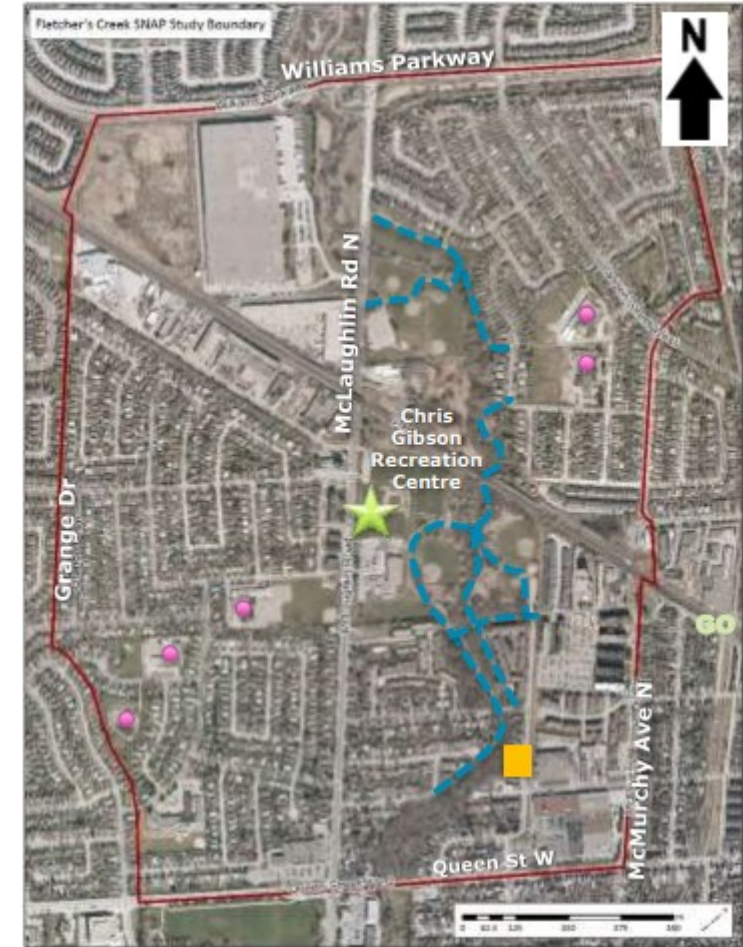


Fletchers Creek Sustainable Neighbourhood Action Plan SNAP

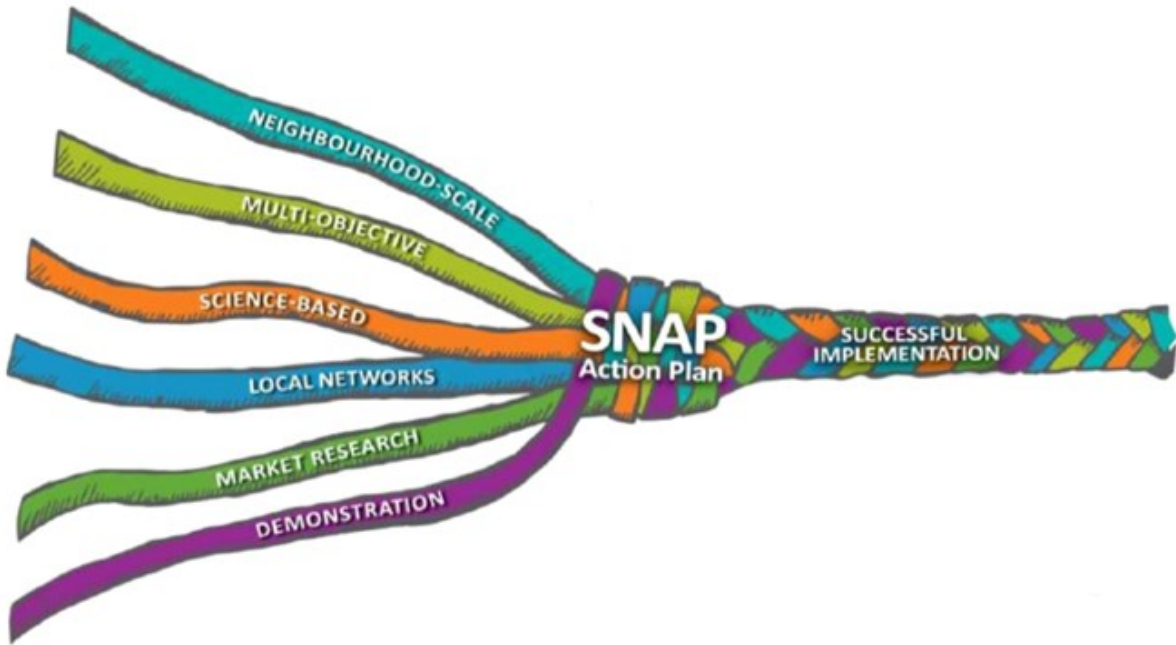
Glendale Public School Rain Garden
Haggert Avenue Bioswale

Environment Advisory Committee

October 12, 2021



What is the Sustainable Neighbourhood Action Program (SNAP)?



- The Sustainable Neighbourhood Action Program (SNAP) is a collaborative, neighbourhood-based approach for advancing urban renewal and climate action in older urban areas.
- Brampton has three active SNAPs:
 - County Court
 - Fletchers Creek
 - Bramalea

Multiple Benefits of SNAPs

- Achieves multiple objectives of City, Region, Conservation Authority, local community
- Creates efficiencies
- Presents integrated, on-the-ground solutions
- Showcases innovation
- Fosters collaborative partnerships
- Empowers residents
- Builds a sense of place
- Opens access to funding



**increase
people
engaged**



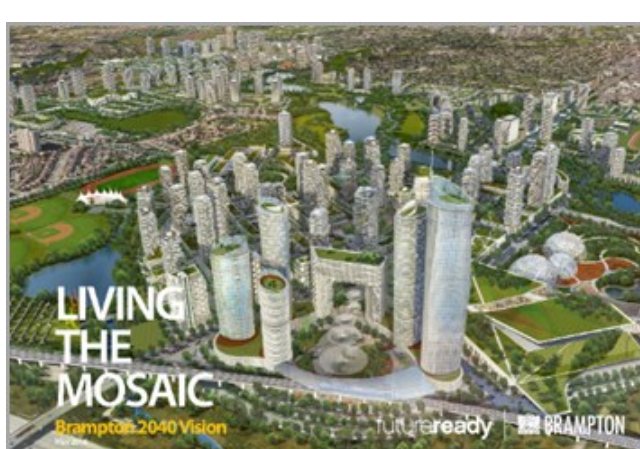
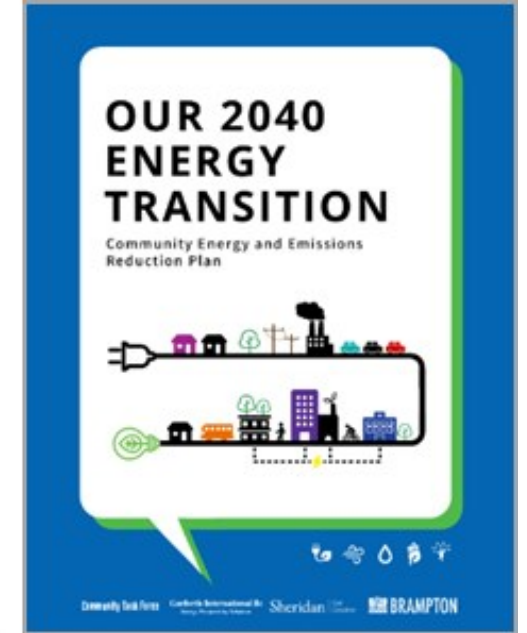
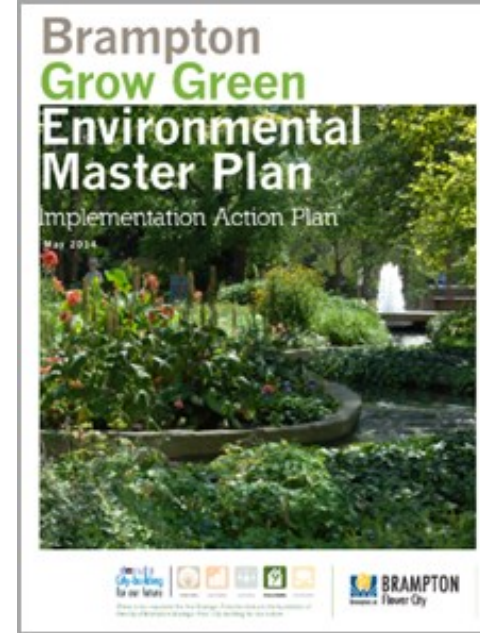
**increase
sustainable
actions
initiated**



**increase
community
projects
initiated**

SNAP Supports the:

- Brampton Grow Green Environmental Master Plan
- Community Energy & Emissions Reduction Plan
- Brampton 2040 Vision: Living the Mosaic
- Nurturing Neighbourhoods Program
- Brampton Eco Park Strategy
- Brampton Active Transportation Master Plan
- Brampton One Million Trees Program



Fletchers Creek Existing SNAP in Brampton

Sustainable Neighbourhood
Action Plan



Fletchers Creek
SNAP

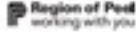


Prepared by: Credit Valley Conservation
Prepared for: City of Brampton

Final Report March 7, 2019













The map illustrates the Fletchers Creek SNAP Action Plan Concept. It shows a residential area with various themes and actions. The themes are categorized into three main groups: Living Parks and Nature, Resilient Homes & Active People, and Strong Schools. The actions are categorized into three main groups: Green Lifeline, Support System, and Actions. The map includes a legend, a scale bar, and a north arrow.

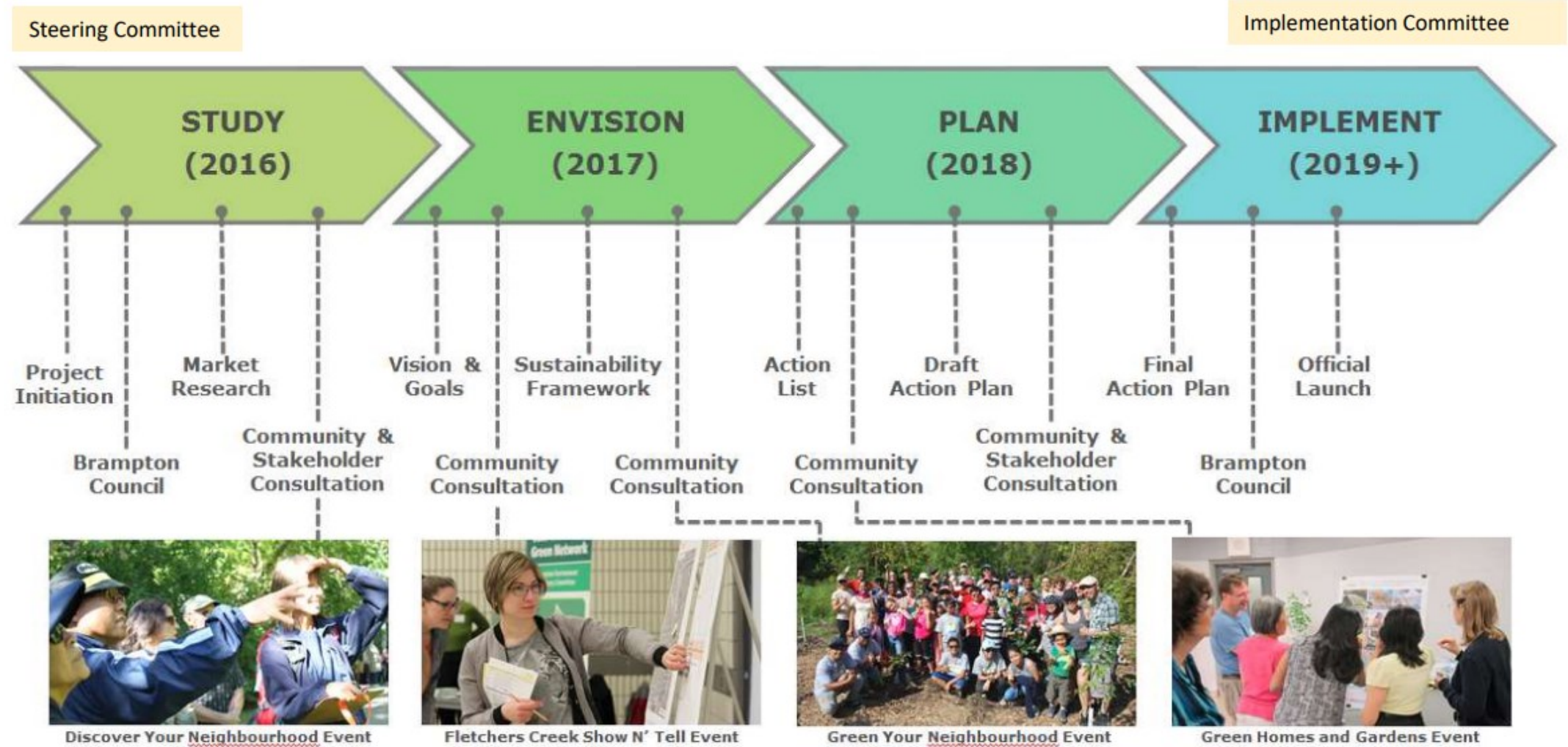
Green Lifeline	Support System	Actions
Existing Urban Forest	Urban Forest Enhancement Areas	Early Action Projects
Fletchers Creek	Buffers and Connectors	Action Plan Themes
Fletchers Creek Trail	Nurturing Neighbours	

Scale in metres: 0 100 200 500

Note: Plan elements are conceptual only and subject to further analysis and refinement.

Figure 3. Fletchers Creek SNAP Action Plan Concept

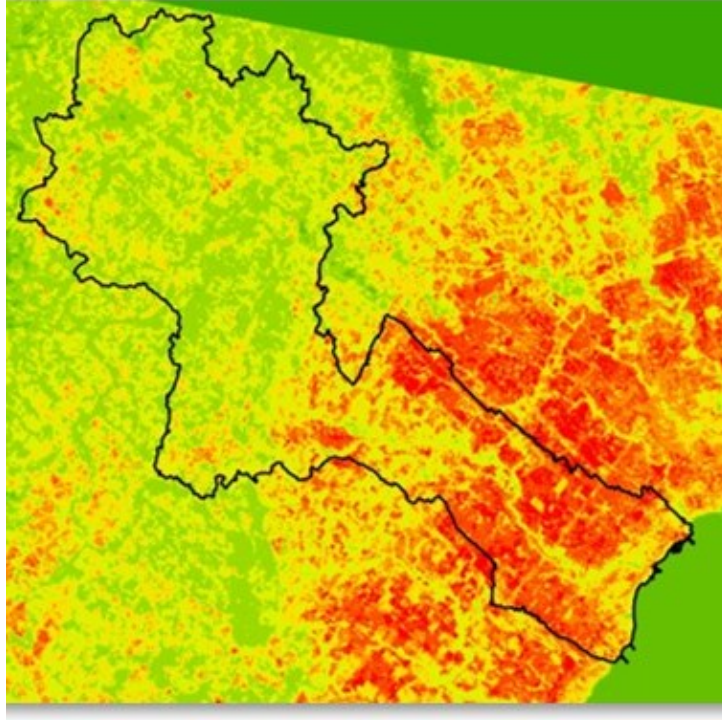
Fletchers Creek SNAP Timeline



Fletchers Creek SNAP Neighbourhood



**Urbanized area with no
stormwater control**



Thermal issues



**Endangered Species
(Redside Dace)**

Fletchers Creek SNAP: Vision



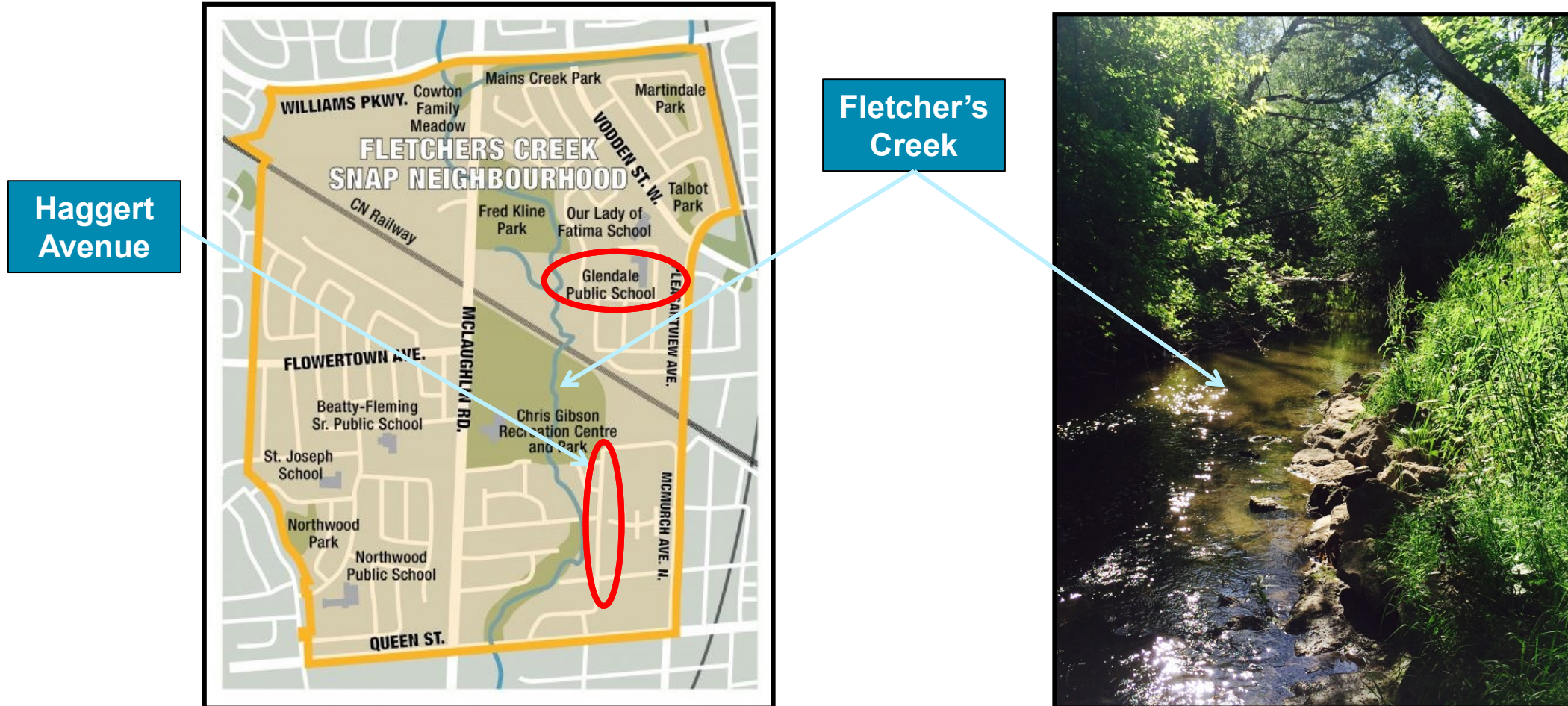
Vision

Fletchers Creek is a green, climate change-ready neighbourhood supported by healthy spaces and championed by caring neighbours.

Goals

- Create a healthy and diverse landscape.
- Support a clean and healthy Fletchers Creek.
- Reduce environmental impacts of everyday decisions and activities.
- Engage the community in neighbourhood improvement.

Fletchers Creek SNAP Projects



FCM Funding Project Update

- In 2018, City and CVC applied for an FCM grant for the implementation of two quick-win projects
- Two Low Impact Development (LID) Pilot Projects to Manage Stormwater Runoff in Brampton
 - Glendale Public School Rain Garden
 - Haggert Avenue LID Road Retrofit (bioswale in conjunction with scheduled road repaving)



Action: Glendale Public School Rain Garden



Glendale Overview

- Address existing drainage concerns
- Improve water quality in Fletchers Creek
- Enhance the aesthetics of the school property and increase native habitat
- Showcase LID benefits
- Create additional learning opportunities for students and the community

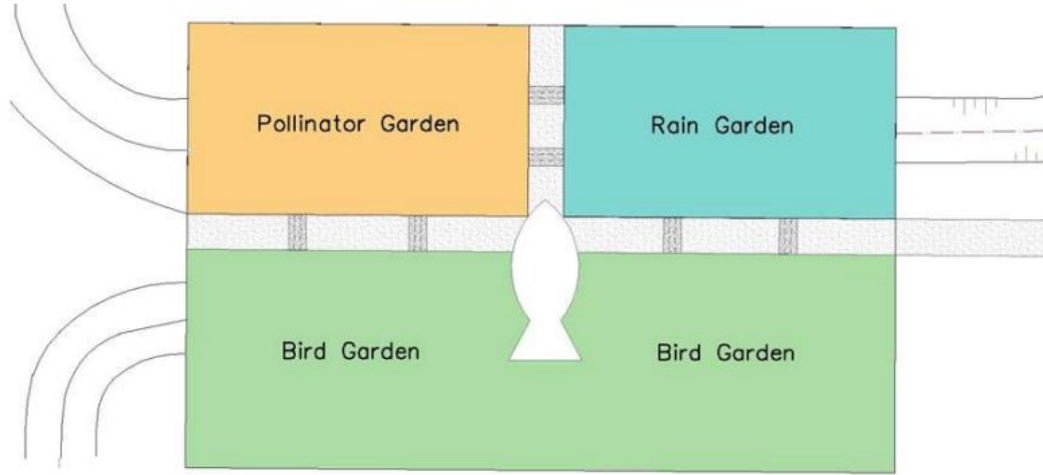


Design & Construction

- The drainage area is equal to 1.61 ha
- Inlets are grass swales that direct runoff to the rain garden
- Treats at least the 27 mm storm event (90% of all storms)
- Three rain garden areas capture a total of 210 m³ of water (or 1300 bathtubs!)

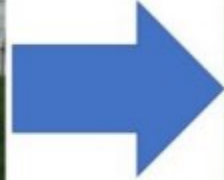


Student and Volunteer Involvement



Success

- Designed to achieve several environmental goals
- Reduced overall project costs and environmental impact
- Multi-stakeholder collaboration
- Provided an experiential learning opportunity



Action: Haggert Avenue LID Road Retrofit

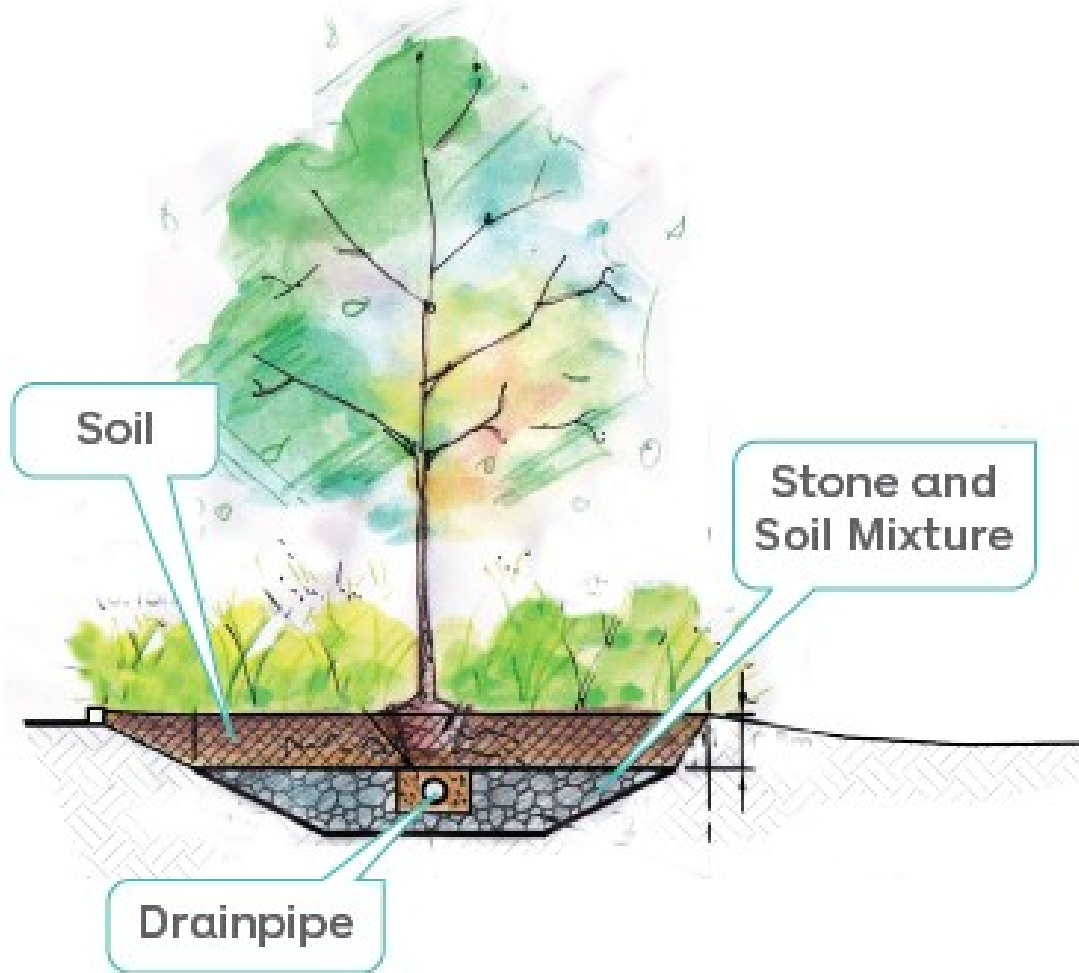


Haggert Avenue LID Road Retrofit Overview

- Stormwater Management benefits: water quality, water quantity, Redside Dace habitat
- Urban Forest benefits: canopy cover, streetscape beautification, cooling habitat
- Natural heritage benefits: biodiversity, pollinator habitat
- Community benefits: demonstration project shows neighbourhood improvement
- Road resurfacing is good opportunity to include LID
- SNAP Theme – Green Street



Bioswale



- drainage area = 3500 m²
- Treats the 27 mm storm event (90% of all storms)
- Inlets are poured concrete spillways
- Three bioswale cells store a total of 63,000L of water (or 400 bathtubs!)



- Initial Plan included trees, perennial grasses, and flowering perennials
- Uncertainty about survival and maintenance of flowering vegetation

- Landscaped plan was revised to minimize flowering plants
- Good opportunity to test different treatments



Success



Tested a new approach



Performance



Promoting green infrastructure

Conclusion

- Glendale Public School Rain Garden complete
- Haggert Avenue planting finalized
- Late Summer/Early Fall Construction and Documentation
- Monitoring, inspections, training, SOP development
- Reporting to FCM
- Late 2021 Project and FCM Agreement Close



Thank you!

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