Pollinator Protection Plan

2025

Town of Orangeville

Executive Summary

Since 2020, through the Sustainable Orangeville Committee, the Town of Orangeville has been a designated Bee City committing to developing, restoring and preserving pollinator-friendly habitats. On March 24, 2025, Councillor Prendergast brought forward a motion to Council to Strengthen Pollinator-Friendly Practices in the Town of Orangeville. Council directed staff to report back on the development of a Pollinator Protection Plan including pollinator-friendly procurement and planting policies; and to identify suitable locations on town-owned property for the development of a municipal pollinator garden and proposed locations, budget implications, and an implementation plan for consideration at the July 14, 2025 Council meeting. The Pollinator Protection Plan supports Orangeville's Sustainable Neighbourhood Action Plan, specifically the 'protect and enhance the natural environment' goal, strategy no. 4, 'protect and enhance natural heritage and the urban forest'[1].

Pollinators are significant contributors to ecosystems and agricultural food systems. In Canada, there are over 800 native pollinator species[2] including butterflies, moths, flies, beetles, wasps, birds and bats. Ontario pollinator species have habitat ranges that vary from less than 500 metres to greater than 1,500 metres[3]. In order to ensure their needs are provided throughout their required range, a focus on creating habitat corridors, whereby individual habitats have connectivity, should be a focus. A 2017 study from the University of Guelph found that declines in pollinator species are generally due to land use changes, climate change, agricultural practices, and pest and pathogen management[4]. As such, when developing pollinator-friendly practices, actions to counteract or minimize these threats should be considered.

The Pollinator Protection Plan includes a review of current by-laws policies, procedures and other guiding documents to ensure that they support pollinator-friendly habitats and the proposed plan and budgetary implications for the municipal pollinator garden are included.

Through a review of the Town of Orangeville's by-laws, policies, procedures and other guiding documents, it was found that the Property Standards By-Law No. 2022-021 as amended from time to time and the Procurement Policy or By-Law No. 2023-061 as amended from time to time contained items and language that were not conducive to

---

[1] Town of Orangeville, 2019. Sustainable Neighbourhood Action Plan. Available online.

[2] Government of Canada, 2024. Pollinator protection. Available online.

[3] Pindar and Raine, 2023. Safeguarding pollinators requires specific habitat prescriptions and substantially more land area than suggested by current policy. *Scientific Reports*, 13(*1040*).

[4] Ibid.

pollinator-friendly practices and could be improved. It is recommended that these documents be updated to support pollinator-friendly habitats and practices.

Based on a literature review and a review of pollinator guiding documents from other municipalities, it is recommended that the Town of Orangeville consider adopting a Pollinator Policy to support the Town's commitment as a designated Bee City. The policy can include items to increase designated natural areas, mandate percentage of pollinator-friendly habitat in new development and Town-owned garden spaces, explore incentive programs for residences to increase pollinator habitat corridors and include feedback from public engagement.

Creating a municipal pollinator garden demonstrates the Town of Orangeville's commitment to support pollinator habitat as a designated Bee City, but secondly and perhaps more importantly, a municipal pollinator garden is a tangible community engagement piece. As such, it's important that the location of the municipal pollinator garden can be visited by community members, is accessible and has signs to communicate what is growing, where the public can learn more and the benefits of pollinator habitats.

The recommended location of the municipal pollinator garden is along the Mill Creek Trail south of Montgomery Boulevard between Chapman Road and Gooseberry Street. The maximum width of the garden should be limited to 1.25 metres to provide accessibility from all sides. All species selected for the municipal pollinator garden should be native species to support native pollinator species. The *Native Plants for Pollinators* publication from CVC has a list of species that are native to the Credit Valley watershed and therefore applicable to Orangeville[5]. It is recommended that flowering plants, shrubs, grasses and trees are selected from this list. Should non-native species be selected, they must be non-invasive so they do not outcompete the native species within the garden or invade naturalized areas beyond the garden. Consideration should be given to varying heights of plants so that those utilizing mobility aids who may not be able to access ground-level or tall plants can have an opportunity to interact with plant species.

Initially, the bed will need to be prepared because no garden exists at the proposed location along the Mill Creek Trail. This can occur in the fall, during which spring bulbs can be planted. In the spring the garden can be fully planted with a mix of seeds and seedlings. Alternatively, the garden installation can be deferred to spring of 2026 so that it can be fully captured within the 2026 budget for Council review and approval. In this case, spring bulbs can be planted in the fall of 2026.

[5] Credit Valley Conservation, 2021. Plant list: native plants for pollinators. Available online.

Parks staff have confirmed that maintenance of the pollinator garden can be undertaken within the current operational budget for the Parks Department. An initial budget of $2,500 plus HST is proposed to purchase the materials, plants and seeds required to establish the garden. Formal quotation is recommended.

It is recommended that signs be added to the garden to engage the community to learn about the importance of native plant habitat and supporting pollinators. An aluminum sign that is 120 centimeters by 150 centimeters including shipping and tax is estimated to cost $600 to $640. A local company, Sign Needs Inc. was contacted and they provided a quoted cost of $425 inclusive of tax, but exclusive of shipping because this can be picked up by staff in Orangeville. Formal quotation will be requested and included in the 2026 budget. Communications will be engaged to develop messaging for the sign. Alternatively, local artisans can be consulted to collaborate on the sign design.

To increase community engagement and build capacity with the intent of creating more pollinator habitat across Orangeville, it is also recommended that a pollinator information workshop be held for members of the public. A CVC workshop tailored to residents is estimated to cost $1,500 plus HST. Formal quotation is recommended.

Opportunities to offset costs include hosting a planting event with community volunteers or approaching local businesses for donations for plants, seeds and materials, giving recognition to donors on the sign. Additionally, Sustainable Orangeville Committee (SOC) or other community group can be engaged to consider including contributions to the municipal pollinator garden or a workshop within their annual work plan, to consider organizing a community event for maintenance of the garden or to provide in-kind contributions through volunteer hours or donation of plants.

Grants such as TD's Friends of the Environment Foundation (FEF) would be an applicable program for the municipal garden. The submission deadlines for the fund are July 15 for summer and January 15 for winter. If directed, staff could prepare an application for the January 15 funding intake to offset the costs of establishing the municipal pollinator garden.

Beyond providing pollinator habitat, a municipal pollinator garden is an opportunity to build pollinator-friendly capacity within the community. Engaging with the public early on in the process of establishing a municipal pollinator garden will help build this community. It is suggested that a survey be made available to gather public input on the design of the garden, including species selection.

Upon Council approval, Community Services staff in collaboration with Infrastructure Services staff can develop a more refined budget for the pollinator garden and include it as a 2026 budget item for consideration.

Pending Council approval, the following action items have been identified following this Pollinator Protection Plan. Provisional items are subject to Council approval and direction.

Item	Description	Target Timelines
Develop Pollinator Protection Plan	Following the Motion to Council to Strengthen Pollinator-Friendly Practices in the Town of Orangeville, develop a Pollinator Protection Plan to include pollinator-friendly procurement and planting policies; and to identify suitable locations on town-owned property for the development of a municipal pollinator garden and report back to Council with proposed locations, budget implications, and an implementation plan for consideration at the July 14, 2025 Council meeting.	July 2025
PROVISIONAL Develop a budget for a Municipal Pollinator Garden for the 2026 Budget	Explore funding opportunities and engage local businesses for donations for the municipal pollinator garden. Seek formal quotation for the sign and finalize a list of plant species and materials required for the garden. Engage SOC to include a resident workshop as part of their workplan and TD Friends of the Environment Fund to offset costs.	October 2025
PROVISIONAL Apply to the Friends of the	Complete and submit a funding application to TD bank for the Friends of the	January 2026

Item	Description	Target Timelines
Environment Foundation offered by TD Bank	Environment Fund to cover the costs of the materials and plant species for the municipal pollinator garden along with the cost of the sign. (only applicable to municipalities, not SOC)	
PROVISIONAL Undertake Community Engagement	Prepare and release a survey, gathering feedback for the municipal pollinator garden. Summarize and incorporate the feedback in the design of the municipal pollinator garden.	February 2026
PROVISIONAL Prepare a Municipal Pollinator Garden	Place an order for materials, plants and seeds. Prepare the garden bed.	April 2026
PROVISIONAL Install a Municipal Pollinator Garden	Host a community event to plant pollinator species. Alternatively, Parks staff will install the garden.	May 2026
PROVISIONAL Host a Pollinator Knowledge Building Workshop	Hold a pollinator workshop, presented by CVC. *This item could be included in SOC's workplan upon discretion of the Committee, or the Town can include the costs within the 2026 budget.*	June 2026

Item	Description	Target Timelines
PROVISIONAL Prepare a draft Pollinator Policy for Council review	Staff will prepare a proposed Pollinator Policy for review by Council.	August 2026
PROVISIONAL Present suggested amendments to policy, by-laws and procedures in a report to Council	Staff to take suggested amendments for policies, by-laws and procedures as presented in this Pollinator Protection Plan and develop a report to Council with the suggested amendments.	October 2026

Contents

Introduction and Background

Pollinators are significant contributors to ecosystems and agricultural food systems. It is estimated that 87.5% of flowering plant species rely on animal pollination to produce fruits and seeds, and ultimately reproduce[6]. In a study that analyzed crop production in over 200 countries, it was found that 35% of crops depend on pollinators for their production[7]. A 2005 study found that the global economic value of pollination services for crop production translates to $217 Billion (2005 USD) annually[8]. These studies confirm the profound and mutualistic relationship between pollinators and plant species as well as the economic value to humans.

In Canada, there are over 800 native pollinator species[9] including butterflies, moths, flies, beetles, wasps, birds and bats. Although the European honeybee is the most well-known pollinator species it is not native to North America but has been colonized here for agricultural purposes. Most native wild bees in Canada are solitary, and nest underground or in small cavities of dead plant matter[10]. Just like humans have different needs for survival such as food and shelter, pollinators also have habitat needs that extend beyond flowering plants (i.e., a nectar source). The habitat needs of pollinators include nesting requirements (i.e., bare soil or leaf litter), host plants to lay eggs and in some cases a food source for caterpillars, a life stage of butterflies. The habitat needs and ranges of native pollinator species are important considerations when implementing pollinator-friendly practices through a Pollinator Protection Plan. In addition to supporting pollinator habitat requirements, it is important that the Plan also strategizes methods to minimize threats to pollinators to increase their likelihood of survival and reproduction.

The Pollinator Protection Plan supports Orangeville's Sustainable Neighbourhood Action Plan, specifically the 'protect and enhance the natural environment' goal, strategy no. 4, 'protect and enhance natural heritage and the urban forest'[11].

---

[6] Ollerton J *et al*., 2011. How many flowering plants are pollinated by animals. Oikos, 120, pp. 321-326.

[7] Klein AM *et al*., 2007. Importance of pollinators in changing landscapes for world crops. Proc Biol Sci, 274(*1608*), pp. 303-313.

[8] Helmholtz Association of German Research Centres, 2008. Economic value of insect pollination worldwide estimated at U.S. $217 Billion. ScienceDaily. Available online.

[9] Government of Canada, 2024. Pollinator protection. Available online.

[10] Bee City Canada. About pollinators.

[11] Town of Orangeville, 2019. Sustainable Neighbourhood Action Plan. Available online.

Motion: Strengthening Pollinator-Friendly Practices

Since 2020, the Town of Orangeville has been declared a Bee City by Bee City Canada. As a designated Bee City, the Town of Orangeville commits to developing, restoring and preserving pollinator-friendly habitats across Orangeville. On March 24, 2025, Councillor Prendergast brought forward a motion to Council to Strengthen Pollinator-Friendly Practices in the Town of Orangeville. Council directed staff to report back on the development of a Pollinator Protection Plan including pollinator-friendly procurement and planting policies; and to identify suitable locations on town-owned property for the development of a municipal pollinator garden and proposed locations, budget implications, and an implementation plan for consideration at the July 14, 2025 Council meeting.

For the purposes of this report, pollinator-friendly practices refers to actions or processes that have a net positive benefit for pollinator species such as an increase of pollinator habitat, protecting pollinator habitat or a reduction in threats to pollinators. The Pollinator Protection Plan is presented herein.

Pollinator Protection Plan

A Pollinator Protection Plan will include a review of current by-laws policies, procedures and other guiding documents to ensure that they support pollinator-friendly habitats. Next, pollinator-friendly requirements can be built into the Town's municipal operations to ensure that pollinator-friendly habitat and practices are continued moving forward. Lastly details of the municipal pollinator garden will be included within the Plan.

Protecting Pollinators

In order to successfully execute pollinator-friendly practices within a Pollinator Protection Plan, it is important to understand known threats to the survival of pollinator species. An extensive literature review assessing the status and trends of pollinator health in Ontario was completed by researchers at the University of Guelph in 2017[12]. This study found that declines in pollinator species are generally due to land use changes, climate change, agricultural practices, and pest and pathogen management[13]. As such, when developing pollinator-friendly practices, actions to counteract or minimize these threats should be considered.

[12] Pindar *et al*., 2017. Status and trends of pollinator health in Ontario. Comprehensive Literature Review, University of Guelph.

[13] Ibid.

Optimizing Pollinator-Friendly Practices

Successful pollinator-friendly practices should consider the following suggestions gathered from the 2017 Status and Trends of Pollinator Health in Ontario literature review[14]:

- Habitats should provide nectar and nesting sites because these are limiting factors for the survival of wild pollinators.
- Creating new habitats has a positive impact on wild pollinators.
- To enhance the diversity of pollinator species, habitat creation and management should consider the timing and duration of flowering plants and the distribution of nectar and nesting sites within a landscape.
- Buy-in from all stakeholders is required to find sustainable and affordable solutions for habitat creation and management of wild pollinators.

From these suggestions, it is clear that creating suitable habitat that meets the needs of wild pollinator species along with buy-in from management and staff will lead to a successful Pollinator Protection Plan.

Creating pollinator habitat supports pollinators by providing food (i.e., nectar from flowering plants) and habitat needs (e.g., bare soil for nesting, plant species to lay eggs and hallowed plant stalks to overwinter in). This can be achieved through installing and maintaining a municipal pollinator garden. However, to support a diversity of pollinator species, the spatial distribution of nesting sites and food sources must also be reviewed[15]. Ontario pollinator species have habitat ranges that vary from less than 500 metres to greater than 1,500 metres[16]. In order to ensure their needs are provided throughout their required range, a focus on creating habitat corridors, whereby individual habitats have connectivity, should be a focus. In fact, it is estimated that 11.6% to 16.7%[17] of land area that supports wild bee populations is needed in North America to properly support healthy bee biodiversity. While a single pollinator garden will not achieve this target, ensuring connectivity of individual habitats will aid in developing a larger land area habitat corridor.

To build pollinator corridors it is recommended that the Town also focus on pollinator-friendly practices across the jurisdiction to increase the spatial distribution of pollinator

---

[14] Pindar *et al.*, 2017. Status and trends of pollinator health in Ontario. Comprehensive Literature Review, University of Guelph.

[15] Ibid.

[16] Pindar and Raine, 2023. Safeguarding pollinators requires specific habitat prescriptions and substantially more land area than suggested by current policy. *Scientific Reports*, 13(*1040*).

[17] Ibid.

habitat. To achieve this, policies and procedures must support this goal and the public needs to be engaged so that privately-owned properties are contributing to this goal.

Pollinator-Friendly Practices for Property Owners

Property owners can implement practices on their own property to support pollinator habitats. First and foremost, creating pollinator-friendly habitat on privately-owned property is an action that supports the survival and reproduction of pollinators. This can be achieved through planting native plant species that are known to support pollinators, either by providing them with a food source, acting as a host plant or providing habitat refuge. The *Native Plants for Pollinators* publication from Credit Valley Conservation is a good resource to use when planning or creating a pollinator habitat[18].

Modifying gardening practices can also increase pollinator survival. These practices deviate from traditional gardening practices but are known and promoted within the pollinator community. Pollinator-friendly gardening practices include the following:

- Leave patches of bare soil for solitary bees to nest instead of covering all spaces with a heavy mulch layer.
- Leave leaf litter in gardens in the fall for pollinators to overwinter within.
- Leave woody plant stalks in the garden over the winter, rather than trimming all plants back to ground surface. These hallowed stalks provide nesting and overwintering habitat for pollinators.
- Retain seed heads on flowering plants over the winter for birds to feed on and to help promote seed distribution, especially for native plants.
- Consider allocating space as dedicated naturalized areas because this is shown to positively correlate with an increase in abundance and diversity of bee species[19].
- Delay spring clean out of gardens because many pollinators will still be overwintering and cleaning out the garden and any plant debris may disturb or kill them.
- Avoid the use of pesticides on your property, especially the use of insecticides.
- Consider leaving leaf litter in your gardens in the spring, the leaves provide a natural mulch that breaks down easily and should not interfere with ground nesting wild bees.
- Consider delaying mowing your lawn until later in the spring to allow any flowering plants on the lawn to bloom during the early spring and provide an early source of nectar to pollinators.

---

[18] Credit Valley Conservation, 2021. Plant list: native plants for pollinators. Available online.

[19] Horn, 2010. A comparison of pollinator biodiversity between green spaces, industrial areas and residential land-use zones in urban, southern Ontario. University of Guelph.

These actions, along with creating pollinator habitat on private property will collectively help build a more pollinator-friendly Orangeville and create habitat connectivity, expanding the habitat range for pollinators within Orangeville. Many of these practices also have a co-benefit such as reduced gardening labour, reduced maintenance costs and the presence of pollinators on properties will also benefit owners who are growing flowering plants, fruits or vegetables that rely on pollination.

The Sustainable Orangeville Committee offers an annual Sustainable Orangeville Grant Program that is applicable to property owners. Creating pollinator-friendly habitat on private property is an eligible project within this grant program and successful grant applicants could receive financial support for this type of project.

Existing Strategies

Resources from other municipalities were reviewed to ensure that the Pollinator Protection Plan reflects best practices and is aligned with other government organizations. A review of these resources is summarized herein.

City of Toronto Pollinator Protection Strategy

The City of Toronto's Pollinator Protection Strategy was developed in 2018, and it aims to create a diverse pollinator community to help the City build resilient ecosystems and enhance urban biodiversity[20].

Collingwood Pollinator Protection Plan

As a Bee City, Collingwood's Pollinator Protection Plan is a step to mitigate the issue of biodiversity loss[21]. The four key goals in this plan are: 1. Create, maintain, expand and connect native habitat areas; 2. Empower and incentivize residents to create native habitat; 3. Minimize direct and indirect harm to pollinators; and 4. Educate and engage the Collingwood community.

Within these goals, the Plan also focuses on staff training, habitat standards for new development, restoring habitat, creating demonstration gardens with extensive signage, allowing residents to garden on boulevards, review by-laws that may pose unreasonable barrier to residents creating pollinator habitat at home, education and engagement, providing plants and funds to residents, controlling invasives, as well as collaborating with the County to delay yard waste collection and educate residents about leaving plant material in gardens the fall and spring.

[20] City of Toronto, 2018. Toronto pollinator protection strategy. Available online.

[21] Town of Collingwood, 2024. Collingwood pollinator protection plan. Available online.

In addition to the Plan, Collingwood has a Canopy Collingwood Bees & Trees program which offers residents rebates on eligible trees and native garden materials. This program is financially supported by a citizen donation and in the last five years, residents have planted over 1,000 trees and 150 pollinator gardens.

Montreal's Promoting Biodiversity by Protecting Pollinators, 2022 to 2027

Montreal's strategy set three primary goals to welcome a diverse community of pollinators, which each have sub-goals and actions. The three goals are: 1. Conserve, create and connect pollinator-friendly habitats; 2. Improve pollinators' living conditions; and 3. Recognize the importance of pollinators for biodiversity.[22]

Town of Wasaga Beach No Mow May

To support habitat protection for pollinators, the Town of Wasaga Beach supports the practice of No Mow May. No Mow May is a movement started in the United Kingdom, whereby property owners chose to either not mow their lawns or significantly reduce the frequency of mowing occurrences in the month of May. By doing so, disturbances to overwintering species found in leaves and on lawns are prevented and lawn species are allowed to flower, providing early food sources for pollinators. The Town of Wasaga Beach does not enforce Section 2(b) of the Clean Yards By-Law 2019-14 from May 1 to May 31 each year to allow property owners to exceed the grass and weed height restriction of 30 centimeters.[23]

Town of Orangeville By-Law, Policy and Procedure Review

To ensure that the Pollinator Protection Plan is effective, it is important that the Town of Orangeville ensures its by-laws, policies, procedures and other guiding documents support pollinator-friendly habitats and practices. Ambiguities that could restrict or discourage pollinator-friendly habitats or practices on either privately-owned or town-owned properties need to be identified so appropriate amendments can be considered.

Property Standards By-Law 2022-021 as amended

The Property Standards By-Law outlines property maintenance and occupancy standards for all properties in the Town of Orangeville to protect the health and safety of occupants, tenants and anyone entering the property.

The following items were identified in this By-Law that are not conducive to pollinator-friendly habitats and practices.

---

[22] City of Montreal, 2022. Montreal: promoting biodiversity by protecting pollinators. Available online.

[23] Town of Wasaga Beach, No Mow May. Bylaw Administration.

Section	Item	Consideration
4.1 (g)	long grass, brush, undergrowth, and weeds that exceed 15 cm in height	Height restrictions on lawns may not be conducive to allowing property owners to grow pollinating plant species. Height restrictions are prohibitive of low mowing frequency (i.e., No Mow May). The term weed is not defined in the By-Law (only noxious weeds) and therefore is an ambiguous term that may be interpreted to include beneficial native plant species that support pollinators. **Suggestion:** Eliminate height restrictions for pollinator plant species, with the exception where safety is a concern such as traffic sight-line visibility. Define the term weed to exclude pollinating plants. Consider removing height restrictions during the month of May aligning with the Town of Wasaga Beach's approach.
4.2	Notwithstanding section 4.1 (g), this By-Law does not apply to open space Town	Naturalized areas do not apply to privately owned property and as such naturalized areas on private

Section	Item	Consideration
	lands that have been naturalized.	property are regulated under this By-Law. **Suggestion:** Include naturalized areas on privately-owned property as an exemption of this section. Consider adding size limitation where concerns about scale are raised. Naturalized areas help support wild bee populations, conserve water and require less energy to maintain.

Procurement Policy or By-Law No. 2023-061

The Procurement Policy provides Town staff with the guidance required to ensure integrity and consistency in procurement and contracting activities and to delegate the authority to carry out these activities.

The following item was identified in this Policy that could be improved to better support pollinator-friendly habitats and practices.

Section	Item	Consideration
Part 4 (3)	When preparing specifications for a Good or Service, General Managers shall ensure the environmental impacts of the Good or Service are considered and, as appropriate, shall afford a preference to environmentally sustainable Goods and Services.	This is vague language left to the interpretation of the General Manager. Without a guiding principle such as a Pollinator Policy there is no merit to what constitutes as environmentally sustainable with respect to pollinators. **Suggestion:** Define environmental impacts and environmentally sustainable terms to eliminate vague

Section	Item	Consideration
		language and create consistency across projects.

Absence of a Pollinator Policy

The Town of Orangeville's 2012 Urban Forestry Policy speaks to Open Spaces/ Natural Areas. The policy provides a list of approved tree species for these areas and dissuades the use of traditional horticultural or ornamental planting plans, but it does not speak to pollinator-friendly practices. The language in this policy is limited primarily to trees.

Without a dedicated policy for pollinator-friendly practices or pollinator habitat requirements, the Town of Orangeville is missing an opportunity to support pollinators and pollinator habitat whether through a by-law, corporate policy or organizational procedures.

Subject to approval and feedback from Council, the proposed Pollinator Policy could include the following items:

- Designated natural areas. A study from the University of Guelph found that regardless of urban land-use, the presence of naturalized areas was positively correlated with an increase in abundance and diversity of bee species[24]. An allotment for designated natural areas or protection of existing natural areas under a Pollinator Policy would help increase the abundance and diversity of native bee species within Orangeville.
- A mandate that requires new development or parkland to contain a percentage of pollinator-friendly habitat. A 2023 study estimates the habitat requirement for wild bee populations is 11.6% to 16.7% of land use[25]. This percentage could be used as a basis for the mandated pollinator-friendly habitat within the Pollinator Policy.
- A requirement to use a percentage of native plants that support native pollinator species in Town-owned gardens could be implemented and applied to new gardens or where replanting or infill planting is required for existing gardens. A percentage of 15% could be set initially since that would fall within the land use percentage as described above.

[24] Horn, 2010. A comparison of pollinator biodiversity between green spaces, industrial areas and residential land-use zones in urban, southern Ontario. University of Guelph.

[25] Pindar and Raine, 2023. Safeguarding pollinators requires specific habitat prescriptions and substantially more land area than suggested by current policy. *Scientific Reports*, 13(*1040*).

- Incentive programs or resources for private-land owners to restore or build pollinator-friendly habitat on their property to support the development of pollinator habitat corridors.
- Feedback obtained through public engagement.

Municipal Pollinator Garden

Creating a municipal pollinator garden demonstrates the Town of Orangeville's commitment to support pollinator habitat as a designated Bee City, but secondly and perhaps more importantly, a municipal pollinator garden is a tangible community engagement piece. As such, it's important that the location of the municipal pollinator garden can be visited by community members, is accessible and has signs to communicate what is growing, where the public can learn more and the benefits of pollinator habitats. The garden will showcase what a pollinator habitat can look like with the goal of encouraging people to implement pollinator-friendly habitats or practices on privately-owned properties which ultimately will allow habitat corridors to form within the Town of Orangeville.

To develop a municipal pollinator garden, many considerations must be given including visibility of the garden so it can continue to act as an effective engagement piece, site conditions to support the habitat, resource and budgetary implications including initial start-up costs and maintenance and operation costs. These considerations are explored herein.

Review of Established Pollinator Gardens

A review of established municipal pollinator gardens was undertaken to understand the species selected, scale, maintenance and costs.

Town of Mono Pollinator Garden

In 2015 the Town of Mono Council approved the concept of a Pollinator Garden. In 2016, the Town of Mono designated a 1.5 acre property and contributed funds to initiative development of a pollinator garden. Following this the pollinator garden was designed, constructed and maintained by local volunteers. Developing the garden started with weed control through tilling, cutting, hand-weeding and mulching and architectural design. In 2017, 2,000 perennials, shrubs and trees were planted and TD Bank planted over 100 trees and composting was established on-site. In 2018, in-fill planting took place, and the volunteers focused on weed control and mulching. An information kiosk was built, signage was added as well as a portable toilet.

Donations allowed the Town of Mono to acquire benches, create a permanent walking trails and a parking area. The education program was initiated through signs throughout the garden. Over 100 people attended the opening ceremony. In 2019, in-filling planting continued, and weeds were controlled through mulching but also soil protective weed

cutting to protect possible nesting sites for pollinators that would not be offered with mulching. Areas where persistent invasive weeds were hard to control, the volunteers planted competitive plants. Trial plots were established for a wildflower meadow and regenerative soil health recovery. Education programs offered through schools were established and included field trips to the garden. The garden is still managed by volunteers and donations and sponsorships are accepted to support the ongoing operations of the garden.[26]

Suitable Locations

The Town of Orangeville's Community Services team were engaged to identify possible suitable locations for the municipal pollinator garden.

The Ontario Provincial Police (OPP) building located on C-Line was suggested as an option. However, there were concerns that people using this facility may have allergies to stinging insects and as such the proximity to potentially stinging pollinators is a public health concern. Secondly, the OPP building may not be conducive for public engagement with the municipal pollinator garden and the nearby walkways receive salt for winter maintenance which will run off to the garden which may have a negative effect for plant species that have a low tolerance to salt.

The second suggested location is located along the Mill Creek Trail south of Montgomery Boulevard between Chapman Road and Gooseberry Street. This location is sheltered, receives full sun, will be accessible to trail users and is located nearby water, treed and shrub covered areas that potentially contain pollinator host species. The walkways along this section of the Trail are not cleared in the winter, so salt interference with the garden is not a concern. Should winter maintenance be initiated in the future, the garden location is set back from the Trail to maintain a buffer and reduce possible salt effects. This is the preferred location for the municipal pollinator garden.

Designing a Pollinator Garden

The suggested garden size will be 1.8 metres by 1.8 metres and will be installed and maintained by the Parks Department under Community Services. During engagement with Credit Valley Conservation (CVC) to support the development of this Plan, it was recommended that a more narrow and longer garden size be considered. By doing so, the garden can be more easily maintained because accessing the center of the garden for maintenance will be easier. Secondly, all species will be more visible from all sides of the garden. As such the maximum width of the garden should be limited to 1.25 metres.

[26] Town of Mono, Pollinator Garden

All species selected for the municipal pollinator garden should be native species to support native pollinator species. Ecological ecosystems and the species within them have co-evolved, creating very reliant or symbiotic relationships between species. This is true for mutualistic relationships between native plants that rely on native pollinators to aid in their reproduction (i.e., pollination) and native pollinators that rely on a few plant species for their habitat needs (i.e., food, protection and reproduction). It is important to consider these symbiotic relationships when selecting species for the municipal pollinator garden.

Furthermore, native plant species are much better adapted to local conditions such as precipitation, periods of drought, seasonal changes, and light and soil conditions than non-native plant species. Therefore, native plant species are often easier to maintain since they are adapted to the local conditions which should translate to lower maintenance and replacement costs, beyond the initial establishment period.

In addition to selecting native plant species, it is important to include a range of species that support pollinators within the municipal pollinator garden. This includes flowering species that provide a source of nectar throughout the entire foraging season – meaning there should always be blooming flowers. To achieve this, species with long bloom periods, or multiple species with overlapping bloom periods should be selected. CVC has suggested that individual plant species be planted in clusters of five plants and that consideration should be given to varying heights of plants so that those utilizing mobility aids who may not be able to access ground-level or tall plants can have an opportunity to interact with plant species.

Beyond providing nectar, native plant species also support pollinators in their reproductive and habitat needs. These plants are called host species and provide habitat for pollinators to lay eggs, eat and live on – this is especially important for butterfly pollinators whose life cycle includes eggs, larva (caterpillar), pupa (chrysalis) and butterfly – all of which have different needs. A productive pollinator garden should include host species that are required for native pollinators.

The *Native Plants for Pollinators* publication from CVC has a list of species that are native to the Credit Valley watershed and therefore applicable to Orangeville[27]. It is recommended that flowering plants, shrubs, grasses and trees are selected from this list.

The Town of Orangeville's Parks Department provided a list of species for this garden which can be sourced. The applicable native or non-invasive non-native plants that may be included in this garden include, pagoda dogwood, temple of bloom seven-son flower, moss phlox, wild columbine, bee balm, blue fortune anise hyssop, blazing star, calamint,

[27] Credit Valley Conservation, 2021. Plant list: native plants for pollinators. Available online.

coneflower, black-eyed Susans, Tuscan sun false sunflower, butterfly weed, spotted or sweetscented joe-pye weed and swamp milkweed.

Should non-native species be selected, they must be non-invasive so they do not outcompete the native species within the garden or invade naturalized areas beyond the garden. Spring bulbs that are non-native to Ontario are an example of non-invasive non-native species that provide early garden blooms.

Maintaining a Pollinator Garden

Initially, the bed will need to be prepared because no garden exists at the proposed location along the Mill Creek Trail. This can occur in the fall, during which spring bulbs can be planted. In the spring the garden can be fully planted with a mix of seeds and seedlings. Alternatively, the garden installation can be deferred to spring of 2026 so that it can be fully captured within the 2026 budget for Council review and approval. In this case, spring bulbs can be planted in the fall of 2026.

During the initial establishment of the garden, hand watering may be required during periods of no rain and high summer temperatures. This will require maintenance by the Parks staff. Beyond the establishment period (one to two seasons), the garden should not require any hand watering and can rely completely on rainfall for irrigation. Ongoing maintenance will occur twice per year to remove undesirable species and maintenance to encourage the distribution of seeds. Ideally woody plant stalks, leaf litter and seed heads are retained at the end of the growing season to provide habitat for overwintering species and food sources for birds. Spring cleanout should be delayed until mid to late May to ensure that overwintering species are not disturbed. These practices will also help maintain soil health and lower the needs for nutrient amendments to be applied to the bed.

Budgetary Implications

Parks staff have confirmed that maintenance of the pollinator garden can be undertaken within the current operational budget for the Parks Department. Allocation of staff time towards the pollinator garden will however take time away from maintenance for other spaces.

An initial budget of $2,500 is proposed to purchase the species and seeds required to establish the garden. Formal quotation is recommended.

It is recommended that signs be added to the garden to engage the community to learn about the importance of native plant habitat and supporting pollinators. Maximum Signs, a preferred sign vendor used by the Town, was contacted to obtain an informal quotation for the purpose of this report. An aluminum sign that is 120 centimeters by 150 centimeters including shipping and tax is estimated to cost $600 to $640. A local company, Sign Needs Inc. was contacted and they provided a quoted cost of $425 inclusive of tax, but exclusive of shipping because this can be picked up by staff in Orangeville. Formal quotation and

solicitation of three vendors is recommended when ordering and purchasing the garden sign. Communications will be engaged to develop messaging for the sign. Alternatively, local artisans can be consulted to collaborate on the sign design.

A CVC workshop tailored to residents is estimated to cost $1,500 plus HST. Formal quotation is recommended.

Opportunities to Offset Costs

The Pollinator Garden in the Town of Mono was designed and constructed as well as currently maintained by local community volunteers. The cost of labour associated with maintenance and operations is eliminated through the implementation of volunteers. This also builds community and allows community volunteers to have meaningful involvement in an important ecologically beneficial project. The garden's costs are funded by the Town of Mono and by donations by interested citizens. The Mono Pollinator Garden welcomes sponsored events at the garden, such as perennial planting sessions from local businesses that include an educational component, creating an opportunity to generate revenue. The Mono Pollinator Garden accepts donations through their website and they accept sponsorship with varying levels from $50 to $2,000 and they offer recognition such as name recognition or signage. [28] Such strategies can be considered for the Town of Orangeville's municipal pollinator garden to generate revenue, build community and offset the municipality's cost to maintain the space.

Engaging with Sustainable Orangeville Committee (SOC), the Horticultural Society, the County of Dufferin's Youth Climate Activation Circle or other community groups to propose including contributions to the municipal pollinator garden within their annual work plan is another option. These groups may also consider organizing a community event for maintenance of the garden or provide in-kind contributions through volunteer hours or donation of plants. Local artisans could be approached to collaborate on the design of the sign, however the cost of this approach is not captured in the sign costs presented above.

Available funding or donation opportunities can be explored to offset the costs of purchasing plants and seeds. Grants such as TD's Friends of the Environment Foundation (FEF) would be an applicable program for the municipal garden. The submission deadlines for the fund are July 15 for summer and January 15 for winter. This opportunity is open to municipalities; therefore SOC would not be able to apply. If directed, staff could prepare an application for the January 15 funding intake to offset the costs of establishing the municipal pollinator garden.

The Pollinator Partnership in collaboration with Toyota Motor North America offers an annual Pollinator Partnership Canada Habitat Grant. This program offers money to cover

[28] Town of Mono, Pollinator Garden

the costs of seeds or plants for shovel-ready projects. The project must include public engagement and the size of the pollinator habitat to be planted must be five acres or larger. This grant application closes July 26, 2025. Although this grant program will not be applicable for the proposed municipal pollinator garden proposed in this Plan, it should be considered for future development of pollinator habitat with the Town of Orangeville.

Local businesses can be approached to seek donations for the establishment of the garden, such as purchasing plants or materials or the sign. Recognition of their financial contribution could be given by mentioning their support on the sign.

Next Steps

Engage with the Public

Beyond providing pollinator habitat, a municipal pollinator garden is an opportunity to build pollinator-friendly capacity within the community. Engaging with the public early on in the process of establishing a municipal pollinator garden will help build this community. It is suggested that a survey be made available to gather public input on the design of the garden, including species selection.

Additionally public engagement can include seeking volunteers to aid the installation of the pollinator garden. This item would be appropriate within the Sustainable Orangeville Committee's workplan should they choose to adopt this item in their 2026 workplan.

CVC offers workshops tailored to private-property owners to educate them on native plant species, how to plant them as well as the benefits. A public workshop could help to eliminate knowledge barriers, build capacity, and ultimately initiate the development of habitat corridors for pollinators across Orangeville.

Develop a 2026 Budget

Upon Council approval, Community Staff in collaboration with Infrastructure Staff can develop a more refined budget for the pollinator garden and include it as a 2026 budget item for consideration.

Actionable Items

Pending Council approval, the following action items have been identified following this Pollinator Protection Plan. Provisional items are subject to Council approval and direction.

Item	Description	Target Timelines
Develop Pollinator Protection Plan	Following the Motion to Council to Strengthen Pollinator-Friendly Practices in the Town of Orangeville, develop a Pollinator Protection Plan to include pollinator-friendly procurement and planting policies; and to identify suitable locations on town-owned property for the development of a municipal pollinator garden and report back to Council with proposed locations, budget implications, and an implementation plan for consideration at the July 14, 2025 Council meeting.	July 2025
PROVISIONAL Develop a budget for a Municipal Pollinator Garden for the 2026 Budget	Explore funding opportunities and engage local businesses for donations for the municipal pollinator garden. Seek formal quotation for the sign and finalize a list of plant species and materials required for the garden. Engage SOC to include a resident workshop as part of their workplan and TD Friends of the Environment Fund to offset costs.	October 2025
PROVISIONAL Apply to the Friends of the	Complete and submit a funding application to TD bank for the Friends of the	January 2026

Item	Description	Target Timelines
Environment Foundation offered by TD Bank	Environment Fund to cover the costs of the materials and plant species for the municipal pollinator garden along with the cost of the sign. (only applicable to municipalities, not SOC)	
PROVISIONAL Undertake Community Engagement	Prepare and release a survey, gathering feedback for the municipal pollinator garden. Summarize and incorporate the feedback in the design of the municipal pollinator garden.	February 2026
PROVISIONAL Prepare a Municipal Pollinator Garden	Place an order for materials, plants and seeds. Prepare the garden bed.	April 2026
PROVISIONAL Install a Municipal Pollinator Garden	Host a community event to plant pollinator species. Alternatively, Parks staff will install the garden.	May 2026
PROVISIONAL Host a Pollinator Knowledge Building Workshop	Hold a pollinator workshop, presented by CVC. *This item could be included in SOC's workplan upon discretion of the Committee, or the Town can include the costs within the 2026 budget.*	June 2026

Item	Description	Target Timelines
PROVISIONAL Prepare a draft Pollinator Policy for Council review	Staff will prepare a proposed Pollinator Policy for review by Council.	August 2026
PROVISIONAL Present suggested amendments to policy, by-laws and procedures in a report to Council	Staff to take suggested amendments for policies, by-laws and procedures as presented in this Pollinator Protection Plan and develop a report to Council with the suggested amendments.	October 2026