

Myler Ecological Consulting

7 Olive Crescent, Stoney Creek, ON L8G 2T2 | (289)700-3038 | bmyler@cogeco.ca

17 December, 2025

Taylor Meadows
Manager of Development Planning
Planning and Development Services
City of Welland, Civic Square
60 East Main Street
Welland ON L3B 3X4

RE: Environmental Impact Study Memorandum – 694 & 698 Niagara Street, Welland

Introduction

Myler Ecological Consulting (Myler) was retained by Darryl Trudel (the proponent) to assess and respond to potential natural heritage constraints to development at 694 and 698 Niagara Street, Welland (the site) that have been the subject of Niagara Peninsula Conservation Authority (NPCA) comments provided to the City of Welland (the City) and that have been addressed in consultation with NPCA.

NPCA and the City initially requested submission of a Natural Heritage Technical Memorandum, which Myler completed on 24 October 2025.

Subsequently, in consideration of the identification of natural heritage features on other lands in the neighbourhood that are not abutting but are nearby the site, the City requested submission of an Environmental Impact Study (EIS) Memorandum to expand upon the Natural Heritage Technical Memorandum by addressing the following:

- Findings of the nearby neighbour's EIS as they relate to the site.
- City of Welland and Niagara Region Official Plan natural heritage policy conformity of the proposed residential redevelopment of the site.
- Additional legislative conformity (e.g., provincial Endangered Species Act, federal Fisheries Act).
- Assessment of potential natural heritage features at the site.

In other words, the City requested that the EIS Memorandum provides a discussion of the findings of the neighbour's EIS and a demonstration of how the site differs from the neighbour's site in terms of presence/absence of natural heritage features.

An electronic copy of the Scoped Environmental Impact Statement (Revision 2) – The Development Squad GP Inc. – 418, 424, 430 Aqueduct Street and 650, 656, 664, 670, and 678 Niagara Street, Welland ON (R.J. Burnside & Associates Ltd., 10 September 2024) was provided to Myler.

This EIS Memorandum was prepared by Myler to provide the required additional review, discussion and conclusions while retaining the content of the previously submitted Natural Heritage Technical Memorandum. As such, it can serve either to complement or to supersede that document.

Initial Reconnaissance

Myler's involvement with the site commenced with a 22 November 2024 reconnaissance-level desktop review of agency mapping and site visit. Apart from an isolated and short segment of NPCA-regulated watercourse (**Figure 1**, below), no natural heritage features were mapped on the site in the City's Official Plan (OP), on NPCA regulation mapping, or on Niagara Region (the Region) Natural Environment System (NES) mapping, and none were observed by Myler during the site visit.



Figure 1: Excerpt of NPCA Watershed Explorer mapping showing the site (red outline) and the NPCA-regulated watercourse (blue line) and regulation area (dark shading) near Niagara Street.

Further, Myler noted at the time that the watercourse segment exhibited characteristics of an ephemeral or intermittent flow regime, with no areas of flowing or standing water, and lacked aquatic habitat characteristics of any sort, including conditions that would be indicative of fish habitat. The watercourse segment's banks and channel contained terrestrial plant species and was manicured as part of the site's existing residential front yards. And given that the watercourse was observed to drain directly into the Niagara Street storm sewer, there is no possibility of periodic, event-based fish migration to the site from downstream reaches.

Similar manicured conditions characterized the watercourse upstream (south) of the site on the neighbouring 684 Niagara Street. Further upstream the watercourse is completely enclosed across 678 Niagara Street and NPCA regulation area was not applied to the watercourse on that property or on 670 and 664 Niagara Street. A second, and final, regulated segment is mapped on the front yard swales of seven contiguous properties south of 664 Niagara Street. Myler's observations of air photos and from Niagara Street indicated a lack of aquatic habitat associated with the watercourse upstream of the site.

As such, the entire extent of regulated watercourse was found to be limited to only the two isolated segments within the residential front yards. The northerly/downstream segment is approximately 80 metres in length, which includes the lowermost approximately 40 metres that crosses the site and drains directly into the Niagara Street storm sewer through a large catch basin structure. The separate southerly/upstream segment is approximately 210 metres in length. As such, the entirely of the regulated length of the watercourse is approximately 290 metres of ephemeral/intermittent channel, all of which drains directly to the storm sewer.

Pre-Consultation

Pre-consultation with the City occurred on 01 May 2025. Comments related to natural features or natural heritage were received from the participating NPCA staff and included the mapped and regulated watercourse segment and plus the potential for occurrence on site of unevaluated wetland. NPCA indicated in the comments a willingness to consider watercourse alterations that comply with NPCA policy and the need to participate in a site visit to confirm the presence or absence of the suspected unevaluated wetlands.

Myler and the proponent conducted a second reconnaissance of the site on 27 May 2025 to investigate the potential wetland occurrence. Only two tiny, isolated low areas were observed on the site, and no wetland was observed on neighbouring properties adjacent to the site. The two tiny low spots on the site were observed to be isolated from local drainage, including the regulated watercourse, and neither was characterized by dominance of wetland plant species. As such, neither was considered to represent potential NPCA-regulated wetland.

A site visit with NPCA staff (Theresa Bukovics) was conducted on 30 July 2025. Absence of unevaluated wetland constraints on and adjacent to the site was confirmed with NPCA. The watercourse segment was observed with NPCA staff and the need to enclose the regulated watercourse segment on the site was discussed. NPCA staff indicated during the site visit that a late summer botanical investigation at the site should include checking for White Wood Aster, a plant species at risk (SAR) that occurs in some parts of Welland and that was confirmed to occur nearby and reported in the R.J. Burnside EIS.

Following the NPCA site meeting, NPCA watershed planner Paige Pearson provided updated NPCA comments in an email dated 11 August 2025 which confirmed:

- No regulated wetlands are present.
- NPCA support of enclosure or “entombment” of the watercourse segment subject to receipt of a technical memo demonstrating both the need for enclosure and that the enclosure would have no negative impact on the hydrologic function of the watercourse or create conditions that would exacerbate natural hazards (i.e., human health and safety, damage/destruction of property, flooding, erosion, soil/bedrock stability) associated with the watercourse.

NPCA described the technical memo as including an NPCA policy overview, a description of the watercourse condition and character, a description of the proposed works, a description of potential impacts and proposed mitigation measures, and documentation that the watercourse indeed discharges directly to the storm sewer. Each of these requirements is addressed below.

Watercourse Enclosure

The need for the watercourse enclosure was not established by Myler, but was described to Myler (and to NPCA staff during the 30 July 2025 site visit) by the proponent's engineer and architect as dictated by existing topography at and adjacent to the site that necessitates enclosure to facilitate the site's access to Niagara Street and fulsome use of the site's area to support the residential redevelopment.

Further, extensive additional enclosure of watercourse segments upstream/south of the site was mentioned by NPCA staff and is recommended in the R.J. Burnside EIS supported by their analysis of the watercourse features and functions.

The proposed watercourse enclosure is described in the Functional Servicing Report (FSR) prepared for the proponent by Upper Canada Consultants (UCC). UCC confirmed that the watercourse segment at the site discharges through an existing 450mm pipe to the 1350mm municipal storm sewer beneath Niagara

Street. The FSR also describes, along with proposed stormwater management measures for the site that will mitigate potential impacts of the site's redevelopment, including the watercourse enclosure.

Quantity control described in the FSR will avoid exacerbation or creation of natural hazards by maintaining existing flow conditions in the developed condition. Quality controls described in the FSR will mitigate water quality impacts in the site's discharge to the municipal storm sewer beneath Niagara Street.

Although not explicitly discussed in the FSR, Myler assumes and recommends that temporary erosion and sedimentation controls would be specified during site preparation and construction, including during construction of the watercourse enclosure. Additionally, Myler recommends that the enclosure be completed in the dry by avoiding conditions of ephemeral/intermittent flow in the watercourse, which does not appear to be a particularly challenging measure for this particular watercourse.

Myler conducted a follow-up site visit on 02 September 2025 to further document the condition of the watercourse segment and to fulfil the NPCA request for a botanical inventory and identification of vegetation communities.

The watercourse segment was once again observed by Myler to exhibit ephemeral/intermittent flow conditions as it was again dry, without flow or standing water, and contained manicured front yard vegetation. There was no observed aquatic vegetation or habitat, and no amphibians, reptiles or other wildlife potentially dependent on aquatic habitat were observed. Fish habitat is absent within the watercourse segment as Myler's observations once again confirmed the impossibility of periodic upstream fish migration owing to the discharge directly to the municipal storm sewer and the absence of aquatic habitat on the watercourse segments upstream of the site.

The portion of the site containing the watercourse, and the watercourse channel itself, were yet again confirmed by Myler's observations to be in a manicured condition consistent with the existing residential use of the site and therefore not possessed of any natural vegetation community described by the provincial Ecological Land Classification (ELC). The watercourse segment traverses a mown front yard turfgrass area with planted amenity trees, shrubs and plants plus a typical assortment of weed species (see **Photos 1** and **2**, below).

Accordingly, Myler observed a total of 26 common plant species (appended), including trees, shrubs and herbaceous plants, at or adjacent to the watercourse segment at the site. None of these species is a provincially listed SAR or would qualify as regionally rare or uncommon per the Niagara Region Natural Areas Inventory (NAI). Fully aquatic plant species were absent. Upland terrestrial plant species dominated the list and dominated the site at and adjacent to the watercourse segment in terms of area and proportion.



Photo 1: Watercourse segment on site, facing upstream. Note manicured lawn, planted Yucca, weeds, and dry channel with terrestrial plants.



Photo 2: Watercourse segment facing downstream towards storm sewer catch basin (in shadow in background beneath shrubs and trees). Note topography and depth below Niagara Street in background. Myler's observations confirmed a lack of aquatic or riparian habitat and associated wildlife that might otherwise trigger recommendations for specialized mitigation measures such as salvage of fish, amphibians and reptiles.

Only a general mitigation measure is recommended for removal of trees and shrubs at and near the watercourse segment and throughout the site to avoid potential impacts to nesting birds and roosting bats. Tree and shrub removal during the October-March period will achieve seasonal avoidance of the local bird nesting season and the active roost period of Ontario bats.

NPCA policy compliance of the proposed watercourse enclosure is described below per NPCA Policy 9.2.3.2 sections a) through h) that establishes NPCA's criteria for assessing watercourse alterations:

- a) "The need for the watercourse alteration has been demonstrated to the satisfaction of the NPCA": Residential redevelopment of the site requires connection to Niagara Street at the established grade of that municipal road plus fulsome use of the site for new residential buildings, parking and services. NPCA staff noted similar enclosure as imminent for the watercourse segments on the lands subject to the R.J. Burnside EIS and as recommended in that EIS.
- b) "The watercourse has been evaluated under NPCA's Procedural Manual and the alteration would be supported": The watercourse has been evaluated from engineering (i.e., hydrology) and ecological (i.e., fisheries/aquatic habitat and riparian habitat) perspectives by UCC and Myler, respectively. UCC has determined that the enclosure and associated SWM measures will maintain hydrologic function. Myler has determined the absence of aquatic habitat, including fish habitat, and riparian habitat in the manicured condition of the watercourse. R.J. Burnside's EIS findings were similar as regards the watercourse on those nearby lands and likewise supported a recommendation of enclosure on that site. Accordingly, neither of natural hazard nor natural heritage impacts are identified for the watercourse enclosure.
- c) "The proposed works are in accordance with NPCA standards": Myler expects that UCC will prepare a detailed design of the proposed works that will be subject to NPCA Work Permit application and review to ensure NPCA standards are met. For this watercourse, with ephemeral/intermittent flow regime, discharge directly to existing storm sewer, and lack of sensitive ecological features and functions, it is anticipated that NPCA standards will be met.
- d) "Any proposed channel realignment shall only be allowed such that any required riparian buffer will not cross any property lines": Enclosure rather than realignment is proposed. Additionally, NPCA acknowledged that enclosure is already indicated for adjacent upstream portions of the watercourse (i.e., the portion of the watercourse south of the site on the lands studied by R.J. Burnside). As such, riparian buffer considerations are not applicable.
- e) "The proposed watercourse alteration does not increase flood plain elevations, flood frequency, erosion rates or erosion frequency along either side of the watercourse, upstream and/or downstream of the proposed works": UCC's FSR has described a plan to enclose the watercourse and with stormwater management measures maintain flow conditions. As such, upstream impacts are not expected. NPCA additionally acknowledged that enclosure is indicated upstream of the site (i.e., the portion of the watercourse south of the site on the lands studied by R.J. Burnside). Downstream impacts are limited to considerations of municipal storm sewer capacity, which UCC addressed in the FSR and through proposed on-site quantity (and quality) controls.
- f) "The works will not adversely affect the hydrologic function of the watercourse and riparian zone": The UCC FSR describes how proposed site stormwater management will complement the proposed enclosure to maintain the watercourse's hydrologic function without adverse effects. Myler confirmed the watercourse's riparian zone to be manicured residential front yard, which is not sensitive to adverse impacts.
- g) "Adequate erosion protection measures are utilized when required": Myler expects that UCC will prepare a detailed design in support of an NPCA Work Permit application that will include erosion protection measures during site preparation and construction, including the recommended completion of the watercourse enclosure in the dry (i.e., when there is no flow in the ephemeral/intermittent watercourse).
- h) "Sediment control measures are incorporated during the construction phase to the satisfaction of the NPCA": Myler expects that UCC will prepare a detailed design in support of an NPCA Work

Permit application that will include construction phase temporary sediment control measures at the site.

Neighbouring Scoped EIS Findings

The R.J. Burnside Scoped EIS addressed a residential redevelopment site comprised of eight contiguous existing residential properties south of the site and separated from the site by the approximately 46 metre width of 684 Niagara Street.

The lands that R.J. Burnside studied included an upstream portion of the same watercourse that crosses the subject site at 694 and 698 Niagara Street.

Additionally, the lands that R.J. Burnside studied included vegetated portions that were tentatively mapped in eastern/rear portions of many of the existing residential properties as contiguous potential woodland and/or wetland on NPCA's updated vegetation community mapping based on desktop analysis of aerial imagery.

R.J. Burnside's studies included vegetation community mapping, botanical and wildlife inventories, and assessment of the watercourse. These studies supported conclusions and recommendations including the extent of natural heritage features as development constraints, SAR occurrence, and management of the watercourse.

In terms of drainage, the R.J. Burnside EIS reported drainage of the westerly portion of their site to the "drainage ditch along the frontage of the properties" which is the watercourse that crosses the 694 and 698 Niagara Street site. Easterly portions of their site were reported to drain in an easterly direction into rear yard swales and catchbasins to the east, without connection to the 694 and 698 Niagara Street site.

Vegetation community mapping reported in the Scoped EIS identified three vegetation community polygons and one vegetation community inclusion. Two separate cultural woodland polygons were identified, one extending across the rear portions of 664, 670, and 678 Niagara Street and one contained entirely within the rear of 418 Aqueduct Street. The site was otherwise covered by manicured residential vegetation (as well as existing houses, outbuildings, driveways and residential hardscape features). A small swamp inclusion of approximately 0.12 hectares was mapped within the rear yards of 650 and 656 Niagara Street.

The northeast cultural woodland polygon was staked on-site with Niagara Region staff and R.J. Burnside reported its area as approximately 0.475 hectares and speculated that it was part of a total area of approximately 1.1 hectares of cultural woodland "when including the offsite extension to the north".

The southeast cultural woodland was reported to be approximately 0.21 hectares in size.

Botanical inventory confirmed the occurrence of the provincially threatened White Wood Aster in the cultural woodland in the northeast corner of R.J. Burnside's site.

Breeding bird surveys identified only common species that are typical of urban areas. Investigation of existing buildings confirmed the absence of provincially threatened Chimney Swift and the then provincially threatened but now "special concern" Barn Swallow.

Only a single frog, a Western Chorus Frog, was heard calling during the breeding amphibian survey, confirming the absence of substantial amphibian breeding habitat.

The EIS reported no SAR bats identified by acoustic monitoring within the northeast cultural woodland polygon. Most of the recorded bat calls were attributed to Big Brown Bat. However, the recent addition of

previously non-SAR bats to the provincial list of endangered bat species includes the Silver Haired Bat, Hoary Bat, and Eastern Red Bat that were recorded at the cultural woodland acoustic survey location. Preservation of the cultural woodland in that location will avoid conflict with the potential occurrence of those newly listed bat species.

Incidental wildlife observations reported in the Scoped EIS were limited to Eastern Gray Squirrel.

Significant wildlife habitat per provincial Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E was determined to be absent based on the biological inventories, mapping and observations by R.J. Burnside.

Significant habitat of threatened and endangered species (i.e., SAR habitat) was determined by R.J. Burnside to be limited to that of the White Wood Aster in the northeast cultural woodland polygon. As noted above, protection of the cultural woodland polygon will avoid conflict with newly listed bat SAR whose potential occurrence was indicated by identification of their calls by the acoustic survey conducted in the woodland.

The northeast polygon of cultural woodland was identified by R.J. Burnside as significant woodland due to combined criteria of total area and the occurrence of endangered White Wood Aster.

The swamp wetland inclusion was not determined to be NPCA-regulated wetland and as no significant natural heritage feature or function was determined to occur in that area it was identified for removal.

Headwater drainage feature assessment applied to the watercourse in the western part of the R.J. Burnside site yield observations similar to those of Myler at 694 and 698 Niagara Street. R.J. Burnside found the watercourse to be dry on all site visits, with an ephemeral/intermittent flow regime, and described the eight segments on the eight properties as “grassed swales or enclosed”. The watercourse was identified as of “limited value as terrestrial habitat” and “lacks standing water and habitat structure to support breeding amphibians”. The watercourse was determined not to represent direct or seasonally occupied fish habitat.

In summary, the R.J. Burnside Scoped EIS identified only approximately 0.475 hectares of cultural woodland plus recommended buffers as a constraint to development on their site as significant woodland and habitat of the endangered White Wood Aster. The Scoped EIS included speculation of the occurrence of additional woodland north of the R.J. Burnside study area. The watercourse was determined to lack fish habitat and through headwater drainage feature assessment was determined not to be of management concern and was recommended to be fully enclosed.

Relevance of the R.J. Burnside EIS Findings to the 694 & 698 Niagara Street Site

The R.J. Burnside EIS findings were in some ways similar to the results of Myler’s assessment of potential natural heritage features at 694 and 698 Niagara Street:

- Conclusions regarding the watercourse were identical between the studies, leading in each case to a conclusion of the absence of fish habitat and a recommendation of enclosure.
- Both studies observed a local drainage divide between the eastern and western portions of the respective sites such that the rear yards of the existing homes are not connected with and do not drain to the western watercourse.
- R.J. Burnside found most of their site to be manicured residential vegetation similar to that observed by Myler across the entire 694 and 698 Niagara Street site.

However, R.J. Burnside’s findings and Myler’s observations of their respective sites also differed in several key fundamental elements:

- While R.J. Burnside observed two small polygons of cultural woodland and a small swamp wetland inclusion on their site, Myler observed only very small groups and linear hedgerows of trees within the manicured 694 and 698 Niagara Street site. The groups of trees on Myler's site were too small to be mapped as distinct vegetation communities.
- Myler's observations confirmed the absence of White Wood Aster on 694 and 698 Niagara Street.
- And while R.J. Burnside reported cultural woodland extending north of their site onto neighbouring lands, Myler's observations southward over the fence to 684 Niagara Street found that property to be entirely manicured at ground level and with an obviously low tree density, too low to qualify as woodland. Myler found that 684 Niagara Street separates the 694 and 698 Niagara Street site from R.J. Burnside's site and its protected cultural woodland area and the associated White Wood Aster occurrence with its manicured width of approximately 46 metres.

As such, the 694 and 698 Niagara Street site was found to differ from the neighbouring lands studied by R.J. Burnside in that it does not contain cultural woodland, wetland, SAR or any other natural heritage features, such that there are no natural heritage constraints to development on the site.

Further, the sites are separated by the approximately 46 metres width of the manicured 684 Niagara Street residential property. And while the western parts of both sites drain to the existing watercourse, the eastern or rear yard parts of the sites are not connected by drainage. As such that there is no need to consider recommending a buffer within the 694 and 698 Niagara Street site to protect the retained cultural woodland and its White Wood Aster on the R.J. Burnside site.

The Myler and R.J. Burnside findings are aligned regarding the watercourse and its management through enclosure.

Presence/Absence of Natural Heritage Features at the Site

Myler's study found no natural heritage features on or immediately adjacent to the 694 and 698 Niagara Street site.

The separation of the site from the natural heritage features identified and recommended for retention on the R.J. Burnside site by approximately 46 metres manicured width of 684 Niagara Street precludes consideration of a protective buffer extending onto the site.

Policy Conformity and Legislative Compliance

As no natural heritage features occur on the site, and the site is separated from the natural features identified on the R.J. Burnside site by approximately 46 metres, a distance greater than any required or recommended buffer width, the natural heritage policies of the City of Welland and Niagara Region Official Plans are neither triggered nor contravened by the proposed residential redevelopment of the site.

As Myler observed no SAR or SAR habitat on the site, residential redevelopment will comply with the provincial Endangered Species Act.

As the watercourse was determined by Myler and R.J. Burnside to lack direct fish habitat, its enclosure will not contravene the federal Fisheries Act.

Removal of vegetation to prepare the site for residential redevelopment will avoid contravention of the Migratory Birds Convention Act through seasonal avoidance of bird nesting season or through the completion of nest surveys to identify and protect active nests.

Vegetation Removal – Regional Woodland By-law Compliance

In consideration of the NPCA's updated ELC mapping's tentative application of wetland/woodland to portions of the site and adjacent properties, Myler's observations and assessment included determination of woodland presence/absence and the potential implications for Regional Woodland By-law compliance.

The NPCA ELC mapping appeared to indicate the potentially extensive occurrence of contiguous woodland throughout the neighbourhood and extending onto the site. However, Myler's observations during each of the site visits confirmed the occurrence of trees only in narrow boundary hedgerows less than 20 meters in width and in small groups of trees, with the largest being less than 0.13 hectares. Additionally, Myler observed isolation of the trees on the site from any woodland area that may occur elsewhere in the neighbourhood by the open, manicured condition of the neighbouring property at 684 Niagara Street.

The Regional Woodland By-law applies to woodlands having an area of one hectare or more. None of the small groups of trees on the site satisfies the one hectare minimum size criterion.

The Regional Woodland By-law can apply to smaller woodland areas, less than one hectare, where the local municipality has delegated such authority. That is not the case in the City of Welland.

As such, the Regional Woodland By-law does not apply to tree removal to prepare the site for residential redevelopment.

Conclusion and Recommendations

Based on site observations, on consultation with NPCA, and on review and consideration of the R.J. Burnside EIS that was prepared for nearby neighbourhood lands, Myler therefore concludes:

- Myler determined, and NPCA concurred and confirmed, the absence of NPCA-regulated wetland at the site.
- Myler determined the absence of natural heritage features at the site.
- Myler determined the absence of the suspected White Wood Aster SAR at the site.
- Myler observed a separation between the sites of approximately 46 metres of manicured neighbouring property that precludes consideration of a buffer extending onto the site from natural heritage features identified on the R.J. Burnside site.
- Myler determined through site observations, and with input from the UCC FSR and the proponent's architect, that the enclosure of the NPCA-regulated watercourse segment is both necessary to allow residential redevelopment of the site and able to be completed in accordance with NPCA policies. R.J. Burnside's EIS reported similar conclusions and recommendations for their portion of the watercourse.
- Myler determined through site observations and review of the Regional Woodland By-law that anticipated tree removal to allow residential redevelopment of the site is not subject to the Regional Woodland By-law.

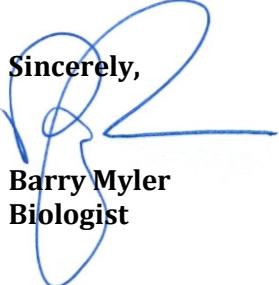
Recommended mitigation measures:

- Temporary erosion and sedimentation measures/strategies, including timing of the watercourse enclosure to avoid intermittent flow and work "in the dry" and standard construction-period erosion and sedimentation controls during site preparation and construction.
- No requirement for fish/wildlife salvage for the watercourse enclosure, as neither fish nor wildlife habitat occurs within the on-site segment.
- Seasonal timing of tree and shrub removal during the October – March period to avoid the local bird nesting season and active bat roosting season. Failing seasonal avoidance, tree and shrub

removal during the bird nesting season is recommended to be guided by the results of a nest survey completed by a qualified biologist.

I trust that the City (and NPCA) will find Myler's assessment and recommendations acceptable and will support initiation of site preparation activities and the proposed enclosure of the on-site segment of regulated watercourse to allow residential redevelopment of the site. I would be pleased to discuss further with the City (and NPCA) if required.

Sincerely,


Barry Myler
Biologist

Botanical Inventory - 1030 Niagara Street, Welland

Scientific Name	Common Name	Niagara Status NAI (2010)	SRANK																																																																
Trees																																																																			
<i>Acer negundo</i>	Manitoba Maple	Common (Native)	SE5																																																																
<i>Acer platanoides</i>	Norway Maple	Introduced (Common)	SE5																																																																
<i>Carya ovata</i>	Shagbark Hickory	Common (Native)	SE5																																																																
<i>Fraxinus pennsylvanica</i>	Red/Green Ash	Common (Native)	SE5																																																																
<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Honeylocust (thornless cultivar)																																																																		
<i>Malus pumila</i>	Apple	Introduced (Common)	SE5																																																																
<i>Picea pungens</i>	Colorado Spruce																																																																		
<i>Tilia americana</i>	Basswood	Common (Native)	SE5																																																																
<i>Ulmus americana</i>	American Elm	Common (Native)	SE5																																																																
Shrubs & Vines																																																																			
<i>Euonymus alata</i>	Winged Euonymus	Introduced (Rare)	SE2																																																																
<i>Juniperus chinensis</i>	Chinese Juniper																																																																		
<i>Lonicera tatarica</i>	Tartarian Honeysuckle	Introduced (Common)	SE5																																																																
<i>Rosa rubiginosa</i>	Sweetbrier	Introduced (Rare)	SE4																																																																
Herbaceous Plants																																																																			
<i>Calystegia sepium</i>	Hedge Bindweed	Common (Native)	SE5																																																																
<i>Daucus carota</i>	Wild Carrot	Introduced (Common)	SE5																																																																
<i>Geum canadense</i>	White Avens	Common (Native)	SE5																																																																
<i>Glechoma hederacea</i>	Creeping Charlie	Introduced (Common)	SE5																																																																
<i>Leersia oryzoides</i>	Rice Cut Grass	Common (Native)	SE5																																																																
<i>Lysimachia nummularia</i>	Moneywort	Introduced (Common)	SE5																																																																
<i>Oxalis stricta</i>	European Wood-sorrel	Common (Native)	SE5																																																																
<i>Poa pratensis</i> ssp. <i>Pratensis</i>	Kentucky Blue Grass	Introduced (Common)	SE5																																																																
<i>Solanum dulcamara</i>	Climbing Nightshade	Introduced (Common)	SE5																																																																
<i>Sonchus arvensis</i>	Perennial Sow Thistle	Introduced (Common)	SE5																																																																
<i>Sympetrum lanceolatum</i>	Panicled Aster	Common (Native)	SE5																																																																
<i>Taraxacum officinale</i>	Common Dandelion	Introduced (Common)	SE5																																																																
<i>Yucca filamentosa</i>	Yucca	Introduced (Rare)	SE1?																																																																
<table border="1"> <thead> <tr> <th>NIAG</th><th>definition</th><th>number</th><th>notes</th></tr> </thead> <tbody> <tr> <td>C</td><td>common (native)</td><td>279</td><td>16% (26% of native taxa)</td></tr> <tr> <td>U</td><td>uncommon (native)</td><td>190</td><td>11% (17% of native taxa)</td></tr> <tr> <td>R</td><td>rare (native)</td><td>439</td><td>26% (41% of native taxa)</td></tr> <tr> <td>RH</td><td>rare historic (native)</td><td>179</td><td>11% (16% of native taxa)</td></tr> <tr> <td></td><td>native (total)</td><td>1100</td><td>65%</td></tr> <tr> <td>IC</td><td>introduced (common)</td><td>107</td><td>6% (19% of introduced taxa)</td></tr> <tr> <td>IU</td><td>introduced (uncommon)</td><td>78</td><td>5% (14% of introduced taxa)</td></tr> <tr> <td>IR</td><td>introduced (rare)</td><td>313</td><td>18% (54% of introduced taxa)</td></tr> <tr> <td>IH</td><td>introduced (historic)</td><td>80</td><td>5% (14% of introduced taxa)</td></tr> <tr> <td>I</td><td>introduced (total)</td><td>587</td><td>35%</td></tr> <tr> <td>DD</td><td>data deficient (status undetermined)</td><td>13</td><td>1% (all native)</td></tr> <tr> <td>hyb</td><td>hybrid</td><td>18</td><td>1% (9 native, 9 introduced)</td></tr> <tr> <td></td><td>provincial conservation concern (S1, S2, S3, SH, SX) and native</td><td>172</td><td>10% (16% of native taxa)</td></tr> <tr> <td></td><td>Species At Risk (SAR) and native</td><td>24</td><td>1% (2% of native taxa)</td></tr> <tr> <td>total</td><td></td><td>1696</td><td></td></tr> </tbody> </table>				NIAG	definition	number	notes	C	common (native)	279	16% (26% of native taxa)	U	uncommon (native)	190	11% (17% of native taxa)	R	rare (native)	439	26% (41% of native taxa)	RH	rare historic (native)	179	11% (16% of native taxa)		native (total)	1100	65%	IC	introduced (common)	107	6% (19% of introduced taxa)	IU	introduced (uncommon)	78	5% (14% of introduced taxa)	IR	introduced (rare)	313	18% (54% of introduced taxa)	IH	introduced (historic)	80	5% (14% of introduced taxa)	I	introduced (total)	587	35%	DD	data deficient (status undetermined)	13	1% (all native)	hyb	hybrid	18	1% (9 native, 9 introduced)		provincial conservation concern (S1, S2, S3, SH, SX) and native	172	10% (16% of native taxa)		Species At Risk (SAR) and native	24	1% (2% of native taxa)	total		1696	
NIAG	definition	number	notes																																																																
C	common (native)	279	16% (26% of native taxa)																																																																
U	uncommon (native)	190	11% (17% of native taxa)																																																																
R	rare (native)	439	26% (41% of native taxa)																																																																
RH	rare historic (native)	179	11% (16% of native taxa)																																																																
	native (total)	1100	65%																																																																
IC	introduced (common)	107	6% (19% of introduced taxa)																																																																
IU	introduced (uncommon)	78	5% (14% of introduced taxa)																																																																
IR	introduced (rare)	313	18% (54% of introduced taxa)																																																																
IH	introduced (historic)	80	5% (14% of introduced taxa)																																																																
I	introduced (total)	587	35%																																																																
DD	data deficient (status undetermined)	13	1% (all native)																																																																
hyb	hybrid	18	1% (9 native, 9 introduced)																																																																
	provincial conservation concern (S1, S2, S3, SH, SX) and native	172	10% (16% of native taxa)																																																																
	Species At Risk (SAR) and native	24	1% (2% of native taxa)																																																																
total		1696																																																																	