

Appendix A

Natural Environment Assessment Report



Brookdale EA Natural Environment Assessment Report

Municipal Class Environmental Assessment

City of Cornwall

9 May 2024

Project name		Cornwall Brookdale Ave EA					
Document title		Brookdale EA Natural Environment Assessment Report Municipal Class Environmental Assessment					
Project number		12628280					
File name		RPT-05-09-2024 Brookdale EA Natural Environment Report-12628280					
Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
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1. Introduction

1.1 Purpose of this Report

The City of Cornwall initiated a Municipal Class Environmental Assessment (Class EA) Study to examine the need for improvements to Brookdale Avenue from Seventh Street Court to Fourteenth Street West (study area shown in **Figure 1**).

This Natural Environment Report provides a characterization and description of existing conditions within the immediate right-of-way (ROW) of Brookdale Avenue, or approximately 120 metres extending from the limit of the existing road (study area), including vegetation communities and flora, wildlife and wildlife habitat, aquatic habitat and fisheries, species of conservation concern, Species at Risk (SAR), and designated natural heritage features. Environmental constraints and opportunities are identified in this report.

1.2 Proposed Works

The proposed works include the possible replacement of the traffic circle at the intersection of Brookdale Avenue and Seventh Street West, as well as enhancements at key intersections such as those with Ninth Street West, Thirteenth Street West, and Fourteenth Street West. Additionally, the shared two-way left-turn lane between Ninth Street West and Thirteenth Street West on Brookdale Avenue is to be examined.

2. Legal Framework

2.1 Federal Legislation

2.1.1 Migratory Birds Convention Act

The purpose of the Migratory Birds Convention Act (MBCA 1994) is to implement the Convention by protecting and conserving migratory birds, as populations and individual birds, and their nests.

No work is permitted to proceed that would result in the destruction of active nests (i.e., nests with eggs or young birds), or the wounding or killing of bird species protected under the MBCA and/or Regulations under that Act.

2.1.2 Fisheries Act

Fish and fish habitat is protected under the Fisheries Act, which is managed by the Department of Fisheries and Oceans, Canada (DFO). The act and associated guidelines include protections for fish and fish habitat in the form of standards, codes of practice, and guidelines for projects in and near water. DFO works to provide guidance on how to avoid and mitigate impacts to fish and fish habitat and comply with the Fisheries Act to avoid causing the death of a fish or harmful alteration, disruption or destruction (HADD) of fish habitat from your work, undertaking or activity. In addition, the Act administers relevant provision of the Species at Risk Act.

2.1.3 Species at Risk Act

The *Species at Risk Act* (SARA) incorporates several prohibitions to protect individuals of listed threatened, endangered or extirpated SAR – as designated by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Per Section 34, Section 58 and Section 61, these prohibitions apply to aquatic species, migratory birds

protected by the MBCA, any listed wildlife species when on federal lands or any lands if recommended by the Minister of the Environment to the Governor in Council.

2.2 Provincial Legislation

2.2.1 Endangered Species Act, 2007

The purpose of the Ontario Endangered Species Act (ESA 2007) is to:

1. Identify species at risk based on the best available scientific information, including information obtained from community knowledge and aboriginal traditional knowledge.
2. Protect species that are at risk and their habitats and promote the recovery of species that are at risk.
3. Promote stewardship activities to assist in the protection and recovery of species that are at risk. 2007, c. 6, s. 1.

The ESA clearly defines the five classifications of species status as *extinct*, *extirpated*, *endangered*, *threatened*, or *special concern*, and provides guidelines on the process of species status determination.

General habitat protection is afforded to all species listed as endangered or threatened. General habitat descriptions are technical, science-based documents that have been developed for some of the species that are most likely to be affected by human activity. Further information including a Recovery Strategy or Management Plan is required for each listed species, on a timeline dictated by the species status.

2.2.2 Provincial Policy Statement

The Provincial Policy Statement (PPS) is issued under the authority of the *Planning Act*. It provides direction on matters of provincial interest related to land use planning and development and promotes the provincial planning system. The current PPS came into effect on May 1, 2020 and applies to planning decisions made on or after that date.

The PPS states that the province's natural heritage resources, water, agriculture lands, mineral resources, and cultural heritage and archaeological resources provide important environmental, economic and social benefits. The wise use and management of these resources over the long term is a key provincial interest. Through the PPS, the Province wants to ensure that its resources are managed in a sustainable manner to protect essential ecological processes and public health and safety, minimizing environmental and social impacts to meet long term needs.

Section 1.6.6 of the PPS notes that "Municipal sewage services and municipal water services are the preferred form of servicing for settlement areas to support protection of the environment and minimize potential risks to human health and safety. Within settlement areas with existing municipal sewage services and municipal water services, intensification and redevelopment shall be promoted wherever feasible to optimize the use of the services".

2.3 Local and Other Regulatory Bodies

2.3.1 City of Cornwall Official Plan (2018)

The City of Cornwall and Schedule '1' Land Use Plan designations, identifies most of the study area as Urban Residential, and a smaller area as Comprehensive Redevelopment Area. There are no land use designations for any environmental constraint areas within or adjacent to the study area.

Appendix Map A: Natural Heritage Features of the Official Plan, identifies a small woodland complex adjacent to the Seventh Street West and Brookdale Avenue traffic circle. The Official Plan does not detail any constraints or land use protections for woodlands not deemed significant. The presence of these woodlands was considered and assessed for the presence of Species at Risk, whose habitat would be protected under the ESA and SARA.

2.3.2 The United Counties of Stormont, Dundas and Glengarry Official Plan (2018)

The United Counties of Stormont, Dundas and Glengarry Official Plan Schedules B1 (Natural Hazards and Features), B2 (Significant Woodlands) and B3 (Natural Heritage Systems) identifies the study area to be within the City of Cornwall boundary, and therefore falls under the jurisdiction of the City of Cornwall Official Plan.

3. Approach

3.1 Study Area and Secondary Source Review

For the purposes of this report, the study area is defined as the area within 120m of Brookdale Avenue on the west and east side (**Figure 1**). Data from various sources (**Table 1**) was reviewed to assess the general character of the area, identify potential constraints and sensitivities, and assess the general connectivity of natural features in the study area.

Table 1 Secondary Source Review

Source	Information Reviewed
Ministry of Northern Development, Mines, Natural Resources and Forestry (MNRF)	Natural Heritage Information Centre (NHIC) mapping Aquatic Resources Area (ARA) Data
Ministry of Environment, Conservation and Parks (MECP)	Species at Risk (SAR) records from the NHIC database
Ontario Breeding Bird Atlas – 3rd Atlas	Breeding Bird Data for the study area
City of Cornwall Official Plan 2018	Applicable policies and schedules
United Counties of Stormont, Glengarry and Dundas Official Plan	Applicable policies and schedules
iNaturalist	Relevant flora and fauna observations Mammal observations
Cuddy, 1991	Check for records of rare plants species within the region
Ontario Reptile and Amphibian Atlas	Species records
Ontario Butterfly Atlas	Species records
eBird	Species records

3.2 Agency Consultation

3.2.1 Ministry of Northern Development, Mines, Natural Resources and Forestry

The Ministry of Northern Development, Mines, Natural Resources and Forestry (MNRF) Kemptville-Kingston District was consulted via email on March 11, 2024, to request available natural heritage information, aquatic records, and relevant wildlife records. An automatic reply was received on March 12, 2024, from the Kemptville-Kingston District MNRF. Agency correspondence records have been provided in **Appendix A**.

3.2.2 Ministry of Environment, Conservation and Parks

The Ministry of Environment, Conservation and Parks (MECP) was consulted via email on March 12, 2024, to request SAR records. A response was received on March 12, 2024, from the SAR Branch of MECP. MECP outlined that SAR records can be requested from the Natural Heritage Information Centre (NHIC). Agency correspondence records have been provided in **Appendix A**.

3.2.3 Raisin Region Conservation Authority

The Raisin Region Conservation Authority (RRCA) was consulted via email on March 12, 2024, to request available natural heritage information, aquatic records, and relevant wildlife records. A response was received on March 15, 2024, from Colin Herrewynen of RRCA. RRCA confirmed that based on their best available information, their review did not include any information beyond what GHD has gathered during our desktop background information screening. Agency correspondence records have been provided in **Appendix A**.

3.3 Field Survey Methods

3.3.1 Terrestrial Ecosystems

Community and land classification for the study area was completed using aerial photo interpretation and roadside field observations. In some cases where direct observations could not be made in the field due to obstructions or lack of access, communities were characterized based on air photo interpretation only.

Terrestrial field reconnaissance surveys were conducted on February 8, 2024 by a qualified GHD ecologist along the length of the study area, where property access was available. Data collection focused on assessing preliminary vegetation, wildlife habitat characteristics and assessments of potential SAR habitat. The terrestrial assessment involved:

- Describing the vegetation communities based on dominant canopy species, understory, ground layer composition, relative age and drainage conditions.
- Assessing the sensitivity and significance of vegetation communities to identify any potentially sensitive habitats or species assemblages including Significant Wildlife Habitat.
- Noting any specific features or functions, and assessing anticipated wildlife usage and potential habitat functions associated with the vegetation communities; cavity tree habitat in woodlands for SAR bat species.
- Inspection of structures in the ROW for evidence of nesting migratory bird species and bat habitat, including, chimney swift, and SAR bat species.
- Recording all observations and evidence of wildlife.

The vegetation assessment was conducted according to the Ecological Land Classification (ELC) system for southern Ontario (Lee et al. 1998; 2008). All natural and cultural vegetation communities within and adjacent to the study area were classified and mapped. Since entering private property was not permitted, communities were assessed from the edge of the ROW.

Habitat conditions and all observations and signs of wildlife were recorded, including browse, tracks or trails, scat, burrows, nests and vocalizations. In addition, habitat assessments were carried out to determine the potential presence for SAR.

Bat Habitat Assessment

A preliminary habitat assessment was undertaken in accordance with the Ministry of Natural Resources and Forestry Guelph District's 'Survey Protocol for Species at Risk Bats within Treed Habitats' guideline (2017). GHD completed field work to identify any potential habitat trees for SAR bat species in the study area.

Given the minimal forested ecosites on and adjacent to the study area, bat acoustic monitoring was not completed. The requirement for bat acoustic monitoring will be developed based on guidance from the MECP, and determined through detail design (i.e., limit of disturbance).

3.3.2 Significant Wildlife Habitat

Prior to site visits, a candidate list of Significant Wildlife Habitat (SWH) features were determined based on the Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E, 2015. During site visits, GHD biologists looked for evidence of those candidate significant wildlife habitat features (i.e., to determine presence/absence). Upon compiling field data, further consideration was given to which candidate SWHs could be or are confirmed as present on the property.

4. Existing Conditions

The study area is an urbanized area dominated by residential and commercial land use with some areas of green space. The study area is from Fifteenth Street West to the north and Fifth Street West to the south with 120 meters on each side of Brookdale Avenue. A small woodland (ELC Code: FOD7-2 – Fresh-Moist Ash Lowland Deciduous Forest) is adjacent to the east approach of the Seventh Street West traffic circle (**Figure 1**).

These features and the results of field surveys undertaken to date are discussed in further detail below.

4.1 Designated Natural Heritage Features

There are no Environmentally Significant Areas (ESAs), provincially or locally significant wetlands (PSWs or LSWs), ANSI's, or other natural heritage features present within or near the study area.

4.2 Vegetation Communities and Woodland

Vegetation communities were assessed from a desktop analysis and confirmed in the field.

The existing ROW lands are primarily occupied by sidewalks, manicured lawns and associated housing or greenlands, and residential and commercial driveways (**Figures 2 and 3**). These cultural communities are labeled as CGL (Greenlands), CVC (Commercial and Institutional) and CVR (Residential). Vegetation in these areas was typical of urbanized and environments with largely non-native species and planted ornamental trees and shrubs. Some of the trees identified in this area included: red pine (*Pinus rubus*), eastern white pine (*Pinus strobus*), white spruce (*Picea glauca*), white birch (*Betula papyrifera*), and Norway maple (*Acer platanoides*). No regionally rare or SAR vegetation species were identified in these areas.

A small woodland classified as FOD7-2 is identified east of the Seventh Street West traffic circle east approach (**Figure 4**). The woodland was dominated by green ash (*Fraxinus pensylvanica*) in poor health, with most trees dead and in stages of decay (Decay codes: 3-6). The understory was largely European buckthorn (*Rhamnus cathartica*), and Tartarian honeysuckle (*Lonicera tatarica*). Chokecherry (*Prunus virginiana*), wild grape (*Vitis riparia*), aster spp (*Symphyotrichum spp*), and Queen Anne's lace (*Daucus carota*) were also noted. No regionally rare or SAR

vegetation species were identified in this area. A narrow ditch adjacent to the traffic circle east approach contained dense common reed (*Phragmites australis*). A list of all vegetation encountered is provided in **Appendix B**.

When applying the Ministry of Natural Resources and Forestry's Natural Heritage Reference Manual (2005) and the criteria for Significant Woodlands to the woodland, it is found that the area does not likely meet Provincial definitions of Significant Woodland as per the Natural Heritage Reference Manual.

4.3 Wildlife and Wildlife Habitat

Wildlife habitat was identified using desktop applications and confirmed during the field visit.

Wildlife and signs of wildlife activity during the terrestrial habitat surveys were recorded, including scat, tracks, animal trails, signs (nests, middens, tunnels, nip twigs, dens, browse, digs, lays, beds, marking trees, etc.), and any animal remains.

4.3.1 Birds

Very few birds were observed during field surveys, likely owing to the time of year and the highly urbanized environment. The only bird species identified was American crow (*Corvus brachyrhynchos*), which was found to be roosting in a tree in the FOD7-2 woodland community.

4.3.2 Mammals

The study area is likely to be host to many urbanized mammals and may support habitats for: raccoons (*Procyon lotor*) and striped skunks (*Mephitis mephitis*), eastern chipmunk (*Tamias striatus*), groundhog (*Marmota monax*) red squirrel (*Tamiasciurus hudsonicus*), eastern gray squirrel (*Sciurus carolinensis*) and several small mammals that often go undetected (for example shrews, voles, mice, bats).

4.3.3 Herpetofauna

No herpetofauna or herpetofauna habitat were identified by GHD. The ditch adjacent to the FOD7-2 community did not present ideal amphibian habitat due to being highly dominated by invasive common reed; limiting the ability for standing water to harbour amphibian breeding and viable egg retention. The ditch and its location next to a busy intersection would present high mortality rates and act as a population sink for any amphibian population.

The amphibians square, which covers a 10km by 10km square including the Site. Within the last ten years, three species of turtles, three species of snakes, eight species of frogs, one species of toad, one species of salamander have been identified in this square. These sightings are likely associated with features outside of the direct study area due to the highly urbanized setting. No herpetofauna or herpetofauna habitat were seen by GHD during the site visit due to the time of year.

4.4 Species at Risk

Prior to conducting field surveys, a screening of SAR with potential to be present within the study area was completed. The term SAR is used to encompass species that are listed as endangered, threatened, or special concern under the ESA or SARA. Only species and their habitats listed as threatened and endangered receive protection under the ESA. Special Concern species may be protected under other policy instruments such as significant wildlife habitat under the Provincial Policy Statement. Apart from migratory birds and aquatic species, SARA generally does not apply on non-federal lands.

SAR species are categorized with the following definitions as per the ESA:

- SC Special Concern
- THR Threatened

- END Endangered
- EXP Extirpated

GHD did not identify any SAR species during the study area investigation. However, background investigations looking at recent SAR records for the area identified several records of SAR fauna. We have provided these records in the following sections.

Bat Habitat Assessment

Habitat for potential SAR bats was limited to the woodland adjacent to the east approach of the Seventh Street West traffic circle. The woodland contained potential snag and cavity trees for bats, given that most, if not all, of the present trees are dead or dying. Potential SAR bats in the study area that make use of dead or dying trees for roosting and rearing young, include: little brown myotis (*Myotis lucifugus*) (END) and northern myotis (*Myotis septentrionalis*) (END).

SAR birds

The Ontario Breeding Bird Atlas (2nd Atlas) documented nine (9) species that were identified to be SAR in Ontario which is a 10 km by 10 km atlas square (18WQ18) that encompasses the study area. The records include: bank swallow (*Riparia riparia*) (THR), barn swallow (*Hirundo rustica*) (SC), bobolink (*Dolichonyx oryzivorus*) (THR), chimney swift (*Chaetura pelagica*) (THR), common nighthawk (*Chordeiles minor*) (THR), eastern meadowlark (*Sturnella magna*) (THR), wood thrush (*Hylocichla mustalina*) (THR), least bittern (*Ixobrychus exilis*) (THR) and, eastern wood-pewee (*Contopus virens*) (SC).

Breeding habitat for these species was not identified within the study area. Foraging habitat for the chimney swift and common nighthawk may exist over the general area.

SAR herpetofauna

The Ontario Reptile and Amphibian Atlas documents several species within the 10km-by-10km atlas square (18WQ18), however most of these records are likely associated with natural areas outside of the study area. Five (5) species recorded in the atlas are SAR and include: Blanding's turtle (*Emydoidea blandingii*) (END) northern map turtle (*Graptemys geographica*) (SC), snapping turtle (*Chelydra serpentina*) (SC), and the eastern musk turtle (*Sternotherus odoratus*) (SC). While roadsides are commonly used by many turtle species for egg laying, this study area poses too much traffic and no substantial waterbodies to attract turtles and maintain turtle populations.

4.5 Significant Wildlife Habitat

Field surveys did not confirm any SWH in the study area.

A screening and site assessment for Significant Wildlife Habitat was conducted using the criteria for ecoregion 6E (MNRF 2015). On-site investigation identified 1 candidate SWH habitat type; Bat Maternity Colonies. The FOD7-2 community within the south study area may provide habitat for roosting bats. To be confirmed as SWH, a total of 10 big brown bats and/pr 5 adult female silver-haired bats must be identified. Trees in the forest stand must also be mature, with >10 large diameter trees (>25cm dbh) per hectare. Trees must also be in the early stages of decay. Given that the most trees in the woodlot were not large diameter trees (ranging from 5-25cm dbh) and that the woodlot was less than 1 hectare in size (0.28 ha), the likelihood of SWH is very low.

5. Impact Assessment and Recommendations

The following section provides a description of the predicted impacts that may result from the proposed development. It also identifies mitigation measures to be implemented to avoid and/or minimize adverse effects to the natural environment features within or near the project.

5.1 Vegetation and Woodlands

Impacts to vegetation will include removal of trees to facilitate development and construction. No tree clearing should take place during the active period for bats from May 1 through September 30 (as directed by MECP guidelines), and no clearing should occur during the active nesting season for birds from April 1 to August 31st. Should clearing be required within these time periods, a qualified biologist should inspect the areas to be cleared prior to clearing to ensure no birds or bats will be harmed to remain compliant with MECP policy and the MBCA.

Temporary sediment erosion control (SEC) measures will be installed prior to construction and maintained throughout construction until restoration is complete and disturbed areas are stabilized against erosion. SEC measures will be routinely inspected, including following storms, and repaired, as required.

Exposed surfaces will be restabilized and revegetated with native plant species as soon as possible following disturbance. Appropriate vegetation clearing techniques are to be used (e.g., felling trees away from retained natural areas and watercourses, removal outside of sensitive timing windows).

Equipment maintenance and refueling will be conducted at the designated and properly contained maintenance areas located well away from creek banks and wetlands and outside retained vegetation areas. The Contractor must have a Spills Prevention Plan and required materials in the study area at all times in accordance with the Ontario Provincial Standards Specification (OPSS) 100.

Environmental inspections should be conducted during construction to review implemented mitigation measures, assess the need for maintenance and ensure remedial measures are initiated in a timely manner where warranted.

5.2 Wildlife

Potential impacts to wildlife include the potential loss of habitat in the identified woodlands. The general mitigation measures outlined above propose to minimize effects to vegetation and protect adjacent vegetation areas, which will also protect the associated wildlife habitat functions. However, it is also necessary to ensure the protection of breeding birds, other wildlife that may nest or otherwise use areas where construction is proposed (the proposed route options). The following general mitigation measures are proposed:

- Implement timing windows to avoid works during sensitive wildlife life stages.
- No vegetation clearing will occur during the breeding bird period from April 1 to August 31. Birds may also nest outside of this time frame, and the proponent is responsible for ensuring compliance with the requirements of the *Migratory Birds Convention Act* (MBCA).
- No tree clearing should take place during the active period for bats from April 1 through September 30, as indicated by MECP for southern Ontario. This recommendation is especially pertinent for the FOD7-2 woodlands which have the possibility to house SAR bats.
- Where clearing cannot be avoided during the breeding bird period, nest searches of any vegetation to be cleared must be conducted by an avian specialist in advance of clearing activities during the breeding bird window. If active nests are identified, the specialist will provide recommendations to maintain compliance with the MBCA and identify an appropriate protection area around the nest, if applicable. Clearing activities may proceed outside of this protection area and as per any additional recommendations by the avian specialist.
- Installation of exclusion fencing is recommended to minimize wildlife movement into the construction area, particularly when works must occur during wildlife active seasons. Ecologists should be consulted as design and footprint details become known to advise on the use of timing windows and exclusion fencing.
- Prior to works starting each day, a sweep of the construction area will be completed to ensure no wildlife has entered the work area. All equipment will be inspected daily before operating to make sure wildlife are not using equipment for shelter.
- If a nest or a bird in the process of constructing a nest is observed, all work shall be stopped to not disrupt the nesting bird and may resume after the fledglings vacate the nest. If an empty nest is observed, a qualified ecologist may be called on site to determine if the nest is being occupied and if works can resume.

- All persons with any on site role shall be provided information/trained on:
 - The SAR present in the vicinity of the work area, what these species are, what these species look like and how to distinguish these from other species potentially found in the vicinity.
 - General SAR awareness training including the need to avoid SAR found on site.
 - Fiber based biodegradable Erosion Control Blankets/Mats are to be utilized, should they be required.

5.3 Site Restoration

All disturbed natural surfaces and regraded surfaces should be promptly stabilized upon completion of the proposed works. This includes the placement of topsoil, application of a suitable seed mix or re-planting of damaged/removed native species and, where warranted, the installation of biodegradable erosion control blankets.

5.4 Summary of Features and Potential Constraints

All disturbed natural surfaces and regraded surfaces should be promptly stabilized upon completion of the proposed works. This includes the placement of topsoil, application of a suitable seed mix or re-planting of damaged/removed native species and, where warranted, the installation of biodegradable erosion control blankets. A summary of impacts to the identified natural features and mitigation measures is provided in **Table 2**.

Table 2 Impact Assessment and Recommendation Summary

Feature or Function	Impact to Feature or Function	Mitigation
Woodlands and Vegetation	Loss of trees and vegetation within ROW and FOD7-2 Erosion and sediment loading into ROW lands, loss of vegetation.	<ul style="list-style-type: none"> – No removal of trees and other vegetation within the breeding bird timing window (April 1 – August -31). – No removal of trees and other vegetation within the active bat timing window (April 1 – September 30). – If removal must occur within the timing window, a qualified biologist must conduct a nest search to ensure no nesting birds will be disturbed or destroyed, and that all cavity trees to be removed (FOD7-2) are not housing bats. – Establish sediment erosion control (SEC) measures prior to construction and maintain and upkeep SEC installations during and after construction until soils are stabilized and re-vegetated with appropriate plantings and/or seed-mixes.
Potential SAR Bats	Potential loss of bat maternity roost and refuge trees	<ul style="list-style-type: none"> – See mitigation for woodlands and vegetation. – if bats are identified, permitting with ESA would be required.
Breeding Birds	Potential disruption and loss of breeding bird habitat.	<ul style="list-style-type: none"> – See mitigation for woodlands and vegetation

6. Conclusion

This Natural Environmental Assessment Report has been prepared as part of the Municipal Class Environmental Assessment for road improvements in the City of Cornwall. Field investigations were undertaken to confirm and describe the natural environment features present within the study area in respect to existing terrestrial habitat. Where significant features and potential constraints have been identified mitigation measures have been proposed.

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- Oldham, M.J. 1993. Distribution and Status of the Vascular Plants of Southwestern Ontario. Draft. Ontario Ministry of Natural Resources, Aylmer District, Aylmer. xix + 150 pages.
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- The United Counties of Stormont, Dundas and Glengarry. Official Plan. 2018.

Appendices

Appendix A1

Agency Correspondence

From: [Species at Risk \(MECP\)](#)
To: [Keenan Shelly](#)
Cc: [Candice Talbot](#); [Chris Ellingwood](#)
Subject: RE: Background Information Request - Cornwall
Date: Tuesday, March 12, 2024 11:53:22 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[Client Guide to Preliminary Screening.pdf](#)

Some people who received this message don't often get email from sarontario@ontario.ca. [Learn why this is important](#)

Hello Keenan,

To request records on the presence of Species at Risk in your area you will need to contact the [Natural Heritage Information Center](#) at NHICrequests@ontario.ca. If you have contacted NHIC and have identified SAR in the area, and you will be conducting work that will impact SAR, I strongly suggest filling out an IGF and submitting it to us so that we can determine if you need a permit, or if we need to send you a letter of confirmation that you will not be contravening the ESA. I have pasted some information below related to Species at Risk permitting. Let me know if you have any further questions.

Thank you for your submission to the Ministry of the Environment, Conservation and Parks (MECP) about species at risk (SAR).

MECP is responsible for the administration of the *Endangered Species Act, 2007* (ESA) ([Endangered Species Act, 2007, S.O. 2007, c. 6 \(ontario.ca\)](#)). The ESA provides for the protection and recovery of species on the Species at Risk in Ontario (SARO) List ([O. Reg. 230/08: SPECIES AT RISK IN ONTARIO LIST](#)). The ESA includes prohibitions against killing, harming, harassing, capturing or taking a living member of a species listed as extirpated, endangered, or threatened on the SARO List (section 9) and against damaging or destroying the habitat of a species listed as endangered or threatened on the SARO List (section 10), without an exemption or authorization.

Seeking an ESA authorization or exemption is a proponent-led process. **This means that the person carrying out an activity is responsible for determining whether SAR and their habitat are present on or around the site of the activity, and ultimately ensuring their actions do not contravene the ESA.**

For information about assessing which SAR may be present on or in the area of your site, please refer to the MECP's draft "Client's Guide to Screening for Species at Risk" (attached).

You may proceed with the screening on your own or you may wish to consider hiring a qualified professional to perform a screening on your behalf. MECP recommends that the services of a professional environmental consultant be retained to assist in the completion of a screening, field assessments and surveys. An environmental consultant will be able to provide advice and direction on the type of surveys that should be performed and will be able to interpret the results of any surveys carried out.

If after carrying out a thorough SAR screening, including any field assessments and surveys that might be necessary, there is **no evidence of SAR or SAR habitat located on or adjacent to the site of your activity** and your activity will therefore not cause any prohibited impacts, an exemption or authorization under the ESA would not be necessary to proceed. The ministry strongly recommends that you document your SAR screening and assessment and rationale for avoiding prohibited impacts for future reference if needed. Proponents are responsible for ensuring their actions do not contravene the ESA.

If there IS evidence of species a risk and/or habitat on or around the location of your activity, the ministry recommends that you carry out the work necessary to prepare an Information Gathering Form (IGF). This includes consideration of all the elements in your SAR screening data collection and further levels of assessment of impacts and potential to minimize adverse effects.

After considering all the data and information in the IGF, if you have determined that the activity can be carried out in such a way that you **WILL NOT** have adverse impacts prohibited by sections 9 and/or 10 of the ESA, an exemption or authorization under the ESA would not be necessary to proceed if the activity is carried out in that way. Again, proponents are responsible for ensuring their actions do not contravene the ESA.

If after considering all the data and information in the IGF you have determined that the proposed activities **COULD POTENTIALLY** have adverse impacts prohibited by sections 9 and/or 10 of the ESA, an exemption or authorization may likely be required before you proceed. If there is no applicable exemption in regulations under the ESA, submit the IGF to the ministry at SAROntario@ontario.ca to seek a permit or agreement. Please visit [How to get an Endangered Species Act permit or authorization | ontario.ca](#) to obtain information on how to get an ESA permit or authorization.

Please consider in your project planning that it takes an average of 12-15 months from the submission of a complete IGF to a decision about a permit, if one is needed. This considers the time required to conduct the technical review of the application as well as to carry out public and Indigenous consultation, along with factors such as project complexity, seasonal nature of field survey and data collection required, volume of applications and quality of submissions. It is recommended that proponents submit a complete IGF well in advance of the activity's proposed start date. Failure to submit a complete and accurate IGF with supporting rationale and not allowing adequate time for review and the issuance of any required authorizations could result in delays to the activity's anticipated start date.

Thank you,

Species at Risk Branch

From: Keenan Shelly <Keenan.Shelly@ghd.com>

Sent: March 12, 2024 8:09 AM

To: Species at Risk (MECP) <SAROntario@ontario.ca>

Cc: Candice Talbot <Candice.Talbot@ghd.com>; Chris Ellingwood <Chris.Ellingwood@ghd.com>

Subject: Background Information Request - Cornwall

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

Good morning,

GHD has been retained by the United Counties of Stormont, Dundas, and Glengarry to conduct a Municipal Class EA. As such, GHD would like to request the following background information, if available, from the MECP to ensure our data is complete. The project area is in Cornwall, Ontario, on Brookdale Avenue from Seventh Street turning circle to Fourteenth Street, as shown in the attached map. Through our background review process, we will also be contacting the Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF) and Raisin Region Conservation Authority (RRCA).

Through an initial review of NHIC, LIO, and other databases, we have identified records for the following SAR within the vicinity of our study area:

Amphibians

Western chorus frog - Great Lakes St. Lawrence/Canadian Shield Population

Insects

Monarch

Birds

Bank swallow
Barn swallow
Bobolink
Chimney swift
Common nighthawk
Eastern meadowlark
Eastern wood-pewee
Least bittern
Wood thrush
Common gallinule

Mammals

Eastern small-footed myotis
Little brown myotis
Tri-colored bat
Northern myotis

Reptiles

Blanding's turtle - Great Lakes/St. Lawrence population
Midland Painted Turtle
Northern map turtle
Snapping turtle
Eastern musk turtle

We are seeking any additional information regarding SAR data, and any other data you feel is valuable for this assessment.

Please let me know if you have any questions or require any further information. We look forward to your response to our request.

Thanks,

Keenan Shelly (he/him)
B.Sc. (EnvSci), MES
Graduate Ecologist

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From: [Kemptville-Kingston MNRF](#)
To: [Keenan Shelly](#)
Subject: Automatic reply: Background Information Request - Cornwall (NDMNRF)
Date: Tuesday, March 12, 2024 8:19:30 AM

Thank you for your request. / Merci pour votre demande. (le français suit)

This email inbox is being monitored regularly to ensure we provide responsive customer service. In accordance with our service standards, you will receive a reply from the staff member assigned to your file within 15 business days.

- Are you looking for more information on ministry programs and services?
 - Access the Natural Resources Information Portal at [NRIP Portal](#) to learn more about Fish & Wildlife, Lands and Water, Aggregates, Forestry and Petroleum and to apply for permits, licences or complete program submissions.
 - Visit our [Crown Land Use Policy Atlas](#) map to locate Crown land and check for permitted activities
 - Use [Topographic maps | ontario.ca](#) to make a topographic map for your next outdoor adventure or to support your work permit application or visit [Geohub](#) access Ontario's geospatial data.

If you have any further questions, please contact Kemptville-Kingston.MNRF@ontario.ca

Sincerely,

Kemptville - Kingston District
Ontario Ministry of Natural Resources and Forestry
Kemptville-Kingston.MNRF@ontario.ca

-

Help Protect Our Natural Resources – To report natural resource abuse call the TIPS Reporting line at 1-877-847-7667

As part of providing [accessible customer service](#), please let us know if you have any accommodation needs or require communication supports or alternate formats.

Cette boîte de réception courriel est surveillé de façon régulière afin d'assurer un bon service à la clientèle. Conformément à nos normes de service, vous allez recevoir une réponse d'un membre de notre personnel assigné à votre dossier dans un délai

de 15 jours ouvrables.

- Cherchez-vous plus d'informations sur les programmes et services offerts par notre ministère?
 - Veuillez accéder au Portail d'information sur les ressources naturelles au [Portail PIRN](#) pour en apprendre davantage sur poisson et faune, terres de la Couronne, agrégats, foresterie et pétrole, et pour faire demande pour des permis ou des soumissions complètes à un de nos programmes.
 - Veuillez visiter la carte de notre [Atlas et politiques d'aménagement des terres de la Couronne](#) afin de localiser des terres de la Couronne et de vérifier les activités permises
 - Veuillez utiliser [Cartes topographiques – ontario.ca](#) pour créer une carte topographique pour votre prochaine aventure plein air ou pour appuyer votre demande de permis ou veuillez visiter [CarrefourGéo](#) pour accéder aux données géospatiales de l'Ontario.

Si vous avez d'autres questions, veuillez contacter Kemptville-Kingston.MNRF@ontario.ca

Sincèrement,

District de Kemptville-Kingston

Ministère des Richesses naturelles et des Forêts de l'Ontario
Kemptville-Kingston.MNRF@ontario.ca

-

-

Aidez-nous à protéger nos ressources naturelles – Pour signaler l'abus des ressources naturelles, téléphonez à la ligne de signalement du MRNF au 1-877-847-7667

Dans le cadre de la prestation d'un [service à la clientèle accessible](#), veuillez nous aviser si vous avez besoin d'un aménagement particulier, de soutien à la communication ou de supports de substitution.

From: [Colin Herrewynen](#)
To: [Keenan Shelly](#)
Cc: [Candice Talbot](#); [Chris Ellingwood](#)
Subject: RE: Background Information Request - Cornwall (RRCA)
Date: Friday, March 15, 2024 3:56:20 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Good Afternoon Keenan,

Thank you for reaching out.

That part of Cornwall has been built up for a very long time.

I'm sorry to say that looking in our system we don't have any EIS reports / etc for developments in the study area identified.

I don't believe we also would have any info to add either at this time.

Hopefully the MNRF or MECP has more info to aid you in the study research.

Best Regards,

Colin Herrewynen, RPP, MCIP.
Watershed Planner
Raisin Region Conservation Authority
613-938-3611 x 232 www.rrca.on.ca

From: Keenan Shelly <Keenan.Shelly@ghd.com>
Sent: Tuesday, March 12, 2024 9:23 AM
To: Colin Herrewynen <Colin.Herrewynen@rrca.on.ca>
Cc: Candice Talbot <Candice.Talbot@ghd.com>; Chris Ellingwood <Chris.Ellingwood@ghd.com>
Subject: Background Information Request - Cornwall (RRCA)

Good morning Colin,

GHD has been retained by the United Counties of Stormont, Dundas, and Glengarry to conduct a Municipal Class EA. As such, GHD would like to request any available background information from the Raisin Region Conservation Authority (RRCA) to assist in this effort, if available. The project area is in Cornwall, Ontario, on Brookdale Avenue from Seventh Street turning circle to Fourteenth Street, as shown in the attached map. In fulfillment of this work, GHD is contacting the NDMNRF, the MECP, and the RRCA to ensure our data is complete.

Below is a summary of the natural heritage information reviewed through NHIC, LIO, and other databases:

No Natural Areas, no Greenbelt designation, no Wildlife Values, no Wildlife Concentration Areas.

SAR

Amphibians

Western chorus frog - Great Lakes St. Lawrence/Canadian Shield Population

Insects

Monarch

Birds

Bank swallow
Barn swallow
Bobolink
Chimney swift
Common nighthawk
Eastern meadowlark
Eastern wood-pewee
Least bittern
Wood thrush
Common gallinule

Mammals

Eastern small-footed myotis
Little brown myotis
Tri-colored bat
Northern myotis

Reptiles

Blanding's turtle - Great Lakes/St. Lawrence population
Midland Painted Turtle
Northern map turtle
Snapping turtle
Eastern musk turtle

We are seeking additional information such as:

- Ecological Land Classification data (if separate from GIS layers)
- Flora and fauna species
- Any reports/previous ecological studies completed within and in the vicinity of the study area

Please let us know if you have any questions or require any further information. We look forward to your response to our request.

Keenan Shelly (he/him)

B.Sc. (EnvSci), MES

Graduate Ecologist

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Appendix A2

Plant Species List

Appendix B Plant Distribution

By Community

Families and genera for the plant species found in this appendix are listed in taxonomic order. The species are listed alphabetically within each genus.

Three standard reference works were used for the botanical nomenclature and taxonomy (Newmaster et. al., 1998; Gleason and Cronquist 1991; Voss 1980; 1985). Other published works for botanical names included; ferns (Cody and Britton 1989); grasses (Dore and McNeill 1980); orchids (Whiting and Catling 1986); shrubs (Soper and Heimburger 1982) and trees (Farrar 1995).

Community 1

ComID: 5564

ELC Code: ROW general

Common Name	Scientific Name	Remarks
PINE FAMILY	PINACEAE	
white spruce	<i>Picea glauca</i>	
red pine	<i>Pinus resinosa</i>	
BUCKWHEAT FAMILY	POLYGONACEAE	
curled dock	<i>Rumex crispus</i>	
PEA FAMILY	FABACEAE	
black medick	<i>Medicago lupulina</i>	
BUCKTHORN FAMILY	RHAMNACEAE	
European buckthorn	<i>Rhamnus cathartica</i>	
GRAPE FAMILY	VITACEAE	
Virginia creeper	<i>Parthenocissus inserta</i>	
wild grape	<i>Vitis riparia</i>	
MAPLE FAMILY	ACERACEAE	
Manitoba maple	<i>Acer negundo</i>	
Norway maple	<i>Acer platanoides</i>	
CASHEW FAMILY	ANACARDIACEAE	
staghorn sumac	<i>Rhus typhina</i>	
CARROT FAMILY	APIACEAE	
Queen-Anne's lace	<i>Daucus carota</i>	
NIGHTSHADE FAMILY	SOLANACEAE	
bitter nightshade	<i>Solanum dulcamara</i>	
MINT FAMILY	LAMIACEAE	
heal-all	<i>Prunella vulgaris ssp. Lanceolata</i>	
OLIVE FAMILY	OLEACEAE	
green ash	<i>Fraxinus pennsylvanica var. subinteg</i>	

ASTER FAMILY	ASTERACEAE	
common burdock	<i>Arctium minus</i>	
chicory	<i>Cichorium intybus</i>	
New England aster	<i>Symphotrichum novae-angliae</i>	
GRASS FAMILY	POACEAE	
awnless brome grass	<i>Bromus inermis ssp.inermis</i>	
orchard grass	<i>Dactylis glomerata</i>	
Kentucky blue grass	<i>Poa pratensis</i>	

Plant Species Per Community 20

Community 2

ComID: 5565

ELC Code: FOD7-2

Common Name	Scientific Name	Remarks
BEECH FAMILY	FAGACEAE	
white oak	<i>Quercus alba</i>	
bur oak	<i>Quercus macrocarpa</i>	
ROSE FAMILY	ROSACEAE	
apple	<i>Malus domestica</i>	
choke cherry	<i>Prunus virginiana</i>	
BUCKTHORN FAMILY	RHAMNACEAE	
European buckthorn	<i>Rhamnus cathartica</i>	90% understory
GRAPE FAMILY	VITACEAE	
wild grape	<i>Vitis riparia</i>	
CASHEW FAMILY	ANACARDIACEAE	
staghorn sumac	<i>Rhus typhina</i>	
RUE FAMILY	RUTACEAE	
prickly ash	<i>Zanthoxylum americanum</i>	
CARROT FAMILY	APIACEAE	
Queen-Anne's lace	<i>Daucus carota</i>	
OLIVE FAMILY	OLEACEAE	
green ash	<i>Fraxinus pennsylvanica var. subinteg</i>	90% cover, dead/dying
HONEYSUCKLE FAMILY	CAPRIFOLIACEAE	
tartarian honeysuckle	<i>Lonicera tatarica</i>	10% understory
ASTER FAMILY	ASTERACEAE	
aster species	<i>Aster spp.</i>	
chicory	<i>Cichorium intybus</i>	
GRASS FAMILY	POACEAE	
common reed	<i>Phragmites australis</i>	ditch

Plant Species Per Community 14

Total Number of Plant Species 28

