

Sustainable Neighbourhood Action Program

ACTION PLAN



Toronto and Region
Conservation
Authority

West Bolton Sustainable Neighbourhood Action Plan (SNAP)

Bringing people, nature and places together

March 2019

In partnership with:



Region of Peel
working with you

The West Bolton SNAP is a comprehensive action plan for neighbourhood revitalization that integrates local community interests and sustainability objectives under the overarching theme of bringing people, nature and places together. Connectivity, both physical and social, has been the key interest expressed by the community throughout the plan's co-creation. By bringing people, nature and places together, we can rethink the experiences that a residential neighbourhood can provide, while improving its resilience.

WHAT IS SNAP

The Sustainable Neighbourhood Action Plan (SNAP) Program of TRCA is a collaborative, neighbourhood-based approach for advancing urban renewal and climate change action in older urban areas. SNAPs help municipalities and other community collaborators improve efficiencies, draw strong local support, and build innovative partnerships for the implementation of a broad range of initiatives in the public and private realms.

WEST BOLTON SNAP

The West Bolton SNAP was initiated in 2016 by the Town of Caledon, Toronto and Region Conservation Authority (TRCA) and the Region of Peel. As one of six pilot SNAP projects in the Toronto Region, the West Bolton SNAP seeks to demonstrate the implementation of the Town's Community Climate Change Action Plan at the neighbourhood scale, while also advancing the objectives of the Humber River Watershed Plan, TRCA's Trail Strategy, the Region of Peel's Climate Change Strategy and Water Efficiency Strategy, as well as many other municipal and conservation authority management plans and strategies.

The West Bolton neighbourhood was selected due to the alignment of multiple sustainability priorities of the Town, the Region and TRCA. These priorities, together with stakeholder interests and opportunities, include:

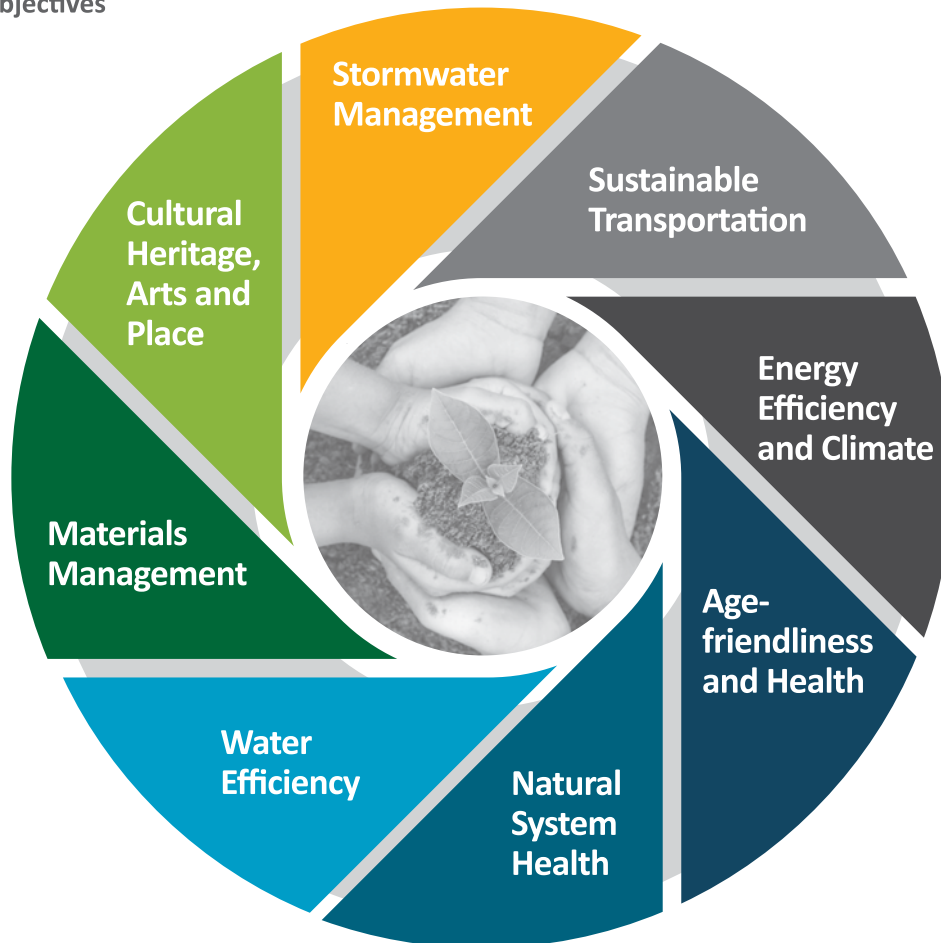
- **Jaffary's Creek** - Remediation efforts to address long-standing erosion issues in Jaffary's Creek provide the potential to explore green infrastructure solutions as part of the Town of Caledon's Environmental Assessment and Drainage Study.
- **Energy intensity** - Areas of the neighbourhood have high energy consumption as identified by the Town of Caledon's residential energy study, which highlights the potential to improve home energy performance.
- **Water consumption** - Residential water consumption in the neighbourhood is higher than the Region of Peel's average, highlighting potential opportunities for reducing both indoor and outdoor water usage.
- **Urban forest** - The Region of Peel's urban forest priorities and heat vulnerability index show a need to increase neighbourhood tree canopy.
- **Natural heritage** - TRCA's Humber River Watershed Plan identifies the need for watershed regeneration by increasing habitat connectivity and natural cover in West Bolton.
- **Greater connectivity** - There is a strong local interest in creating a neighbourhood-wide connected system of active and sustainable transportation infrastructure.
- **Stronger sense of place and local heritage** - Residents have a strong sense of their local heritage and appreciation for their natural settings, notably including the Humber River, which provides opportunities for integrating this unique local sense of place in community revitalization initiatives.
- **Age friendliness and social resilience** - An aging population and urban growth present potential opportunities for encouraging aging-in-place initiatives and fostering intergenerational interactions.

Some of the issues identified above can be exacerbated by emerging threats from climate change including extreme weather events such as intense storms and heat waves. Heat waves can pose a threat to vulnerable populations, such as seniors and children, however, there are also emerging opportunities. For example, technology can help us control our homes making them energy efficient or provide opportunities to work from home reducing the number of car trips.

SUSTAINABILITY OBJECTIVES

Eight sustainability objectives (Figure 1), informed by local sustainability priorities and stakeholder interests, have guided the development of the West Bolton Action Plan.

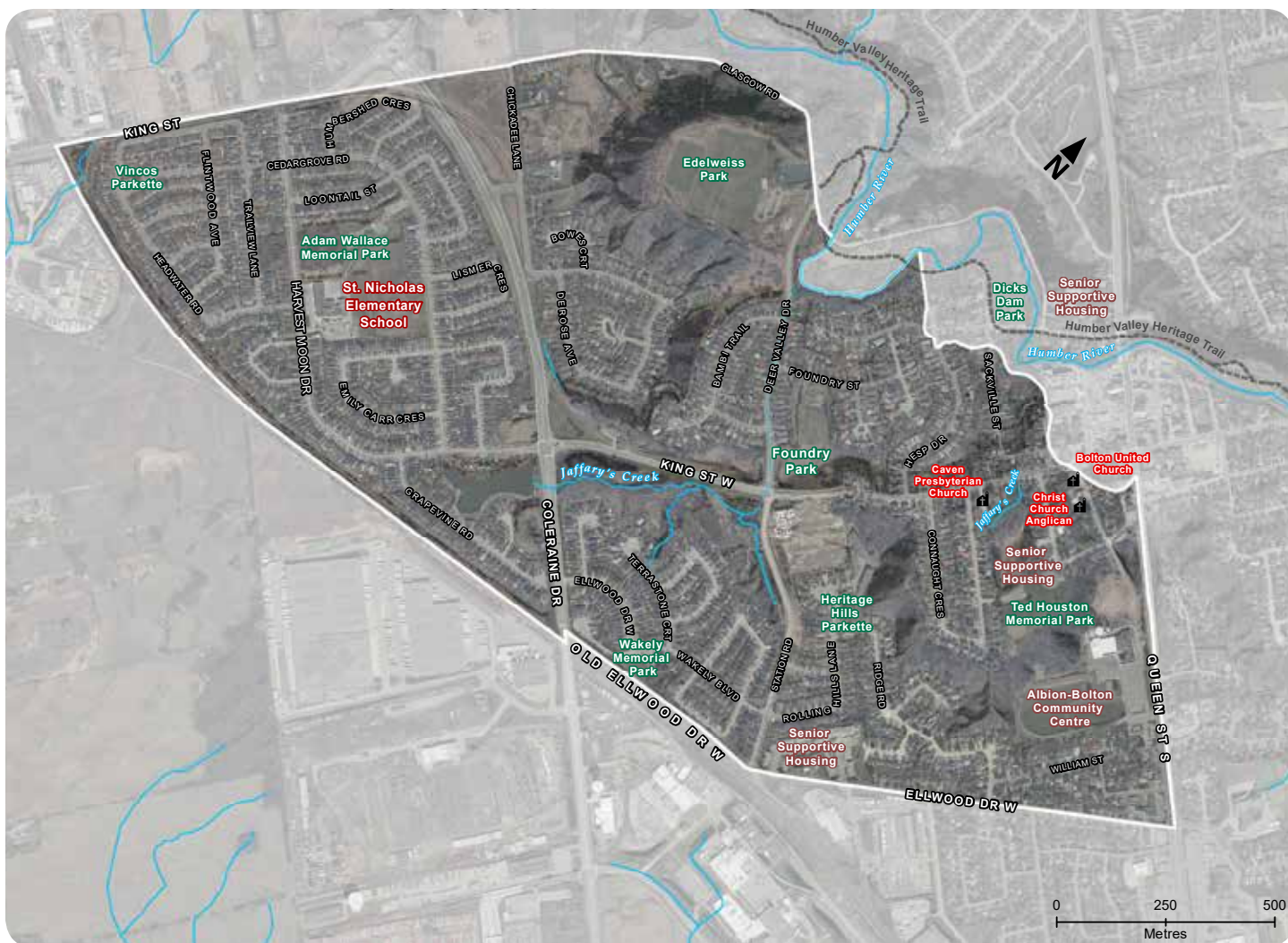
Figure 1 -
West Bolton SNAP
Sustainability Objectives



WEST BOLTON NEIGHBOURHOOD

Located within the Humber River watershed, West Bolton is a mature neighbourhood in Bolton (Figure 2: West Bolton SNAP Neighbourhood). Situated in close proximity to the historic Bolton downtown core, this neighbourhood is comprised mostly of single-family homes, predominantly 20-60 years old, with some pockets of commercial and institutional development. There are several parks, natural areas, and trails located in the neighbourhood, as well as the heavily-altered and locally-valued Jaffary's Creek, a tributary of the Humber River. Notable neighbourhood amenities include a community centre, library, elementary school and three churches. There are also two Peel Living buildings that provide social housing for seniors and families. The neighbourhood has a relatively stable population, mostly comprised of families, a majority of whom have school-aged children and dual incomes. There is also a concentration of seniors living in the eastern section of the neighbourhood (see Table 1 for the Neighbourhood Profile).

Figure 2 -
West Bolton SNAP Neighbourhood



The data used to create this map was compiled from a variety of sources and dates. TRCA takes no responsibility for errors or omissions in the data and retains the right to make changes and corrections at any time without notice. For further information about the data on this map contact the TRCA GIS Department 416.661.6600. Data provided by OMNR is copyright, Queen's Printer for Ontario. Other data provided or used is copyright by their respective owners. Orthophoto: First Base Solutions; Spring 2018 Date: April 11, 2019.

Table 1 - Neighbourhood Profile¹

SIZE

253 ha

LAND USE

Medium Density Residential	60%
Commercial/Institutional	2.1%
Recreational	11%
Rural Residential	3%
Roads	3%
Vacant Land	1%

POPULATION

West Bolton	8,315 (12% of Caledon's population)
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HOUSEHOLDS

# of households	West Bolton - 2,668
% of households with children at home	West Bolton - 70% Town of Caledon - 56%
% of residents with English as language most commonly spoken at home	West Bolton - 90% Town of Caledon - 86%
% of residents who identify as immigrants	West Bolton - 22% Town of Caledon - 25%
% of residents who have a university degree	West Bolton - 5% Town of Caledon - 22%

MEDIAN AGE

West Bolton	38
Town of Caledon	41

MEDIAN INCOME

West Bolton	\$44,053
Town of Caledon	\$41,476

MEDIAN INCOME

West Bolton	\$44,053
Town of Caledon	\$41,476

UNEMPLOYMENT RATE

West Bolton	5%
Town of Caledon	5.5%

HOUSING

% of dwellings that are single or semi-detached homes	West Bolton - 86% Town of Caledon - 89%
% of homes that are owned	West Bolton - 91% Town of Caledon - 89%

TRANSPORTATION

% of residents who travel to work as driver	West Bolton - 91% Town of Caledon - 89%
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¹ Based on 2016 Canada Census Data



THE STORY OF Jaffary's Creek

Named after a family of Scottish immigrants with properties in the area since the early 19th century, Jaffary's Creek has witnessed the evolution of West Bolton. Historic land developments have altered the natural course of the creek resulting in two disconnected segments as the only visible traces of this tributary to the Humber River. Despite this alteration, the creek's ecosystem still retains some significant flora and fauna species. There are very small fragments of mature forest on the creek's slope (west of Coleraine Drive), including sugar maple and eastern hemlock. Some of flora species classified as urban conservation concern in proximity to the creek include: eastern hemlock, variegated horsetail, arrow-leaved aster, and bladder sedge. The creek's watershed also includes a stormwater management pond that provides natural habitat of poor-to-fair quality. Several species of fauna surviving along the creek's surrounding ravine include: mink, muskrat, short-tailed shrew, and American toad.

Speaking to the local residents

"Historically, [Jaffray's Creek] ran down from the west, across what is now Station Road; passing a slaughterhouse and reportedly gathering all the effluent - making the smell and flies in the slow flow of the summer stream unbearable on Sundays in two downstream Churches, and for residents. It should be noted that both the Anglican and United Church have experienced problems with what is locally referred to as 'shifting sand' around their basements where the Creek is buried, causing even larger problems when extensions were added. As subdivisions were built, storm retention ponds were constructed and a decision was made to divert much of the creek and new subdivision run-off from the west, through a large and long underground culvert from the Station Road Pond directly to the Humber River at a bend in the river at the west end of Dick's Dam Park. However much of the drainage water east of Station Road still runs from the streets, homes, springs and hills – downhill - back into the Creek and/or its culverts. Consequently, in spite of the diversions and buried culverts, the Creek still gathers rainfall from the hills and water from small springs and can be seen behind Caven Presbyterian Church."

Heather Broadbent, local resident

"I have lived beside Jaffary's Creek since 1971 and I observed that flooding events in Jaffary's Creek became more frequent. During late winter thaws and spring rainstorms it was not unusual to see runoff flood over the creek banks and on occasion spill out onto King Street. But I have also seen the revival of the ecosystem in the open remnants of the creek. A variety of sturdy trees and wild flowers have sprung up, attracting interesting fauna, like deer, water fowl and birds of prey. A unique heritage oak that took root about the time of Wyatt Jaffary (1826-1883) still stands, dominating the ravine along Station Road branch of the creek."

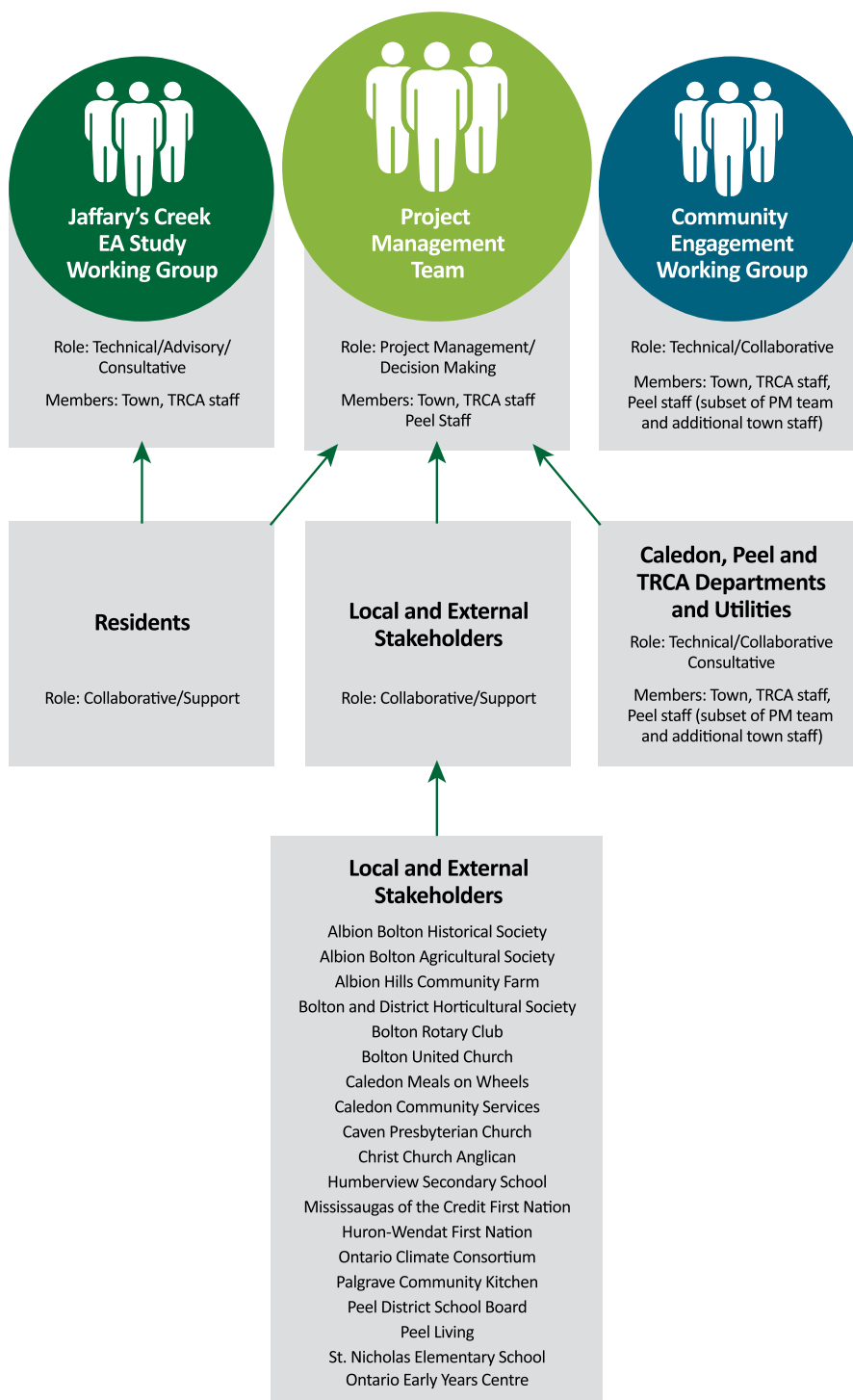
Jerry Gorman, local resident

HOW WE GOT HERE

The SNAP Governance

The West Bolton SNAP was developed using a highly collaborative approach to foster co-ownership of the action plan among key stakeholders and the community. The project was co-managed by the key partners (Town of Caledon, TRCA and Region of Peel) through a project management team and it engaged a large number of diverse stakeholders in various capacities (*Figure 3*).

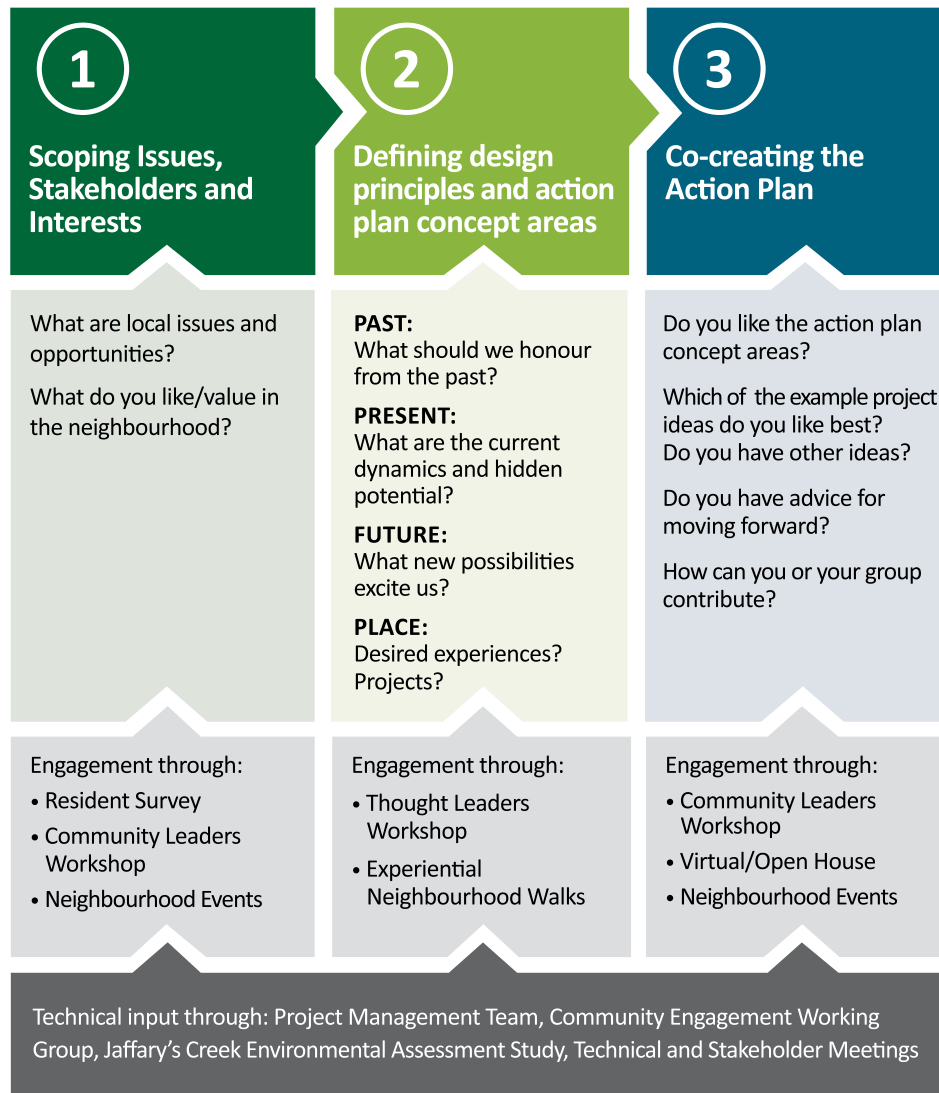
Figure 3 - Project Management Structure and Stakeholder List



The Planning Process

The West Bolton SNAP followed a planning model that was comprised of three main tasks: (1) scoping issues, identifying stakeholders and interests; (2) defining design principles and action plan concept areas; and (3) co-creating the action plan (see Figure 4).

Figure 4 -
Action Plan Co-creation Process



All supporting studies and information are contained in the Technical Background Report available upon request.

A central component of the planning process was a Thought Leaders Forum, which utilized a co-design planning approach with community and industry stakeholders that tapped into people's emotional connection to the neighbourhood as a main motivator for taking actions to improve neighbourhood sustainability and resiliency.

"The participants needed to create a new story for the West Bolton SNAP that climbed above the individual perspectives to find a new meaning for this neighbourhood. People are growing tired of traditional sustainability and environmental conversations. Organizations are also looking for a breath of creativity and a fresh approach from the conventional planning processes. While topics such as natural heritage, stormwater management, water, active transportation, materials management, and energy are critical, they need to be woven together in a story in which they are the players, not the plot."

- Hilary Van Welter, Thought Leaders Forum facilitator

The Thought Leaders Forum was attended by community members, staff, councillors, and industry experts. Participants were engaged in a full day of experiential activities geared towards rethinking their relationships with the neighbourhood. This was achieved through facilitated exercises, prompting participants to think about the past, present and future of West Bolton. Participants were encouraged to unleash their creativity in developing guiding principles and design considerations for potential SNAP projects and interventions.



Participants taking part in various Thought Leaders Forum activities.

WHO WAS INVOLVED

Through a variety of engagement forums, the SNAP team gathered community input from a diverse range of residents, local groups, and organizations from every geographic area of the neighbourhood, including those listed in *Figure 4*. In particular, special considerations were given to groups that are not traditionally represented in the consultation process:

- **Seniors:** Given the presence of two Peel Living buildings in the neighbourhood, the SNAP team hosted tailored consultation events at their facilities to ensure the participation of the tenants who otherwise would not be able to attend community-wide events.
- **First Nations:** Historically, the lands that Bolton currently occupies, have been the traditional territories of 12 different indigenous groups which were contacted as part of the planning process. Meetings were held with, and input sought from, those that expressed interest, including the Mississaugas of the New Credit First Nation and the Huron-Wendat Nation.
- **Youth:** In order to incorporate youth perspectives and ideas, the SNAP team sought input from local youth through family-oriented events and by participating in the Caledon Youth Summit.



Community Engagement Highlights:

- Over 20 stakeholder groups were engaged in the West Bolton SNAP co-creation process
- Over 6% of households (164) participated in a neighbourhood survey in 2016 (confidence level over 95%)
- Over 900 engagement interactions were made with residents and stakeholders through events and surveys, representing input from over 10% of the residents.



THE WEST BOLTON SNAP ACTION PLAN

The action plan is comprised of a series of strategic projects that each support one or more of the sustainability objectives and five inter-related, guiding goals for neighbourhood features and functions: Living Creek and Wildlife, Living Trails, Living Places, Living Homes, and Living Communities (see Figure 5).

Figure 5 -
Guiding Goals for Neighbourhood Features and Functions



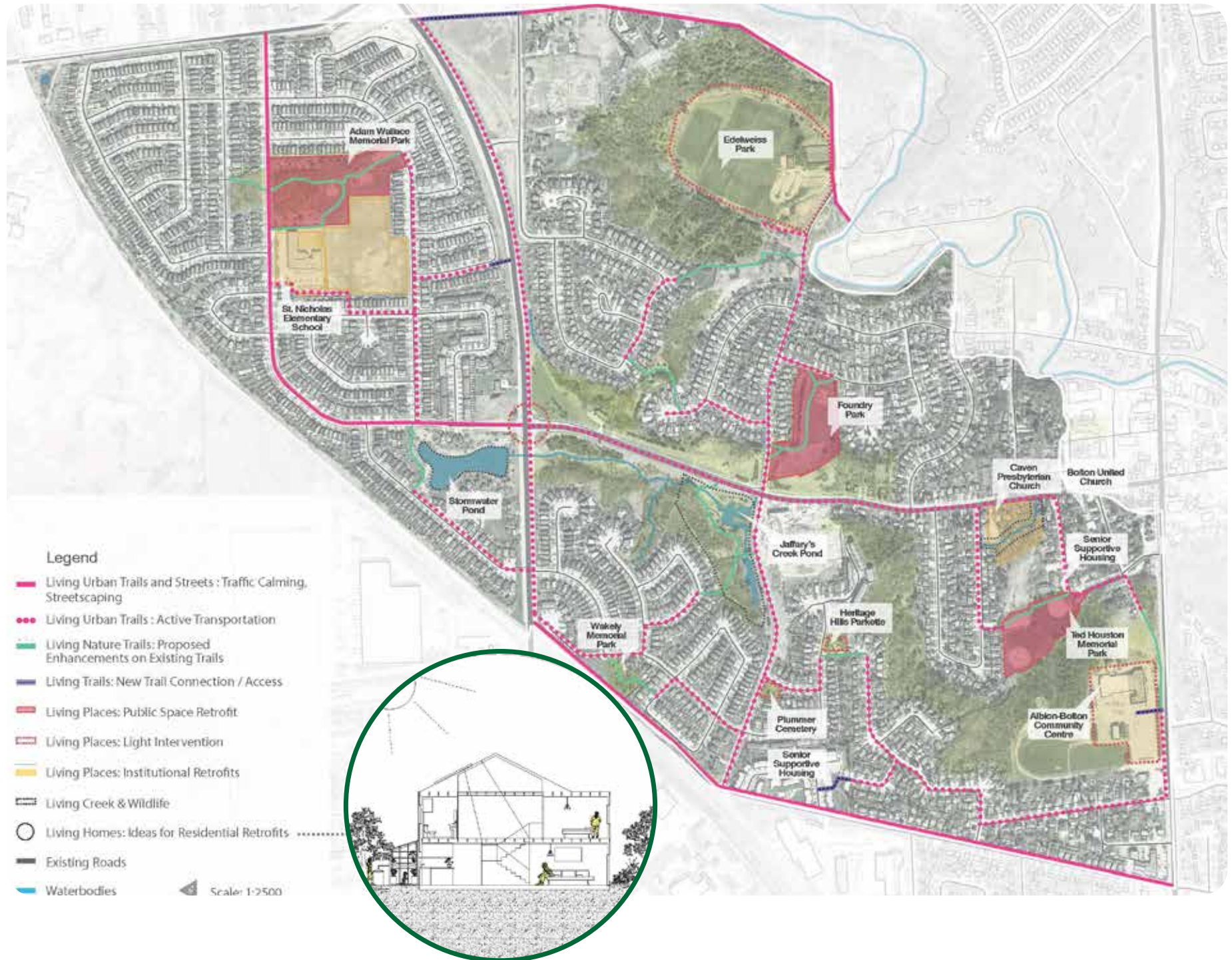
The recommended projects form an interconnected network of trails and destinations. They demonstrate new ways to blend nature and human ingenuity that can be replicated in yards and public spaces. Each of these destinations tells a different part of the story. A major focus of this story is about finding a unique identity from lessons of the past, while helping to shape a new community that is ready for the future. The celebrated heritage of West Bolton can be replicated and modernized. This includes local energy production, industry, food production, reforestation, learned respect for the floodplain and an eco-tourism destination for fresh air. Stories from the past can inform a 21st century model for quality of life and wellbeing for people and the Humber River.

This concept is about creating a system of corridors that lead through the entire community and connect to regional-scale trails and destinations outside the neighbourhood. The corridors weave through the parks and along the streets, keeping a consistent look so trail users can follow a path. Within this system there can be roles for churches and community groups to create future programming and opportunities for residents to work together with the Town, the Region and TRCA.

Partnership with University of Toronto's John H. Daniels Faculty of Architecture, Landscape and Design (Professor Liat Margolis and Victor Perez-Amado)

In order to tap into leading-edge research and new approaches in creating ecologically sustainable, artful, and culturally-stimulating spaces and environments, the SNAP team partnered with the University of Toronto's Daniels Faculty. Under the lead of Liat Margolis (Associate Professor, Landscape Architecture) and Victor Perez-Amado (Assistant Professor of Architecture and Urbanism), an interdisciplinary team of graduate students helped develop creative ideas for various neighbourhood spaces and generated the West Bolton SNAP action plan concept and conceptual drawings for signature projects.

Figure 6 -
Action Plan Concept



A CLOSER LOOK AT THE ACTION PLAN PROJECTS

A combination of small community-led initiatives and larger infrastructure renewal projects will create an integrated, walkable and cyclable network of vibrant local destinations and contribute to a healthier, local environment. The network has been divided into loops that relate to four distinct areas of the neighbourhood, each containing signature actions. Common design objectives and initiatives are outlined below to help guide implementing partners in advancing the plan.

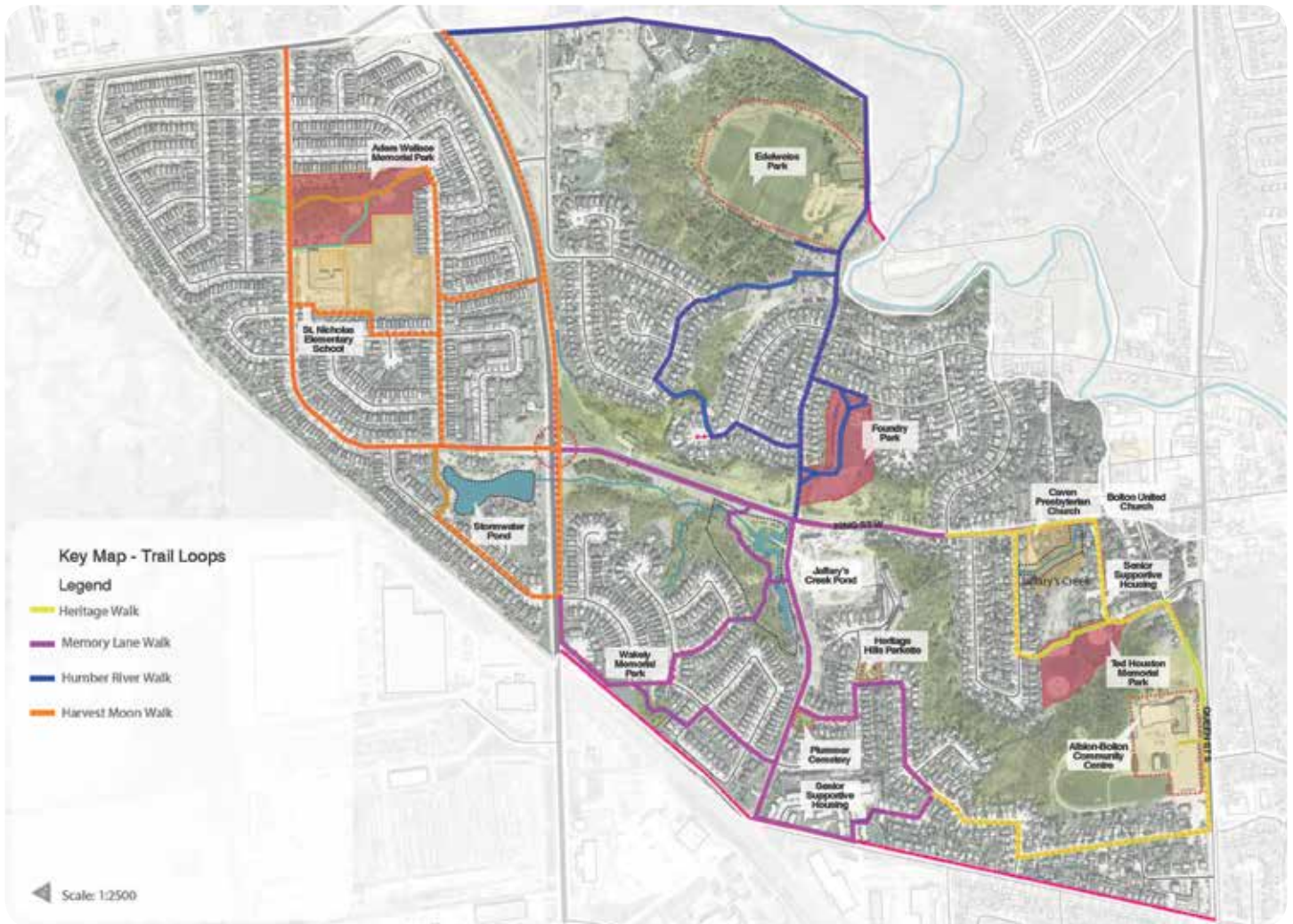
Common Design Objectives by Goal

- *Living Creek and Wildlife:*
 - Implementing green infrastructure on residential properties and public spaces such as parks to restore more natural hydrological patterns, while contributing to a healthier Jaffary's Creek and Humber River
 - Protecting and enhancing natural features to increase habitat quality, quantity, and connectivity through restoration plantings, education, local stewardship, and citizen science
 - Regularly maintaining two stormwater management ponds, which provide water quality and quantity controls, and implementing site enhancements to turn the stormwater management ponds into a community destination through the inclusion of community amenities, (e.g. trails for active living, a community gathering space, a look out, wayfinding signage) and restoration plantings
- *Living Trails:*
 - Urban Trails: Active Transportation: Making enhancements on the existing streetscape of local roads (e.g. Connaught Crescent, Station Road, Deer Valley Drive) to accommodate more active use across demographics, while creating complete streets that include shade tree plantings, resting stations, public art installations, and wayfinding signage to help residents identify different walkable loops with colours or patterns chosen by the community. Stormwater infiltration features and green infrastructure will be incorporated and aligned where possible with road reconstruction works and road right of ways.
 - Urban Trails: Traffic-Calming and Streetscaping: Retrofitting the streetscape of main roads (Ellwood Drive West, Glasgow Road, Harvest Moon Drive and intersection of Coleraine Drive and King Street West) for traffic-calming while contributing to improved pedestrian and cyclist safety, increased urban forest cover, and improved stormwater management in road right of ways. In particular, green infrastructure should be considered for King Street to improve habitat connectivity across the natural cover fragments in Bolton (e.g. between Bolton Resource Management Tract and Nashville Conservation Reserve).
 - Nature Trails: Improvements on Existing Trails: Maintaining and enhancing nature appreciation experiences through trail designs that ensure compatible use and incorporate light interventions such as accessibility improvements or wayfinding signage on existing trails in the area. Some of these existing trails include: Ted Houston Memorial Park and Heritage Hills Parkette trails, a De Rose- Deer Valley Drive connection, and a De Rose-Bambi Trail connection.
- *Living Places:* Renewing public spaces and institutional properties to provide greater opportunities for the community to come together and celebrate the local heritage, while increasing the urban forest cover and managing stormwater
- *Living Homes:* Home retrofitting, including strategic building and property retrofits and behaviour changes, contributes to neighbourhood targets for reduced energy and water consumption, waste diversion, increased urban forest canopy, and improved stormwater management. In the Heritage Walk area and East section of Memory Lane Walk, low impact development (LID) measures at residential properties are especially needed to reduce the impact of untreated stormwater flowing into Jaffary's Creek and the Humber River.
- *Living Communities:* Collaborating with and nurturing the valuable social networks of local residents and building capacity in existing community groups can help to create a sustained neighbourhood movement to support the implementation of action plan projects and support neighbourhood resilience. Peer-to-peer community leadership will be especially important to deliver programs designed to promote commuter ride-sharing, walking and cycling, intergenerational activities and mentoring, emergency preparedness, as well as story-telling and fun activities to animate the revitalized public spaces in the neighbourhood.

SIGNATURE ACTIONS WITHIN THE FOUR LOOPS

The action plan is comprised of a series of strategic projects that each support one or more of the sustainability objectives and five inter-related, guiding goals: Living Creek and Wildlife, Living Trails, Living Places, Living Homes, and Living Communities (see Figure 5).

Figure 7 -
Key Map of Trail Loops





LOOP 1 - Heritage Walk

This area of West Bolton is within walking-distance to historic downtown Bolton and contains several heritage homes, three churches, a Peel Living building and Ted Houston Memorial Park. Residents expressed the need for additional public spaces in which to informally meet and spend time with family and friends. An Environmental Assessment (EA) study, led by the Town of Caledon to address an ongoing erosion issue in Jaffary's Creek, presents a key opportunity to incorporate additional revitalization and community functions.



Inspiration from other places – a pop-up food hub, street-side bio-swale, pop-up recreational activities.

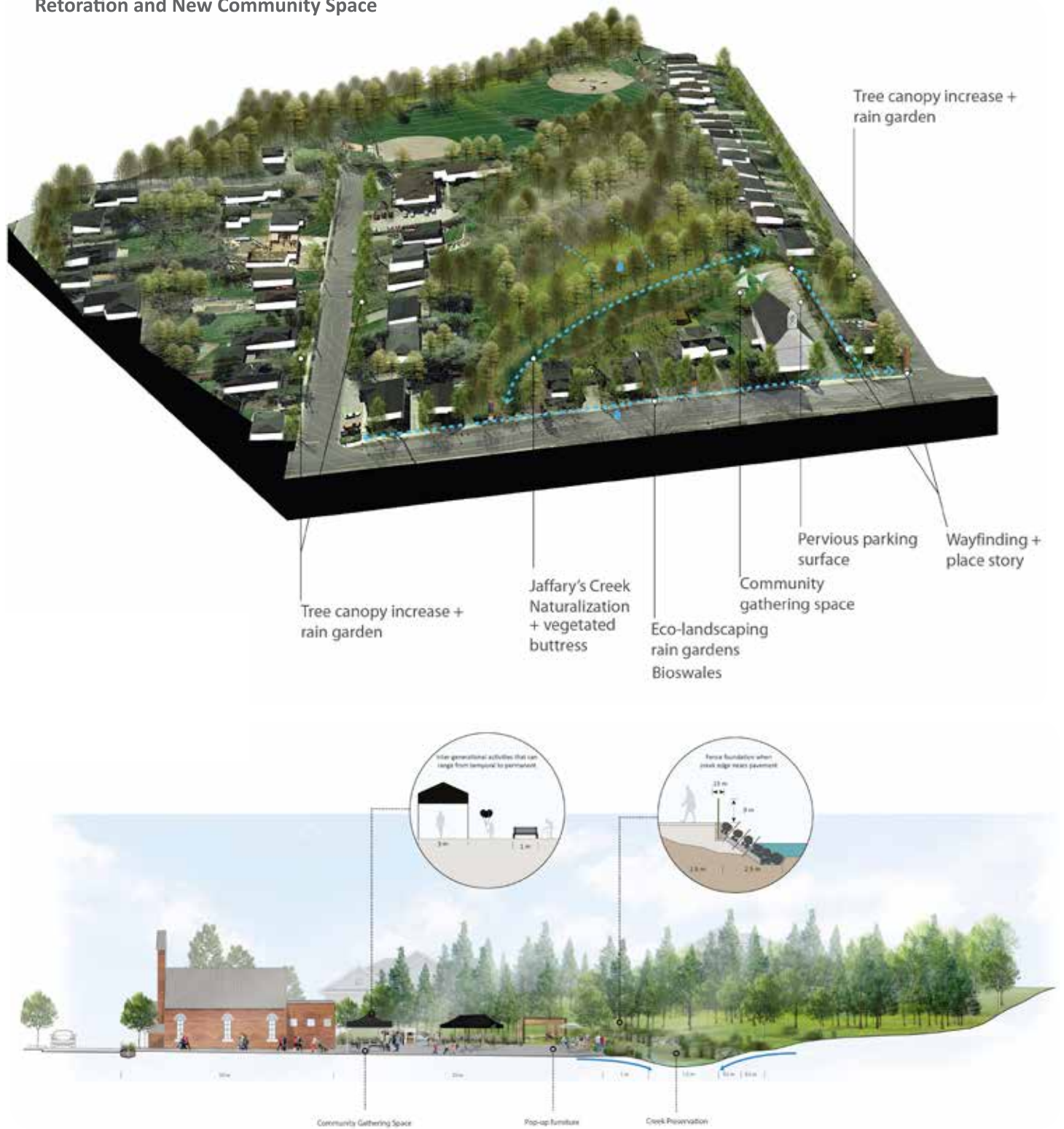
What we heard from the community

- *“Would love to see more revitalization of the downtown core. Because many seniors live nearby, it would be great to make it a hub for seniors with affordable or free activities, etc.”*
- *“We need a central ‘square’ where people can sit and socialize.”*
- *“Caven Presbyterian Church: We would love to expand the use of the area surrounding the creek. It could be a space with a little bridge where couples could have their wedding pictures, or a pathway and picnic area.”*
- *“I like the idea of bike lanes. We need a lot more trees and greenery in downtown Bolton. I also have recently been biking in the area so it is great to see that this is an idea.”*
- *“I love the idea of the bio-swales.”*
- *“Vibrant public space compatible with wildlife and natural space is needed.”*

Recommended retrofits include:

- **Jaffary's Creek restoration and new community space (Living Creek and Wildlife, Living Places):** Following the technical recommendations of the EA study, erosion issues in Jaffary's Creek will be addressed by implementing a vegetated buttress and selected plantings on the banks. In partnership with Caven Presbyterian Church and local residents, an additional new community destination can be created by incorporating place-making (e.g. resting stations, hang out space, public art installation) and improving the natural heritage in close proximity to the creek.
- **Ted Houston Memorial Park enhancement (Living Places):** Replacing dead ash trees and making natural heritage improvements through selected tree plantings is recommended. Due to its proximity to the Peel Living building, and the presence of two baseball diamonds, this public space presents an opportunity to foster intergenerational interactions through place-making initiatives. These types of interventions should be further explored and confirmed with residents as complementary uses to the current recreational use of the park.
- **Albion Bolton Community Centre (Living Places):** Significant retrofitting efforts have already been invested into this facility, therefore it is recommended that continued opportunities be explored in future renovations and capital projects to align with the objectives of this action plan (e.g. greening the parking lot, harvesting rainwater, renewable energy, etc.).

Figure 8 -
 Conceptual Design for Jaffary's Creek
 Retoration and New Community Space



Not a plan – for illustrative purposes only. All areas will be subject to full planning and co-design with citizens and other stakeholders



LOOP 2 - Memory Lane Walk

The Memory Lane theme of this trail loop represents the concept of celebrating local heritage through tangible and visible interventions in the multiple parkettes, as well as through way-finding signage to foster appreciation of less tangible local assets, such as heritage stories of the local residents.

Located between downtown and the newer neighbourhood pocket to the west of Coleraine Drive, this area of West Bolton has a distinct character given the varied topography, the presence of small parkettes and the train track. There is another Peel Living building in this section of the neighbourhood and new housing is under construction at King Street and Station Road, with some designated units for seniors. Jaffary's Creek flows along King Street towards Jaffary's Creek Pond, where it is piped and diverted under Deer Valley Drive towards the Humber River.

There is an identified need to improve walkability and the creation of new local destinations to help support the development of an active transportation network, while also improving the health of Jaffary's Creek and its natural surroundings. The need for walkability and local destinations are of particular importance for some seniors and other residents with mobility challenges, given the limited distance they can travel and the variable conditions of the existing trail routes pose barriers to connecting with the broader community.



Inspiration from other places - pedestrian seating and trails.

What we heard from the community

- "Senior participants liked the idea of benches, resting-stations and more shade trees along Ellwood Drive."
- "Property grounds of Stationview Place are not very well used as shade is limited and seating is very uncomfortable."
- "I like the streetscape designs with bike lanes, bioswales and trees but I'm concerned there may not be enough space in the downtown area or on main roads. "
- "Like the idea of separating cars from people and cyclists, specifically the physical space"

Recommended retrofits include:

- **Jaffary's Creek Pond retrofit (Living Creek and Wildlife):** This stormwater management pond area has been identified by the Town for testing best management practices in stormwater management, and by TRCA as contributing to terrestrial natural heritage targets. These interventions to achieve environmental objectives could be leveraged to integrate other community functions that may create a local destination that includes active recreational uses and a look-out structure.
- **Retrofit of parkettes (Living Places):** Light interventions in the small local parkettes can activate these public spaces, support walkability through resting-stations, and contribute to mitigating urban heat island effects through shade tree plantings. Potential interventions depend on the opportunities available in specific parkettes, with some of them celebrating local heritage (e.g. Plummer Cemetery), while others have a more active use (e.g. Heritage Hills Parkette). The alignment with the maintenance schedule of the Town will be key to finding potential synergies in the design and construction of retrofit features.
- **New pedestrian access to Peel Living building (Living Trails and Living Places):** Construction of an accessible pathway from Ridgewood Crescent to Stationview Place would give seniors access to a 45 minute, fully- accessible walking loop across from Heritage Hills and Plummer Cemetery. This pathway could be part of a community-led depaving project in which a currently underutilized section of street could be transformed into a public space with trees and other community amenities.

Figure 9 -
**Conceptual Design for
 Heritage Hills Parkette Retrofit**



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LOOP 3 - Harvest Moon Walk

Built in the late 1990s, Harvest Moon is the newest of the neighbourhood developments. The neighbourhood is characterized as being a family-oriented residential area with St. Nicholas Elementary School and Adam Wallace Memorial Park as the only walkable destinations in proximity. An unnamed stormwater management pond, where Jaffary's Creek originates, collects all of the water runoff for this part of the neighbourhood. There is great potential for increasing the tree canopy in this neighbourhood. There are local needs for community spaces, traffic-calming interventions and greening retrofits to make street corridors more pedestrian friendly.



What we heard from the community

- "I think all of the proposed uses for St. Nicholas Elementary School would be beneficial to the community. The location is ideal (and I can walk there)."
- "It makes sense to develop the area around St. Nicholas school, but traffic speed mitigation is required in the area as is, never mind if another destination is created along Harvest Moon."
- "School traffic areas slow and create shared spaces for street festivals and summer activities."
- "Definitely plant more trees."



Inspiration from other places - a basketball court, green street design, a greenhouse

Recommended retrofits include:

- **St. Nicholas Elementary School and surrounding area (Living Places):** The school grounds and surrounding areas can be improved through tree plantings, renovation of the basketball courts, and encouragement of active transportation to and from school (through targeted programming and infrastructure retrofits). Temporary interventions could be further explored with respect to repurposing the empty lot next to the school to create a community destination in partnership with the landowner, Peel District School Board (PDSB), and the local residents. Temporary uses could include a community vegetable garden and/or a market space, to connect residents with the agricultural heritage of West Bolton.
- **Adam Wallace Memorial Park retrofit (Living Places):** Park retrofits should aim to diversify functions and provide a range of experiences across neighbourhood demographics. Tree planting initiatives that started during the action plan co-creation process should be continued to support the creation of a natural buffer that protects the woodlot located just to the west of the park. This natural woodlot has a high ecological value given the presence of large, mature trees (e.g. sugar maple and beech) and a low-lying area with vernal pools and patches of swamp/silver maple. New forms of interpretation and signage could be installed to help foster natural heritage appreciation and stewardship of this site. Local homeowners should be encouraged to adopt native or non-invasive plants in their yard as a way to increase local biodiversity and connect this woodlot to other habitat patches nearby.



St. Nicholas Elementary School, Adam Wallace Memorial Park and surrounding area (TRCA, 2017)

Figure 10 -
 Conceptual Design for Adam Wallace
 Memorial Park Retrofit



Not a plan – for illustrative purposes only. All areas will be subject to full planning and co-design with citizens and other stakeholders



LOOP 4 - Humber River Walk

Close proximity to the Humber River defines the landscape and look of this part of the West Bolton area. A network of trails provides several opportunities for walking to local destinations like Edelweiss Park or the Humber River itself. The neighbourhood trail system and programming should enhance access to the Humber Valley Heritage Trail and highlight the historical indigenous connections with the Humber River. The local Foundry Park represents one of the biggest revitalization opportunities in the neighbourhood, given its central location and the amount of available space.

What we heard from the community

- *“I would definitely like to see more trees throughout Bolton. I heavily support that initiative.”*
- *“The more trails and attempts to interact, the more the nature corridors become extended gardens and manicured parks. Some corridors should be left to nature and wildlife, and some used for walking trails and park-like use. Tree planting would benefit all areas of the community.”*
- *“Inviting animals and birds to live in the space is great, but if cars keep racing through it, it will be a waste.”*
- *“We should celebrate natural amenities such as the Humber River designation as a Canadian Heritage River.”*
- *“The Humber River is the best kept secret of Bolton.”*
- *“I’m excited about the potential of Jaffary’s Creek trail to offer trail and park possibilities, while maintaining a natural state and minimizing impact to nature. The addition of stairs and steeper trails within Edelweiss section from existing trail off Derose, down to Edelweiss Park would be fantastic. Connection to a safer walking/running trail instead of Glasgow road at the north side of Edelweiss would improve safety and use and allow for a loop around Edelweiss Park”,*
- *“I would love to see some art along the trails.”*
- *“I would like to see trail tours from local First Nations groups about the history of the land”*
- *“We should have sponsor activities in parks, opportunities to bring kids to the park, offer open air music, art (i.e. Shakespeare in the park), and food concessions in the park. Focusing on hiking alone will not get everyone involved; we need to keep areas natural and value viewpoints.”*



Inspiration from other places for a movie night, seating and canopy

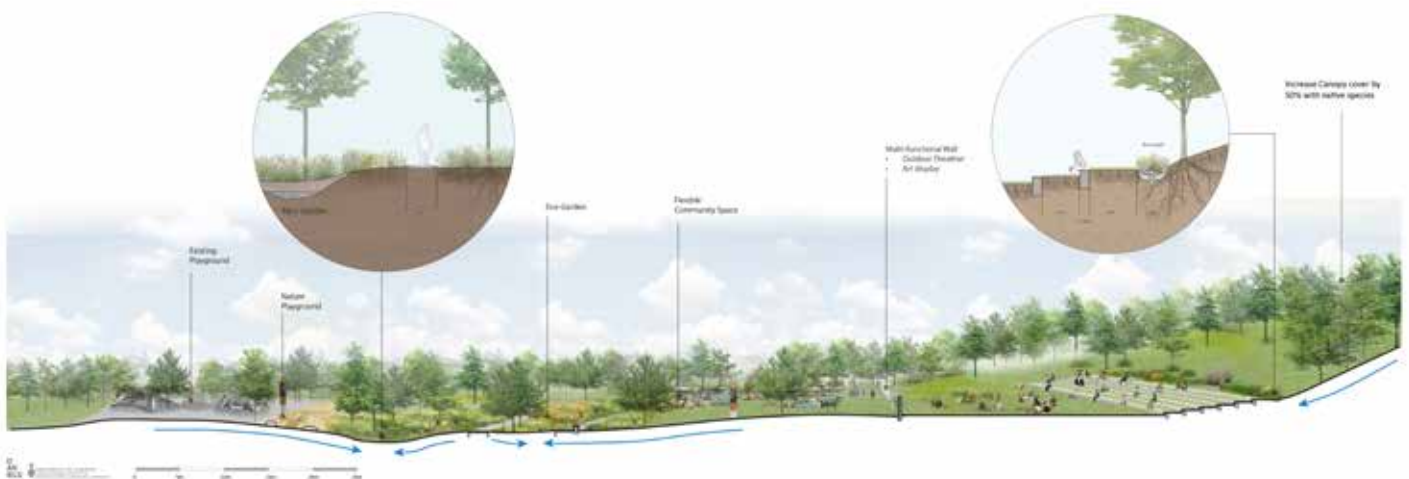
Recommended retrofits include:

- **Foundry Park retrofit (Living Places):** Revitalization efforts in Foundry Park should look to create a diversity of functions and experiences across demographics however, given that most parks in the area focus on active recreation uses (i.e. soccer, baseball, etc.), there is an opportunity here to focus on passive activities such as community gatherings, outdoor theatre, or yoga. These activities could be facilitated by providing dedicated spaces within the park such as an amphitheatre for movie nights or theatre performances and a shade structure for yoga or community gatherings. This reflects the feedback received from the local community and keen interest in these types of activities. Tree plantings can be added to provide shade and contribute to alleviating the urban heat island effect of this area.
- **Living Places - Edelweiss Park:** Despite long-term strategies that recommend the renaturalization of this area, there is a current need to continue with the recreational use of the park as a soccer hub. Given this existing usage, there are very few short-term retrofitting opportunities present in this park. In this context, exploring opportunities in future planning and capital projects is recommended to align with the objectives of this action plan (i.e. renaturalization of the area, creating opportunities for active living, improving the quality of the natural heritage and wildlife corridor, etc.)rainwater, renewable energy, etc.).



Aerial Image of Foundry Park (Google Maps, 2017)

Figure 11 -
**Conceptual Design for
 Foundry Park Retrofit**



Not a plan – for illustrative purposes only. All areas will be subject to full planning and co-design with citizens and other stakeholders

MEASURING SUCCESS

The West Bolton SNAP provides direction for the local implementation of many higher level municipal and conservation authority plans and strategies. Table 1 identifies specific neighbourhood targets that can be achieved through the implementation of this action plan. As part of the West Bolton SNAP planning process, baseline conditions have been documented for many indicators. Specific monitoring protocols will be developed as part of the implementation programs to enable tracking of progress toward the long-term targets over time. The long-term timeline is 20 years unless otherwise indicated.

Table 2 -
Key Outcomes over the Long-Term

SUSTAINABILITY OBJECTIVES	NEIGHBOURHOOD TARGET
Natural Heritage System Health	<p>Increase the overall urban forest canopy cover from 31% to 45% of the study area. This can be achieved by:</p> <ul style="list-style-type: none"> - Increasing the target Terrestrial Natural Heritage System (TNHS) from 15% to 25% of the study area and maximizing tree canopy in the TNHS - Increase the urban forest canopy outside the TNHS from 16% to 20% by planting an estimated 1500 trees on various property types, outside of the TNHS
Stormwater Management (SWM)	>30% of homes implement lot level LID measures to manage runoff volume, improve water quality and moderate runoff temperature, especially in areas draining directly, untreated to Jaffary's Creek and Humber River
Water Efficiency	Achieve the Region of Peel water efficiency target by reducing residential single family indoor water demand from an average of 186 litres per capita per day (LCD) to 150 LCD
Energy Efficiency and Climate	<p>Achieve the Town of Caledon energy efficiency targets by:</p> <ul style="list-style-type: none"> - Retrofitting 50% of homes (425) built before 1990 by 2025* - Retrofit buildings energy performance gain to be equal to 15% above performance of buildings constructed from 2012-2016 - Retrofitting 25% of homes (462) built after 1991 by 2025* - Retrofit buildings energy performance gain to be equal to 10% above performance of buildings constructed from 2012-2016 <p><i>*Anticipating the Town's target year of 2031</i></p>
Sustainable Transportation	<p>Achieve the Town of Caledon sustainable transportation targets by:</p> <ul style="list-style-type: none"> - Increasing the number of residents walking or cycling for local transportation by 2% to 3% - Increasing sustainable employment commute transportation by 5% to 7% within 10 years
Cultural Heritage, Arts and Place	<ul style="list-style-type: none"> - Increase the number of local events and initiatives that foster social connections - Increase the number of projects and initiatives including public art - Increase the number of initiatives and projects celebrating local Indigenous and settler history
Health and Age-Friendliness	<ul style="list-style-type: none"> - Increase the number of residents participating in daily walking and cycling - Increase the number of residents aged 55+ participating in daily physical activity - Increase the number of hours of walking or cycling per week per person - Achieve standards for an age-friendly community in the outdoor spaces and buildings, social participation, and respect and social inclusion dimensions
Materials Management	<ul style="list-style-type: none"> - Increase the number of local events and initiatives that include a waste education, reduction or waste reuse component - Achieve or exceed the Region of Peel's waste diversion target of 75% by 2034



Achieving the Urban Forest Target - An Example

The urban forest canopy target of 20% could be achieved by planting an estimated 1500 trees on various property types.

For example:

- 600 trees in residential front yards and local road right-of way
- 185 trees in regional road right of way
- 450 trees in residential back yards
- 25 trees on residential multiunit properties
- 80 trees in public parks
- 70 trees on parking lots
- 30 trees on institutional properties
- 75 trees on farm properties

IMPLEMENTATION OF THE ACTION PLAN HAS ALREADY BEGUN!

An implementation framework has been developed to identify a leader for each project, key collaborators or partners, estimated implementation timeframes, potential funding sources, and next steps. As different projects get implemented, their contribution towards the neighbourhood targets will be tracked through ongoing monitoring and recorded in a performance monitoring plan.

In accordance with the highly collaborative nature of the SNAP approach, the Town of Caledon, the Region of Peel, TRCA, local residents, groups, and other stakeholders will continue to work together to refine components of the action plan through development of pilot projects and implementation of programs. Special consideration should be given to the continued involvement of seniors, youth and First Nations. In particular, it is observed that:

- Further engagement efforts are required to ensure that action plan projects both acknowledge and respect First Nations distinctive spiritual relationships with the land and water, while contributing to the call for action from the Truth and Reconciliation Commission of Canada to improve relationships between Canadians and First Nations people.
- Despite best efforts, youth are still thought to be underrepresented in this action plan. As such, more work is needed to foster greater youth involvement in local events and implementation projects.

Community Tree Plantings During Action Planning

Community Tree Plantings During Action Planning Tapping into the community passion for trees and family-friendly events, the SNAP team hosted three community tree planting events during the action planning process. In addition to contributing to the urban forest target for the neighbourhood, these events were used to collect feedback from residents on key milestones of the co-creation process. Over 350 participants planted 400 trees and shrubs in Adam Wallace Memorial Park throughout the three events.





Participation in Pilot Home Retrofit Program

Early in the consultation process, residents expressed interest in improving their homes' water and energy efficiency and eco-landscaping. This interest, coupled with the need for action in the residential sector to address high energy and water consumption as shown by the neighbourhood data, represented an opportunity to further nurture community engagement and mobilize already engaged community members in short-term actions. The SNAP team launched a pilot home retrofit program with home consultations as the main delivery channel. Home consultations are 45-minute home assessments undertaken by two trained SNAP advisors who recommend the best suited retrofits for each home. By the time this action plan was finalized, over 20 homeowners had already participated in the pilot program. The lessons learned in the pilot will inform a refined version of the program to be implemented in 2019.

Community Leadership and Local Action

Local groups including the Albion-Bolton Historical Society, Bolton and District Horticultural Society, and the Humber Valley Heritage Trail Association are already demonstrating leadership by leading local nature hikes, heritage walks and tree plantings. Other groups which operate on a regional basis could potentially play an increasing role here in this neighbourhood. These are just a few of many local leaders who have tremendous skills and expertise and who can contribute in many valuable ways to implementation of this action plan and the creation of a resilient community.



The West Bolton Sustainable Neighbourhood Action Program (SNAP) is led by the Town of Caledon, the Region of Peel and TRCA in close collaboration with many community leaders and stakeholders. Several specialized consultant teams and industry experts contributed to this project including the University of Toronto's John H. Daniels Faculty of Architecture, Landscape and Design, Ascentia, Lura Consulting, and Aquafor Beech Limited.

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