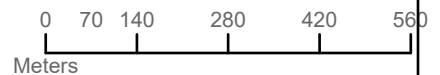


2024 NATURAL AREAS UPDATE

SITE NE9

- █ NATURAL AREAS
- █ VEGETATION COMMUNITIES
- █ SPECIAL MANAGEMENT AREAS
- █ LINKAGES



Produced by IT-GIS, Client Services

NE9

CLASSIFICATION	Park Name	PLANNING DISTRICT	AREA (Ha)
Significant Natural Area	Paul Coffey Park/ Wildwood Park	Northeast (2)	58.90
CONSERVATION AUTHORITY	SUBWATERSHED	OWNERSHIP	SURROUNDING LAND USE
Toronto Region Conservation Authority	Mimico Creek	Private- Public	Industrial- Commercial- Parkland

GENERAL SUMMARY

NE9 is south along Mimico Creek from Derry Road East to American Drive, west of Goreway Drive. Mimico Creek links this site with natural area MA1.

NE9 is two parcels comprised of the riparian and floodplain areas along a section of Mimico Creek, surrounded by industrial and commercial buildings. NE9 supports habitat-generalist wildlife and provides a connection to other natural areas.

PHYSICAL DESCRIPTION

NE9 is a medium-large sized natural area for the City. This site is located in the floodplain of Mimico Creek. Bedrock geology consists of the grey shales of the Georgian Bay Formation. These are overlain by over 15 m of soils and glacial deposits consisting of imperfectly drained Peel clays, formed within Lacustrine - Wildfield till complex deposits laid down in glacial Lake Peel.

There are no known Earth Science Features within this area. Hydrological Features within this area include a watercourse.

CONDITION

This site is currently in fair condition. Disturbances include formal and unplanned trails, garbage, dumping, and airplane and train noise. Armourstone lines the creek in various locations for erosion control. The presence of fine silt on the floodplain vegetation indicates severe flooding which impacts native floodplain species. The erosion and silt deposition may be partially a result of more frequent and intense flood events resulting from inappropriate stormwater practices in upstream developments.

Highly invasive plant species (as regarded by Ontario Invasive Plant Council) include Garlic Mustard (*Alliaria petiolata*), Dog Strangling Vine (*Vincetoxicum rossicum*), Common Reed (*Phragmites australis australis*), Tartarian Honeysuckle (*Lonicera tatarica*), Purple Loosestrife (*Lythrum salicaria*), and European Buckthorn (*Rhamnus cathartica*).

ECOLOGICAL LAND CLASSIFICATION

Number of Plant Communities

There are 13 plant communities within NE9, including Forest (FOD4, FOD7-3 and FOD9-3), Cultural Woodland (CUW1), Cultural Savannah (CUS1), Cultural Thicket (CUT1), Cultural Meadow (CUM1-1), Meadow Marsh (MAM2-2), Shallow Marsh (MAS2, MAS2-1 and MAS 2-7), Thicket Swamp (SWT2-2 and SWT2-5) and Anthropogenic/ manicured areas. Community descriptions are appended.

Significant Plant Communities

There are no Significant Plant Communities in NE9.

SPECIES RICHNESS

Flora

274 species have been recorded from the site, a high diversity for the City. The native FQI is 44.92 and the native mean coefficient is 3.50, a high and medium value, respectively. The native FQI and the native mean coefficient have decreased from previous values of 45.93 and 3.60, respectively. In total, 109 introduced plant species are present (representing 39.80% of the total number of species present).

Three flora species considered provincially significant or at risk within the province and/or nationally have been recorded at this site.

22 locally significant flora species have been noted at this site.

54 Credit Valley Conservation flora species of Conservation Concern (Tier 1-3) have been recorded at this site.

Fauna

There are a total of 71 faunal species documented for this site: 49 bird, 8 mammal, 6 amphibian, 1 reptile, and 7 insect species.

Eight fauna species considered provincially significant or at risk within the province and/or nationally have been noted at this site.

32 Credit Valley Conservation fauna species of Conservation Concern (Tier 1-3) have been noted at this site.

MANAGEMENT RECOMMENDATIONS

1. Invasive species, such as Dog-strangling Vine, should be controlled now, as it will become harder as they become more established.
2. Consideration should be given to naturalization or restoration of vegetation within the cultural or manicured areas, in particular the portions adjacent to the wetlands or creek in order to establish a natural buffer. Restoration of the Cultural Woodland would also be beneficial to increase native canopy cover at this site and promote succession to a forest community.

REFERENCES

Hayes (2002)

ECOLOGICAL LAND CLASSIFICATION

Fresh-Moist Willow Lowland Deciduous Forest Type (FOD7-3)

The willow lowland community occurs along the floodplain of Mimico Creek. Scattered mature Crack Willow (*Salix fragilis*), Manitoba Maple (*Acer negundo*), Black Walnut (*Juglans nigra*), and Green Ash (*Fraxinus pennsylvanica*) form an open canopy. The canopy (10-20 m) covers approximately 60-70% of the community. The sub-canopy (2-10 m, > 60% cover) is dominated by Manitoba Maple and Black Walnut. The predominant species in the understory is Staghorn Sumac (*Rhus typhina*) that is 1-2 m in height and covers 25-60% of the community. The ground layer (0.2-0.5 m, > 60% cover) consists of a variety of species including: Virginia Creeper (*Parthenocissus inserta*), Wild Cucumber (*Echinocystis lobata*), Garlic Mustard (*Alliaria petiolata*), Canada Goldenrod (*Solidago canadensis*) and Yellow Avens (*Geum aleppicum*).

Dry-Fresh Deciduous Forest Ecosite (FOD) and Cultural Woodland (CUW1)

There are deciduous forest ecosites and cultural woodlands throughout the site that have been highly influenced by human disturbance. Canopy cover is diverse and includes Black Walnut (*Juglans nigra*), Willows (*Salix* spp.), Manitoba Maple (*Acer negundo*), White Poplar (*Populus alba*), Norway Maple (*Acer platanoides*), Red Oak (*Quercus rubra*), Silver Maple (*Acer saccharinum*), Hop Hornbeam (*Ostrya virginiana*), White Oak (*Quercus alba*), and Sugar Maple (*Acer saccharum* ssp. *saccharum*), among others. Canopy cover is greater than 60% in the Deciduous Forest and variable in the Cultural Woodland (35 to 60%). The canopy species are 10-25 m in height. The sub-canopy contains a diversity similar to the canopy with American Elm as an additional associate. The sub-canopy is equally as densely vegetated as the canopy with species that are 2-10 m in height and covers greater than 60% of the forest. The understory consists of dense European Buckthorn (*Rhamnus cathartica*) that is 1-2 m in height and covers greater than 60% of

the community. The ground layer is dominated by Garlic Mustard as well as the occasional Yellow Avens that are 0.2-0.5 m in height and covers greater than 60% of the community.

Fresh-Moist Oak Deciduous Forest Type (FOD9-3)

The oak forest is located south and east of the sports fields within the City park. The canopy is densely vegetated (greater than 60% cover) with Bur Oak, White Oak, Red Oak, and Sugar Maple. The canopy vegetation is typically greater than 25 m in height. The sub-canopy vegetation is less dense than the canopy, covering 25-60% of the forest at 10-25 m in height. The predominant species in this layer include Manitoba Maple and White Oak. Riverbank Grape (*Vitis riparia*), European Buckthorn, and Tartarian Honeysuckle (*Lonicera tatarica*) are abundant in the understory which is 1-2 m in height and covers greater than 60% of the forest. The ground layer is densely vegetated (greater than 60% cover) with Choke Cherry (*Prunus virginiana*) and European Buckthorn seedlings. The ground layer vegetation is 0.2-0.5 m in height, covers 25-60% of the community, and primarily consists of Yellow Avens. As this community is linear in shape, the species in the understory and ground layer have been highly influenced by edge effects and are not typical of an oak forest.

Hawthorn Cultural Savannah Type (CUS1-1)

The hawthorn (*Crataegus* sp.) cultural savannah (CUS1-1) is located at the south end of the site, to the north and east of the creek. The canopy is sparsely vegetated (25-60% cover) with a variety of hawthorns, as well as the occasional European Buckthorn and Green Ash that are 2-10 m in height. The understory is 1-2 m in height and also covers 25-60% of the community. This layer contains an abundance of Riverbank Grape, European Buckthorn, and Tartarian Honeysuckle. The ground layer contains an abundance of old field species. Such old field species (0.5-1 m) include Canada Goldenrod (*Solidago canadensis*) and Wild Carrot (*Daucus carota*), Kentucky Bluegrass (*Poa pratensis*), Heath Aster

(*Symphotrichum ericoides*), and Smooth Brome (*Bromus inermis*) that cover greater than 60% of the community.

Dry-Moist Old Field Meadow Type (CUM1-1)

Old fields (CUM1-1) are present, in multiple places scattered across the site. The old fields are dominated by Teasel (*Dipsacus fullonum* ssp. *sylvestris*) and White Sweet-Clover (*Melilotus alba*) in the canopy. The canopy vegetation is 1-2 m in height and covers greater than 60% of the community. The understory contains an abundance of Canada Goldenrod, Wild Carrot, and Field Milkweed (*Asclepias syriaca*). The understory vegetation is 0.5-1 m in height and covers greater than 60% of the community. The ground layer is less than 0.2 m in height and is dominated by a dense layer of Smooth Brome, as well as the occasional Field Thistle (*Cirsium arvense*), and Heath Aster that cover greater than 60% of the community. Scattered Red-Osier Dogwood (*Cornus sericea*) is also present in this community.

Reed-canary Grass Mineral Meadow Marsh (MAM2-2)

The Reed-canary Grass Mineral Meadow Marsh occurs in the south end of the site and represents the floodplain of the watercourse. It occurs adjacent to Cultural Meadow (CUM1-1). There is no canopy or sub-canopy. The community is dominated by Reed-canary Grass (*Phalaris arundinacea*) as the ground cover, which is between 1-2 m tall and represent greater than 60% cover. Associate species include Spotted Joe-pye-weed (*Eutrochium maculatum*) and Purple Loosestrife.

Bur-reed Mineral Shallow marsh (MAS2-7)

The Bur-reed Mineral Shallow Marsh (MAS2-7) is a small patch of wetland near the cricket pitch. It is dominated by hydrophytic emergent vegetation including bur-reed (*Sparganium* sp.) sedges (*Carex* spp.) and rushes (Juncaceae).

Cattail Mineral Shallow Marsh Type (MAS2-1)

There are two cattail marshes (MAS2-1), both located west of Goreway Drive. They are dominated by Narrow-Leaved Cattail (*Typha angustifolia*) in the canopy as well as the occasional Riverbank Grape, Wild Cucumber (*Echinocystis lobata*), and Red-Osier Dogwood around the edge of the community. The canopy is 1-2 m in height and covers greater than 60% of the community. The invasive Purple Loosestrife (*Lythrum salicaria*) is abundant in the understory of the marsh, as well as the occasional Jewelweed (*Impatiens capensis*). Understory species are 0.5-1 m in height and cover 25-60% of the community. Other species typical of wetlands that are scattered throughout the ground layer include bedstraws (*Galium* spp.), a variety of sedges (*Carex* spp.) and bulrushes (*Scirpus* spp.) that are 0.2-0.5 m in height and cover 10-25% of the wetland. Common Reed (*Phragmites australis australis*) is an expanding threat to this community.

Mineral Shallow Marsh (MAS2)

The Mineral Shallow Marsh (MAS2) represents monoculture patches of Common Reed, which are expanding within the cattail marsh community. This community is Common Reed with occasional cattail (*Typha* spp.), Purple Loosestrife and other wetland associates.

Red-osier Dogwood Thicket Swamp (SWT2-5)

Small-pockets of Red-osier Dogwood Thicket Swamp (SWT2-5) have been included in the mapping because they function as vernal pools, which are important wetland features for breeding amphibians. Canopy includes willows (*Salix* spp.), Manitoba Maple and elms (*Ulmus* spp.). sub canopy includes a similar composition as the canopy with scattered Green Ash (*Fraxinus pennsylvanica*). Canopy and sub canopy trees are 10-25 m and 5 to 10 m, respectively and have a cover less than 30%. Canopy is predominantly overhanging trees. Understory is dominated by Red-osier Dogwood (*Cornus sericea*).

Willow Mineral Thicket Swamp (SWT2-2)

The Willow Mineral Thicket Swamp (SWT2-2) is a small patch of community between the sports fields and a path. There is no canopy or sub-canopy layers. The small wetland is dominated by willow (*Salix* spp.) shrubs.

Bur Oak Cultural Savannah (CUS)

The sparsely treed community (canopy cover approximately 40%) consists of Bur Oak (*Quercus macrocarpa*), Red Oak (*Quercus rubra*) and Black Walnut (*Juglans nigra*) with some American Basswood (*Tilia americana*). A number of oak trees reach over 80 cm in diameter. The groundcover is manicured lawn, maintained to function as a picnic area / amenity space. As a result, there is no shrub / sapling understory. Given the manicured groundcover and lack of understory, the community does not meet the minimum tree density requirements to be considered a woodland.

Anthropogenic and Manicured Communities

The anthropogenic area consists of sports fields, roads and parking areas. The majority of manicured and anthropogenic features on the property have been excluded from the community mapping and are not included as part of the natural area unless they are surrounded by natural communities.