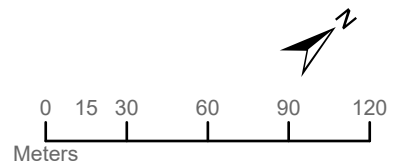


Natural
AREAS SYSTEM

2024 NATURAL AREAS UPDATE

SITE LV4

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



LV4

CLASSIFICATION Significant Natural Area	Park Name Helen Molasy Memorial	PLANNING DISTRICT Lakeview	AREA (Ha) 3.22
CONSERVATION AUTHORITY CVC	SUBWATERSHED Cooksville Creek	OWNERSHIP Municipal	SURROUNDING LAND USE Residential / City Park / Industrial

GENERAL SUMMARY

North along Cooksville Creek from Lakeshore Road West to the Canadian National Railway line. Throughout its length Cooksville Creek links a number of natural areas, including CC1, CV8, and LV5.

PHYSICAL DESCRIPTION

This site is located in the floodplain of Cooksville Creek. The topography of this site is level. Soil is well drained Fox sand that developed within Lake Iroquois shallow water deposits. These deposits are underlain by bedrock geology consisting of the grey shales of the Georgian Bay Formation. An unconfined shallow sand aquifer is associated with the Lake Iroquois deposits. Cooksville Creek is engineered along a portion of this site.

CONDITION

This site is currently in poor condition. Disturbances include the channelization of Cooksville Creek, dumping, garbage, erosion, invasive species, trampling, asphalt trails and unplanned dirt trails. Surrounding land use is residential, City park and industrial.

Invasive plant species include Garlic Mustard (*Alliaria petiolata*), Japanese Knotweed (*Reynoutria japonica*), Dog-strangling Vine (*Cynanchum rossicum*), Winged Euonymus (*Euonymus alatus*), and Purple Loosestrife (*Lythrum salicaria*). A single non-native toxic species was documented, Wild Parsnip (*Pastinaca sativa*).

ECOLOGICAL LAND CLASSIFICATION

Number of Plant Communities

Five vegetation communities are present at this

site (see accompanying figure); fresh-moist willow lowland deciduous forest type (FOD7-3), mineral cultural woodland ecosite (CUW1), mineral open beach/bar ecosite (BB01), open aquatic (OAO), and manicured parks (Helen Molasy Memorial Park and R.K. McMillan Park).

Significant Plant Communities

There are no Significant Plant Communities in LV4.

SPECIES RICHNESS

Flora

There are 226 flora species documented for this site. The native FQI is 35.02, and the native mean coefficient is 3.32, both medium values. Both the native FQI and the native mean coefficient have decreased from previous values of 35.29 and 3.43, respectively. There have been 83 introduced flora species recorded at this site, representing 50.9% of the total flora species present.

One provincially significant flora species has been documented from this site.

Eight locally significant flora species have been documented at this site.

Forty-one Credit Valley Conservation flora species of Conservation Concern (Tier 1-3) have been documented at this site.

Fauna

There are a total of 46 fauna species documented for this site: 40 bird, 4 mammal, 1 amphibian or reptile, and 1 odonata or lepidoptera species.

Four provincially significant fauna species have been documented at this site.

Twenty-one Credit Valley Conservation fauna

species of Conservation Concern (Tier 1-3) have been documented at this site.

MANAGEMENT RECOMMENDATIONS

1. There is a Special Management Area adjacent to this site which offers the potential for expansion of the Natural Greenspace area.
2. The City Parks, Helen Molasy Memorial and R.K. McMillan Park, is included within this natural area.
3. Riparian vegetation along the creek should be restored.

REFERENCES

City of Mississauga (1978b)

Transportation and Works (1998)

ECOLOGICAL LAND CLASSIFICATION

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

The willow lowland deciduous forest community is located on the slopes along Cooksville Creek. The canopy in this community is comprised of Hybrid Willow (*Salix x rubens*), Freeman's Maple (*Acer x freemanii*), Austrian Pine (*Pinus nigra*), and Manitoba Maple (*Acer negundo*). This layer ranges in height from 10-25 m and covers 25-60% of the community. The sub-canopy is mainly comprised of Freeman's Maple, Manitoba Maple, and American and Siberian Elm (*Ulmus americana* and *U. pumila*). The sub-canopy ranges from 2-10 m in height and covers 25-60% of the community. The understory is comprised of Siberian Elm, Choke Cherry (*Prunus virginiana*), Winged Euonymus, and Red-osier Dogwood (*Cornus sericea*). The understory is 1-2 m and covers 10-25%. The ground cover is partly dominated by Canada Goldenrod (*Solidago canadensis*), Virginia Creeper (*Parthenocissus quinquefolia*), and Japanese Knotweed (*Reynoutria japonica*) with a lesser abundance of European Stinging Nettle (*Urtica dioica* ssp. *dioica*), Wood Avens (*Geum urbanum*), and Coltsfoot (*Tussilago farfara*). The ground cover ranges in height from 0.2-0.5 m with a community cover of 25-60%.

Mineral Cultural Woodland Ecosite (CUW1)

The canopy is mainly comprised of Manitoba Maple, American Elm, Eastern Cottonwood (*Populus deltoides*), with a lesser abundance of Hybrid Willow. The cultural woodland was previously documented as a cultural meadow community based on the open nature of the canopy. The canopy now has a height of 10-25 m and covers 25-60%. The sub-canopy is partly comprised of Manitoba Maple and Little-leaved Linden (*Tilia cordata*). This layer ranges in height from 2-10 m and covers 25-60% of the community. The understory is mainly comprised of Wild Grape (*Vitis riparia*) and European Buckthorn (*Rhamnus cathartica*), ranges in height from 1-2 m and covers 25-60% of the community. The ground cover is partly dominated by Garlic Mustard (*Alliaria petiolata*) with a lesser

abundance of Virginia Strawberry (*Fragaria virginiana*), Kentucky Blue-grass (*Poa pratensis*), Wild Carrot (*Daucus carota*), Canada Goldenrod, and Coltsfoot to name a few. The ground layer is 0.2-0.5m in height and covers 25-60%.

Mineral Open Beach/Bar Ecosite (BBO1)

The beach/bar community is located at the mouth of Cooksville Creek along the shore of Lake Ontario. The canopy is dominated by Sandbar Willow (*Salix interior*) and as an associate species Pussy Willow (*Salix discolor*). The canopy is 1-2 m in height and covers greater than 60%. The sub-canopy and understory are non-existent. The ground story contains Rough Cocklebur (*Xanthium strumarium*), Common Silverweed (*Potentilla anserina* ssp. *anserina*), Common Ragweed (*Ambrosia artemisifolia*), Common Milkweed (*Asclepias syriaca*), and White Sweet-clover (*Melilotus albus*). Ground cover is up to a meter in height and covers 10-25%.

Open Aquatic (OAO)

The mouth of Cooksville Creek is located inside the natural area boundaries. This section has been channelized and has no tree cover, submerged or floating vegetation.

Manicured

The manicured community occurs at the park entrance off of Richey Crescent (Helen Molasy Memorial Park) and on the other side of the bridge crossing of Cooksville Creek (R.K. McMillan Park). This community has been partly planted with hostas and other non-native ornamentals within the manicured flower beds. The grass in this area is maintained on a regular basis including the area under the treed canopy on the south side of the trail entering the park from Richey Crescent. Canopy cover (20-50%) consists of planted trees.