

CRR3

CLASSIFICATION	Park Name		PLANNING DISTRICT		AREA (Ha)	
Significant Natural Area	Streetsville Memorial P	Streetsville Memorial Park		Credit	73.41	
CONSERVATION AUTHORITY	SUBWATERSHED	OWNERSHIP		SURROUNDING LAND USE		
Credit Valley Conservation	on Credit River	Public-	Public-Private		Residential	

GENERAL SUMMARY

CRR3 is located North along the Credit River from Bristol Road West and Creditview Road. The Credit River links CRR3 to several natural areas (e.g., CRR2, CRR6, and CRR8). SV10 is located within 500 m to the west.

CRR3 is two parcels divided by Britannia Road West and has a well-developed public trail system. CRR4 is surrounded by residential and parkland areas and supports a variety of wildlife while also providing connectivity to other natural areas.

PHYSICAL DESCRIPTION

CRR3 is a medium-sized natural area for the City. The topography of this site varies between the undulating floodplain and steep valley walls. There are three soil types present at this site; well-drained Oneida clay loam on the east side of the Credit, imperfectly drained Chinguacousy clay loam on the west side of the Credit, and a small pocket of well-drained Fox sandy loam west of Creditview Road. All of the soils at this site developed within the Halton till plain. Soils and glacial deposits overlay bedrock geology that consists of grey shales of the Georgian Bay Formation. A bedrock outcrop is present on the eastern bank, north of Bristol Road. Water from the Mullet Creek subwatershed enters the Credit River within this site.

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 numerous ad hoc and formal trails, litter and encroachment. Armour stone and gabion baskets have been installed

along steeper slopes for stability. There is a large concrete spillway located on the west slope. Land ownership appears to extend to the riverbank in some places on the west slope where there are patios and stairs located, and yard waste is also common. Soil compaction, noise from the roads, and a potentially contaminated site add to a disturbance at CRR3.

Highly invasive plant species (as regarded by Ontario Invasive Plant Council) include European Buckthorn (*Rhamnus cathartica*), Purple Loosestrife (*Lythrum salicaria*), Reed Meadowgrass (*Glyceria maxima*), Tartarian Honeysuckle (*Lonicera tatarica*) and Garlic Mustard (*Alliaria petiolata*). The affects of the Emerald Ash Borer infestation are apparent at this site.

ECOLOGICAL LAND CLASSIFICATION Number of Plant Communities

There are 7 plant communities within CRR3, including Deciduous Forest (FOD), Open Water (OAO), Cultural Savannah (CUS), Cultural Woodland (CUW) and Cultural Plantation (CUP). Community descriptions are appended.

Significant Plant Communities

There are no Significant Plant Communities in CRR3.

SPECIES RICHNESS

Flora

283 species have been recorded from the site, a high diversity for the City. The native FQI is 47.05 and the native mean coefficient is 3.74, both of which are medium values. In total, 124 introduced plant species are present (representing 43.82% of the total number of species present).

- 2 flora species considered provincially significant or at risk within the province and/or nationally have been recorded at this site.
- 57 Credit Valley Conservation flora species of Conservation Concern (Tier 1-3) have been recorded on site.

Fauna

There are 55 bird, 8 mammal, 1 amphibian, 2 reptile and 5 insect species documented at this site.

7 fauna species considered significant or at risk within the province and/or nationally have been recorded at this site.

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

MANAGEMENT RECOMMENDATIONS

- 1. Ad hoc trails should be minimized (e.g., block trails with plantings) and closed where possible.
- 2. Efforts should be made to collect on-site garbage and "no dumping" signs should be installed.
- 3. Rehabilitation/restoration of cultural communities and riparian vegetation along the watercourse should be undertaken.
- 4. Mowing should not occur in natural areas.
- 5. Wild Parsnip (*Pastinaca sativa*), a non-native photo-toxic species, is a human health risk and should be managed in areas where there is a possibility of human contact.

REFERENCES

City of Mississauga (1978)

North-South Environmental (2001)

ECOLOGICAL LAND CLASSIFICATION

<u>Dry-fresh Sugar Maple Deciduous Forest Ecosite (FOD5)</u>

The sugar maple forest (FOD5) occurs on the slopes of this site. The canopy of this community is dominated by Sugar Maple (Acer saccharum ssp. saccharum), Red Oak Bur (Quercus rubra), 0ak (Quercus macrocarpa), White Ash (Fraxinus americana), White Pine (Pinus strobus) and (Tsuga Eastern Hemlock canadensis). Coniferous trees are more prevalent on north-facing slopes. The canopy is > 25 m in height and covers > 60%. The sub-canopy consists of Red Oak, Sugar Maple, Hop Hornbeam (Ostrya virginiana) and Shagbark Hickory (Carya ovata). This layer is between 10-25 m in height and covers 10-25%. The understory consists of European Buckthorn (Rhamnus cathartica), Tartarian Honeysuckle (Lonicera tatarica), Alternate-leaf Dogwood (Cornus alternifolia), Maple-leaved Viburnum (Viburnum acerifolium) and Wild Black Currant (Ribes americanum). This layer is between 1-2 m in height and covers 10-25%. The ground layer is diverse in most locations and is dominated by Enchanters Nightshade (Circaea lutetiana), Garlic Mustard (Alliaria (Podophyllum petiolata). May Apple peltatum) and White Trillium (Trillium grandiflorum). Spring emphemerals, such as Yellow Trout Lily (Erythronium americanum americanum) and Large-flowered Bellwort (*Uvularia grandifolia*), occur in this community. Garlic Mustard dominates the understory in many locations. This layer is between 0.5-1 m in height and covers between 25-60%.

<u>Fresh-moist Willow Lowland Deciduous</u> <u>Forest Type (FOD7-3)</u>

The willow lowland forest (FOD7-3) is dominated by Willow (*Salix* spp.), Black Walnut (*Juglans nigra*) and Black Locust (*Robinia pseudoacacia*). Green Ash (*Fraxinus pennsylvanica*) has experienced die-off in the canopy due to Emerald Ash Borer. This layer

is over 25 m tall and covers > 60%. The subcanopy is dominated by Manitoba Maple (A. negundo), Willow, Green Ash, and Black Walnut. This laver is between 10-25 m and covers > 60%. The understory consists of Manitoba Maple, European Buckthorn. Tartarian Honeysuckle, Riverbank Grape (Vitis riparia), Staghorn Sumac (Rhus typhina), and Red-osier Dogwood (Cornus stolonifera). This layer is between 2-10 m and covers 25-60%. The ground layer consists of Canada Goldenrod (Solidago canadensis). Spotted Ioe-pve-weed (Eupatorium maculatum ssp. maculatum), Wild Parsnip (Pastinaca sativa), Climbing Nightshade (Solanum dulcamara), Jerusalem Artichoke (Helianthus tuberosus). This layer is between 0.5-2m in height and covers > 60%. Grapevines grow into tree canopies. Tree planting has occurred in the floodplain.

<u>Scots Pine Coniferous Plantation Type (CUP3-3)</u>

The scots pine plantation (CUP3-3) is dominated by Scots Pine (Pinus sylvestris) in the canopy, which is> 25 m in height and cover > 60%. The sub-canopy is dominated by Jack Pine (Pinus banksiana) and White Ash. This layer is between 10-25 m in height and covers > 60%. The understory is dominated by Hawthorn (Crataegus spp.), European Buckthorn and Tartarian Honeysuckle. This layer between 2-10 m in height and covers 10-25%. The ground layer is dominated by Garlic Mustard, Yellow Avens (Geum aleppicum), Climbing Nightshade, and Riverbank Grape. This layer is between 0.5-1 m in height and covers > 60%. Non-native invasive species heavily dominate the understory and ground layer of this community.

Open Aquatic (OAO)

The open aquatic (OAO) community refers to the Credit River; this community contains no vegetation.