

SOUTHDOWN - LAKESHORE (RATTRAY MARSH CONSERVATION AREA)

Region of Peel	NAI Area # 4007, 4013	Credit Valley Conservation Authority
City of Mississauga	Size: 53 hectares	Watershed: Sheridan Creek; Turtle Creek
Con 3 SDS, Lots 25-27	Ownership: 27% private, 73% public (Credit Valley Conservation, Peel District School Board, City of Mississauga)	Subwatershed: na

General Summary

This urban natural area located in the City of Mississauga on the lower reaches of Sheridan Creek and Turtle Creek, where they empty into Lake Ontario. The area includes Rattray Marsh, a prominent coastal marsh and conservation area, some Lake Ontario shoreline and the lower valley of Turtle Creek. Rattray Marsh is the last remaining large lakefront marsh between Toronto and Burlington.

In spite of high passive recreational use impacts from historical and present urban surroundings, this area has a high biodiversity and provides habitat for several Species at Risk and rare species. It is an important migratory bird stopover point and fish spawning area. This natural area is a refuge within an urban environment and provides “green space” and educational opportunities.

Vegetation communities, plant species and breeding bird species inventories of this natural area have been done (by consultants) under the Mississauga Natural Areas Survey (NAS) project 4 times between 1996 and 2009. This natural area corresponds with two NAS areas (the lower part of CL8, CL9 excluding the upper 2 sections of Sheridan Creek in this area) as a narrow strip of vegetation connects the Turtle Creek valley with the Rattray Marsh conservation area. The NAS provides vegetation community coverage for 100% of the delineated area. Note that some of the NAS coverage extends beyond the area delineated here so some species reported for this area may actually only be present in adjacent natural patches.

NAI and CVC work at this area supplements the NAS data. NAI biologists conducted small mammal inventories and bat audio inventories in 2007 (Table 1). Fish species were inventoried in 2002-2009 from sampling stations within the natural area. CVC has a Terrestrial Monitoring station within this natural area and their annual observations from the monitoring plot between 2003 and 2007 have been included in this data set. Additional incidental observations from a variety of sources have also been included.

Table 1: CVC Field Visits

Visit Date	Inventory Type
30 July 2002	Fish
18 Aug. 2003	Fish
09 Aug. 2004	Fish
15 Aug. 2005	Fish
28 June 2006	Fish
09 July 2007	Fish
30 Aug. 2007	Fauna

31 Aug. 2007	Fauna
15 Oct. 2007	Fauna
16 Oct. 2007	Fauna
17 Oct. 2007	Fauna
18 Oct. 2007	Fauna
08 July 2008	Fish
18 Aug. 2009	Fish

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Natural Feature Classifications and Planning Areas

This natural area is part of:

Life Science ANSI - provincially significant Rattray Coastal Marsh

ESA - Rattray Marsh ESA

PSW - Rattray Marsh Wetland Complex

Physical Features

This area is in the Iroquois Plain physiographic region; characterized by a gentle slope toward Lake Ontario and a thin layer of sandy and silty sand soils. The shoreline of glacial Lake Iroquois was higher than the current Lake Ontario shoreline and this area was once lakebed.

This natural area includes the lower reaches two Lake Ontario tributary streams. Turtle Creek is a short stream that flows directly into Lake Ontario just east of Rattray Marsh, arising south of the QEW. This area includes the lower portion of the Turtle Creek corridor, downstream from where it crosses under Bexhill Rd. Sheridan Creek arises a short distance north of the QEW and is largely engineered or buried as it flows south. However the lower reaches of Sheridan Creek are natural, flowing through ravines with a few side branches, to Rattray Marsh at its mouth. This area includes the lower part of Sheridan Creek ravine downstream of where the stream crosses under Meadow Wood Rd... Rattray Marsh is separated from Lake Ontario by a shingle beach bar. There is an intermittent outflow channel that corresponds to lake water levels. Sand, gravel and shingle stone levels also fluctuate in the outflow channel in response to storms on the lake. These influences, relative to drainage down the watercourse, create a fluctuating water level in the marsh.

Human History

In the early 1800's, the large Eastern White Pines (*Pinus strobus*) of Rattray Marsh were being logged and used as masts for British Navy ships. During early settlement and by the 1900's much of this area was in agricultural usage (cultivated fields, orchards). The land in the area of Rattray Marsh was purchased by Major James Rattray in 1945. When he died in 1959 the land was to be developed but concerned citizens fought to protect the area. A portion of it was purchased by Credit Valley Conservation and became Rattray Marsh Conservation Area in 1975 (Elliot, 2010; Hamilton, 1982; Harrington and Hoyle, 2009; Heritage Mississauga, Undated; Hussey and Goulin, 1990).

As all of the surrounding area was developed for residential use, narrow strips of natural vegetation along Sheridan Creek and Turtle Creek remained along with Rattray Marsh, comprising this natural area. Several parts of this natural area are publicly used for passive recreation (walking, jogging). An extensive trail system exists throughout Rattray Marsh Conservation Area and is heavily used.

The Sheridan Creek ravine at the west side of this area is bordered by Meadow Wood Rd. The Turtle Creek corridor on the east side of this natural area is bordered by Bexhill Rd. The east side of the area is bordered by the Lake Ontario shoreline. Surrounding land use is primarily single-unit residential, but some adjacent land is institutional with a public school and manicured playing field. The school and a small residential subdivision intrude into a block of forest on higher ground next to the conservation area. A large part of the surrounding residential neighbourhood is older, with large established trees and landscaping, playing a supporting role to natural habitat in the conservation area and ravines.

Vegetation Communities

For the most part, the vegetation community mapping generated by the Mississauga NAS coincides with the NAI natural area delineations in Mississauga although there are some small discrepancies. Part of this could be due to real changes in community boundaries between the years that the mapping and area delineation were done. Other factors that may contribute to discrepancies are

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differing ways of defining edges of communities and differing levels of resolution in mapping. Values for community sizes and proportions making up the natural area are taken from the NAS mapping.

The general community types are treed beach bar (3%), coniferous forest (4%), deciduous forest (58%), shallow marsh (17%), deciduous swamp (0.5%), mixed shallow aquatic (8%), cultural meadow (4%) and plantation (2%).

A total of 32 plant communities belonging to 14 different vegetation types are known for this natural area (CVC, City of Mississauga, 2006a, 2006b; Table 2). Six communities were classified only to the ecosite level. The two communities belonging to the Mineral Treed Beach / Bar Ecosite type (BBT1) are regionally rare.

The Dry-Fresh Oak – Hardwood Deciduous Forest (FOD2-4) community is an abundant producer of mast (nuts) serving as an important food source for a variety of wildlife species.

Table 2: ELC Vegetation Communities

Map reference *	Vegetation type		
BBT1	Mineral Treed Beach/bar Ecosite (2 communities)	1.32	2.52
FOC3-1	Fresh - Moist Hemlock Coniferous Forest (2 communities)	2.04	3.89
FOD2-4	Dry-Fresh Oak - Hardwood Deciduous Forest	1.06	2.02
FOD3-1	Dry-Fresh Poplar Deciduous Forest	2.82	5.37
FOD5	Dry-Fresh Sugar Maple Deciduous Forest ecosite (4 communities)	10.90	20.75
FOD5-2	Dry-Fresh Sugar Maple - Beech Deciduous Forest (2 communities)	2.84	5.41
FOD5-8	Dry-Fresh Sugar Maple - White Ash Deciduous Forest (2 communities)	4.46	8.48
FOD7-2	Fresh-Moist Ash Lowland Deciduous Forest (2 communities)	1.44	2.74
FOD7-3	Fresh-Moist Willow Lowland Deciduous Forest (3 communities)	6.69	12.73
MAS3-1	Cattail Organic Shallow Marsh (4 communities)	8.77	16.70
SWD4-1	Willow Mineral Deciduous Swamp	0.28	0.53
SAM1-4	Pondweed Mixed Shallow Aquatic (2 communities)	4.12	7.84
CUM1-1	Dry-Moist Old Field Meadow (5 communities)	2.10	3.99
CUP3-2	White Pine Coniferous Plantation	0.80	1.53
	TOTAL AREA INVENTORIED	49.64	

* Note: The map reference code refers to the vegetation type shown on mapping for this area and also to the Appendix list of species typically encountered in this vegetation type.

Species Presence

Vascular Plants

A total of 319 vascular plant species occur in this area, of which 212 (66%) are native. Two of these are Species At Risk (Table 3). Butternut (*Juglans cinerea*), is Endangered both nationally and provincially, as well as being provincially rare (S-rank S3?). One Butternut tree was observed and it appears to be healthy. In urban locations, there is a possibility that it could be a hybrid with another *Juglans* species. The second Species At Risk is American Chestnut (*Castanea dentata*, S-rank S2), that is Endangered both nationally and provincially. It is also provincially rare. This species may have been planted.

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Two additional provincially rare species are present, Hybrid Baneberry (*Actaea x ludovici*, S-rank S1?) and Jack's Poplar (*Populus x jackii*, S-rank S2). Fourteen plant species are regionally rare.

Carolinian plant species occur here.

Birds

A total of 219 species of birds occur here, of which 215 (98%) are native. This includes both migratory and breeding birds. This area serves as an important area for migratory birds including land-birds, shorebirds and waterfowl.

Twenty-one Species At Risk birds have been recorded here, using the area as migrants, visitors or breeding birds (Table 3). Barn Owl (*Tyto alba*), Red Knot (*Calidris canutus*) and Prothonotary Warbler (*Protonotaria citrea*) are all Endangered nationally and provincially. Cerulean Warbler (*Dendroica cerulea*) is Endangered nationally and Special Concern provincially. Both the Chimney Swift (*Chaetura pelagica*), Whip-poor-will (*Caprimulgus vociferous*) and Least Bittern (*Ixobrychus exilis*) are Threatened nationally and provincially. The Canada Warbler (*Wilsonia Canadensis*), Golden-winged Warbler (*Vermivora chrysoptera*), Hooded Warbler (*Wilsonia citrina*), Olive-sided Flycatcher (*Contopus cooperi*), Red-headed Woodpecker (*Melanerpes erythrocephalus*) and Common Nighthawk (*Chordeiles minor*) are all Threatened nationally and designated Special Concern provincially. The American White Pelican (*Pelecanus erythrorhynchos*) is Threatened provincially. The Yellow-breasted Chat (*Icteria virens*) and Louisiana Waterthrush (*Seiurus motacilla*) are both Special Concern nationally and provincially. The Peregrine Falcon (*Falco peregrinus*) is Special Concern nationally and Threatened provincially. Both Barn Swallows (*Hirundo rustica*) and Eastern Meadowlarks (*Sturnella magna*) are Threatened nationally. The Rusty Blackbird (*Euphagus carolinus*) is Special Concern nationally. The Bald Eagle (*Haliaeetus leucocephalus*) is Special Concern provincially.

Twenty-five provincially rare birds are recorded from this area as migrants, visitors or breeding birds, Trumpeter Swan (*Cygnus buccinator*, S-rank S2S3), Black-crowned Night Heron (*Nycticorax nycticorax*; S-rank S3), Great Egret (*Ardea alba*; S-rank S2), Great Black-backed Gull (*Larus marinus*; S-rank S2B), Semi-palmated Sandpiper (*Calidris pusilla*; S-rank S3B,S4N), Yellow-breasted Chat (S-rank S2B), Horned Grebe (*Podiceps auritus*; S-rank S1B, S4N), Red-necked Grebe (*Podiceps grisegena*; S-rank S3B, S4N), American Golden-plover (*Pluvialis dominica*; S-rank S2S3B,S4N), Bald Eagle (S-rank S1S2N,S4B), Barn Owl (S-rank S1), Cerulean Warbler (S-rank S3B), Gray-cheeked Thrush (*Catharus minimus*; S-rank S2S4B), Hooded Warbler (S-rank S3B), Peregrine Falcon (S-rank S3B), Prothonotary Warbler (S-rank S1B), Red-throated Loon (*Gavia stellata*; S-rank S1N, S3B), Short-billed Dowitcher (*Limnodromus griseus*; S-rank S3S4B,S4N), Red Knot (S-rank S1N), Long-tailed Duck (*Clangula hyemalis*; S-rank S3B), Hudsonian Godwit (*Limosa haemastica*; S-rank S3B, S4B), American White Pelican (S-rank S2B), Red-necked Phalarope (*Phalaropus lobatus*; S-rank S3S4B), Louisiana Waterthrush (S-rank S3B) and White-eyed Vireo (*Vireo griseus*; S-rank S2B).

A historic record exists of a heronry within Rattray Marsh.

This site supports the breeding of two species of colonial-nesting birds, Black-crowned Night Heron and Common Tern (*Sterna hirundo*). It supports at least four species of waterfowl, namely Hooded Merganser (*Lophodytes cucullatus*), Blue-winged Teal (*Anas discors*), Northern Shoveler (*Anas clypeata*) and Mallard (*Anas platyrhynchos*). Interior forest habitat exists in this area, supporting one species of area-sensitive forest interior bird, Pileated Woodpecker (*Dryocopus pileatus*). Open and successional habitat provides breeding habitat for Eastern Kingbird (*Tyrannus tyrannus*), a grassland bird. The extensive wetlands here support wetland-nesting Wood Ducks (*Aix sponsa*).

This site also provides a foraging area for eight additional species of colonial-nesting birds, namely Great Blue Heron (*Ardea herodias*), Great Egret (*Ardea alba*), Green Heron (*Butorides virescens*), Bank Swallow (*Riparia riparia*), Barn Swallow, Cliff Swallow (*Petrochelidon pyrrhonota*), Northern Rough-winged Swallow (*Stelgidopteryx serripennis*) and Marsh Wren (*Cistothorus palustris*). The site

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provides foraging habitat for an additional five species of waterfowl, namely American Black Duck (*Anas rubripes*), American Widgeon (*Anas americana*), Common Merganser (*Mergus merganser*), Gadwall (*Anas strepera*) and Green-winged Teal (*Anas crecca*). This area provides foraging habitat for an additional eleven species of area-sensitive forest interior birds, namely Winter Wren (*Troglodytes troglodytes*), Red-breasted Nuthatch (*Sitta canadensis*), Hairy Woodpecker (*Picoides villosus*), Brown Creeper (*Certhia americana*), Veery (*Catharus fuscescens*), Black-and-white Warbler (*Mniotilta varia*), Black-throated Blue Warbler (*Dendroica caerulescens*), Ovenbird (*Seiurus aurocapilla*), Scarlet Tanager (*Piranga olivacea*), Blackburnian Warbler (*Dendroica fusca*) and Black-throated Green Warbler (*Dendroica virens*). The open and successional habitat at this site supports foraging for four species of grassland bird, Savannah Sparrow (*Passerculus sandwichensis*), Eastern Meadowlark, Willow Flycatcher (*Empidonax traillii*) and Brown Thrasher (*Toxostoma rufum*). Two of the grassland bird species Eastern Meadowlark and Savannah Sparrow, are area-sensitive. Seven species of raptor have been observed foraging at this site, namely immature Broad-winged Hawks (*Buteo platypterus*), Cooper's Hawk (*Accipiter cooperii*), Long-eared Owl (*Asio otus*), Northern Harrier (*Circus cyaneus*), migrant Sharp-shinned Hawks (*Accipiter striatus*), Red-shouldered Hawk (*Buteo lineatus*) and Osprey (*Pandion haliaetus*). The extensive wetlands here support foraging of eight species of wetland-nesting birds, namely Marsh Wren (*Cistothorus palustris*), Wilson's Snipe (*Gallinago delicata*), Pied-billed Grebe (*Podilymbus podiceps*), Common Loon (*Gavia immer*), Virginia Rail (*Rallus limicola*), Sora (*Porzana carolina*), American Coot (*Fulica americana*) and American Bittern (*Botaurus lentiginosus*).

Mute Swans (*Cygnus olor*) nest and raise young here.

Fish

Eleven species of fish are recorded from here, of which ten (91%) are native. Fish spawn abundantly in Sheridan creek. This natural area supports warmwater fish communities.

Butterflies, Skippers and Moths

A total of 37 species of butterflies, skippers and moths have been recorded for this site, of which 34 (92%) are native. Some incidental moth species records exist for this area. One species, Monarch (*Danaus plexippus*), is Special Concern nationally and provincially (Table 3). It is also provincially rare (S-rank S2N, S4B). Two species are regionally rare in adjacent Halton Region, namely, Milbert's Tortoiseshell (*Aglais milberti*) and Wild Indigo Duskywing (*Erynnis baptisiae*) (Dwyer, 2006).

Dragonflies and Damselflies

Five species of dragonflies/damselflies were recorded, all of which are native.

Herpetofauna

Fourteen herpetofaunal species are recorded for this area, all of which are native. Five of these are Species At Risk (Table 3). The Blanding's Turtle (*Emydoidea blandingii*) is designated Threatened both nationally and provincially. The Blanding's Turtle was last observed in 1988. The Eastern Snapping Turtle (*Chelydra serpentina*), Northern Map Turtle (*Graptemys geographica*) and Eastern Milksnake (*Lampropeltis triangulum triangulum*) are designated Special Concern both nationally and provincially. The Western Chorus Frog (*Pseudacris triseriata*) is Threatened nationally. The remaining species observed here consist of five frog/toad species one of which is Bullfrog (*Rana catesbeiana*), one salamander species, two additional snake species and one additional turtle species.

Four species are provincially rare, Eastern Snapping Turtle (S-rank S3), Blanding's Turtle (S-rank S3), Northern Map Turtle (S-rank S3) and Eastern Milksnake (S-rank S3).

Eastern Snapping Turtles are known to mate and lay their eggs within Rattray Marsh Conservation Area. Nest predation has been reported.

Historic records include Eastern Newt (*Notophthalmus viridescens*; from 1976), Spotted Salamander (*Ambystoma maculatum*; from 1976), Gray Treefrog (*Hyla versicolor*; from 1976), Wood Frog (*Rana*

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sylvatica; from 1976), Smooth Green Snake (*Opheodrys vernalis*; from 1976), Northern Redbellied Snake (*Storeria occipitomaculata occipitomaculata*; from 1976), Ringneck Snake (*Diadophis punctatus*; date unknown) and Eastern Hognosed Snake (*Heterodon platirhinos*; from 1924; Mississauga NAS database; Hussey and Goulin, 1990).

Mammals

A total of 25 species of mammals are recorded at this site. A bat acoustic inventory in 2007 detected seven species of bats within this area, including three bat species new to the Credit River watershed: Hoary Bat, Eastern Pipistrelle and Northern Long-eared Bat. The Hoary Bat (S-rank S3?) and Eastern Pipistrelle (S-rank S3?) are provincially rare. A small mammal survey was also performed (Reid, 2007; Reid and Amelon, 2007). Mink and Long-tailed Weasel are present.

Table 3: Designated Species At Risk

Scientific name	Common name	COSEWIC	COSSARO	S rank	G rank
VASCULAR PLANTS					
<i>Castanea dentata</i>	American Chestnut	END	END	S2	G4
<i>Juglans cinerea</i>	Butternut	END	END	S3?	G4
BIRDS					
<i>Pelecanus erythrorhynchos</i>	American White Pelican		THR	S2B	G4
<i>Haliaeetus leucocephalus</i>	Bald Eagle		SC	S1S2N, S4B	G5
<i>Tyto alba</i>	Barn Owl	END	END	S1	G5
<i>Wilsonia canadensis</i>	Canada Warbler	THR	SC	S4B	G5
<i>Dendroica cerulea</i>	Cerulean Warbler	END	SC	S3B	G4
<i>Chaetura pelagica</i>	Chimney Swift	THR	THR	S4B	G5
<i>Chordeiles minor</i>	Common Nighthawk	THR	SC	S4B	G5
<i>Vermivora chrysoptera</i>	Golden-winged Warbler	THR	SC	S4B	G4
<i>Wilsonia citrina</i>	Hooded Warbler	THR	SC	S3B	G5
<i>Ixobrychus exilis</i>	Least Bittern	THR	THR	S4B	G5
<i>Seiurus motacilla</i>	Louisiana Waterthrush	SC	SC	S3B	G5
<i>Contopus cooperi</i>	Olive-sided Flycatcher	THR	SC	S4B	G4
<i>Falco peregrinus</i>	Peregrine Falcon	SC	THR	S3B	G4
<i>Protonotaria citrea</i>	Prothonotary Warbler	END	END	S1B	G5
<i>Calidris canutus</i> ¹	Red Knot	END	END	S1N	G4T2
<i>Melanerpes erythrocephalus</i>	Red-headed Woodpecker	THR	SC	S4B	G5
<i>Euphagus carolinus</i>	Rusty Blackbird	SC		S4B	G4
<i>Caprimulgus vociferus</i>	Whip-poor-will	THR	THR	S4B	G5
<i>Icteria virens</i>	Yellow-breasted Chat	SC	SC	S2B	G5
BUTTERFLIES					
<i>Danaus plexippus</i>	Monarch	SC	SC	S2N,S4B	G5

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HERPETOFAUNA					
<i>Emydoidea blandingii</i>	Blanding's Turtle	THR	THR	S3	G4
<i>Lampropeltis triangulum triangulum</i>	Eastern Milksnake	SC	SC	S3	G5T5
<i>Chelydra serpentina</i>	Eastern Snapping Turtle	SC	SC	S3	G5
<i>Graptemys geographica</i>	Northern Map Turtle	SC	SC	S3	G5
<i>Pseudacris triseriata</i>	Western Chorus Frog	THR		S4	G5

¹Sub-species not recorded, but believed to be ssp. *rufa*, the only known subspecies in Ontario.

Table 4: Regionally Rare Vascular Plant Species (Kaiser, 2001)

Scientific name	Common name	S rank	G rank
VASCULAR PLANTS			
<i>Angelica atropurpurea</i>	Great Angelica	S5	G5
<i>Apios americana</i>	Groundnut	S5	G5
<i>Bolboschoenus fluviatilis</i>	River Bulrush	S4S5	G5
<i>Heracleum lanatum</i>	Cow-parsnip	S5	G5
<i>Hieracium kalmii</i>	Canada Hawkweed	S4S5	G5
<i>Lactuca biennis</i>	Tall Blue Lettuce	S5	G5
<i>Lysimachia terrestris</i>	Swamp Loosestrife	S5	G5
<i>Osmorhiza longistylis</i>	Smoother Sweet-cicely	S5	G5
<i>Osmunda claytoniana</i>	Interrupted Fern	S5	G5
<i>Ranunculus pensylvanicus</i>	Bristly Buttercup	S5	G5
<i>Sassafras albidum</i>	Sassafras	S4	G5
<i>Sicyos angulatus</i>	One-seeded Bur Cucumber	S5	G5
<i>Symplocarpus foetidus</i>	Skunk Cabbage	S5	G5
<i>Teucrium canadense</i> ssp. <i>canadense</i>	Canada Germander	S5?	G5T5

Site Condition and Disturbances

This is a site under urban influence, however it remains biologically diverse and is in reasonable condition.

Having once been an estate, and now being surrounded by residential development, non-native species are abundant, and invasive plant species represent a major disturbance. Notable invasive species include Garlic Mustard (*Alliaria petiolata*), Tartarian Honeysuckle (*Lonicera tartarica*), Common Buckthorn (*Rhamnus cathartica*), Reed Manna-grass (*Glyceria maxima*), Common Reed (*Phragmites australis*), Periwinkle (*Vinca minor*), and Dame's Rocket (*Hesperis matronalis*). In addition to invasive plant species, exotic fish (carp) have also made an impact here, and carp exclusion experimentation is underway to understand how the marsh might be restored to more natural vegetation and the advances of invasive marsh species resisted.

Sedimentation is a problem in the marsh as pollution is carried down Sheridan Creek as runoff from a variety of surrounding land uses.

Well-marked trails plus unsanctioned trails wind through the conservation area and there is associated litter.

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Ecological Features and Functions

This natural area includes all of the provincially significant Rattray Coastal Marsh Life Science ANSI and all of the provincially significant Rattray Marsh Wetland Complex. Rattray Marsh ESA (wetland type) is also included in this natural area.

With forest communities greater than 2 ha, wetlands over 0.5 ha in size, this natural area has the potential to support and sustain biodiversity, healthy ecosystem functions and to provide long-term resilience for the natural system. The riparian area provides a transitional zone between terrestrial and aquatic habitats, helping to maintain the water quality of the stream, and providing a movement corridor for plants and wildlife.

By containing a relatively high number of habitat types, this natural area has the potential for high biodiversity function, particularly for species that require more than one habitat type for their life needs. This natural area contains regionally rare vegetation communities and thus has the potential to support additional biodiversity above and beyond that found in common community types.

This area serves as a centre for dispersal for species to the upper reaches of Sheridan Creek and Turtle Creek. This area connects the valleys of Sheridan Creek and Turtle Creek. There is linkage across Bexhill Rd. with the upstream continuation along Turtle Creek, however connectivity in the upper parts of Turtle Creek are limited due to the busy nature of Lakeshore Rd, which crosses the creek. Connectivity along the Lake Ontario shoreline is good, although some is via short stretches of manicured land. An interrupted chain of natural and cultural habitat exists along the shoreline and connects the valleys of other tributary streams as well as the major Credit River and Etobicoke Creek corridors.

This area also lies along the Lake Ontario shoreline and thus supports the connectivity function of the shore by providing a natural habitat corridor that facilitates the cross-regional movement of wildlife along this corridor between major provincial corridors.

This is a large natural area that protects Rattray Marsh, the only baymouth bar coastal marsh in the City of Mississauga and is the last remaining large lakefront marsh between Toronto and Burlington (City of Mississauga, 2006; Credit Valley Conservation, Undated).

This area's proximity to the Lake Ontario shoreline makes it an important migration stopover and staging area for birds, butterflies and bats.

This area supports a regionally rare vegetation community.

Twenty-nine Species At Risk occur in this area (two plant species, 21 bird species, three turtle species, one frog species, one snake species, one butterfly species). As well, 37 provincially rare species occur here, including four plant species, 25 bird species, two bat species, one butterfly species, three turtle species, and one snake species. Fourteen regionally rare plant species occur here.

Interior forest habitat is present here, supporting 12 species of area-sensitive forest interior birds.

Open country and grassland habitat supports five species of grassland birds, of which two are area-sensitive. Also, the area supports ten species of colonial-nesting birds, eight waterfowl species, nine species of wetland-nesting birds and at least seven raptor species.

Wetlands at this area support amphibian breeding. Turtles breed and nest here. Bullfrogs are present.

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Based on the above features, this area should be evaluated to determine if significant wildlife habitat is present in accordance with the Provincial Policy Statement, Region of Peel Official Plan, and area municipal Official Plan.

One of the forest communities is an abundant producer of mast (nuts).

This area supports Carolinian plant species.

Opportunities

The heavy recreational trail use of this area and abundance of adjacent home gardens that might serve as introduction sites for invasive plants into the natural area presents an opportunity to educate and engage the public on invasive species issues and controls. Monitoring of invasive species in this area would be beneficial and controls might be considered.

The high public visitation to this site creates a good opportunity for other messaging to be delivered regarding maintenance and enhancement of wildlife habitat and linkages between natural areas. The more mature nature of the urban forest in adjacent residential neighbourhoods also creates novel opportunities to improve habitat connectivity between this area and nearby more isolated natural patches.

Public messaging should be considered to educate the public not to release unwanted Red-ear Sliders into the marsh. Turtles raised as pets may carry disease that may be detrimental to other species.

The health of Butternut trees at this site could be assessed by a Butternut Assessor to determine whether any individuals are candidates for inclusion in the Butternut recovery program.

This natural area contains at least one mature forest community and these communities could be checked for old-growth forest characteristics.

The presence of bats warrants additional study to determine whether there are breeding/maternal roost sites here and also to determine use of this area as a migration stopover location.

Mink are present and a search is recommended to locate any den sites within this natural area.

Data gaps still exist for this area and targeted surveys for butterflies and dragonflies would be beneficial and likely productive. Also data collection to increase understanding about how this natural area supports migration of birds, bats, butterflies and dragonflies/damselflies would be helpful to more fully characterize the ecological functions of this site.

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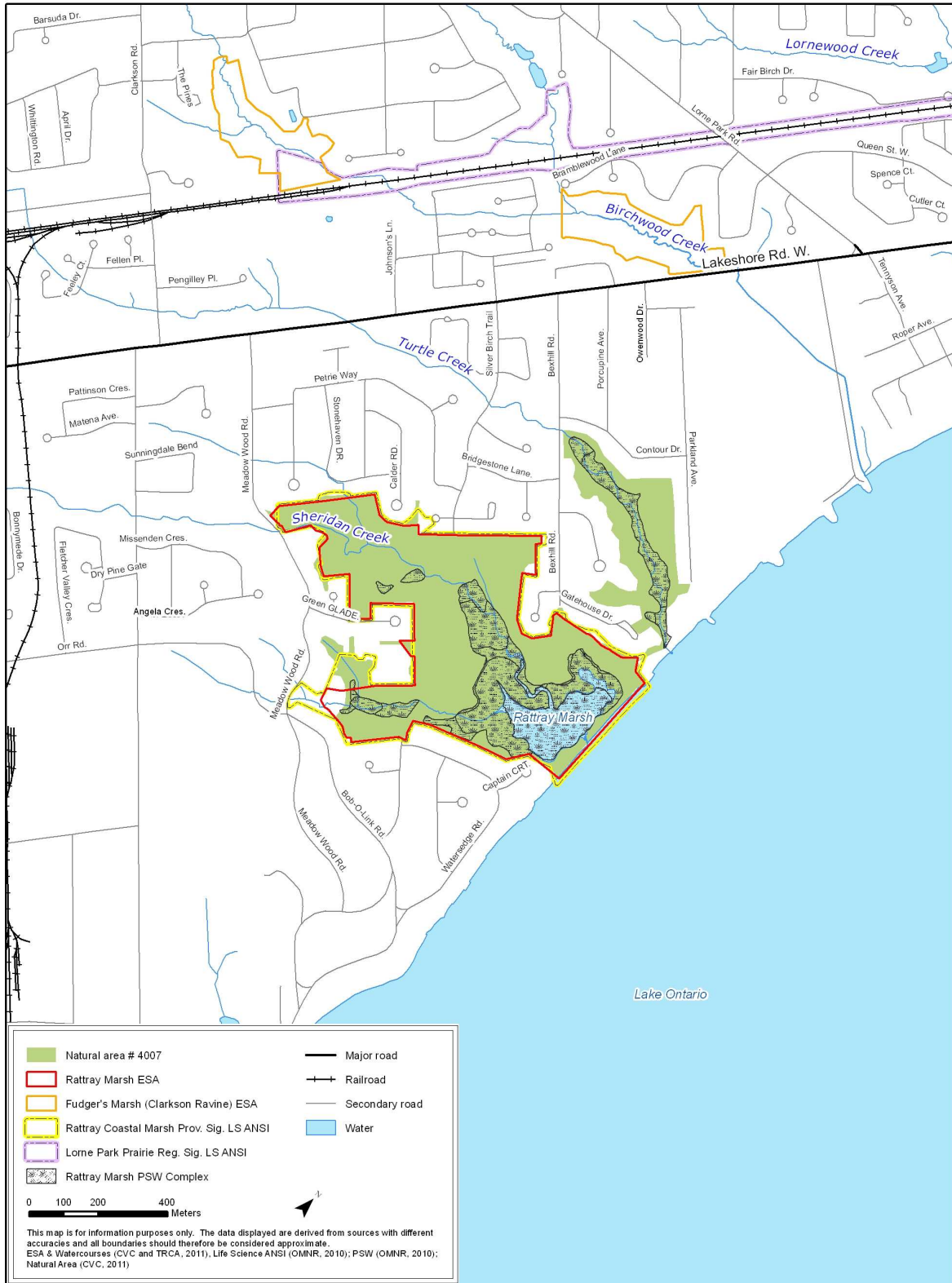
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SOUTHDOWN - LAKESHORE (RATTRAY MARSH CONSERVATION AREA)

Southdown - Lakeshore Context Map (NAI Area # 4007)



SOUTHDOWN - LAKESHORE (RATTRAY MARSH CONSERVATION AREA)

Southdown - Lakeshore Vegetation Communities Map (NAI Area # 4007)

