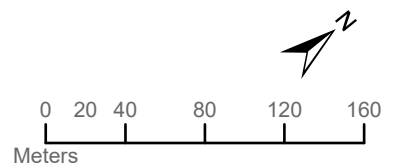


Natural Areas System

2024 NATURAL AREAS UPDATE

SITE CV12

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



CV12

CLASSIFICATION Significant Natural Area	Park Name Richard Jones	PLANNING DISTRICT Cooksville	AREA (Ha) 8.16
CONSERVATION AUTHORITY CVC	SUBWATERSHED Cooksville Creek	OWNERSHIP Private/City	SURROUNDING LAND USE Residential

GENERAL SUMMARY

Southwest along Cooksville Creek from the Canadian Pacific Railway line to Kirwin Avenue. Throughout its length, Cooksville Creek links a number of natural areas, including CC1, CV8 and LV4. Contributes to the linkage function of Cooksville Creek. Floodplain provides floodwater storage for Cooksville Creek.

PHYSICAL DESCRIPTION

The topography of this site varies from steep valley slopes in the east to undulating floodplain. Lake Iroquois beach deposits occur along the Canadian Pacific Railway line. Bedrock geology consists of grey shales of the Georgian Bay Formation. These are overlain by up to 7.5 m of soils and glacial deposits consisting of well drained Fox sand developed in Lake Iroquois shallow water deposits. A small pocket of imperfectly drained Cooksville clay loam is present in the northeast. Soil moisture is mesic throughout the floodplain and dry-mesic on the valley slopes and adjacent tableland. Cooksville Creek is extensively engineered with armourstone, concrete, and gabion baskets throughout most of this site.

CONDITION

This site is currently in fair to poor condition. Disturbances are numerous and include, garbage, household dumping, unplanned trails, channelization of Cooksville Creek, trampling, past logging evidence, odours, train noise, evidence of fire pits, erosion, vandalism, and residential encroachment. Old stone steps down the east slope are part of a private estate. Invasive plant species are prevalent and include: Norway Maple, Garlic Mustard, Purple Loosestrife (*Lythrum salicaria*), European Buckthorn, Periwinkle, Goutweed and Multiflora Rose (*Rosa multiflora*). One hundred and forty-two

introduced species are present at this site (representing 47.97% of the total number of species present), which is considered very high. Surrounding land use is residential.

ECOLOGICAL LAND CLASSIFICATION

Number of Plant Communities

Six vegetation communities are present within this natural area (see accompanying figure): sugar maple deciduous forest ecosite (FOD5), fresh-moist lowland deciduous forest type (FOD7), fresh-moist willow lowland deciduous forest type (FOD7-3), mineral cultural woodland (CUW1), coniferous plantation ecosite (CUP3), and a manicured park.

Significant Plant Communities

There are no Significant Plant Communities in CV12.

SPECIES RICHNESS

Flora

FQI is 47.94, a high value, and the native mean coefficient is 3.62, a medium value. The native FQI has increased from 44.37 and the native mean coefficient has decreased from the previous value of 3.66.

There are 296 floral species documented for this site.

4 provincially significant plant species were noted on site; 1 Endangered, 3 rare/uncommon.

10 locally significant flora species have been noted on site; 2 rare species (known from 1 to 3 locations) and 8 uncommon species (known from 4 to 10 locations) within the City.

48 Credit Valley Conservation flora Species of

Conservation Concern (Tier 1-3).

Fauna

From the perspective of wildlife habitat, this natural area is relatively large, with a higher interior-to-edge ratio than many natural areas within the City, and with highly variable topography. Portions are densely wooded and much of the wooded area, including both deciduous forest and conifer plantations, is relatively mature. The diversity of fauna present is considered moderate to high. Breeding bird species include mainly those that are urban-adapted, such as Northern Cardinal and Black-capped Chickadee. Red-eyed Vireo, a species that is somewhat dependent on mid-age to mature forest conditions, was also documented at this site. Mallard are common along the creek. Other species of interest noted during the breeding season include: Gray Catbird, Chimney Swift, Red-breasted Nuthatch, Hairy Woodpecker, Least Flycatcher and Carolina Wren. Gray Catbird requires thicket habitat and occurs in most natural areas in Mississauga. Chimney Swifts nest in older houses, and their decline has been noted throughout North America. Red-breasted Nuthatch depends on "islands" of mature coniferous plantation or forest and is unusual in Mississauga as a breeding species. Hairy Woodpecker, Least Flycatcher and Carolina Wren all require relatively large patches of mature forest. A total of 38 birds, 3 mammals and 1 reptile (Eastern Garter Snake) have been documented at this site. Cooksville Creek is a type 2 fishery within this site.

A total of 42 faunal species have been documented at this site.

1 provincially significant fauna species was noted on the site; Threatened.

18 Credit Valley Conservation fauna Species of Conservation Concern (Tier 1-3).

MANAGEMENT RECOMMENDATIONS

1. A Special Management Area lies adjacent to this site which offers the potential for

expansion of the Natural Greenspace area.

2. The City park, Richard Jones, is included within this natural area.
3. Continued monitoring of Cooksville Creek to ensure the frequency and intensity of flooding events is reduced. Continue rehabilitation and adaptive management if needed.

REFERENCES

Gore & Storrie Limited and R.E. Winter & Associates Limited (1994)

City of Mississauga (1978)

Transportation and Works (1998)

ECOLOGICAL LAND CLASSIFICATION

Sugar Maple Deciduous Forest Ecosite (FOD5)

This forest is located on a slope, south of the plantation. The wooded slope is characterized by mature Sugar Maple (*Acer saccharum ssp. saccharum*) and Red Oak (*Quercus rubra*) in the canopy (10-25 m in height, covers greater than 60% of the community). The sub-canopy primarily contains Sugar Maple, Hop Hornbeam (*Ostrya virginiana*), Black Cherry (*Prunus serotina*) and American Basswood (*Tilia americana*). Sub-canopy trees are 2-10 m in height and cover greater than 60% of the community. The understory is dominated by Choke Cherry (*Prunus virginiana*) and European Buckthorn (*Rhamnus cathartica*) that are 1-2 m in height and cover greater than 60% of the community. The ground layer is 0.2-0.5 m in height and contains an abundance of Large-leaved Aster (*Eurybia macrophylla*), Blue-stemmed Goldenrod (*Solidago caesia*), Zig-zag Goldenrod (*Solidago flexicaulis*), and Garlic Mustard (*Alliaria petiolata*). This community contains the majority of the significant flora species in the natural area.

Fresh-Moist Lowland Deciduous Forest Type (FOD7)

The lowland forest is located within the floodplain of Cooksville Creek. Willow species (*Salix spp.*), Black Walnut (*Juglans nigra*), American Elm (*Ulmus americana*), and Freeman's Maple (*Acer x freemanii*) is abundant in the canopy. Scattered along Cooksville Creek are large (*i.e.*, over 1 m in diameter) Hybrid Willows (*Salix x rubens*). Canopy trees are less than 25 m in height and cover greater than 60% of the community. The sub-canopy is dominated by Manitoba Maple and American Elm that are 2-10 m in height and cover 25-60% of the forest. Ash species (*Fraxinus spp.*) and Euonymus species (*Euonymus spp.*) are abundant in the understory. Understory vegetation is 1-2 m in height and covers 25-60% of the community. The ground layer is dominated by Virginia Creeper (*Parthenocissus quinquefolia*), followed by Yellow

Avens (*Geum aleppicum*) and Garlic Mustard (*Alliaria petiolata*), then False Nettle (*Boehemeria cylindrica*) and Goutweed (*Aegopodium podagraria*).

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

The willow lowland forest community is comprised of scattered mature Willow species (*Salix spp.*) and Black Walnut (*Juglans nigra*) in the canopy. Canopy trees are 10-25 m in height and covers greater than 60% of the community. The sub-canopy is composed of mainly Ash species (*Fraxinus spp.*) and Manitoba Maple (*Acer negundo*). Sub-canopy vegetation is 2-10 m in height and cover 25-60% of the community. The understory is dominated with Multiflora Rose (*Rosa multiflora*), Common Burdock (*Arctium minus*), and Euonymus species (*Euonymus spp.*). Understory vegetation is 1-2 m in height. The ground layer consists of Erect Hedge-parsley (*Torilis japonica*), followed by Garlic Mustard (*Alliaria petiolata*), Spotted Jewelweed (*Impatiens capensis*), Devil's Beggarticks (*Bidens frondosa*) and Ground-ivy (*Glechoma hederacea*) less than 1m in height and covering greater than 60% of the community.

Mineral Cultural Woodland (CUW1)

The cultural woodland is dominated by Black Locust (*Robinia pseudo-acacia*) and Black Walnut in the canopy (10-25 m in height, 25-60% cover). The sub-canopy is similar with Black Locust and Black Walnut dominating the vegetation. The understory is vegetated (25-60% cover) with European Buckthorn (*Rhamnus cathartica*), Tartarian Honeysuckle (*Lonicera tatarica*) and European Privet (*Ligustrum vulgare*) that is 1-2 m in height. The ground layer contains a variety of species including Garlic Mustard (*Alliaria petiolata*), Canada Goldenrod (*Solidago canadensis*), Riverbank Grape (*Vitis riparia*) and Black Raspberry (*Rubus occidentalis*). Ground layer vegetation is 0.5-1 m in height and covers

greater than 60% of the community.

Coniferous Plantation Ecosite (CUP3)

The plantation is composed of rows of Norway Spruce (*Picea abies*) and assorted pines (*Pinus* spp.) in the canopy (10-25 m in height, 25-60% cover). The sub-canopy is growing up with Manitoba Maple (*Acer negundo*) and Norway Maple (*Acer platanoides*) are 2-10 m in height and cover 10-25% of the community. The understory is dominated by European Buckthorn (*Rhamnus cathartica*), Euonymus species (*Euonymus* spp.) and Choke Cherry (*Prunus virginiana*). Understory vegetation is 1-2 m in height and covers greater than 60% of the community. The ground layer contains an abundance of Garlic Mustard (*Alliaria petiolata*), Yellow Avens (*Geum aleppicum*) and Large False Solomon's Seal (*Maianthemum racemosum*) that are 0.2-0.5 m in height and cover greater than 60% of the community.

Manicured

The manicured park is located in the southeast corner and was formerly an old field community.