

APPENDIX

A

SPECIES LIST



Appendix B: Vascular Plants Species List

COMMON NAME	SCIENTIFIC NAME	CC ¹	CW ¹	G_RANK ³	N_RANK	S_RANK ⁴	COSEWIC ⁵	SARA ⁶	SARO ⁷	CITY OF TORONTO (Varga et al. 2000) ⁸	ECODISTRICT 7E4 (GTA) (Oldham 2017) ⁸	TRCA (2018) ⁸	YORK REGION (Varga et al. 2000) ⁸	GREATER TORONTO AREA (Varga et al. 2000) ⁸	NATIVE STATUS ⁹	AUTHOR	ORDER	FAMILY
Freeman's Maple	<i>Acer x freemanii</i>	6	-5	GNA	NNA	SNA				X	hyb	L4	XSR	X	N	E. Murr.	Sapindales	Sapindaceae
Manitoba Maple	<i>Acer negundo</i>	0	0	G5	N5	S5				X	IC	L+?	X	X	N	L.	Sapindales	Sapindaceae
Norway Maple	<i>Acer platanoides</i>		5	GNR	NNA	SNA				X	IC	L+	X	X	I	L.	Sapindales	Sapindaceae
Red Maple	<i>Acer rubrum</i>	4	0	G5	N5	S5				X	C	L4	X	X	N	L.	Sapindales	Sapindaceae
Sugar Maple	<i>Acer saccharum</i>	4	3	G5	N5	S5				X	C	L4	X	X	N	Marsh.	Sapindales	Sapindaceae
Silver Maple	<i>Acer saccharinum</i>	5	-3	G5	N5	S5				X	X	L4	X	X	N	L.	Sapindales	Sapindaceae
Garlic Mustard	<i>Alliaria petiolata</i>		0	GNR	NNA	SNA				X	IC	L+	X	X	I	(Bieb.) Cavar.a & Grande	Capparales	Brassicaceae
Common Burdock	<i>Arctium minus</i>		3	GNR	NNA	SNA				X	IC	L+	X	X	I	Bernh.	Asterales	Asteraceae
Canada Thistle	<i>Cirsium arvense</i>		3	G5	NNA	SNA				X	IC	L+	X	X	I	(L.) Scop.	Asterales	Asteraceae
Bull Thistle	<i>Cirsium vulgare</i>		3	GNR	NNA	SNA				X	IC	L+	X	X	I	(Savi) Ten.	Asterales	Asteraceae
Hawthorn sp.	<i>Crataegus sp.</i>															L.	Rosales	Rosaceae
Wild Carrot	<i>Daucus carota</i>		5	GNR	NNA	SNA				X	IC	L+	X	X	I	L.	Apiales	Apiaceae
Woodland Strawberry	<i>Fragaria vesca</i>	4	3	G5	N5	S5									N	L.	Rosales	Rosaceae
Green Ash	<i>Fraxinus pennsylvanica</i>	3	-3	G5	N5	S4				X	C	L5	X	X	N	Marsh.	Scrophulariales	Oleaceae
Wood Avens	<i>Geum urbanum</i>		5	G5	NNA	SNA				X	IX	L+	X	X	I	L.	Rosales	Rosaceae
Ground-ivy	<i>Glechoma hederacea</i>		3	GNR	NNA	SNA				X	IC	L+	X	X	I	L.	Lamiales	Lamiaceae
Virginia Stickseed	<i>Hackelia virginiana</i>	5	3	G5	N5	S5				XU	U	L5	R5	X?	N	(L.) I.M. Johnston	Lamiales	Boraginaceae
Dame's Rocket	<i>Hesperis matronalis</i>		3	G4G5	NNA	SNA				X	IC	L+	X	X	I	L.	Capparales	Brassicaceae
Hawkweed sp.	<i>Hieracium sp.</i>															L.	Asterales	Asteraceae
Common St. John's-wort	<i>Hypericum perforatum</i>		5	GNR	NNA	SNA				X	IC	L+	X	X	I	L.	Theales	Hypericaceae
Black Walnut	<i>Juglans nigra</i>	5	3	G5	N4	S4?				X	C	L5	R	X	N	L.	Juglandales	Juglandaceae
Common Nipplewort	<i>Lapsana communis</i>		3	GNR	NNA	SNA				X	IU	L+	X	X	I	L.	Asterales	Asteraceae
Tamarack	<i>Larix laricina</i>	7	-3	G5	N5	S5				R3	R	L3	X	X	N	(Du Roi) K. Koch	Pinales	Pinaceae
Honeysuckle sp.	<i>Lonicera sp.</i>															L.	Dipsacales	Caprifoliaceae
Garden Bird's-foot Trefoil	<i>Lotus corniculatus</i>		3	GNR	NNA	SNA				X	IC	L+	X	X	I	L.	Fabales	Fabaceae
American Water-horehound	<i>Lycopus americanus</i>	4	-5	G5	N5	S5				X	C	L4	X	X	N	Muhl. ex W. Bart.	Lamiales	Lamiaceae
Large False Solomon's-seal	<i>Maianthemum racemosum</i>	4	3	G5	N5	S5				X	C	L5	X	X	N	(L.) Link	Liliales	Asparagaceae
Apple sp.	<i>Malus sp.</i>															Mill.	Rosales	Rosaceae
Dwarf Mallow	<i>Malva neglecta</i>		5	GNR	NNA	SNA				X	IR	L+	X	X	I	Wallr.	Malvales	Malvaceae
White Mulberry	<i>Morus alba</i>		0	GNR	NNA	SNA				X	IC	L+	XSR	X	I	L.	Urticales	Moraceae
European Wood-sorrel	<i>Oxalis stricta</i>		3	G5	N5	S5				X	C	L5	X	X	I	L.	Geraniales	Oxalidaceae
Virginia Creeper	<i>Parthenocissus quinquefolia</i>	6	3	G5	N4N5	S4?				R	R	L5	R	X	N	(L.) Planch. ex DC.	Rhamnales	Vitaceae
Thicket Creeper	<i>Parthenocissus vitacea</i>	4	3	G5	N5	S5				X	C	L5	X	X	N	(Kner) A.S. Hitchc.	Rhamnales	Vitaceae
Spotted Lady's-thumb	<i>Persicaria maculosa</i>		-3	G3G5	NNA	SNA				X	IC	L+	X	X	I	Gray	Polygonales	Polygonaceae
Reed Canarygrass	<i>Phalaris arundinacea var. communis</i>	0	-3	G5TNR	NNR	S5				X	C	L+?	X	X	N	L.	Cyperales	Poaceae
Common Reed	<i>Phragmites australis</i>	0	-3	G5	N5	S4?				X	IC	L+	X	X	N	(Cavan.) Trinius ex. Steudel	Cyperales	Poaceae
Norway Spruce	<i>Picea abies</i>		5	G5	NNA	SNA				X	IX	L+	X	X	I	(L.) Karst.	Pinales	Pinaceae
White Spruce	<i>Picea glauca</i>	6	3	G5	N5	S5				X+	U	L3	X	X	N	(Moench) Voss	Pinales	Pinaceae
Blue Spruce	<i>Picea pungens</i>		3	G5	NNA	SNA						L+			I	Engelm.	Pinales	Pinaceae
Eastern White Pine	<i>Pinus strobus</i>	4	3	G5	N5	S5				X	C	L4	X	X	N	L.	Pinales	Pinaceae
Scots Pine	<i>Pinus sylvestris</i>		3	GNR	NNA	SNA				X	IC	L+	X	X	I	L.	Pinales	Pinaceae
Canada Poplar	<i>Populus x canadensis</i>		0	GNA	NNR	SNA				X	hyb	L+		X	I	Moench (pro sp.)	Salicales	Salicaceae
Trembling Aspen	<i>Populus tremuloides</i>	2	0	G5	N5	S5				X	C	L5	X	X	N	Michx.	Salicales	Salicaceae
Black Cherry	<i>Prunus serotina</i>	3	3	G5	N5	S5				X	C	L5	X	X	N	Ehrh.	Rosales	Rosaceae
Common Buttercup	<i>Ranunculus acris</i>		0	G5	NNA	SNA				X	IC	L+	X	X	I	L.	Ranunculales	Ranunculaceae
European Buckthorn	<i>Rhamnus cathartica</i>		0	GNR	NNA	SNA				X	IC	L+	X	X	I	L.	Rhamnales	Rhamnaceae
Staghorn Sumac	<i>Rhus typhina</i>	1	3	G5	N5	S5				X	C	L5	X	X	N	L.	Sapindales	Anacardiaceae
Eastern Prickly Gooseberry	<i>Ribes cynosbati</i>	4	3	G5	N5	S5				X	C	L5	X	X	N	L.	Rosales	Grossulariaceae
Black Locust	<i>Robinia pseudoacacia</i>		3	G5	NNA	SNA				X	IC	L+	X	X	I	L.	Fabales	Fabaceae
Black Raspberry	<i>Rubus occidentalis</i>	2	5	G5	N5	S5				X	C	L5	X	X	N	L.	Rosales	Rosaceae
White Willow	<i>Salix alba</i>		-3	G5	NNA	SNA				X	IC	L+	X	X	I	L.	Salicales	Salicaceae
Cottony Willow	<i>Salix eriocephala</i>	4	-3	G5	N5	S5				X	C	L5	X	X	N	Michx.	Salicales	Salicaceae
Golden Weeping Willow	<i>Salix x sepulcralis</i>		0	GNA	NNA	SNA				X	hyb	L+	X	X	I	Simonkai	Salicales	Salicaceae
Purple Crown-vetch	<i>Securigera varia</i>		5	GNR	NNA	SNA				X	IC	L+	X	X	I	(L.) Lassen	Fabales	Fabaceae
Canada Goldenrod	<i>Solidago canadensis var. canadensis</i>	1	3	G5T5	N5	S5				X	C	L5	X	X	N	L.	Asterales	Asteraceae

Appendix B: Vascular Plants Species List

COMMON NAME	SCIENTIFIC NAME	CC ¹	CW ¹	G_RANK ³	N_RANK	S_RANK ⁴	COSEWIC ⁵	SARA ⁶	SARO ⁷	CITY OF TORONTO (Varga et al. 2000) ⁸	ECODISTRICT 7E4 (GTA) (Oldham 2017) ⁸	TRCA (2018) ⁸	YORK REGION (Varga et al. 2000) ⁸	GREATER TORONTO AREA (Varga et al. 2000) ⁸	NATIVE STATUS ⁹	AUTHOR	ORDER	FAMILY
Heart-leaved Aster	<i>Symphotrichum cordifolium</i>	5	5	G5	N5	S5				X	C	L5	X	X	N	(L.) Nesom	Asterales	Asteraceae
Panicled Aster	<i>Symphotrichum lanceolatum</i>	3	-3	G5	N5	S5									N	(Willdenow) Nesom	Asterales	Asteraceae
Common Dandelion	<i>Taraxacum officinale</i>		3	G5	N5	SNA				X	IC	L+	X	X	I	G.H. Weber ex Wiggers	Asterales	Asteraceae
Eastern White Cedar	<i>Thuja occidentalis</i>	4	-3	G5	N5	S5				X	C	L4	X	X	N	L.	Pinales	Cupressaceae
Coltsfoot	<i>Tussilago farfara</i>		3	GNR	NNA	SNA				X	IC	L+	X	X	I	L.	Asterales	Asteraceae
Broad-leaved Cattail	<i>Typha latifolia</i>	1	-5	G5	N5	S5				X	C	L4	X	X	N	L.	Typhales	Typhaceae
Elm sp.	<i>Ulmus sp.</i>															L.	Urticales	Ulmaceae
Stinging Nettle	<i>Urtica dioica</i>	2	0	G5	N5	S5					IR				N	L.	Urticales	Urticaceae
Riverbank Grape	<i>Vitis riparia</i>	0	0	G5	N5	S5				X	C	L5	X	X	N	Michx.	Rhamnales	Vitaceae

PLANT LIST LEGEND

Scientific Name, Common Name and Family

Based on Vascan (Dec. 2017) and NHIC (Dec. 16 2018)

Vascan: <http://data.canadensys.net/vascan/search>

NHIC: http://www.sse.gov.on.ca/sites/MNR-PublicDocs/EN/ProvincialServices/Ontario_Vascular_Plants.xlsx

¹ Coefficient of Conservatism, Coefficient of Wetness, Weediness, and Physiology/Habit

Oldham, M. J., W. D. Bakowsky and D. A. Sutherland. 1995. Floristic Quality Assessment System for Southern Ontario. Natural Heritage Information Centre, Ministry of Natural Resources. Peterborough, Ontario.

NHIC: http://www.sse.gov.on.ca/sites/MNR-PublicDocs/EN/ProvincialServices/Ontario_Vascular_Plants.xlsx

CC and CW values reflect updates by NHIC, current as of Dec. 16, 2018).

CC: Coefficient of Conservatism. Rank of 0 to 10 based on plants degree of fidelity to a range of synecological parameters: (0-3) Taxa found in a variety of plant communities; (4-6) Taxa typically associated with a specific plant community but tolerate moderate disturbance; (7-8) Taxa associated with a plant community in an advanced successional stage that has undergone minor disturbance; (9-10) Taxa with a high fidelity to a narrow range of synecological parameters.

CW: Coefficient of Wetness. Value between 5 and -5. A value of -5 is assigned to Obligate Wetland (OBL) and 5 to Obligate Upland (UPL), with intermediate values assigned to the remaining categories.

Weediness: Weediness Score, assigned to all non-native species and range from -1 (low impact of the species on natural areas) to -3 (high impact of the species on natural areas).

Habit: Physiology/Habit. The growth form of the species (e.g. forb, shrub, tree).

² OWES Wetland Plant List

Ontario Ministry of Natural Resources. 2013. Ontario Wetland Evaluation System Southern Manual. 3rd Edition, Version 3.3

Ontario Ministry of Natural Resources. 2013. Ontario Wetland Evaluation System Northern Manual. 1st Edition, Version 1.3

Species presence or absence on the Ontario Wetland Evaluation System (OWES) Wetland Plant List.

Codes are defined as follows:

X: Present on the list

³ G-Rank (Global)

Global Status from Nature Serve (via NHIC, Dec. 16, 2018)

NS: <http://explorer.natureserve.org/>

NHIC: http://www.sse.gov.on.ca/sites/MNR-PublicDocs/EN/ProvincialServices/Ontario_Vascular_Plants.xlsx

Global ranks are assigned by a consensus of the network of Conservation Data Centres (CDCs), scientific experts, and the Nature Conservancy to designate a rarity rank based on the range-wide status of a species, subspecies, or variety.

Global (G) Conservation Status Ranks

- G1: Critically Imperiled - At very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
- G2: Imperiled - at high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
- G3: Vulnerable - At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
- G4: Apparently Secure - At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
- G5: Secure - At very low risk of extinction or elimination due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
- G#G#: Range Rank – A numeric range rank (e.g., G2G3, G1G3) is used to indicate the range of uncertainty about the exact status of a taxon or ecosystem type. Ranges cannot skip more than two ranks (e.g., GU should be used rather than G1G4).
- GX: Presumed Extinct - Not located despite intensive searches and virtually no likelihood of rediscovery.
- GH: Possibly Extinct - Known from only historical occurrences but still some hope of rediscovery. Examples of evidence include (1) that a species has not been documented in approximately 20-40 years despite some searching and/or some evidence of significant habitat loss or degradation; (2) that a species has been searched for unsuccessfully, but not thoroughly enough to presume that it is extinct or eliminated throughout its range.
- GU: Unrankable – Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- GNR: Unranked – Global rank not yet assessed.
- GNA: Not Applicable – A conservation status rank is not applicable because the species is not a suitable target for conservation activities. A global conservation status rank may be not applicable for several reasons, related to its relevance as a conservation target. For species, typically the species is a hybrid without conservation value, or of domestic origin. For ecosystems, the type is typically non-native (e.g, many ruderal vegetation types), agricultural (e.g. pasture, orchard) or developed (e.g. lawn, garden, golf course).
- ?: Inexact Numeric Rank – Denotes inexact numeric rank; this should not be used with any of the Variant Global Conservation Status Ranks or GX or GH.
- T#: Intraspecific Taxon (trinomial) - The status of intraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank. Rules for assigning T-ranks follow the same principles outlined above. For example, the global rank of a critically imperiled subspecies of an otherwise widespread and common species would be G5T1. A T subrank cannot imply the subspecies or

variety is more abundant than the species, for example, a G1T2 subrank should not occur. A vertebrate animal population (e.g., listed under the U.S. Endangered Species Act or assigned candidate status) may be tracked as an infraspecific taxon and given a T rank; in such cases a Q is used after the T-rank to denote the taxon's informal taxonomic status.

- Q: Questionable taxonomy that may reduce conservation priority – Distinctiveness of this entity as a taxon or ecosystem type at the current level is questionable; resolution of this uncertainty may result in change from a species to a subspecies or hybrid, or inclusion of this taxon or type in another taxon or type, with the resulting taxon having a lower priority (numerically higher) conservation status rank. The "Q" modifier is only used at a global level and not at a national or subnational level.
- C: Captive or Cultivated Only – Taxon or ecosystem at present is presumed or possibly extinct or eliminated in the wild across their entire native range but is extant in cultivation, in captivity, as a naturalized population (or populations) outside their native range, or as a reintroduced population or ecosystem restoration, not yet established. The "C" modifier is only used at a global level and not at a national or subnational level. Possible ranks are GXC or GHC. This is equivalent to "Extinct" in the Wild (EW) in IUCN's Red List terminology (IUCN 2001).

⁴ S-Ranks (Provincial)

Provincial Status from the NHIC (Dec. 16, 2018)

NHIC: http://www.sse.gov.on.ca/sites/MNR-PublicDocs/EN/ProvincialServices/Ontario_Vascular_Plants.xlsx

Provincial (or Subnational) ranks are used by the Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. These ranks are not legal designations. Provincial ranks are assigned in a manner similar to that described for global ranks, but consider only those factors within the political boundaries of Ontario.

- S1: Critically Imperiled – At very high risk of extirpation in the jurisdiction due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.
- S2: Imperiled – At high risk of extirpation in the jurisdiction due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
- S3: Vulnerable – At moderate risk of extirpation in the jurisdiction due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
- S4: Apparently Secure – At a fairly low risk of extirpation in the jurisdiction due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
- S5: Secure – At very low or no risk of extirpation in the jurisdiction due to a very extensive range, abundant populations or occurrences, with little to no concern from declines or threats.
- S#S#: Range Rank – A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community. Ranges cannot skip more than one rank (e.g., SU is used rather than S1S4).
- SX: Presumed Extirpated – Species or ecosystem is believed to be extirpated from the jurisdiction (province). Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered. [equivalent to "Regionally Extinct" in IUCN Red List terminology]
- SH: Possibly Extirpated (Historical) – Known from only historical records but still some hope of rediscovery. There is evidence that the species or ecosystem may no longer be present in the jurisdiction, but not enough to state this with certainty. Examples of such evidence include (1) that a species has not been documented in approximately 20-40 years despite some searching and/or some

evidence of significant habitat loss or degradation; (2) that a species or ecosystem has been searched for unsuccessfully, but not thoroughly enough to presume that it is no longer present in the jurisdiction.

SNR:	Unranked – subnational conservation status not yet assessed.
SU:	Unrankable – Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
SNA:	Not Applicable – A conservation status rank is not applicable because the species is not a suitable target for conservation activities (e.g., long distance aerial and aquatic migrants, hybrids without conservation value, and non-native species).
?:	Inexact or Uncertain - Denotes inexact or uncertain numeric rank.
T#:	Intraspecific Taxon (trinomial) - The status of intraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank. Rules for assigning T-ranks follow the same principles outlined above. For example, the subnational rank of a critically imperiled subspecies of an otherwise widespread and common species would be S5T1. A T subrank cannot imply the subspecies or variety is more abundant than the species, for example, a S1T2 subrank should not occur. A vertebrate animal population may be tracked as an intraspecific taxon and given a T rank; in such cases a Q is used after the T-rank to denote the taxon's informal taxonomic status.

⁵ COSEWIC (Committee on the Status of Endangered Wildlife in Canada)

The federal review process is implemented by COSEWIC (Status as of Dec. 2018)

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) is an independent advisory panel to the Minister of Environment and Climate Change Canada that meets twice a year to assess the status of wildlife species at risk of extinction.

<https://www.canada.ca/en/environment-climate-change/services/committee-status-endangered-wildlife.html>

EXT:	Extinct – A species that no longer exists.
EXP:	Extirpated – A species no longer existing in the wild in Canada, but occurring elsewhere.
END:	Endangered – A species facing imminent extirpation or extinction.
THR:	Threatened – A species likely to become endangered if limiting factors are not reversed.
SC:	Special Concern – A species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats.
NAR:	Not At Risk – A species that has been evaluated and found to be not at risk of extinction given the current circumstances.
DD:	Data Deficient – Available information is insufficient (a) to resolve a species' eligibility for assessment or (b) to permit an assessment of the species' risk of extinction.

⁶ SARA (Species at Risk Act) Status and Schedule

Federal status from the Government of Canada's Species at Risk Public Registry (Status as of Dec. 2018)

<http://www.registrelep-sararegistry.gc.ca/>

The Act establishes Schedule 1, as the official list of species at risk in Canada. It classifies those species as being either Extirpated, Endangered, Threatened, or a Special Concern. Once listed, the measures to protect and recover a listed species are implemented. However, please note that while Schedule 1 lists species that are extirpated, endangered, threatened and of special concern, the prohibitions do not apply to species of special concern.

EXT:	Extinct – A species that no longer exists.
EXP:	Extirpated – A species that no longer exists in the wild in Canada, but exists elsewhere in the wild.
END:	Endangered – A species that is facing imminent extirpation or extinction.
THR:	Threatened – A species likely to become endangered if limiting factors are not reversed.
SC:	Special Concern – A species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats.

⁷ SARO (Species At Risk in Ontario)

Provincial status from MNRF (Status as of Dec. 2018)

<https://www.ontario.ca/environment-and-energy/species-risk-ontario-list>

The provincial review process is implemented by the MNR's Committee on the Status of Species at Risk in Ontario (COSSARO). COSSARO is an independent advisory panel to the Ontario Ministry of Natural Resources and Forestry that assesses the status of species at risk of extinction.

EXP:	Extirpated – Lives somewhere in the world, and at one time lived in the wild in Ontario, but no longer lives in the wild in Ontario.
END:	Endangered – Lives in the wild in Ontario but is facing imminent extinction or extirpation.
THR:	Threatened – Lives in the wild in Ontario, is not endangered, but is likely to become endangered if steps are not taken to address factors threatening it.
SC:	Special Concern – Lives in the wild in Ontario, is not endangered or threatened, but may become threatened or endangered due to a combination of biological characteristics and identified threats.

⁸**Ecodistrict 7E4 (comprising the City of Toronto, and southern portions of York, Peel, and Halton Regional Municipalities)**

Oldham, Michael J. 2017. List of the Vascular Plants of Ontario's Carolinian Zone (Ecoregion 7E). Carolinian Canada and Ontario Ministry of Natural Resources and Forestry. Peterborough, ON. 132 pp.

Rankings are based on "previous lists, personal communications, and the author's knowledge of the Carolinian Zone flora."

Codes are defined as follows:

- H: Historic. Native and no known records for at least 30 years.
- R: Rare
- U: Uncommon
- C: Common
- X: Present. Native but no status assigned because of lack of information, often due to confusion with similar species.
- I: Introduced. A non-native (exotic) species that is established (or was formerly established) outside of cultivation.

⁸**Toronto and Region Conservation Authority (TRCA).**

Toronto and Region Conservation Authority (TRCA). 2018. Annual Local Occurrence Score and Local Rank Update: Terrestrial Species and Vegetation Communities.

L rank (Local Rank) – A rank assigned by TRCA to a species, vegetation community, or habitat patch which describes its rank and level of conservation concern in the TRCA Region. Species of concern, according to the TRCA methodology are any species with a local rank of L1 to L3, and some particularly sensitive species with a rank of L4. They are generally species which are disappearing in the landscape, primarily as a result of land use changes. For flora the ranks are defined as follows:

- L1: Of concern regionally; almost certainly rare in TRCA jurisdiction; generally occur in high-quality natural areas, in natural matrix; unable to withstand disturbance.
- L2: Of concern regionally; probably rare in TRCA jurisdiction; generally occur in high-quality natural areas, in natural matrix; unable to withstand disturbance.
- L3: Of concern regionally; generally secure in natural matrix; able to withstand minor disturbance.
- L4: Of concern in urban matrix; generally secure in rural matrix; able to withstand some disturbance.
- L5: Not of concern; generally secure throughout jurisdiction, including urban matrix; able to withstand high levels of disturbance.
- LX: Extirpated from the TRCA region with remote chance of rediscovery. Presumably highly sensitive. Not scored.
- LH: Hybrid between two native species. Usually not scored unless highly stable and behaves like a species.
- L+: Exotic. Not native to TRCA jurisdiction. Includes hybrids between a native species and an exotic. Not scored.
- L+?: Origin uncertain or disputed (i.e., may or may not be native). Not scored.

⁹**Native Status**

Based on Vascan (Dec. 2017) and NHIC (Dec. 16, 2018)

Vascan: <http://data.canadensys.net/vascan/search>

NHIC: http://www.sse.gov.on.ca/sites/MNR-PublicDocs/EN/ProvincialServices/Ontario_Vascular_Plants.xlsx

Appendix B: Incidental Wildlife Species List

COMMON NAME	SCIENTIFIC NAME	G_RANK ³	S_RANK ⁴	COSEWIC ⁵	SARO ⁷	FAMILY
Mallard	<i>Anas platyrhynchos</i>	G5	S5	-	-	Anatidae
Canada Goose	<i>Branta canadensis</i>	G5	S5	-	-	Anatidae
Northern Cardinal	<i>Cardinalis cardinalis</i>	G5	S5	-	-	Cardinalidae
American Goldfinch	<i>Carduelis tristis</i>	G5	S5B	-	-	Fringillidae
American Crow	<i>Corvus brachyrhynchos</i>	G5	S5B	-	-	Corvidae
Blue Jay	<i>Cyanocitta cristata</i>	G5	S5	-	-	Corvidae
Green Frog	<i>Lithobates clamitans</i>	G5	S5	-	-	Ranidae
Belted Kingfisher	<i>Megaceryle alcyon</i>	G5	S4B	-	-	Alcedinidae
Downy Woodpecker	<i>Picoides pubescens</i>	G5	S5	-	-	Picidae
Hairy Woodpecker	<i>Picoides villosus</i>	G5	S5	-	-	Picidae
Black-capped Chickadee	<i>Poecile atricapillus</i>	G5	S5	-	-	Paridae
Eastern Gray Squirrel	<i>Sciurus carolinensis</i>	G5	S5	-	-	Sciuridae
Red-breasted Nuthatch	<i>Sitta canadensis</i>	G5	S5	-	-	Sittidae
Eastern Cottontail	<i>Sylvilagus floridanus</i>	G5	S5	-	-	Leporidae
Eastern Chipmunk	<i>Tamias striatus</i>	G5	S5	-	-	Sciuridae
American Robin	<i>Turdus migratorius</i>	G5	S5B	-	-	Turdidae
Mourning Dove	<i>Zenaida macroura</i>	G5	S5	-	-	Columbidae






APPENDIX

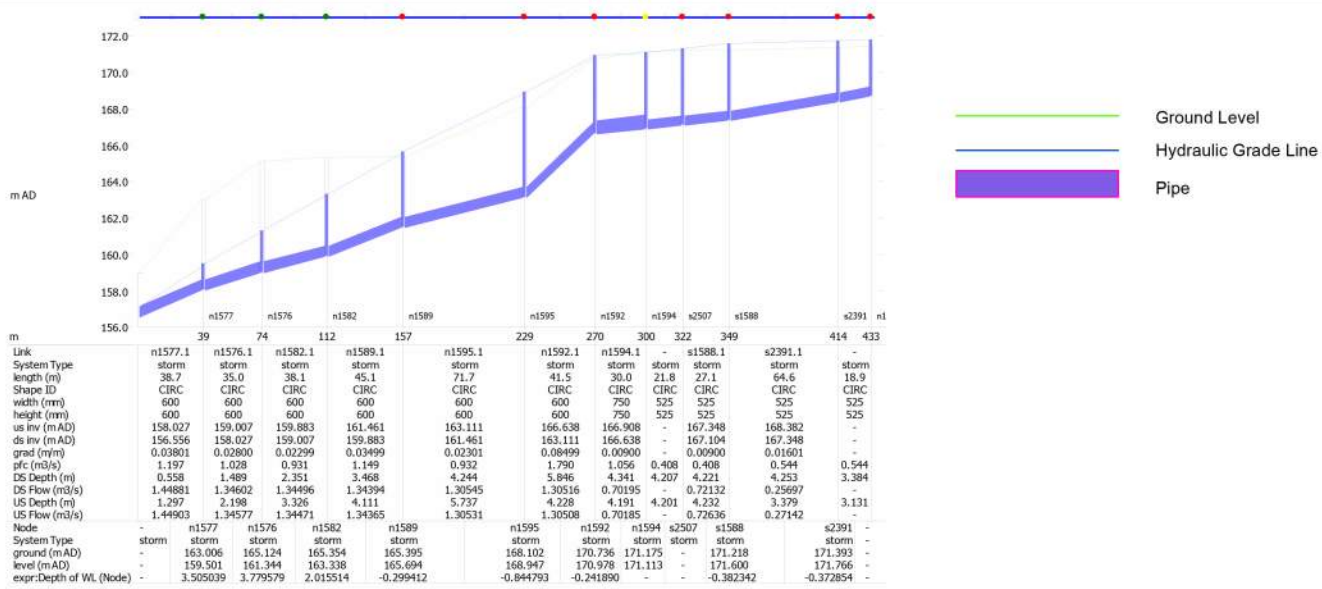
B

HYDRAULIC PROFILES – 100- YEAR EXISTING SYSTEM



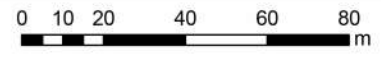
Legend

-  Existing Conditions
-  Existing MH
-  Catch Basin
-  Contour Lines
-  Cross Section



Project 121-15461-00

Glynnwood Tributary Class EA








1:1,200

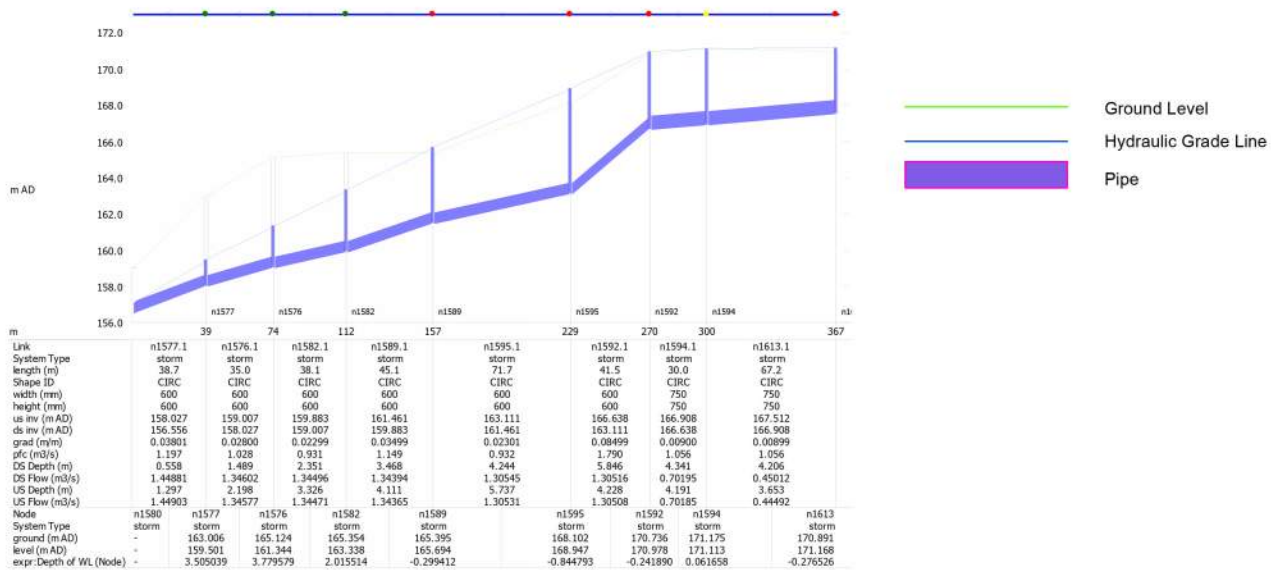
Figure B1.1 Existing Conditions

Glynnwood Tributary Area
Sewer Surcharge Study
Existing Conditions MH11 to Pond



Legend

-  Existing Conditions
-  Existing MH
-  Catch Basin
-  Contour Lines
-  Cross Section



Project 121-15461-00

Glymwood Tributary Class EA



1:1,200

Figure B1.2 Existing Conditions

Glymwood Tributary Area
Sewer Surcharge Study
Existing Conditions MH8 to Pond