Taylor Massey Creek Environmentally Significant Area (ESA) Management Plan

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Land Acknowledgement

We acknowledge the land we are meeting on is the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples and is now home to many diverse First Nations, Inuit and Métis peoples. We also acknowledge that Toronto is covered by Treaty 13 with the Mississaugas of the Credit.

Preamble

The City of Toronto (the City) has developed a Management Plan for Toronto's Environmentally Significant Areas (ESA's). That Plan builds upon existing ESA management by providing structure, clarity, and consistency to ESA management processes. A foundational piece of the Plan is the core value and guiding principles (**Figure 1**).

The Management Plan for Toronto's ESAs identifies steps for the preparation of ESA-specific management plans which document the unique characteristics of an ESA or group of ESAs. ESA-specific management plans recommend management actions based on management objectives and site mapping that will help to maintain priority values and address priority pressures that influence the specific ESA(s).

ESA-specific management plans will assist the City in planning, prioritizing, and managing existing programs and program resources to ensure a coordinated and consistent approach to management operations. Where capital projects are identified (e.g., trail improvements), ESA-specific management plans will assist the City in planning for and managing resources to undertake larger management projects.

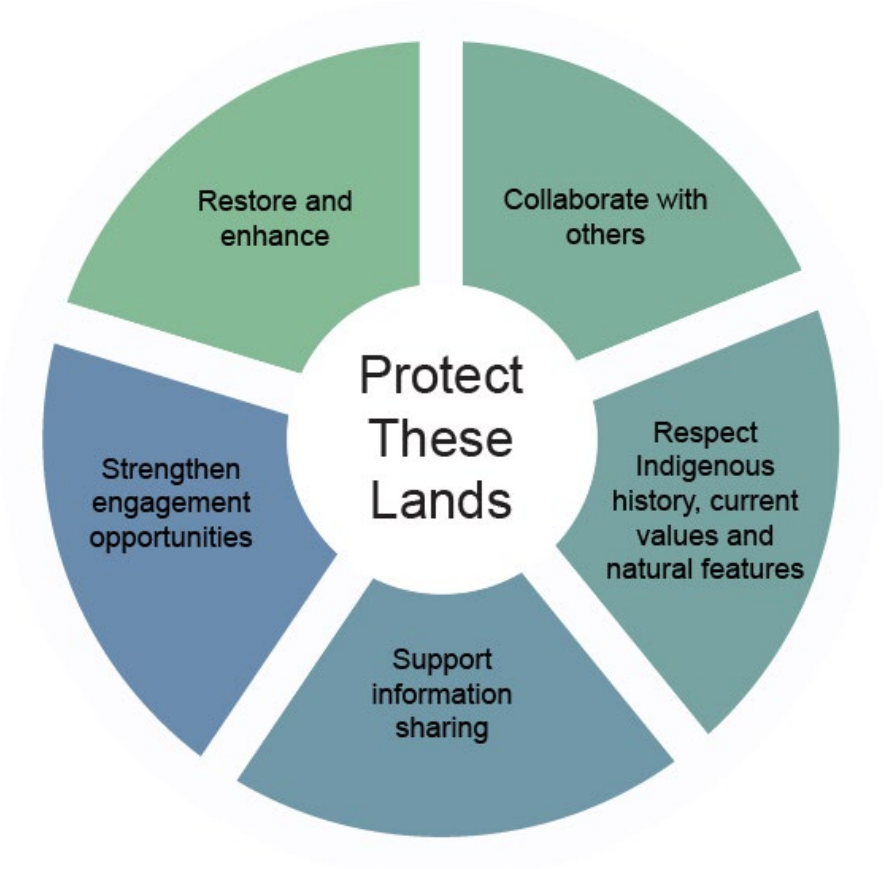


Figure 1: The core value "Protect These Lands" and the guiding principles that connect and provide direction for management of the ESAs.

This ESA-Specific Management Plan for Taylor Massey Creek ESA was developed to test and further refine the step-by-step process for preparing ESA-specific management plans developed through the draft Management Plan for Toronto's ESAs (**Figure 2**). Therefore, this Plan may have minor variations in format or content from plans for other ESA sites prepared in future. In addition to guidance provided through the Management Plan for Toronto's ESAs, Engagement with First Nations Treaty Holders and Rights Holders, a Technical Advisory Group and external stakeholders have informed this ESA-Specific Management Plan for Taylor Massey Creek ESA.

Figure 1: Key steps in preparing an ESA-specific plan.

Introduction

Taylor Massey Creek ESA covers approximately 65 ha of parkland, meadows and forested landscapes, including pockets of wetlands and high-quality forest, near The Don Valley Parkway and Don Mills Road in Toronto, Ontario (**Figure 3**).

This ESA-Specific Management Plan for Taylor Massey Creek ESA documents key outcomes from each step of the ESA-specific planning process.

Engagement Summary

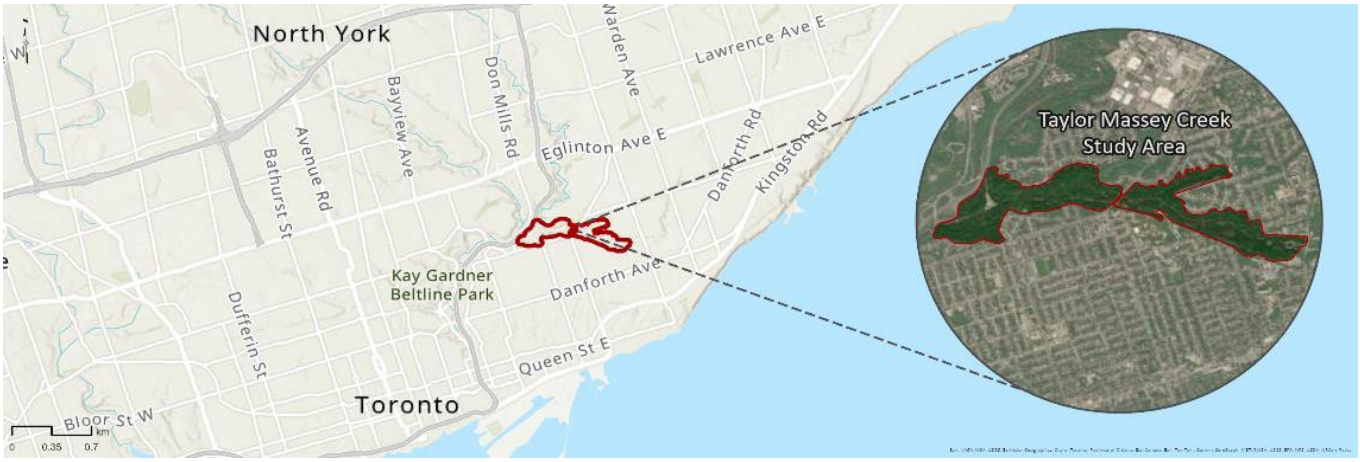
Engagement for this Plan occurred throughout October and November 2024. Through engagement, the City sought to identify site-specific values (ecological features as well as uses) and associated pressures / concerns. Participants were able to provide written comment(s) and map specific locations of interest / concern. Other input that could inform management objectives was also gathered.

Indigenous engagement included meetings with Treaty Holders and Rights Holders as well as a community sharing meeting which included participants who identify as First Nation, Métis, and Inuit.

The City engaged with ESA users, neighboring residents, and the public by hosting two pop-up events, as well as through a neighbourhood mail campaign, an online survey and digital mapping tool (Social Pinpoint).

Participants identified important natural values (including wildlife habitat, flora and fauna diversity, ecologic integrity / climate change resilience, and inherent values like connecting with nature), important built amenity values (including walking trails and seating areas), and valued activities (including walking, nature appreciation and biking). Pressures / concerns were identified by participants and included litter / dumping, invasive plants, off-leash dogs and over-use. In terms of management activities, respondents identified native tree planting, litter removal, wetland / creek restoration and invasive species management as top priorities. Feedback received also reflected Indigenous values such as protecting rare or culturally significant plants, place / historical recognition, as well as traditional teaching.

Figure 2. Location Map of Taylor Massey Creek ESA.



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community. ESA Boundary, City of Toronto

Plan Preparation

Step 1 | Characterization Report

The Taylor Massey Creek ESA Characterization Report documents the current understanding of site-specific ecologic features and functions, current uses and issues, and existing infrastructure. This report collates existing secondary source information with supplementary field study conducted (June 19th, 20th, August 1st and September 26th, 2023, and April 5th, 2024) to confirm and add to existing site information. Due to sensitive species and location information, the report has been prepared as an internal resource. A site characterization summary is included in **Appendix A**.

Step 2 | Identification of Values and Pressures

Informed by the ESA Characterization Report and site-specific engagement, values in the ESA and pressures that affect ESA values(s) were identified. Existing uses were also assessed to determine if they align with the guiding principles for ESA management, if they are considered value(s) or pressure(s), and / or if they are a priority for management.

Values include features, functions and activities / uses that are important from an ecological, cultural, economic, or social perspective. Examples of values include unique or rare species and / or landforms, environmental services provided, and amenity features like trails.

Pressures include disturbances or activities (natural or human-caused) that currently do or have potential to negatively impact a value. Examples of pressures include the presence of invasive species, erosion and informal trails.

Values and pressures identified for Taylor Massey Creek ESA are presented in **Table 1**. Management feasibility and priority are assigned to each value and pressure. Management feasibility is informed through consideration of types of effective and reasonable management options and tools available. Management priority, for those values and pressures which can be managed, are assigned a relative ranking (i.e., High, Medium, Low) as informed by ecological, alignment with the ESA Management guiding principles, and engagement outcomes.

Table 1. Identification of Values and Pressures in Taylor Massey Creek ESA

Value	Pressure (including Cause / Source if known)	Management Feasibility	Management Priority Level (for Manageable Pressures)
Fen-like areas / seepage areas	Invasive species	Management options available: • Populations (at the time of plan preparation) are still of manageable size / density (discreet populations). • May need to consider proximity to water feature.	High Highest Sensitivity / Ecological Value in ESA
Fen-like areas / seepage areas	Trails – Informal natural surface foot trail	Management options available: • Mechanisms for trail management available; further assessment of trail-use and planning required to determine site-specific feasibility.	High Highest Sensitivity / Ecological Value in ESA
Fen-like areas / seepage areas	Hydrologic changes from adjacent land use changes	Not manageable within context of individual ESA-specific management.	N/A
Taylor Creek	Invasive goldfish in ponds – risk of entering waterway during flood	Not manageable within context of individual ESA-specific management.	N/A
High quality forests on steep slopes	Erosion – human-caused (informal trails)	Management options available: • Further assessment trail-use and planning required in parkland areas. • Education/Awareness campaign for private landowners.	High (where on City parkland) Ecological value is high

Value	Pressure (including Cause / Source if known)	Management Feasibility	Management Priority Level (for Manageable Pressures)
High quality forests on steep slopes	Compaction associated with encampments / high-use areas (e.g., gathering areas)	Not manageable as a stand-alone pressure. • Requires further assessment of park use and available management tools.	N/A
Biodiversity	Invasive species	Management options available: • Where populations are still of manageable size / density (discreet populations). • May need to consider proximity to water feature	High Ecological value is high Pressure is manageable (for discreet populations)
Biodiversity	Domestic animals (free-roaming cats, off-leash dogs)	Not manageable within context of individual ESA-specific management	N/A
Biodiversity	Litter, dumping	Management options available. • Operations staff may consider targeted or enhanced efforts for removal via existing access	Low Ecological value is high, however, management requires a multi-divisional site-by-site approach
Habitat integrity	Encroachment (from neighbouring private property)	Management options available: • Further assessment required to determine feasibility and supporting resources	Low Ecological value is high, however, management requires a multi-divisional site-by-site approach
Habitat integrity	Gaps in Natural Area Connectivity	Management options available: • Further assessment required to determine management options (e.g., planting / restoration) and to determine feasibility	Medium Ecological value is high
Recreational Trails and	Diversity of user groups (walking,	Management options available:	Medium Recreational use value is high

Value	Pressure (including Cause / Source if known)	Management Feasibility	Management Priority Level (for Manageable Pressures)
Amenity Uses	biking, electric or motorized vehicles)	• Further assessment trail-use and planning required in parkland areas	
Indigenous cultural value of flora and fauna	Biodiversity loss	Management options available: • Management may be achieved in part by addressing other issues	High Cultural value is high

City-wide Values and Pressures Heard from Engagement

In addition to what is included in Table 1, Indigenous cultural values that were identified through engagement included interests in traditional medicine gardens / plantings and harvesting, co-management (including paid / economic opportunities), recognizing historical significance (signage, art, traditional language), archaeological studies and access for cultural uses and placemaking (fires, teaching, programming). Through the Reconciliation Action Plan, the City is working on supportive processes and opportunities where these interests can be implemented and / or further discussed.

Comments received during public engagement relating to motorized recreational vehicles on trails, speed limits on trails, general park amenity requests and park servicing are outside the scope of ESA-specific management which is focused on preserving the ecologic features and functions of the specific ESA. Some concerns and their potential solutions require a more comprehensive approach to be considered as part of city-wide management and communication strategies (e.g., sign standards, bylaw enforcement).

Step 3 | Management Objectives

The following site-specific management objectives for Taylor Massey Creek ESA have been identified based on the site characterization and existing conditions (Step 1) and prioritized values and pressures (Step 2).

Taylor Massey Creek ESA high quality forest and sensitive fen-like seepage areas are top priority ecologic values of the site. A high value was also placed on Indigenous cultural values. A medium value was placed on access for usership in the ESA (e.g., trail use). Major pressures to these values that can be managed at the site level include impacts from park users and invasive species. Management objectives for values and pressures at this site include:

- Promote and increase biodiversity by managing populations of invasive vegetation and planting native species
- Prioritize naturalization efforts that improve natural area connectivity through capital project planning and /or through ecological restoration and enhancement activities
- Create or enhance opportunities that educate and / or engage park and trail users on the ecological and Indigenous significance of the site
- Manage for appropriate and sustainable public access and use in areas of existing or planned park infrastructure (formal trails, bridges)
- Explore opportunities to reduce negative impacts to natural features from park user related activities
- Explore opportunities where Indigenous cultural value(s) identified through engagement and dialogue with Indigenous peoples can be integrated with City projects and management activities

Step 4 | Application of Management Zones

Management zones provide information for City decision-makers and project leads to assess the appropriateness or extent of planned and compatible uses and management activities in ESAs. Zones are defined by consistent overarching management themes:

- **Ecological Preservation Zone** | Areas containing natural features with highest value and sensitivity.
- **Conservation Zone** | Areas containing natural features with less sensitivity to public use that may already have some effects from existing authorized uses or recent disturbances.
- **Passive Recreation Zone** | Areas containing natural features that are being impacted by high social and public use values or heavier disturbances from planned capital projects.

All previous steps contribute to how mapping of management zones within the ESA has been applied. Not all priority values / pressures or management objectives that support those values / pressures can be mapped if they lack a specific physical location or are widespread considerations (e.g., Biodiversity, Indigenous cultural value of flora and fauna). In such cases, management activities to support them is considered appropriate in all management zones. **Table 2** provides additional rationale for how management zones were assigned and applied. Technical mapping details are provided in **Appendix B**. Management zone mapping for Taylor Massey Creek ESA is illustrated in Figure 4. Management Zone Mapping for Taylor Massey Creek ESA (4-1 and 4-2) **Figure 4**.

Table 2. Application of Management Zones in Taylor Massey Creek ESA

Priority Value / Existing Site Condition	Management Zone	Rationale
Fen-like areas / seepage areas	Ecological Preservation	High Sensitivity Ecological Value

Priority Value / Existing Site Condition	Management Zone	Rationale
High quality forests on steep slopes, and other 'High Sensitivity' communities	Ecological Preservation	High Sensitivity Ecological Value
Habitat Integrity and Other 'Locations of Significant Species and Communities' (where no overlap with Ecological Preservation zones above), and locations of Low – Moderate Sensitivity where no overlap with 'Passive Recreation' management zones below	Conservation	Ecological Value
Existing asphalt multi-use recreational trails	Passive Recreation	High Recreational Use Value
Existing City managed natural surface recreational trails	Conservation	Recreational-use Value
Existing City Managed Amenity Space(s) and manicured turf Picnic areas, washrooms	Passive Recreation	High Recreational-use Value

Step 5 | ESA-Specific Plan

The ESA-Specific Plan (**Table 3**) combines elements of all previous steps to identify management activity recommendations. This plan is to be used in conjunction with guidance from the Management Plan for Toronto's ESAs as a roadmap for management decisions and how projects or management activities will be planned for and implemented to ensure the best outcomes for the Taylor Massey Creek ESA. The implementation of ESA management activity recommendations (e.g., invasive species management) or the delivery of subsequent detailed project planning (e.g., trail planning) is determined by the same opportunities and restrictions that influence all City operations or detailed project planning undertakings.

Most ESA management objectives will be achieved through current and (as applicable) future ESA-related programs and program resources. Opportunities to coordinate with capital infrastructure or similar projects may also be identified as opportunities to undertake beneficial management activities for the ESAs.

Management recommendations identified in this Plan will be implemented over time in consideration of phasing, follow-up treatment, adaptive management, available resources, shifting priorities and collaboration opportunities. Some recommendations that require larger commitments of time or resources may benefit from immediate and interim actions while working towards the larger goal. Other effective management activities beyond what is recommended in this report can also be considered for implementation where they align with the core value and guiding principles for ESA management and stated objectives for Taylor Massey Creek ESA.

Figure 4-1: Management Zones

Taylor Massey Creek ESA
Management Plan

ESA Boundary
Watercourse (MNRF)
Private Ownership

Management Zone / Opportunity

Ecological Preservation (37%)
- Fen-like/seepage areas
- High quality forests on steep slopes
- High sensitivity communities

Conservation (53%)
- Habitat Integrity
- Locations of Significant Communities/Species
- Existing City managed natural surface trails with 2m buffer

Passive Recreation (10%)
- Existing asphalt trails with 5m buffer
- Existing City managed amenity spaces and manicured turf (i.e. picnic areas)

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Figure 4-2: Management Zones

Taylor Massey Creek ESA
Management Plan

- ESA Boundary
- Watercourse (MNRF)
- Private Ownership

Management Zone / Opportunity

Ecological Preservation (37%)
- Fen-like/seepage areas
- High quality forests on steep slopes
- High sensitivity communities

Conservation (53%)
- Habitat Integrity
- Locations of Significant Communities/Species
- Existing City managed natural surface trails with 2m buffer

Passive Recreation (10%)
- Existing asphalt trails with 5m buffer
- Existing City managed amenity spaces and manicured turf (i.e. picnic areas)

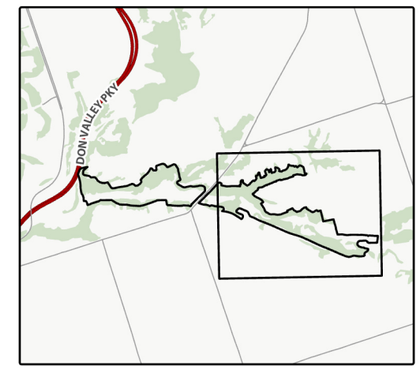

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Table 3. Summary of Priority Values / Pressures, Management Objectives, Management Zones and Recommended Management Actions for Taylor Massey Creek ESA

Priority Value	Priority Pressure	Management Objectives	Management Zone	Recommended Site-Specific Actions
Fen-like areas / seepage areas	Invasive species	• Promote and increase biodiversity by managing populations of invasive vegetation and planting native species	Ecological Preservation	1) Reduce levels of invasive species in accordance with BMP's (where available). Ongoing management and monitoring may be required. 2) Plant native trees, shrubs, herbaceous ground covers in areas treated for invasive species. 3) Monitor the site.
Fen-like areas / seepage areas	Trails – Unofficial natural surface foot trail	• Create or enhance opportunities that educate and / or engage park and trail users regarding the ecological and cultural significance of the site	Ecological Preservation	1) Conduct phased assessment of trail use and planning in coordination with the Taylor Creek Park Management Plan (2021) to determine site-specific feasibility of mechanisms for trail management.
High quality forests on steep slopes	Erosion – human-caused (informal trails)	• Create or enhance opportunities that educate and / or engage park and trail users regarding the ecological and cultural significance of the site	Ecological Preservation	1) Conduct phased assessment of trail-use and planning in parkland areas in coordination with the Taylor Creek Park Management Plan (2021).

Priority Value	Priority Pressure	Management Objectives	Management Zone	Recommended Site-Specific Actions
				2) Education/Awareness campaign for private landowners.
Biodiversity / Indigenous Cultural Value of Flora and Fauna	Invasive species	• Promote and increase biodiversity by managing populations of invasive vegetation and planting native species • Create or enhance opportunities that educate and/or engage park and trail users regarding the ecological and cultural significance of the site • Explore opportunities where Indigenous cultural value(s) identified through engagement and dialogue with Indigenous peoples can be integrated with City projects and management activities	Ecological Preservation and Conservation	1) Reduce levels of invasive species in accordance with BMPs (where available). Repeated treatment may be required. 2) Plant native trees, shrubs, herbaceous ground covers in areas treated for invasive species. 3) Monitor the site.
Habitat Integrity	Gaps in Connectivity	• Prioritize naturalization efforts that improve ecological connectivity through capital project planning and /or through ecological restoration and enhancement activities • Explore opportunities to reduce impacts to natural features from park user related activities	Conservation	1) Consider naturalization efforts that improve ecological connectivity through capital project planning and /or through ecological restoration and enhancement activities.
Recreational trails and amenity spaces	Diversity of user groups (walking, biking, electric or	• Manage for appropriate and sustainable public access and use in areas of existing or planned	Passive Recreation	1) Conduct phased assessment of trail-use and planning in

Priority Value	Priority Pressure	Management Objectives	Management Zone	Recommended Site-Specific Actions
(applicable to existing and planned)	motorized vehicles)	park infrastructure (formal trails, bridges) • Create or enhance opportunities that educate and / or engage park and trail users regarding the ecological and cultural significance of the site • Explore opportunities to reduce impacts to natural features from park user related activities		coordination with the Taylor Creek Park Management Plan (2021). 2) Education/Awareness campaign may be considered, but not within context of individual ESA-specific management planning.

APPENDIX 1 | ESA Characterization Summary

Taylor Massey Creek

ESA Characterization Summary

Taylor Massey Creek Environmentally Significant Area (ESA) includes approximately 65 ha of natural forest and parkland near the Don Valley Parkway and Don Mills Road in Toronto. The majority of the ESA (74%) is owned and/or managed by the City. Encompassing the river corridor and ravine area, the ESA lies within the Don River watershed and exhibits moderate to very steep slopes. It contains 4 km of watercourse, which includes Taylor Massey Creek and two smaller tributaries, and flows directly into the Don River.

WHAT MAKES TAYLOR MASSEY CREEK AN ESA?

Presence of significant flora, fauna and vegetation communities.

- 41 significant flora species
- 5 significant vegetation communities
- 1 significant fauna species

A high diversity of flora, fauna and vegetation communities.

- 72 L1 to L4 species
- 38 vegetation communities

Providing important ecological functions beyond its boundaries.

- Marshes and swamps provide 13 ha of water storage area

L Ranking
Local (L) ranks score species and vegetation communities based on local distribution. Scores range from L1 (rarest) to L5 (most common).

Significance
Species and communities are considered significant if they are vulnerable, rare, threatened or endangered within the City and Greater Toronto Area.

Significant Wildlife Habitat (SWH)
SWH includes habitat features and vegetation communities that are utilized by sensitive or at-risk species in Ontario.

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Vegetation

A wide range of vegetation communities are found within Taylor Massey Creek ESA such as forests, woodlands, swamps and marshes.

Deciduous forest communities are the most prevalent at 32.6 ha. Tree species found within these communities include sugar maple, American beech, red oak and white birch. Within Taylor Massey Creek ESA you can find the regionally rare Dry ś Fresh Red Oak Deciduous Forest community.

Cultural communities also have a presence in the ESA, covering 17.17 ha. These communities are the result of recent or historical human activities that have caused disturbance and often contain a higher proportion of non-native and invasive species. Cultural communities found in Taylor Massey Creek ESA include woodlands, plantations, thickets, and meadows. Tree species found in these communities include black locust, Carolina poplar and Manitoba maple.

Wetlands and aquatic communities make up 12.69 ha of the ESA. This includes swamps, marshes and open aquatic habitats with willow, paper birch, poplar, European alder, reed canary grass, and cattails. Three of the wetland and aquatic communities found in the ESA are considered significant vegetation communities. Regionally rare plant species found in the ESA include red pine, hooded ladiesŇtresses, sharp-fruited rush, meadow evening primrose, interrupted fern, and greater fringed gentian.

Wildlife

During a 2023 survey, 32 wildlife species were observed in Taylor Massey Creek ESA, including three species at risk: the chimney swift, eastern wood pewee and painted turtle. This is an increase from the initial ESA assessment, which only identified one significant fauna species. A screening for Significant Wildlife Habitat (SWH) in the ESA was also completed. Three seeps and springs were identified in the ESA during 2024 surveys and have been recognized as SWH.

Invasive Plant Species

The City is actively working on invasive plant species management in Taylor Massey Creek ESA. There were 12 invasive species from the CityŇ priority invasive management list documented in the ESA during a 2023 review. Some of the more prominent invasive species include dog-strangling vine, garlic mustard, and common buckthorn.

Infrastructure

Taylor Massey Creek ESA has 6.24 km of formal trails, including a paved trail that runs the length of the valley and 11 formalized access points. There are 18 outfalls in the ESA, 2.86 km of retaining walls and 13 bridges. The ESA also includes 2.34 ha of areas managed as manicured and park amenity spaces or infrastructure. Park amenities include washrooms, firepits and picnic areas. A hydro corridor runs along the south side of the site. Ongoing infrastructure and projects and improvements can be found in the Taylor Creek Park Management Plan and Taylor Massey Creek Sub-Watershed Master Plan.

Pressures Impacting Taylor Massey Creek ESA

- Invasive Species
- Informal Trail Uses
- Erosion
- Dumping and Littering
- Unsanctioned Structures or Uses

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APPENDIX 2 | Other Tables

Table 4. Technical Mapping Details of Management Zones in Taylor Massey Creek ESA

Priority Value / Existing Site Condition	Management Zone	How to Map
Fen-like areas / seepage areas	Ecological Preservation	Based on ELC communities; see also 'Highest' Sensitivity mapping in NSE Management Summary Maps (2015)
High quality forests on steep slopes, and other 'High Sensitivity' communities	Ecological Preservation	Based on ELC communities and steep slope mapping; 'High' Sensitivity mapping in NSE Management Summary Maps (2015) and 'Areas of Highest Sensitivity' and 'Areas with Species of High Sensitivity' from Taylor Creek Park Management Plan (2021)
Habitat Integrity and Other 'Locations of Significant Species and Communities' (where no overlap with Ecological Preservation zones above), and locations of Low – Moderate Sensitivity where no overlap with 'Passive Recreation' management zones below	Conservation	Based on NSE Management Summary Maps (2015), and 'Areas Locally Significant or Rare Species' from Taylor Creek Park Management Plan (2021),
Existing asphalt multi-use recreational trails	Passive Recreation	Based on City trail asset data, including 5m buffer on either side
City managed natural surface recreational trails	Conservation Zone	Based on City trail asset data, including 2m buffer on either side
Existing City managed amenity space(s) • Picnic areas, washrooms	Passive Recreation	Mapped as 'Anthropogenic' in current ELC mapping