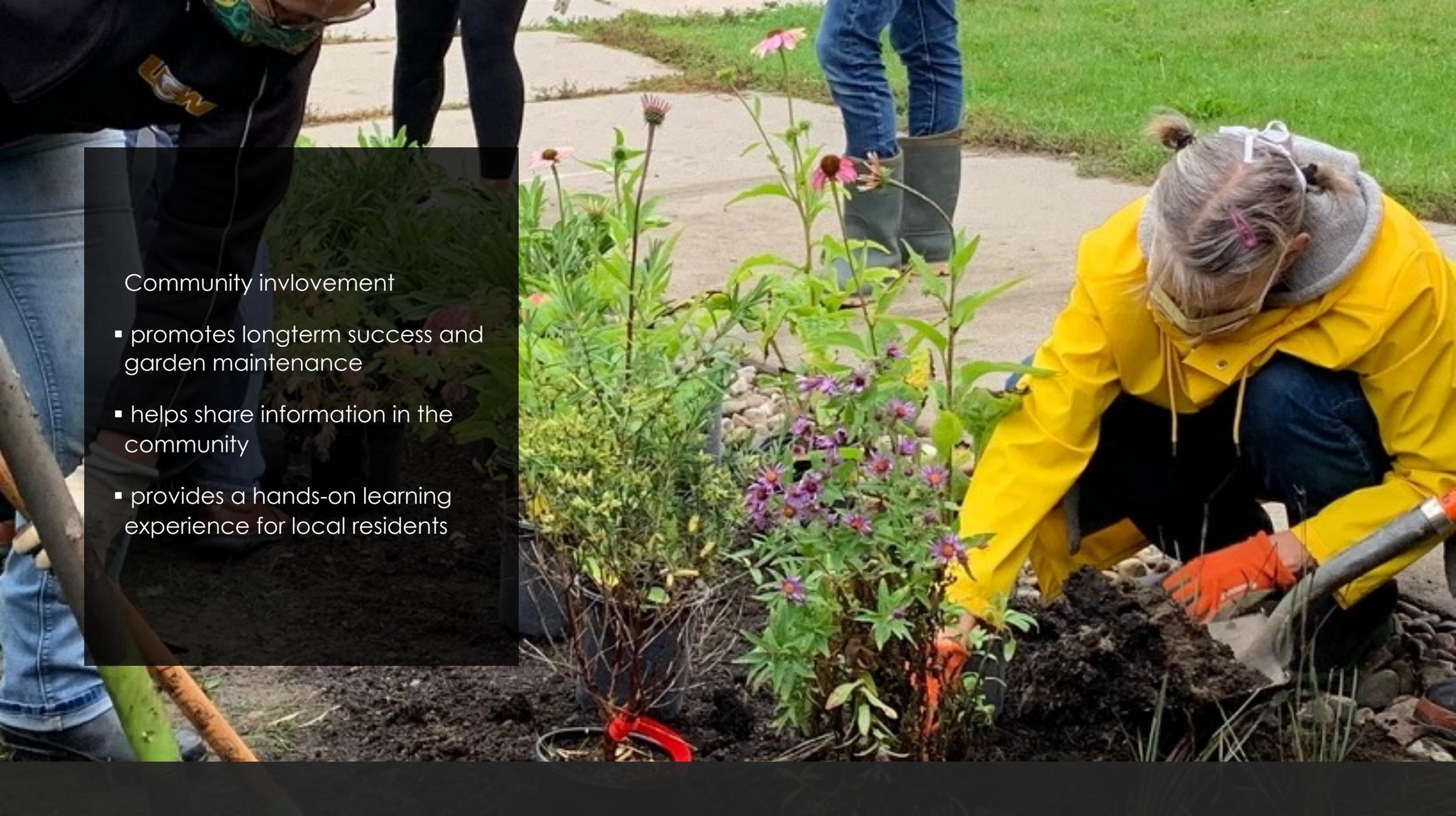
Amending the soil and utilizing low maintenance, deluge and drought tolerant native plants, allows rainwater to be absorbed naturally onsite. A rain garden absorbs up to 30% more water than a typical grass lawn.



Native plants included in this garden are:

- Butterfly Weed
- New England Aster
- Little Bluestem
- Mosquito Grass,
- Kobold Blaizing Star
- Blue Eyed Grass
- Coreopsis
- Wild Columbine
- Canada Anemone
- Purple Coneflower
- Rising Star Ornamental Onion

Along with the incorporation of a tree on site.



## Community involvement

- promotes longterm success and garden maintenance
- helps share information in the community
- provides a hands-on learning experience for local residents

A photograph of a demonstration rain garden. The garden is a rectangular area filled with dark brown wood chip mulch. Several green plants, including some with pink flowers, are growing in the mulch. In the foreground, there are several large, light-colored, rounded rocks. To the left, a concrete sidewalk runs alongside the garden. In the background, there is a grey brick wall, a tree trunk, and a blue car parked on a street. Two Canadian flags are visible on a building in the distance.

The demonstration rain garden provides a convenient and visible example that residents can visit to better understand the concept and how it could look on their own property. Rain gardens can be simple, easy to maintain, formal or naturalized in look.

Ottawa

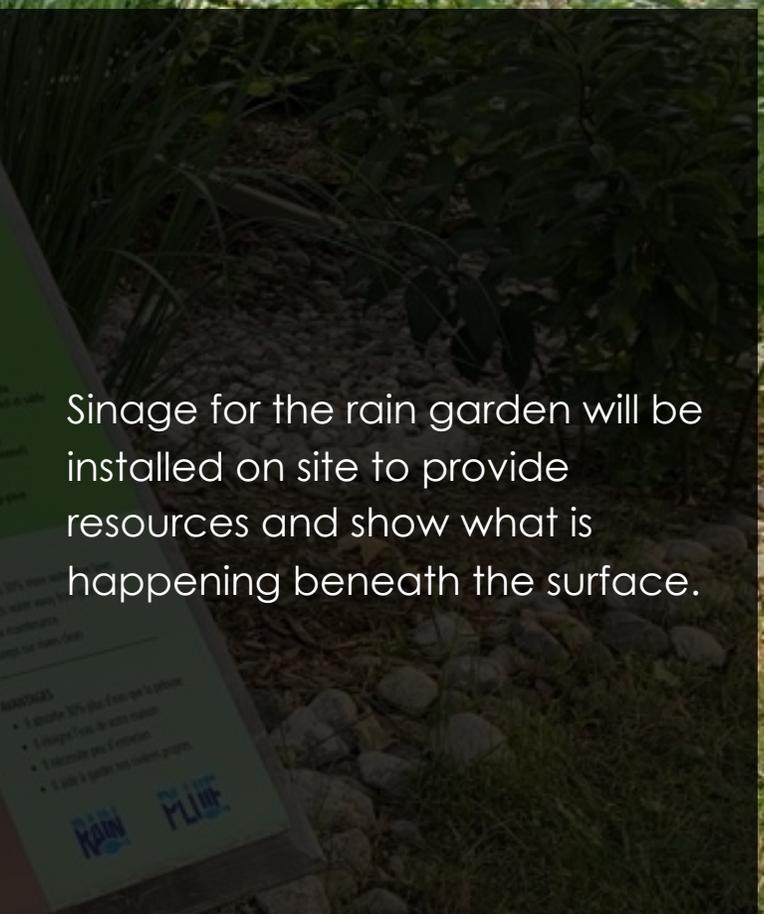
# This Rain Garden **SOAKS it up**

## Ce jardin de pluie **INFILTRÉ**

Learn how to build your own rain garden at [ottawa.ca/pluie](http://ottawa.ca/pluie)

Apprenez comment construire votre propre jardin de pluie à [ottawa.ca/pluie](http://ottawa.ca/pluie)

- 1 Native Plants / Plantes indigènes
- 2 Basin Stones (optional) / Pierres de bassin (optionnelles)
- 3 Basin / L'assèchement du terrain
- 4 Mulch / Paillis
- 5 Soil, Compost and Sand / Mélange de terre, compost et sable
- 6 Sand Base (optional) / Base sablonneuse (optionnelle)
- 7 Geotextile / Toile géotextile



Signage for the rain garden will be installed on site to provide resources and show what is happening beneath the surface.



EnviroCentre coordinated the installation of the Manordale-Woodvale Demonstration Raingarden on behalf of The City of Ottawa's Rain Ready Ottawa program.

Special thanks to Councilor Keith Egli, the Manordale-Woodvale Community Association, and the community volunteers who helped plant it.

To learn more about the City of Ottawa Rain Ready Ottawa program, or rain gardens visit:  
[www.ottawa.ca/rain](http://www.ottawa.ca/rain)