

Attachment 9: Draft Pollinator Protection Strategy implementation plan						
Phase	Action	Key Divisions and Partners	Activities	Estimated Timeframe	Estimated Additional Cost	Notes
Create and enhance habitat						
1	1. Plant more pollinator-friendly native plants, trees, and shrubs in City parks and facilities, with the goal of creating pollinator habitat in every park, where feasible.	PF&R, Facilities Management	Train staff on new guidelines as part of existing horticulture staff training programs	Q2-Q4 2018	\$0	Can be achieved using annually approved budgets for plant purchases by choosing native plant material instead of non-native.
			Site identification for enhanced habitat	Q2-Q4 2018	\$0	
			Where feasible, select native, pollinator-friendly plants when purchasing materials through annual approved plant purchasing budget.	Q2-Q4 2018	\$0	
			Where feasible, integrate site appropriate native, pollinator-friendly plants into existing beds.	2018-2019 (phased)	\$0	
2	2. Work with members of City Council to identify at least one City-managed site in each ward that can be enhanced for pollinators and serve as a model garden, and establish a pollinator demonstration garden at Toronto City Hall.	PF&R, Members of Council	Site selection in consultation with Councillors	Q2-Q4 2018	\$0	For 2018, existing Parks staff time can be reallocated to initiate this action.
			Site preparation and creation of new bed (15 ft x 10 ft)	2018- 2019 (phased)	\$500	
		Park People, Friends of Parks Groups	Install educational signage as gardens are established.	2018-2019 (phased)	\$750	For 2019 and onwards, new staff and resources time may be required.
			Staff time (1 FTE for 7 hours)	2019	\$250	
			Maintenance	ongoing	TBD	
			Total		\$1500/garden (not including maintenance) =\$70,500 (for 47 wards)	
2	3. Create "pollinator patches" at urban agriculture sites managed by the City by incorporating pollinator-friendly native plants into community gardens and allotment gardens.	PF&R, TPH	Site identification in consultation with community and City staff	Q2-Q4 2018	\$0	For 2018, existing Parks staff time can be reallocated to initiate this action.
			Site preparation and creation of new bed (15 ft x 10 ft)	2018- 2019 (phased)	\$500	
		Food Policy Council, Toronto Urban Growers, Park People, Friends of Parks Groups	Integrate native, pollinator-friendly plants appropriate for the selected location into existing beds and maintenance.			

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			Install educational signage as pollinator patches are established.	2018- 2019 (phased)	\$750	
			Staff time (1 FTE for 7 hours)	2019	\$250	
			Maintenance	ongoing	TBD	
			Total		\$1500/garden (not including maintenance) = \$75,000 (50 estimated sites)	
2	4. Work with Solid Waste Management Services to identify City-owned closed landfill sites that may have the potential to become high quality pollinator habitat.	SWMS, PF&R Ontario Waste Management Association	Site identification / habitat evaluation at four sites (Tyrell, Brock West, Thackeray, and Keele Valley are being considered)	Q3 2017 (complete)		Two sites will be amended in 2019 and two sites will be amended in 2020 (depending on input from PF&R). Estimates assume that labour would be provided by volunteers or existing PF&R staff. Costs are estimated seed mix only, from existing hydroseeding/site maintenance budget. (no additional costs).
			Site preparation and maintenance	2019 & 2020	\$0	
			Wildflower and grass seed mix purchase	2019 & 2020	\$0	
1	5. Review the City's landscaping practices, including mowing and mulching activities, with the goal to preserve pollinator habitat.	CP, PF&R, Transportation Services Pollinator Partnership	Staff complete information session with Pollinator Partnership	Q4 2016 (complete)	\$0	City Planning to lead as part of the work being done on the Biodiversity Strategy. Anticipated net cost saving in reduction of mowing activity and more strategic use of mulch.
			Establish working group to make recommendations to best practices for mowing and mulching.	Q3 2018	\$0	

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Design and connect green spaces						
1	6. Identify opportunities to improve connections between existing habitat, and encourage the creation of "pollinator pathways" to foster corridor creation across the city.	PF&R, EED, Strategic Communications	Engage with neighbourhood associations, horticultural societies, garden clubs, not-for-profits	Q2 2018	\$0	Partner with organizations working on corridor creation.
			Develop key messages	Q3 2018	\$0	
		David Suzuki Foundation, World Wildlife Fund, Carolinian Canada	Train staff and volunteers	Q3 2018	\$0	Potential for sponsorship for cost of signage, if pursued.
			Publish information on livegreentoronto.ca	Q3 2018	\$0	
		Investigate tools and partners for mapping corridors	Q4 2018	\$0		
2	7. Continue to support the work of the Toronto and Region Conservation Authority (TRCA) to revitalize hydro corridor space in Toronto and transform it into high functioning meadow habitat that supports pollinators, by contributing staff time and exploring funding requirements needed to advance these efforts.	PF&R, TRCA, Toronto Hydro	Set up preliminary meeting with Parks and TRCA to establish scope of partnership and identify barriers.	Q2 2018	\$0	TRCA to work closely with Parks staff to determine scope and associated costs. Resource request as part of 2019 Budget submission.
			Identify initial funding requirements, Parks staff support, additional partnerships etc.	Q2 2018	TBD	
			Prepare work plan, implementation plan and long term budget requirements.	Q3-Q3 2018	TBD	
			Support TRCA with the revitalization of hydro corridor space in Toronto.	2019	TBD	
1	8. Enhance areas of the City Hall podium green roof with pollinator-friendly habitat, where possible, accompanied by educational signage, to demonstrate the role green roofs play in pollinator habitat and corridor creation.	PF&R, EED, CP	Coordinate activities with Parks Supervisor and Gardeners that maintain the City Hall green roof.	Q4 2017 (complete)	\$0	
			Establish protocol with Gardeners - as plant material needs to be replaced over time, pollinator-friendly plants are incorporated where possible.	Q4 2017 (complete)	\$0	
			Investigate the feasibility of installing educational signage on the green roof podium that speaks to green roofs as habitat for pollinators.	Q2 2018	\$1000	

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2	9. Engage with developers, property owners and landscape architects to encourage the creation of pollinator friendly landscapes, and promote biodiverse, pollinator-friendly green roofs, by updating information in the City's Guidelines for Biodiverse Green Roofs and by offering support through the City's existing Eco-Roof Incentive Program.	CP, Toronto Building, EED GRIT lab at the University of Toronto, Green Roofs for Healthy Cities	Update the City's Guidelines for Biodiverse Green Roofs – EED to work with City Planning	Q4 2018	\$0	City Planning and Toronto Building to update 'Guidelines for Biodiverse Green Roofs' as part of work to update the Green Roof Supplementary Guidelines. The Eco-Roof Incentive Program is self-sustaining, therefore no additional resources will be requested to provide support for biodiverse green roofs, if approved by Council.
			Present a report to Council that investigates offering increased funding for biodiverse green roofs through the Eco-Roof Incentive Program, based on criteria established from the City's Guidelines for Biodiverse Green Roofs.	Q3 2019	\$0	
1	10. Work with relevant City divisions to ensure native, pollinator-friendly plants are considered in the implementation of green infrastructure projects undertaken by the City, and included in City guidelines such as the Green Streets Technical Guidelines, Complete Street Guidelines, the Toronto Green Standard, the Wet Weather Flow Master Plan and Policy, Greening Surface Parking Lots, Streetscape Manual and other relevant policies.	EED, CP, TW, Transportation Services, Engineering and Construction Services, Toronto Parking Authority	Communicate recommendations regarding pollinator plantings to City staff responsible for relevant projects, guidelines and policies.	Q2 2018	\$0	Toronto Green Standard updated in Q4 2017 with reference to native, pollinator-friendly plantings, and will come into effect May 2018. Other relevant policy will be updated as part of regular review process established by Division responsible.
			Revise guidelines as required, as part of regularly scheduled project review and updates.	2018-2019	\$0	
			Consider developing case studies on successful implementation of green infrastructure projects with pollinator stewardship elements.	Q3 2018	\$0	
Partner and build relationships						

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1	11. Engage with the Toronto Association of Business Improvement Areas (TABIA), property and rental associations, condominium boards, faith groups and other large property owners to encourage the creation of pollinator habitat through native plantings.	PF&R, EED, EDC TABIA, TCHC, Toronto Parking Authority, GTAA, BOMA, condominium boards, churches and cemeteries, golf courses, institutions	Communicate and schedule meetings with identified partners to identify site specific opportunities to create pollinator habitat.	Q2 2018	\$0	Property owners will be provided support from the City in selecting plants. Cost of materials and maintenance will be determined by the property owner.
			Provide ongoing support in plant and site selection, promotion and education initiatives.	Ongoing	\$0	
			Assist property owners in securing financial and community support for installation and maintenance of pollinator gardens.	Ongoing	\$0	
			Consider developing case studies of pollinator gardens to inspire others.	Q4 2018	\$0	
1	12. Partner with Toronto Master Gardeners, Landscape Ontario and horticultural and landscape school programs to provide advice and inspiration to property owners in Toronto interested in creating pollinator habitat through on-site consultations and information sessions.	PF&R, EED Toronto Master Gardeners, Landscape Ontario, Humber College, Ryerson, and other landscape school programs	Communicate and schedule meetings with identified partners to identify opportunities to provide services to residents and practical experience to students.	Q3 2018	\$0	On-site consultations offer benefits to property owner looking for site specific recommendations, and offer students practical hands-on experience and school credit. Toronto Master Gardeners already offer consultations. Engage with landscape companies through Landscape Ontario.
			Promote partnerships to residents through livegreentoronto.ca and regular Live Green Toronto outreach, combined with partner outreach.	Q3 2018	\$0	
			Monitor and track participation.	Q2 2019	\$0	
			Gather feedback from participants and revise program accordingly	Q3 2019	\$0	
2	13. Continue to work with local growers and nurseries to encourage them to provide native, pesticide-free plant	PF&R, EED Canadian Nursery	Identify local growers and nurseries	Q1 2018	\$0	Program development for point of sale campaign may be explored. Resource
			Make connections and meet with local growers to learn growing techniques and timing.	Q2 2018	\$0	

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	material and seeds for pollinator habitat, and explore ways to make these items easier for consumers to identify in stores.	Landscape Association, Landscape Ontario	Work together to identify opportunities to reduce or eliminate pesticide use.	Q3 2018	\$0	request part of 2019 Budget.
			Explore best practices for educating consumers in store through point-of sale campaigns	Q3 2018	\$0	
1	14. Support university and college-led research and monitoring projects, and citizen science initiatives that support the goals of this Strategy, and provide data to track and measure the success of implementing the actions in the Strategy.	EED, PF&R, TOP Universities, colleges, David Suzuki Foundation, Bumble Bee Watch	Start by engaging with universities and colleges that have MOUs with the City and investigate potential partnerships.	Q2 2018	\$0	Details about specific partnerships and funding requirements will be brought forward to Council for consideration as required. There are a number of external funding opportunities available to community orgs. MOUs exist with Toronto universities and colleges and the City.
			Promote existing citizen science projects and look for opportunities to create new projects and partnerships. (e.g. University of Toronto and David Suzuki Foundation)	Q2 2018	\$0	
			Look for opportunities to work with students doing research, literature review, policy analysis, policy briefs, GIS/mapping work, etc that support the goals of the Pollinator Strategy.	Q3 2018	\$0	
1	15. Convene an Aboriginal Committee/Working Group to provide ongoing feedback on the incorporation of Indigenous knowledge, practices, and approaches in the implementation of the Strategy.	EED, CP, PF&R, Indigenous Affairs Office, City Manager's Office Indigenous groups in Toronto	In consultation with the City Manager's office, reach out to the Indigenous community in Toronto to determine interest in participating in Working Group.	Q4 2017 - complete	\$0	This is intended to contribute to the City's Commitments to Aboriginal Peoples, and to lead to fuller outcomes through Indigenous engagement and collaboration in the implementation of the Strategy.
			Establish Working Group to advise on implementation strategies and outreach.	Q2 2018	\$0	
			Continue to consult with Working Group on the development of the Biodiversity Strategy.	Ongoing	\$0	
1	16. Continue to coordinate with the Province of Ontario	EED	Stay connected with Provincial staff, information share and update	Ongoing	\$0	Connections have been made between City and

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	on the Pollinator Health Action Plan, and the Provincial Apiarist on the Ontario Bees Act.	OMAFRA, Provincial Apiarist	Provide feedback as requested on elements of the Pollinator Health Action Plan	Ongoing	\$0	Provincial staff. Initial discussions have taken place. City staff to stay engaged in the process.
			Participate in the consultation process for proposed changes related to the Ontario Bees Act	When announced by province	\$0	
Invest and incentivize						
1 & 2	17. Develop and seek funding sources for an incentive program that provides modest financial support to encourage community-led pollinator habitat creation or enhancement, and pollinator education initiatives.	EED, PF&R, TOP	Develop a draft criteria for a pilot incentive program	Q1 2018	\$0	Sponsorship and external funding to be explored. *Request to use outstanding balance in Reserve Fund XR1719 and transfer to new Pollinator Protection Reserve Fund.
			Identify funding source to support the incentive program	Q1 2018	\$0	
			Develop outreach campaign to promote the incentive program with existing Live Green Toronto outreach resources.	Q3 2018	\$0	
			Review applications and issue grants as appropriate	Ongoing in 2018-2019	\$0*	
			Monitor and review program annually	Annually	\$0	
1	18. Explore the creation of a City procurement policy to purchase more pollinator-friendly native plants, and to select plants and seeds that have not been treated with systemic pesticides (e.g. neonicotinoids) for use in City-managed spaces, and incorporate these guidelines into tender documents for all City divisions.	PF&R, PMMD	Parks to engage with Purchasing and Materials Management to discuss approach to development of procurement policy	Q2 2018	\$0	Plant purchases would continue using annually approved budget. Different purchasing parameters would be applied but expenditure would remain within approved budgets.
			Parks to determine scope of plant purchasing requirements	Q2 2018	\$0	
			Develop draft procurement policy	Q4 2018	\$0	
			Report to Council	Q4 2018	\$0	
1 & 2	19. Inspire residents to create pollinator habitat by offering resources such as pollinator-friendly gardening tips, plant	EED PF&R, SWMS, Councillors	Develop gardening tips	Q4 2017 (complete)	\$0	Sponsorship and external funding to be explored. *Potential to use outstanding balance
			Source and compare quotes for native plant seeds	Q3 2018	\$0	

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	lists, seeds and recognition signage (e.g. Pollinators Are Welcome Here!) through the City's Community Environment Days and Live Green Toronto outreach events.		Source and compare quotes for signage	Q3 2018	\$0	of in Reserve Fund XR1719. Seed provider and signage provider to be identified through Divisional RFQ process.
			Develop outreach strategy including Councillor messaging for residents.	Q4 2018	\$0	
			Create and purchase items for "pollinator packs" to distribute at events	Q4 2018, events in 2019	\$0*	
2	20. Update the City's Street Tree brochure to include information on how trees benefit pollinators and identify which trees are pollinator-friendly.	PF&R	Work with Urban Forestry to update brochure at the next scheduled re-print.	Q4 2019	\$0	
1	21. Seek sponsorships, grant and external funding opportunities to support the actions presented in this Strategy.	EED, TOP	Meet with relevant staff at Toronto Office of Partnerships and EED to coordinate inclusion of pollinator actions in existing grant applications, sponsorship proposals.	Q2 2018	\$0	
			Monitor relevant grant and funding databases (Grant Connect, Fundtracker, Philanthropic Foundations Canada) for available relevant funding opportunities	Ongoing	\$0	
Educate and train						
1	22. Develop pollinator-friendly gardening practices tips and share lists of pollinator-friendly native plants, trees and shrubs suited to the Toronto area.	EED, PF&R Pollinator Advisory Group, David Suzuki Foundation, North American Native Plant Society	Work with native plant experts and non-profit organizations to identify pollinator friendly plants	Q4 2017 (complete)	\$0	Cost for printing resources will come from already allocated Live Green Toronto budget.
			Compile gardening tips based on the advice of experts	Q4 2017 (complete)	\$0	
			Print hard copies for distribution at events	Q2 2018	\$0	
			Post list online at livegreentoronto.ca	Q2 2018	\$0	

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1	23. Work with Live Green Toronto to develop and deliver outreach on pollinator stewardship, and look for opportunities to incorporate Indigenous cultural content into educational initiatives.	EED, PF&R Indigenous groups in Toronto	Develop educational materials with input from Strategic Communications and Pollinator Advisory Group Consult with Indigenous groups on materials for educational workshops and Live Green displays Create dedicated page on livegreentoronto.ca and publish all relevant resources Host educational workshops at libraries Train Live Green Toronto Volunteers on pollinator stewardship and outreach Continue to incorporate pollinator initiatives into Live Green Toronto outreach and activities	Q2 2018 Q2 2018 Q2 2018 Q2 2018 Q2 2018 Ongoing	\$0 \$0 \$0 \$0 \$0	Pollinator messaging can be incorporated into existing Live Green Toronto programming. Speaking honorarium will be funded through already allocated Live Green Toronto budget. Four Library events are scheduled for 2018.
1	24. Engage with Toronto School Boards to encourage schools to create pollinator habitat, with the goal of creating a teaching garden at every school, and investigate support for ongoing garden maintenance.	EED, PF&R School Boards, Ontario Institute for Studies in Education (OISE), Ontario Ecoschools	Contact representatives from each Toronto School Board to identify opportunities, determine which schools already have pollinator education programs and gardens, discuss best practices for school gardens / maintenance requirements. Work with Ontario EcoSchools and TDSB Ecoschools programs to highlight pollinator stewardship in Ecoschool certification requirements Engage with OISE and relevant indigenous and environmental groups on the development of resources for teachers and how to incorporate into curriculum. Encourage the establishment of pollinator gardens at Toronto schools	Q3 2018 Q3 2018 Q3 2018 Q4 2018	\$0 \$0 \$0 \$0	Opportunity to learn from schools already successfully installed and maintaining pollinator gardens. Set of best practices can be developed and shared with other schools. Engage community and parents in pollinator garden maintenance needs during school break in summer months.

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			through information and resource sharing (grants and incentives)			
			Assist Toronto schools in securing financial and community support for installation and maintenance of pollinator gardens	Ongoing	\$0	
			Develop case studies of Toronto school pollinator gardens to inspire others	Q4 2018	\$0	
1	25. Continue and expand training for City staff on pollinator protection practices through the Horticulture Program of Excellence and identify pollinator-friendly native plants on the plant list available to City horticulture staff.	PF&R	Update plant list to identify pollinator friendly plants and make available to City staff.	Q4 2017 (complete)	\$0	Ongoing staff training can be achieved using existing resources.
			Identify appropriate training topics and develop training sessions	Q2 2018	\$0	Draft plant list has been developed.
			Schedule sessions for the year with Horticulture staff	Q2 2018	\$0	
			Investigate developing a course to be offered to City Staff on pollinators that could be available through ELI	Q4 2018	\$0	
1	26. Collaborate with the Ontario Beekeepers' Association, Toronto-based beekeeping groups and the Provincial Apiarist to facilitate informed beekeeping in Toronto by creating best practices, promoting training for novice beekeepers, and educating potential beekeepers about habitat creation as a more effective way to help pollinators.	EED, PF&R Ontario Beekeepers Association, Toronto Beekeepers Collective, Toronto Botanical Gardens, OMAFRA, Provincial Apiarist	Participate in beekeeping working group once established by OBA and Provincial staff.	When Province establishes group	\$0	Province and OBA to take the lead on establishing working group and best practices, with City of Toronto participation.
			Create an online resource centre to serve as a first point of contact for potential beekeepers in Toronto.	Q3 2018	\$0	
			Monitor and track inquiries related to beekeeping.	ongoing	\$0	
			Review best practices and online resources as required	ongoing	\$0	

Celebrate and recognize achievements

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1	27. Celebrate and promote National Pollinator Week and Toronto's status as the first Bee City in Canada by undertaking at least one public education and/or habitat creation or restoration activity each year.	EED, PF&R Bee City Canada	Develop and submit Proclamation request to have third week of June proclaimed as "Pollinator Week" in Toronto.	Q2 2018	\$0	Event sponsorship covered 100% of the costs of the annual events in 2016 & 2017. Live Green Toronto partnered with Burt's Bees to deliver this event. The same is anticipated for 2018.
			Identify event partner / sponsor and work collaboratively to develop celebration event	Q2 2018	\$0	
			Event logistics and site preparation	Q2 2018	\$0	
			Event promotion and outreach	Q2 2018	\$0	
1	28. Work with relevant partners such as Canadian Wildlife Federation, Monarch Watch, Pollinator Partnership, World Wildlife Fund, Carolinian Canada, and others to promote existing certification programs, mapping tools, and other resources that guide and recognize Toronto property owners in creating pollinator habitat.	EED, PF&R Canadian Wildlife Federation, Monarch Watch, Pollinator Partnership, World Wildlife Fund, Carolinian Canada	Engage with partners on existing programs	Q4 2017 (complete)	\$0	City to partner with existing program.
			Develop outreach strategy	Q2 2018	\$0	
			Promote program(s) to residents online and at Live Green Toronto outreach events	Q2 2018	\$0	
1	29. Add a pollinator-friendly garden category to the City's existing Garden Awards program, and inspire others by offering in person and virtual tours of award-winning gardens.	PF&R	Expand the Garden Awards by adding a pollinator-friendly garden category	Q2 2017 (complete)	\$0	New category was successfully added to the 2017 Garden Awards. Opportunity to promote past and future winners to inspire others.
			Review submissions and select winners	Q2 2018	\$0	
			Profile winners online and offer virtual tours of gardens, highlighting pollinator-friendly features and plants	Q3 2018	\$0	
			Investigate the ability to offer in person tours once a year of award winning gardens to inspire others	Q3 2018	\$500 (staff time, transport)	

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2	30. Investigate the opportunity to incorporate pollinator protection initiatives into the City's existing Urban Design Awards.	CP	Meet with City Planning to determine approach to incorporate encouragement of pollinators into the awards call and judging criteria Establish criteria for pollinator-friendly design Promote new criteria/category Ensure that judging panel is familiar with new criteria	Q3 2018 Q4 2018 Q1 2019 Q1 2019	\$0	The City's Urban Design Awards run every other year, with the next award round scheduled for 2019.
Total					\$147,000	

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