



THE REGIONAL MUNICIPALITY OF NIAGARA  
PLANNING & ECONOMIC DEVELOPMENT COMMITTEE  
AGENDA

PEDC 1-2025

Wednesday, February 5, 2025

1:00 p.m.

Council Chamber - In Person and Electronic Meeting

Niagara Region Headquarters, Campbell West

1815 Sir Isaac Brock Way, Thorold, ON

To view live stream meeting proceedings, visit: [niagararegion.ca/government/council](http://niagararegion.ca/government/council)

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Pages

1. CALL TO ORDER
2. LAND ACKNOWLEDGEMENT STATEMENT
3. DISCLOSURES OF PECUNIARY INTEREST
4. SELECTION OF COMMITTEE CHAIR AND VICE-CHAIR
  - 4.1 Call for Nominations for Committee Chair
  - 4.2 Motion to Close Nominations for Committee Chair
  - 4.3 Voting for the Position of Committee Chair
  - 4.4 Call for Nominations for Committee Vice-Chair
  - 4.5 Motion to Close Nominations for Committee Vice-Chair
  - 4.6 Voting for the Position of Committee Vice-Chair
5. PRESENTATIONS
6. DELEGATIONS

**7. ITEMS FOR CONSIDERATION**

- 7.1 PDS-C 3-2025 3 - 58  
Recommendation for Consideration from the Agricultural Policy and Action Committee held on November 29, 2024

**8. CONSENT ITEMS FOR INFORMATION**

- 8.1 PDS 2-2025 59 - 89  
2024 Niagara Employment Inventory Results

A presentation will precede the discussion of this item.

- 8.2 ED 2-2025 90 - 102  
Economic Development Foreign Direct Investment (FDi) Update

A presentation will precede the discussion of this item.

- 8.3 PDS-C 1-2025 103 - 298  
Regional Environmental Impact Study Guidelines

- 8.4 ED 1-2025 299 - 306  
Economic Development Update Q3 and Q4

**9. OTHER BUSINESS**

**10. NEXT MEETING**

The next meeting will be held on Wednesday, March 5, 2025, at 1:00 p.m. in the Council Chamber, Regional Headquarters.

**11. ADJOURNMENT**

If you require any accommodations for a disability in order to attend or participate in meetings or events, please contact the Accessibility Advisor at 905-980-6000 ext. 3252 (office), 289-929-8376 (cellphone) or [accessibility@niagararegion.ca](mailto:accessibility@niagararegion.ca) (email).

## **Memorandum**

**PDS-C 3-2025**

**Subject:** Recommendation for Consideration from the Agricultural Policy and Action Committee held on November 29, 2024

**Date:** February 5, 2025

**To:** Planning and Economic Development Committee

**From:** Ann-Marie Norio, Regional Clerk

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At its meeting held November 29, 2024, the Agricultural Policy and Action Committee passed the following motion for consideration by the Planning and Economic Development Committee:

### **Minute Item 4.2**

#### **Presentation**

#### **Protecting the Health and Safety of Niagara's International Agricultural Workers (IAWs): The Role of Health Inspectors**

That the Agricultural Policy and Action Committee **REQUEST** that Regional Council support requesting the Regional Chair sending a letter to the Province and Agriculture and Agri-Food Canada for funding to support additional full-time Public Health Inspectors.

The minutes and agenda items from the Agricultural Policy and Action Committee meeting held November 29, 2024, are attached to this memorandum.

Respectfully submitted and signed by

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Ann-Marie Norio  
Regional Clerk

**THE REGIONAL MUNICIPALITY OF NIAGARA  
AGRICULTURAL POLICY & ACTION COMMITTEE  
MINUTES**

**APAC 2-2024**

**Friday, November 29, 2024**

**Meeting will be held by electronic participation only**

Committee: Councillors Bateman, Bradley (Regional Chair), Kaiser, Seaborn, Steele, Witteveen (Committee Chair); C. Hamilton, G. Janes, S. Marshall, C. Mullet Koop, J. Schonberger, K. Wiens, K. White,

Absent/Regrets: Easton

Staff: E. Acs, Manager, Community Planning, C. Gaspar, Manager, Environmental Health, A. Habjan, Director, Environmental Health, M. Marino, Associate Director, Economic Development, M. McGinty, Economic Development Officer, J. Spratt, Legislative Coordinator

Others Present: R. Bierhuizen, Sunrise Greenhouses, I. Potter, Vineland Research Innovation Center, M.Sipos, Greenbelt Foundation

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**1. CALL TO ORDER**

Committee Chair Witteveen called the meeting to order at 9:00 a.m.

**2. LAND ACKNOWLEDGEMENT STATEMENT**

Committee Chair Witteveen read the Land Acknowledgement Statement.

**3. DISCLOSURES OF PECUNIARY INTEREST**

There were no disclosures of pecuniary interest.

**4. PRESENTATIONS**

**4.1 Alternative Land Use Services - The ALUS program in Niagara**

Leilani Lee-Yates, Chief Administrative Officer/Secretary-Treasurer, Niagara Peninsula Conservation Authority, and Alyssa Cousineu, Alternative Land Use Services, provided information respecting the Alternative Land Use Services - The ALUS Program in Niagara. Topics of the presentation included:

- About the Niagara Peninsula Conservation Authority (NPCA)
- NPCA Watershed

- Enhancing Watershed Restoration and Stewardship
- Agricultural Stewardship
- Alternative Land Use Services (ALUS) Program
- NPCA Context for ALUS
- NPCA and ALUS to date
- ALUS Information Session
- Next Steps

4.2 Protecting the Health and Safety of Niagara's International Agricultural Workers (IAWs): The Role of Health Inspectors

Anthony Habjan, Director, Environmental Health, and Chris Gaspar, Manager, Environmental Health, provided information respecting Protecting the Health and Safety of Niagara's International Agricultural Workers (IAWs): The Role of Health Inspectors. Topics of the presentation included:

- International Agricultural Workers (IAWs) in Niagara
- Who We Are and Why We Inspect
- Interagency Collaboration
- Jurisdictional Documents
- Inspection Overview
- IAW Approval Inspection Report
- Number of IAW Approval Inspections and Re-inspections
- Operational Pressures
- Planning For the Future
- Cost Recovery
- Innovation
- IAW Niagara Region Webpage
- IAW Inspection Request
- Next Steps

Moved by Member S. Marshall  
Seconded by Member C. Mullet Koop

That the Agricultural Policy and Action Committee **REQUEST** that Regional Council support requesting the Regional Chair sending a letter to the Province and Agriculture and Agri-Food Canada for funding to support additional full-time Public Health Inspectors.

**Carried**

5. **DELEGATIONS**

There were no delegations.

6. **ITEMS FOR CONSIDERATION**

6.1 **APAC-C 3-2024**

2025 Agricultural Policy and Action Committee Meeting Dates

Moved by Member C. Mullet Koop  
Seconded by Member G. Janes

That the Agricultural Policy and Action Committee meetings **BE HELD** on  
Fridays at 9:00 a.m. on the following dates in 2025:

February 28, May 9, September 19, November 28.

**Carried**

7. **CONSENT ITEMS FOR INFORMATION**

7.1 **APAC-C 4-2024**

Niagara Region Woodland Conservation

Moved by Councillor Bateman  
Seconded by Member C. Mullet Koop

That Correspondence Item APAC-C 4-2024, being a letter from Niagara  
Federation of Agriculture respecting Niagara Region Woodland  
Conservation, **BE RECEIVED.**

**Carried**

7.2 **APAC-C 5-2024**

News Release respecting Governments Strengthening Mental Health  
Services for International Agricultural Workers

Moved by Member C. Mullet Koop  
Seconded by Councillor Steele

That Correspondence Item APAC-C 5-2024, dated October 17, 2024,  
being a news release respecting Governments Strengthening Mental  
Health Services for International Agricultural Workers, **BE RECEIVED.**

**Carried**

**Councillor Information Request(s):**

Consider inviting the Farms Organization to provide a presentation respecting the healthcare of international agricultural workers. Councillor Bateman.

7.3 APAC 1-2024

Agricultural Policy and Action Committee Meeting Minutes - April 19, 2024

Moved by Councillor Bateman  
Seconded by Member K. White

That Minutes APAC 1-2024, being the minutes of the Agricultural Policy and Action Committee Meeting held on April 19, 2024, **BE RECEIVED.**

**Carried**

8. **OTHER BUSINESS**

8.1 Irrigation Update

Erik Acs, Manager, Community Planning, provided an update on the Irrigation Project and advised Committee members that a tender for consulting services and funding agreements were currently being drafted and an update would be provided at the next meeting.

8.2 Bill 185

Erik Acs, Manager, Community Planning, provided an update on policy changes following the proclamation of Bill 185 and advised that an update would be provided at the February Committee meeting.

8.3 Burn Permit Fees

Sarah Marshall, Committee Member, expressed concerns surrounding costs associated with burn permit fees and advised that commodity groups are working with the Fire Chief on a resolution.

9. **NEXT MEETING**

The next meeting will be held on February 28, 2024, at 9:00 a.m.

**10. ADJOURNMENT**

There being no further business, the meeting adjourned at 10:51 a.m.

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Councillor Witteveen  
Committee Chair

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Jenna Spratt  
Legislative Coordinator

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Ann-Marie Norio  
Regional Clerk





Niagara Peninsula  
**CONSERVATION**

*nature for all*



Niagara Peninsula  
**CONSERVATION**  
*nature for all*

# NPCA HOSTED ALUS INFORMATION SESSION

**LEILANI LEE-YATES**, BES, MSPL.RPD, MCIP, RPP  
Chief Administrative Officer/ Secretary-Treasure  
Interim Director, Watershed Strategies and Climate  
Change

**Niagara Region**  
Agricultural Policy and Action Committee  
9:00 AM - November 29, 2024

# OVERVIEW

- NPCA Restoration Services
- NPCA and ALUS
- Recent Information Session
- Questions





# ABOUT THE NPCA

- Founded in 1959 under the *Conservation Authority Act*
- The core mandate of Conservation Authorities is to undertake watershed-based programs to protect people and property from flooding and other natural hazards, and to conserve natural resources for economic, social, and environmental benefits.
- Oversees the Niagara Peninsula watershed, encompassing the Niagara Region, portions of the City of Hamilton, and portions of Haldimand County.
- Manages 41 Conservation Areas, including four flagship properties such as Ball's Falls, Binbrook, Long Beach, and Chippawa Creek. These lands are held in public trust for recreation, heritage preservation, conservation, and education.

## **VISION: Nature for all**

**We envision a healthy and vibrant environment with shared greenspace and clean water that sustains life for future generations.**

# NPCA WATERSHED



# NPCA RESTORATION SERVICES

## SUMMARY OF MAJOR PROGRAM ACCOMPLISHMENTS (2019 - 2023)\*

2019



2020



2021



2022

- |  |  |  |   |
|--|--|--|---|
| <ul style="list-style-type: none"> <li>• <b>25</b> Projects</li> <li>• <b>8,191 m<sup>2</sup></b> riparian habitat</li> <li>• <b>2.37 ha</b> wetland created</li> <li>• <b>31.6 ha</b> of reforestation</li> <li>• <b>57,817</b> trees planted</li> <li>• <b>1,019</b> shrubs planted</li> </ul> | <ul style="list-style-type: none"> <li>• <b>37</b> Projects</li> <li>• <b>13,075 m<sup>2</sup></b> riparian habitat</li> <li>• <b>4.7 ha</b> wetland created</li> <li>• <b>18.3 ha</b> of reforestation</li> <li>• <b>40,850</b> trees planted</li> <li>• <b>1,830</b> shrubs planted</li> </ul> | <ul style="list-style-type: none"> <li>• <b>61</b> Projects</li> <li>• <b>2.26 ha</b> riparian habitat</li> <li>• <b>3.6 ha</b> wetland created</li> <li>• <b>26.77 ha</b> of reforestation</li> <li>• <b>63,393</b> trees planted</li> <li>• <b>7,926</b> shrubs planted</li> </ul> | <ul style="list-style-type: none"> <li>• <b>61</b> Projects</li> <li>• <b>3.92 ha</b> riparian habitat</li> <li>• <b>3.7 ha</b> wetland created</li> <li>• <b>27.1 ha</b> of reforestation</li> <li>• <b>69,971</b> trees planted</li> <li>• <b>4,279</b> shrubs planted</li> </ul> |
|--|--|--|---|

**2023** → Completed **57** projects = **27 ha** reforestation, **3.89 ha** wetland creation, **2.98 ha** riparian restoration  
**70,700** trees planted, **4,109** shrubs planted, **2,204** herbaceous planted, **9** Agricultural BMPs  
**31.43 Total Hectares of Restored Area in 2023**

\* As reported in NPCA Annual Reports

# NPCA RESTORATION CAPACITY



Wetland Habitat Restoration



Livestock Restriction & Crossings



Conservation Farm Practices



Tree Planting/  
Woodland Restoration



Instream/Riparian Habitat Restoration



Upland Habitat Restoration



Nutrient Management



Water Conservation Practices

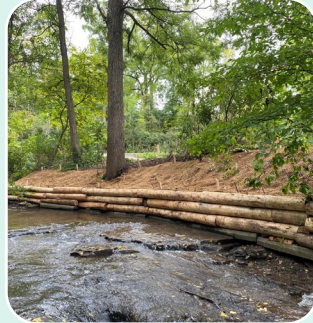


Cover Crops

## Implementation Services Related to Traditional Project Types



# ENHANCED WATERSHED RESTORATION AND STEWARDSHIP



## Internal Restoration Services

*NPCA Conservation Areas*

*CA Strategy*

*Capital Projects*

*LID*

*Habitat and water*

## Watershed Restoration Services

*Large-scale projects*

*Fee for service*

*Municipal and private*

## Private Land Services

*Habitat, biodiversity, water quality improvement*

*Nature Based Solutions*

*Cost -share*

## Agricultural Stewardship Services

*Nature Based Solutions*

*Best management practices*

*Water quality improvement*

*Engagement*

## Urban Stewardship Services

*Residents*

*Municipalities*

*Schools*

## Corporate Stewardship Services

*Office greening*

*Volunteering*

*Fee for service*





# AGRICULTURAL STEWARDSHIP

- Outreach and education, including demonstration projects and on-farm workshops;
- Incentives for implementing agricultural best management practices such as nutrient management projects, livestock exclusion fencing, and erosion control projects; and
- Supporting agricultural stewardship initiatives in the watershed.



# PRIVATE LAND SERVICES

- Same project-based services offered under the former Restoration Grant Program however operating under a cost sharing approach
- Focus on improving water quality, habitat and forest cover.
- Prioritization to support projects with high strategic or great ecological value.



# ALUS PROGRAM



ALUS engages farmers and producers in creating nature-based solutions on their land to build climate resilience and enhance biodiversity for the benefit of communities and future generations.

- Brings funding to farmers and producers to implement projects valued for production of biodiversity and ecosystem services, provides payments to maintain investments
- 8 Principles: Community-developed, Farmer-delivered, Targeted, Market Driven, Voluntary, Integrated – Delivery, Accountable, Science-based.
- Facilitated through independent governance model (Program Advisory Committee) with a minimum requirement of 50% representation by farmers/producers.
- International program, many communities across Canada, several in Southern Ontario

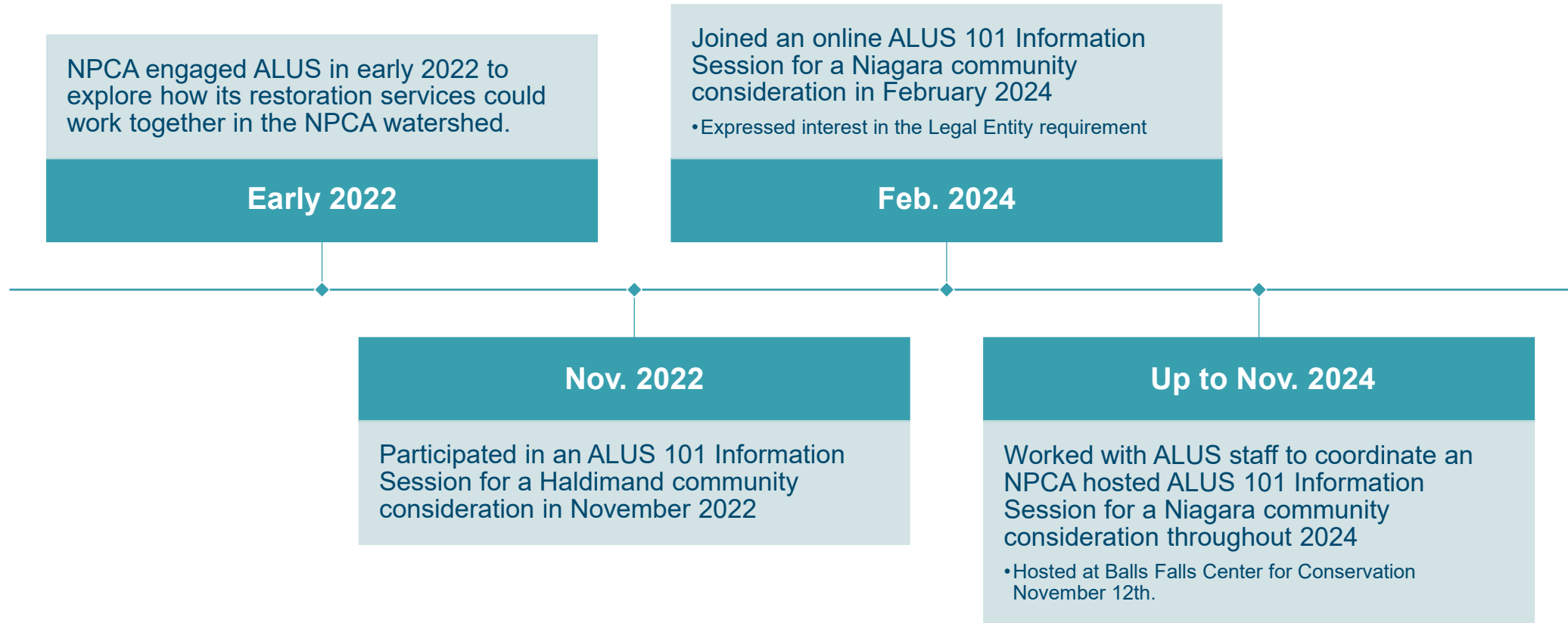


# NPCA CONTEXT FOR ALUS

- NPCA applies research and science to assess watershed conditions, cumulative impacts, and climate risks, guiding strategies to protect, enhance, and restore healthy, climate-resilient watersheds as part of its integrated watershed management approach to managing resources.
- Highly respects the integrated and voluntary community-based engagement and governance model that ALUS is designed upon. Poses a complementary management tool that fits the existing services NPCA offers in terms of enhancement and restoration and aspirations to engage the agricultural community specifically.
- Enabling services supporting NPCA's accountability, efficiency, and effectiveness, aiding programs, governance, and public engagement are available as a potential legal entity for a local ALUS community.



# NPCA & ALUS TO DATE



# ALUS

## Information Session

**November 12, 7 p.m.**

**Ball's Falls Centre for Conservation  
3292 Sixth Ave, Lincoln, ON L0R 1S0**

In communities with active ALUS programs, farmers and ranchers can implement projects on marginal and environmentally sensitive lands.

Projects may include but are not limited to wetland creation, erosion control, seeding native grasses, creating pollinator habitat, and more.

**Join NPCA and ALUS for an information session to learn more about this program.**



Visit [npca.ca/events](http://npca.ca/events)  
or Scan



RSVP by November 10:  
Geoff Verkade, [gverkade@npca.ca](mailto:gverkade@npca.ca)



# SUCCESSFULLY HOSTED

Goal: Drive attendance to the ALUS Information Session and gauge interest from the farming community in the Niagara Peninsula watershed.

- Event attendance: approximately 30 people, engaged audience
- 69% open rate on direct invitation of directly engaged subscribers (quality audience developed from NPCA's stakeholder list) is significantly above industry average
- Social performance saw 68.5K total impressions, total reach of 25.8K unique individuals
- Covered by all relevant news outlets - Ads in Niagara Farms (only ag/farming local news), NOTL Local, Pelham Today, Thorold Today, Giant FM/New Country 89, Haldimand Press



HOME &gt; LOCAL NEWS

# ALUS program to be discussed at upcoming information session

The ALUS program empowers farmers and ranchers to create sustainable, ecosystemfocused projects on marginal or environmentally sensitive lands

Niagara-on-the-Lake Local Staff

Nov 5, 2024 3:15 PM

Updated Nov 5, 2024 7:21 PM





# NEXT STEPS

- ALUS to continue independently testing desire for potential community in Niagara
- NPCA hosted session identified several individuals to advance that notion forward with ALUS staff through an ad-hoc steering committee
- NPCA assessing readiness and will be discussing implementation options to be considered as a potential legal entity for a Niagara ALUS community should that be its desire.
- NPCA and ALUS to continue collaborating towards discussions around a potential Niagara community



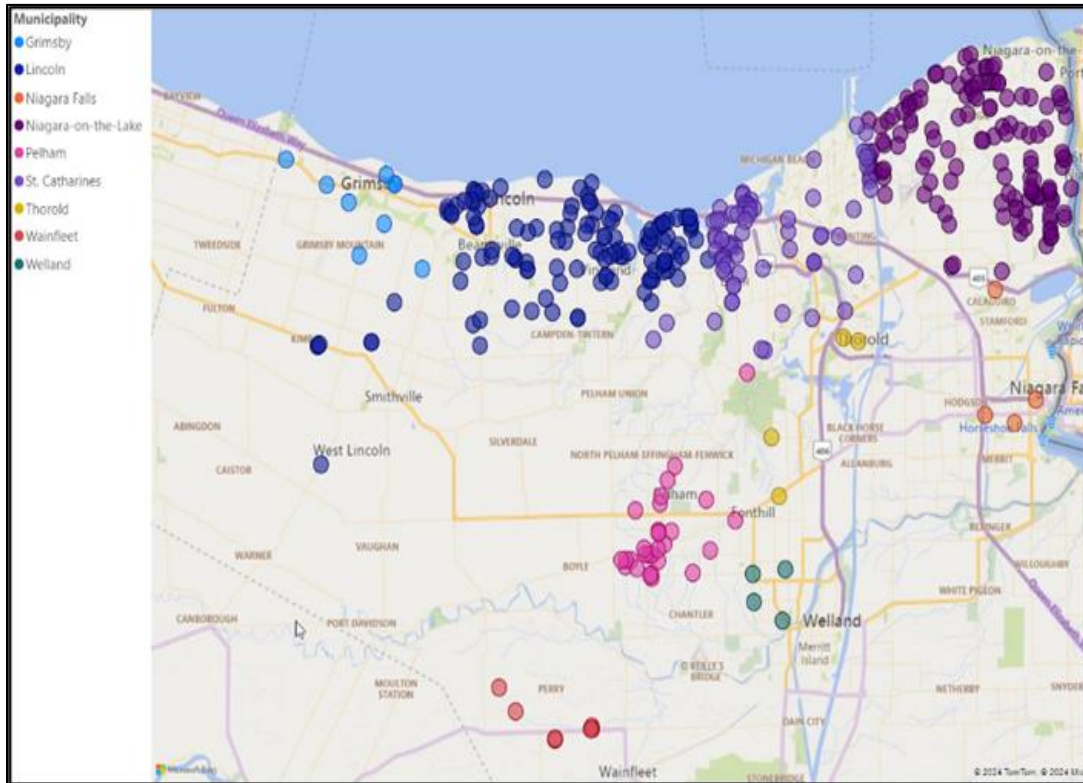
# THANK YOU / QUESTIONS?



# Protecting the Health and Safety of Niagara's International Agricultural Workers (IAWs): The Role of Public Health Inspectors

**Prepared by:** Niagara Region Public Health & Emergency Services  
**Presented by:** Anthony Habjan and Chris Gaspar

# International Agricultural Workers in Niagara



On a local level, Ontario brings in the highest number of international agricultural workers in Canada and the **Niagara Region has the second highest concentration of workers in Ontario**

# Who We Are...

## Public Health Inspectors

- Possess specialized training and educational expertise in the field of environmental health
- Conduct risk assessments to inform follow-up to eliminate or mitigate a potential health hazard

# Why We Inspect...

- To ensure compliance with provincial/federal regulations/guidelines
- To protect and promote the health and well-being of our IAWs

# Interagency Collaboration

- Municipal Fire, Building, and By-law Departments
- Niagara Region's Planning Department
- Community/Sector Partners

# Jurisdictional Documents

## Three Key Documents:

- Seasonal Farm Worker Housing Guidelines (2010)
- Service Canada – Schedule F Housing Inspection Report
- Health Protection and Promotion Act (HPPA)



# Inspection Overview

Approval inspections include assessment of:

- Housing units exterior and interior
- Sanitary and laundry facilities
- Food service areas
- Safe water and sewage disposal
- Maximum occupancy

# IAW Approval Inspection Report

## Niagara Region Public Health

### International Agricultural Worker (IAW) Housing Inspection Report

<b>Facility Inspected:</b> Test Farm	<b>Inspection #:</b> MF-03-00001-121200
<b>Primary owner:</b>	<b>Inspection Date:</b> 17-Apr-2024
<b>Site Address:</b> ON	<b>Inspected By:</b> Chris Haggerty
	<b>Facility Type:</b> IAW Housing
	<b>Inspection Type:</b> On Demand
	<b>Violations:</b> 41

C = In Compliance N/A = Not Applicable X = Not in Compliance

#### IAW Housing

##### Housing Inspection Summary

- This inspection report is for the:
  - Seasonal Agricultural Worker Program administered by FARMS (Foreign Agricultural Resource Management Service) as per the requirements specified in the Seasonal Farm Worker Housing Guidelines.
  - Agricultural Stream (previously NOC C&D) administered by Service Canada as per the requirements specified in the Seasonal Farm Worker Housing Guidelines.
- Type of Housing provided:
  - Apartment
  - Mobile home
  - Single family dwelling
  - Bunkhouse
- MAXIMUM CAPACITY:
- WATER SUPPLY:
  - municipal
  - private
  - drilled well
  - dug well
  - cistern
- SEWAGE SYSTEM:
  - municipal
  - private
- WASHROOM FIXTURES:
- LAUNDRY:
- WORKERS EXPECTED ARRIVAL DATE:

##### Housing Exterior

- Dwelling(s) are located 98 feet or 30 meters away from any building used or intended to be used for sheltering animals or poultry. X
- Dwelling(s) are detached from any building where highly flammable materials are used or stored. X
  - Dwelling(s) to be free of safety hazards.
  - Dwelling(s) to be free from any chemical substance or condition that may become hazardous to the workers.
- Multiple dwellings have 10 meters of space between each housing unit. X
- The dwelling(s) exterior is in good condition, weatherproof and rodent/pest proof. X
  - Exterior components include: roof, wall surfaces, downspouts, gutters, windows and doors.

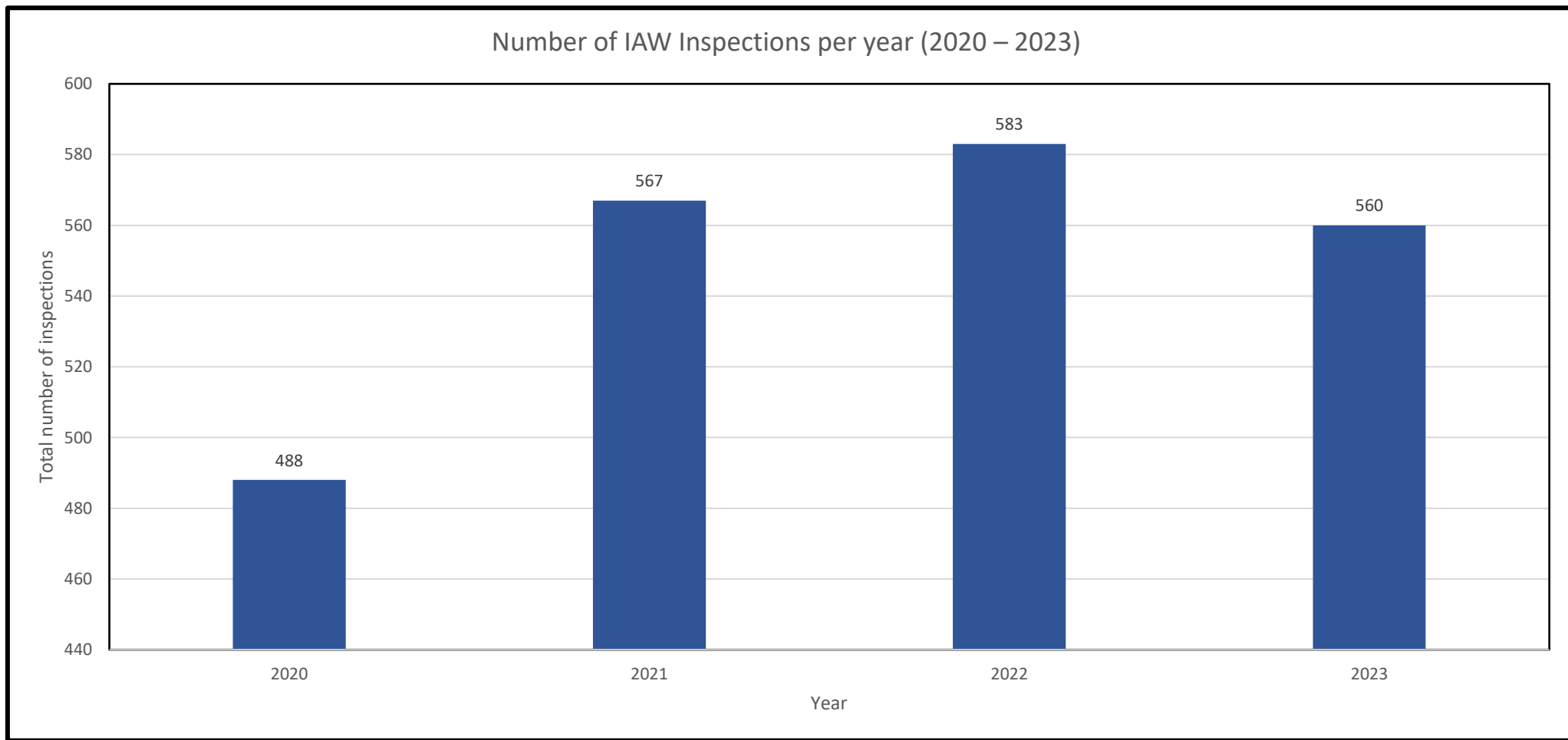
Inspection # MF-03-00001-121200

Page 1 of 5

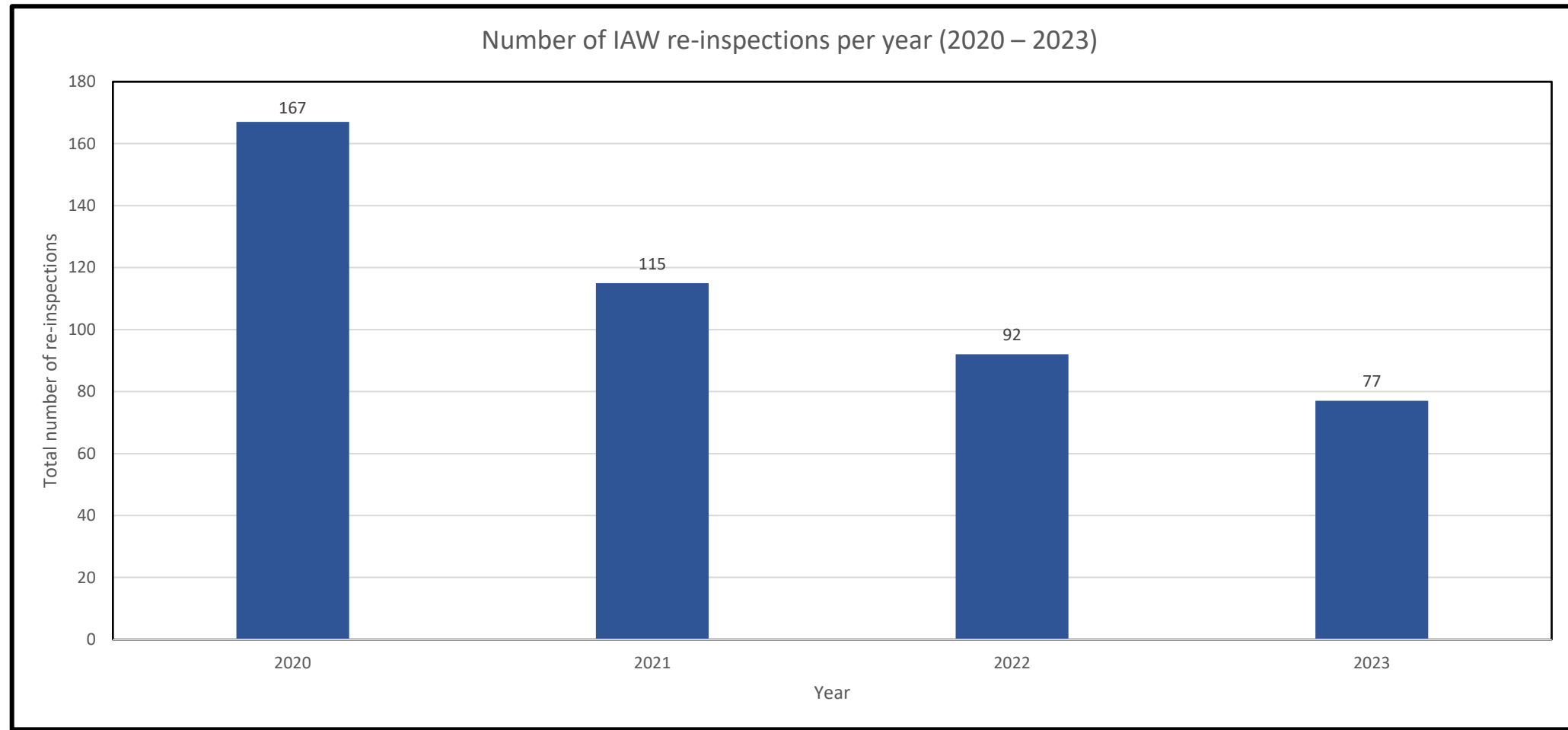
# IAW Approval Inspection Report cont'd

Test Farm [MF-03-00001]	International Agricultural Worker (IAW) Housing Inspection Report
Facility Contact:	
Facility Address: ON	
<ul style="list-style-type: none"> <li>- Exterior walls to be tight fitting to prevent rodent/pest entry.</li> <li>- Roofs are to be tight fitting and waterproof.</li> <li>- Mobile homes to have skirting around the bottom perimeter.</li> <li>- Rodent and/or pest control to be implemented.</li> </ul>	
<b>Housing Interior</b>	
13. Dwelling interior is in good condition and rodent/pest proof. <ul style="list-style-type: none"> <li>- Interior components of the house to be appropriately sealed from the outside and free from drafts of external air.</li> <li>- Interior walls to be tight fitting and non-absorbent.</li> <li>- Floors to be tight fitting, smooth, non-absorbent and readily cleanable.</li> <li>- Rodent and/or pest control to be implemented.</li> </ul>	X
14. Adequate lighting by either natural or artificial means is provided in each dwelling unit. <ul style="list-style-type: none"> <li>- Easily accessible light switches and fixtures to be provided.</li> </ul>	X
15. Adequate ventilation by either natural or artificial means is provided in each dwelling unit. <ul style="list-style-type: none"> <li>- Window(s) to be provided for natural ventilation.</li> <li>- Exhaust fan(s) to be provided for artificial ventilation (i.e. ceiling fans).</li> </ul>	X
16. Windows and doors have a screen covering. <ul style="list-style-type: none"> <li>- Screens to windows and doors to be provided between the first day of May to the first day of November.</li> <li>- Repair all ripped/torn screens.</li> <li>- Exception to screen coverings are permitted for windows that hold portable air conditioning units or where central air conditioning is provided.</li> </ul>	X
17. A minimum temperature of 20C (68F) is maintained within the dwelling unit. <ul style="list-style-type: none"> <li>- A permanent heating system that can maintain a minimum temperature of 20C is to be available within the dwelling(s).</li> <li>- Portable space heaters cannot be used as a primary source of heating for any living space within the dwelling(s).</li> </ul>	X
18. Combustion-type stoves or heaters are directly vented to the outside. <ul style="list-style-type: none"> <li>- Contact local Fire Department for review of ventilation.</li> </ul>	X
19. There is sufficient basic furnishings available inside the dwelling(s) to accommodate the number of workers. <ul style="list-style-type: none"> <li>- Basic furnishings include tables, chairs, couches, etc.</li> <li>- Basic furnishings may accommodate different schedules/shift work (i.e. number of kitchen chairs may be lower than total number of workers).</li> </ul>	X
<b>Garbage Disposal</b>	
20. There is sufficient rodent/pest proof garbage containers provided inside and outside of all housing units. <ul style="list-style-type: none"> <li>- Garbage containers to be large enough to allow for proper disposal between collection.</li> <li>- Garbage containers to be rodent/pest proof.</li> <li>- Garbage containers to be provided that can be easily cleaned and sanitized.</li> <li>- Garbage is to be collected and removed from the property at least once per week.</li> </ul>	X
<b>Sleeping Facilities</b>	
21. Bedrooms are separated from other living areas. <ul style="list-style-type: none"> <li>- Beds to be located within the assigned sleeping areas.</li> <li>- Sleeping facilities to be separated from other living areas by walls.</li> </ul>	X
22. Separate bed(s) are provided for each worker. <ul style="list-style-type: none"> <li>- Separate mattress to be provided for each worker (each bunk must only sleep one person).</li> <li>- Suitable amount of space above/below each bunk provided.</li> <li>- Bunk/mattress is located 18 in or 45 cm apart from another bed/mattress (except when lengthwise on the wall).</li> <li>- At minimum, a twin size mattress (99 x 109 cm) with a bed base is provided for each worker.</li> </ul>	X
23. The bed/mattress is located 12 in or 30 cm off the floor.	X
24. The mattress provided is maintained in good condition.	X
25. There is a supply of clean blankets, sheets, pillow and pillowcase provided and available.	X
Inspection # MF-03-00001-121200	Page 2 of 5

# Number of IAW Approval Inspections



# Number of IAW Re-inspections



# Operational Pressures

Mandated work increasing exponentially

- Number of inspected businesses
- Number of complaints/investigations

*A direct result of increased tourism and economic growth and development witnessed within the Niagara Region*

# Operational Pressures cont'd

- Forecasted growth in IAW housing inspections
- Public Health Inspectors continued involvement ensures:
  - The availability of safe/suitable housing; and
  - The seamless arrival of IAW's to support employer's business needs

# Planning For The Future

Public Health Inspector capacity is diminishing due to the demands of growing mandated work

**How can we achieve sustained IAW program delivery?**



# Through Cost Recovery

**Plan:** To move towards an approval inspection fee model in 2026

**Purpose:** To ensure sustainable program delivery for our local employers of International Agricultural Workers

## **Objectives:**

- Reduce re-inspections
- Increase customer service
- Reduced wait times through embedded efficiencies

# Through Innovation

Creation of an online digital request platform for approval inspections

- Resulting in reduced inspection scheduling turnaround, enhancing customer service

# IAW Niagara Region Webpage

**Niagara Region** Search... Menu

**Public Health**

- Inspection Results
- Vaccinations
- Parenting
- Physical Activity, Nutrition
- Smoking, Drugs
- Mental Health
- Schools
- Paramedics, Dispatch
- Contact Health

## International Agricultural Workers

International agricultural workers are considered essential workers that come to Ontario to work in the seasonal agricultural sector.

## Housing

Housing accommodations for international agricultural workers must be inspected by Niagara Region Public Health and Emergency Services and comply with all local building, fire and zoning requirements before the worker arrives.

### Employer resources

- [Drinking water](#)
- [Hand washing posters](#) (English and Spanish versions)
- [Foreign Agricultural Resource Management Services \(F.A.R.M.S.\)](#)
- [Private sewage systems](#)
- [QUEST Community Health Centre](#)

# IAW Inspection Request

Niagara Region

Search... Menu

Public Health

- Inspection Results
- Vaccinations
- Parenting
- Physical Activity, Nutrition
- Smoking, Drugs
- Mental Health
- Schools
- Paramedics, Dispatch
- Contact Health

## International Agricultural Worker Inspection/Information Request

**Effective - January 1, 2025 all seasonal housing inspection requests must be submitted through the Niagara Region online portal (below)**

The seasonal housing accommodations must meet minimum requirements as set out in the Seasonal Housing Guidelines before an onsite inspection is conducted by the Health Unit.

Seasonal Housing Owners/Operators are required to ensure accommodations comply with all local building, fire and zoning requirements.

\* = Required

# Next Steps...

- Continue with current inspection processes to ensure adherence to all housing guidelines/regulatory requirements
- Continue development of our IAW digitized request platform

# Thank you!

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## Memorandum

**APAC-C 3-2024**

**Subject:** 2025 Agricultural Policy and Action Committee Meeting Dates

**Date:** November 29, 2024

**To:** Agricultural Policy and Action Committee

**From:** Ann-Marie Norio, Regional Clerk

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The following is a list of proposed dates in 2025 that have been identified to hold meetings of the Agricultural Policy and Action Committee:

- February 28, 2025
- May 9, 2025
- September 19, 2025
- November 28, 2025

A resolution of Committee is required to approve the meeting dates. Suggested wording is as follows:

That the Agricultural Policy and Action Committee meetings **BE HELD** on Fridays at 9:00 a.m. on the following dates in 2025:

February 28, May 9, September 19, November 28.

Respectfully submitted and signed by

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Ann-Marie Norio  
Regional Clerk



Niagara Region Woodland Conservation By-law

*Sent via email*

Re: Niagara Region Woodland Conservation By-law

The Niagara Federation of Agriculture (NFA) is your agricultural organization representing over 1,400 farm family members. Niagara offers the most diversified area of food production in all of Canada and agriculture has proven to be the economic mainstay within the Region. Agricultural producers have \$838.1 million in gross farm receipts with an employment impact of 19,892 jobs within the Region. The Niagara Federation of Agriculture (NFA) is the local extension of the Ontario Federation of Agriculture (OFA) which represents over 38,000 farm family members across our province.

The Directors of the Niagara Federation of Agriculture would like to take this opportunity to thank the Region of Niagara for this opportunity to review and comment on the proposed changes to the Woodlands Bylaw.

The current bylaw defines Sensitive Natural Areas and Woodlands, prohibits tree cutting and other injuries to trees in those areas, and allows permits and exemptions that allow farmers to carry out normal farm practices related to trees associated with those features. The proposed by-law changes the definition Sensitive Natural Area to include lands:

- 1.26.a Designated or zoned for environmental protection in the Official Plan and/or Zoning By-law of an Area Municipality or Region of Niagara, including zoning overlay layers intended to protect environmental features
- 1.26.b Within Provincially recognized natural heritage features, including Provincially Significant Wetlands and Areas of Natural Scientific Interest
- 1.26.c within a Natural Area as designated in the Niagara Escarpment Plan.

The proposed by-law also changes where and when agricultural activities can be exempted under Normal Farming Practices. In the proposed by-law, farmers are exempt from the tree cutting prohibition only if:

- 4.15.a the proposed clearing is a Normal Farm Practice as defined in the Farming and Food Production Protection Act, 1998, S.O. 1998, c. 1, as amended, and the clearing is carried out in accordance with Normal Farm Practices;



4.15.b the land that is cleared is put into Agricultural Use within three (3) years of the date on which such clearing commences;

4.15.c prior to the clearing, the Farmer advises the Officer of the proposed clearing. For the purposes of this section the marking of Trees, a Forest Management Plan or a Silvicultural Prescription, a fee and a Permit are not required; and

4.15.d the land being cleared for Agricultural Use is outside the Urban Areas as defined in the Regional Official Plan, and is designated and zoned for Agricultural Use in the Official Plan and Zoning By-law of the Area Municipality and, where applicable, in the Niagara Escarpment Plan; and

4.15.e **the woodland is not a Sensitive Natural Area** (emphasis added)

This change to the current bylaw will have a negative impact on agriculture and prompt many appeals.

The directors have discussed their concerns with the Region in the past about the definition of Natural Heritage features, provincially significant wetlands, and zoning overlays. By extending the definition of the Sensitive Natural Areas to include these features, the agriculture exemptions are no longer effective. A high percentage of woodlots in the Niagara Region are classified as having natural heritage features.

The directors are also confused by the addition of the following paragraph:

Wherever one or more of the above conditions are not met, the Officer will issue a written notice to the Farmer indicating reasons for the decision within 15 days of Farmer advisement. In such cases, a Farmer may apply for a Good Forestry Practices Permit pursuant to the provisions listed in Sections 5 and 6 of this By-law, or appeal the decision subject to the provisions listed in Section 7 of this by-law. No fee shall be required in such cases.

If one or more of the above conditions are not met, does a farmer have to submit a permit to the Region with the expectation the Officer will respond within 15 days if the permit is accepted? If the farmer's permit is denied, the farmer then must apply for a Good Forestry Practices Permit or appeal the decision. Does the permit have an expiration date as some farmers' priorities may change by the time a decision is provided?

Farmers are stewards of the land, and in respect of that stewardship role, the Normal Farm Practices Protection Board has long upheld that the clear-cutting of protected woodland features is not a "normal farm practice." For clarity, the anticipated appeals would not be for extensive brush cutting or field boundary expansion, merely for field maintenance and activities in proximity to protected woodlands.

Over the years, economic challenges have prompted the need for diversification and changed the definition of an agriculture operation. Farmers use their woodlots as heat sources and supplemental income, and we caution sensitivity around changing how farmers may use their lands.

This is an important by-law, and the changes need to be reviewed carefully. We feel that there is a need for further consultation to discuss the recommendations of the proposed Woodlot By-Law.

Please reach out if you have any questions in this regard.

Thank You,

A handwritten signature in black ink, appearing to read "Chris Mullet Koop". The signature is stylized with a large initial "C" and a long horizontal stroke.

Chris Mullet Koop  
President  
Niagara Federation of Agriculture



## NEWS RELEASE

# Governments Strengthening Mental Health Services for International Agricultural Workers

Federal-provincial investment will provide new mental health resources

**October 17, 2024**

[Ministry of Agriculture, Food and Agribusiness](#)

TORONTO — The governments of Canada and Ontario are investing nearly \$1.8 million over two years to provide international agricultural workers (IAWs) in Ontario with enhanced access to mental health supports in Spanish, Tagalog, French and English.

Delivered by the Canadian Mental Health Association (CMHA), Ontario Division, in close partnership with its Windsor-Essex and Brant-Haldimand-Norfolk regional branches, the International Agricultural Worker Wellness Program will support IAWs with managing stress, homesickness and isolation. The program will provide referrals to free local services, including recreational activities, primary care, counselling, support groups, in-person workshops, and more.

“Working far from home can be tough, and it’s so important that our international agricultural workers have access to the mental health supports they need,” said the Honourable Lawrence MacAulay, federal Minister of Agriculture and Agri-Food. “Through the IAW Wellness Program, we can better support these workers with tailored programs and services so they can continue to help us deliver top-quality products to Canadians, and the world.”

“Ontario respects and appreciates the international agricultural workers who call our province home and who contribute so much to our almost \$51 billion agri-food sector,” said Rob Flack, Ontario Minister of Agriculture, Food and Agribusiness. “The IAW Wellness Program will help these important workers access the supports and services needed to improve their quality of life and better integrate into our dynamic agri-food workforce of over 871,000 men and women.”



The program will launch in early 2025 and be delivered over two years, with resources available in Spanish, French and English in year one, expanding to include Tagalog in year two. The program will focus on the Windsor-Essex region first and then expand to Brant-Haldimand-Norfolk in year two. Both regions have high populations of IAWs. In the second year, the program will also offer support to farm operators with workshops on how to create safer workplaces.

This investment recognizes the critical contribution IAWs make in Ontario's agricultural economy. It builds on the success of the IAW Welcome Centre and the IAW Welcoming Communities Initiative.

This program is funded through the Sustainable Canadian Agricultural Partnership (Sustainable CAP), a five-year (2023-2028), \$3.5-billion investment by federal, provincial and territorial governments to strengthen competitiveness, innovation, and resiliency of Canada's agriculture, agri-food and agri-based products sector. This includes \$1 billion in federal programs and activities and a \$2.5 billion commitment that is cost-shared 60 per cent federally and 40 per cent provincially/territorially for programs designed and delivered by the provinces and territories.

## Quick Facts

- In 2023, Ontario launched the [Virtual Welcome Centre](#), a webpage of resources for IAWs available in English, Spanish and French. It includes information and links about worker rights and responsibilities, adjusting to life in Ontario, health care, human and labour trafficking, and living and working safely in the community.
- The IAW Welcoming Communities Initiative, announced in September, supports municipalities and not-for-profits in creating an inclusive and welcoming environment for international agricultural and food workers. Eligible activities include introducing or enhancing translation supports and transportation services.
- The governments of Canada and Ontario also recently announced a \$178,000 expansion of the [Farmer Wellness Initiative](#) to include delivery of services in Spanish for Ontario farm workers.
- For more information about OMAFA programs and services, contact the Agricultural Information Contact Centre (AICC) at 1-877-424-1300 or at [ag.info.omafa@ontario.ca](mailto:ag.info.omafa@ontario.ca).

## Quotes



"International agricultural workers are integral to Ontario's agriculture industry and food supply, so it's critical that this population has mental health support while they're living and working in our province. Since 2022, CMHA's team at Agriculture Wellness Ontario has been working to reduce mental health stigma and meet the needs of the agricultural community. We're delighted to work with our branches to offer this new program for international agricultural workers."

**- Camille Quenneville**

**Chief Executive Officer, Canadian Mental Health Association, Ontario Division**

"Mental health care plays a crucial role in supporting the well-being of migrant workers, who often face unique challenges like family separation and cultural transitions. It's heartening to see the governments of Canada and Ontario develop the IAW Wellness Program. By offering services in their first languages, this initiative ensures that migrant workers feel understood and supported, which is vital for their mental health. This empowers individuals to navigate daily challenges and fosters a more inclusive and compassionate community for everyone. Such efforts are essential for building a society that values the well-being of every migrant worker."

**- Martin Varela**

**Chairman, Migrant Worker Community Program**

## **Additional Resources**

[Sustainable Canadian Agricultural Partnership](#)

[Agriculture and Agri-Food Canada](#)

[Ontario Ministry of Agriculture, Food and Agribusiness](#)

[Grow Ontario](#)

[Agriculture Wellness Ontario](#)

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**THE REGIONAL MUNICIPALITY OF NIAGARA  
AGRICULTURAL POLICY & ACTION COMMITTEE  
MINUTES**

**APAC 1-2024  
Friday, April 19, 2024  
Meeting held by electronic participation**

- Committee: Councillors Bateman, Easton, Steele, Witteveen (Committee Chair); G. Janes, S. Marshall, C. Mullet Koop, J. Schonberger, K. White, K. Wiens
- Absent/Regrets: Bradley (Regional Chair), Councillors Kaiser, Seaborn
- Staff: E. Acs, Manager, Community Planning, A. Basic, Legislative Coordinator, B. Landry, Manager, Economic Research and Analysis, C. Lampman, Manager, Environmental Planning, S. McPetrie, Planner, D. Morreale, Director, Development Approvals, D. Root, Regional Forester, J. Spratt, Legislative Coordinator, A. Stea, Director, Community & Long Range Planning
- Others Present: P. Bootsma, Christian Farmers Federation of Ontario, R. Carlow, Greenbelt Federation, I. Potter, Vineland Research Innovation Center, C. Warren, Ontario Federation of Agriculture

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**1. CALL TO ORDER**

Committee Chair Witteveen called the meeting to order at 9:01 a.m.

**2. LAND ACKNOWLEDGEMENT STATEMENT**

Committee Chair Witteveen read the Land Acknowledgement Statement.

**3. DISCLOSURES OF PECUNIARY INTEREST**

There were no disclosures of pecuniary interest.

**4. PRESENTATIONS**

4.1 Pelham Greenhouse Policies

John Langendoen, Louis Damm, Jan VanZanten, and Jason Weirenga provided information respecting Town of Pelham Greenhouse Policies. Topics of the presentation included:

- Pelham's restrictions on lot coverage for greenhouses
- Appeal with the Normal Farm Practices Board
- Request for Support

Moved by Councillor Easton  
Seconded by Councillor Bateman

1. That the presentation respecting Pelham Greenhouse Policies **BE RECEIVED**; and
2. That staff **BE REQUESTED** to provide additional information on how the Region can support the Pelham Greenhouse Growers Group appeal to the Normal Farm Practices Board.

**Carried**

**5. DELEGATIONS**

There were no delegations.

**6. ITEMS FOR CONSIDERATION**

There were no items for consideration.

**7. CONSENT ITEMS FOR INFORMATION**

Moved by K. Wiens  
Seconded by C. Mullet Koop

That the following items **BE RECEIVED** for information:

APAC-C 1-2024  
Soil Health

APAC-C 2-2024  
An Open Letter to all Councillors, Provincial and Federal Representatives: A  
Note On Climate Change

APAC 2-2023  
Agricultural Policy and Action Committee Meeting Minutes - December 1, 2023

**Carried**

Moved by C. Mullet Koop  
Seconded by K. Wiens

1. That staff **BE REQUESTED** to provide information regarding a soil health working group and potential scope of work.

**Carried**



## 8. **OTHER BUSINESS**

### 8.1 Bill 185 - Cutting Red Tape to Build More Homes Act and Draft PPS

Angela Stea, Director, Corporate Strategy and Community Sustainability, provided information on Bill 185 and updates to the Provincial Planning Statement and advised that feedback could be provided until the consultation period closes on May 10, 2024. Ms. Stea advised that information would be provided at the Planning and Economic Development Committee being held on May 8, 2024, and an update will be provided to the Agricultural Policy and Action Committee in September.

### 8.2 Woodland Conservation By-law Update

Cara Lampman, Manager, Environmental Planning, and Daniel Root, Regional Forester, provided information respecting proposed changes to the Woodland Conservation By-law and advised Committee members that they will be seeking feedback on the proposed changes.

### 8.3 Irrigation Project Update

Erik Acs, Manager, Community Planning, provided an update on the Irrigation Project and advised Committee members that staff are seeking funding from the Canadian Infrastructure Bank and have been selected to advance to the next stage of the Green Belt Foundation Grant Program.

### 8.4 Burn Permit Fees - City of St. Catharines

Kai Wiens, Committee member, provided information respecting the City of St. Catharines' Burn Permit Fees. Committee members requested that staff provide information identifying whether consistent practices for burn permit fees could be applied across Local Area Municipalities.

### 8.5 Surface Water Runoff Fees

Committee members discussed Storm Water Management Fees, specifically the challenges of implementing these fees in Niagara and whether the agricultural sector could be exempted. Paul Bootsma, Christian Farmers Federation of Ontario, advised that they have asked for an exemption for all agricultural zoned properties that do not have storm water infrastructure.

8.6 Abandoned Orchards Act

Kai Wiens, Committee Member, inquired if the Abandoned Orchards Act could be reestablished at the regional level. Erik Acs, Manager, Community Planning, informed Committee that staff could provide legislative information and investigate authority under the Municipal Act, 2001.

8.7 Regional Agricultural 5-year Outlook

Erik Acs, Manager, Community Planning, advised Committee members that the Draft Agriculture Economic Development Action Plan would be included on the agenda for the Planning and Economic Development Committee being held in June and will be provided to the Agricultural Policy and Action Committee for feedback in the fall.

8.8 Farm Signs on Rural Regional Roads

Kai Wiens, Committee member, discussed the importance of farm signage on rural regional roads. Committee Chair Witteveen advised that this can be discussed with Regional Transportation staff.

9. **NEXT MEETING**

The next meeting will be held on September 20, 2024, at 9:00 a.m.

10. **ADJOURNMENT**

There being no further business, the meeting adjourned at 11:08 a.m.

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Councillor Witteveen  
Committee Chair

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Jenna Spratt  
Legislative Coordinator

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Ann-Marie Norio  
Regional Clerk

# 2024 Niagara Employment Inventory Results

Planning and Economic Development Committee

PDS 2-2025

February 05, 2025

Cynthia Tia, Planner

Blake Landry, Economic Research and Analysis Manager

# 2024 Niagara Region Employment Inventory Results

Planning and Economic Development Committee

February 05, 2025

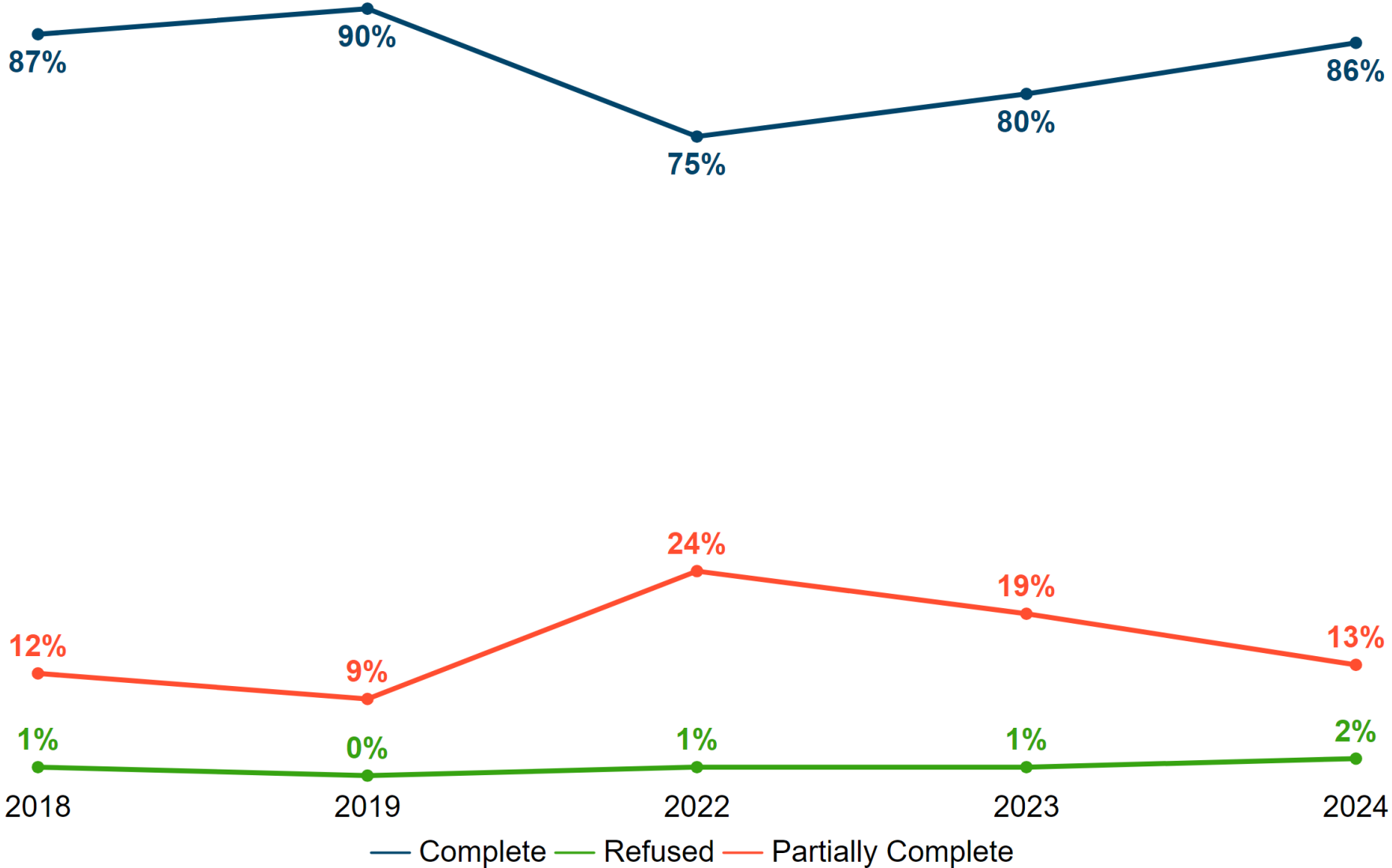
# Employment Inventory Overview

- Annual collection exercise (May – August)
- Team of five post-secondary students conduct door-to-door interviews with business owners/leadership teams
- Targets all publicly accessible (signed) businesses in Niagara, in urban and rural areas
- The NEI has been conducted annually except for a 2-year reporting gap from 2020 – 2021 as a result of the COVID-19 pandemic

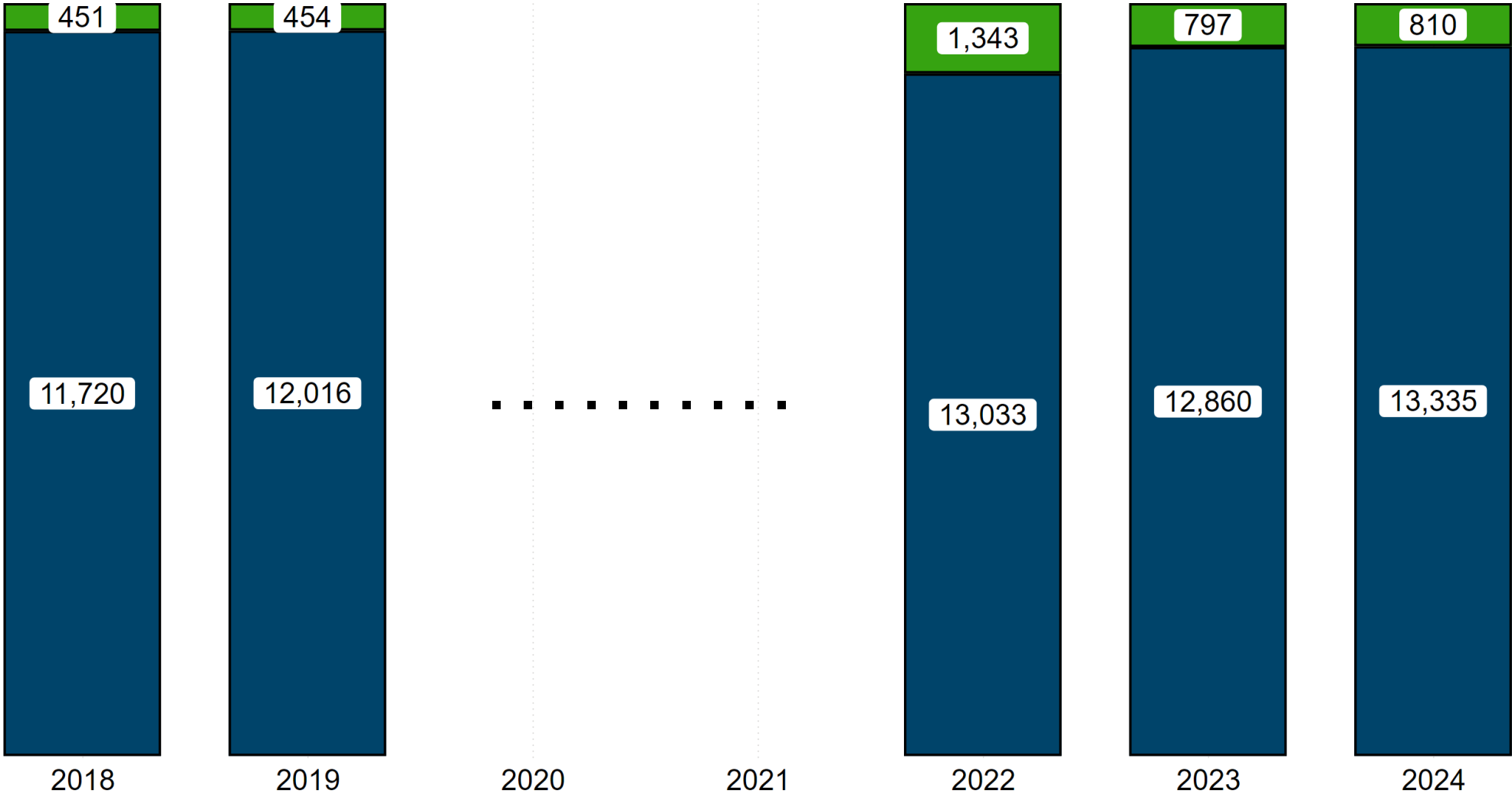
# How is the Data used?



# 5-Year Participation Rate Trend



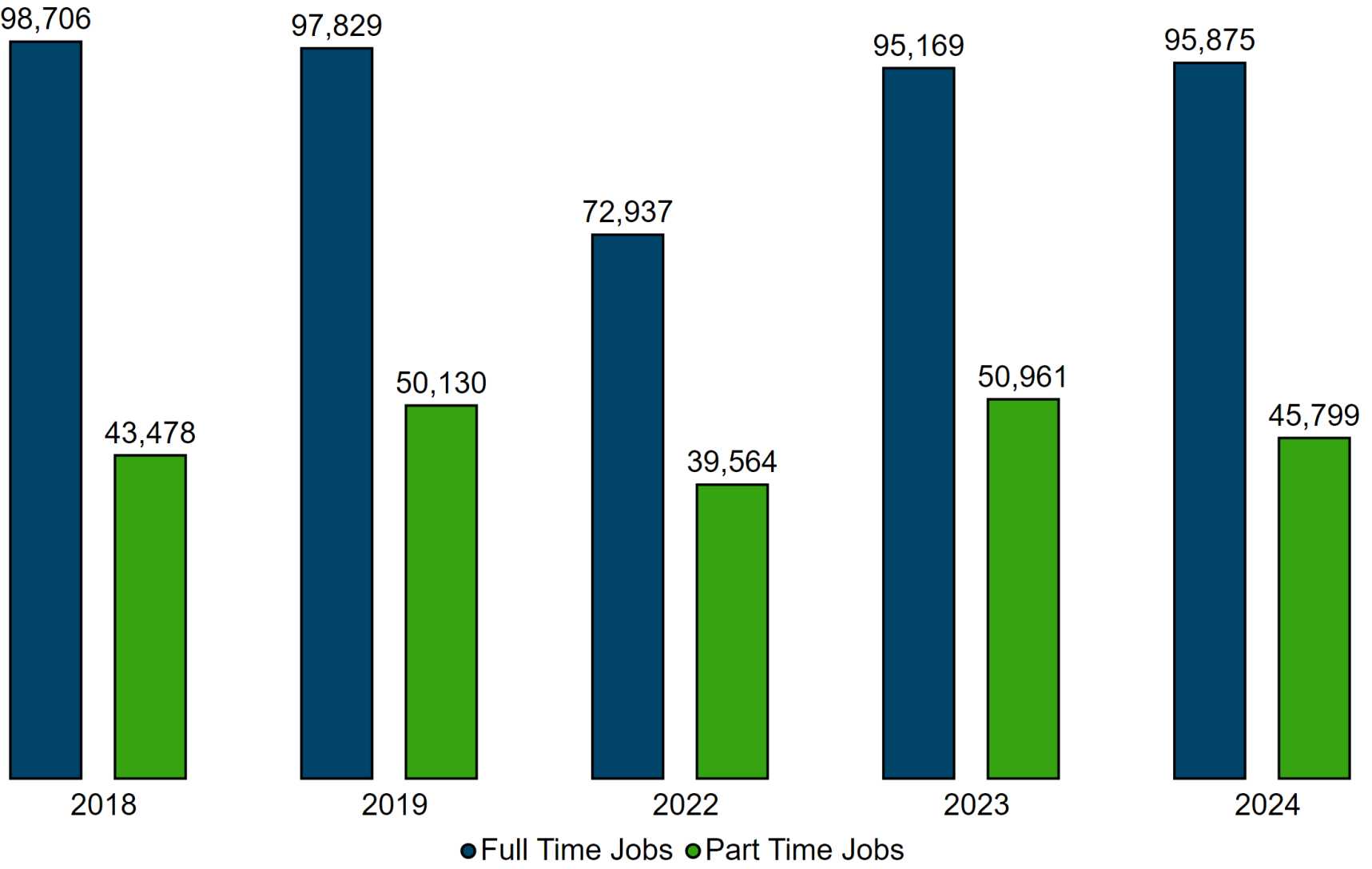
# 5-Year Business Rate Trend



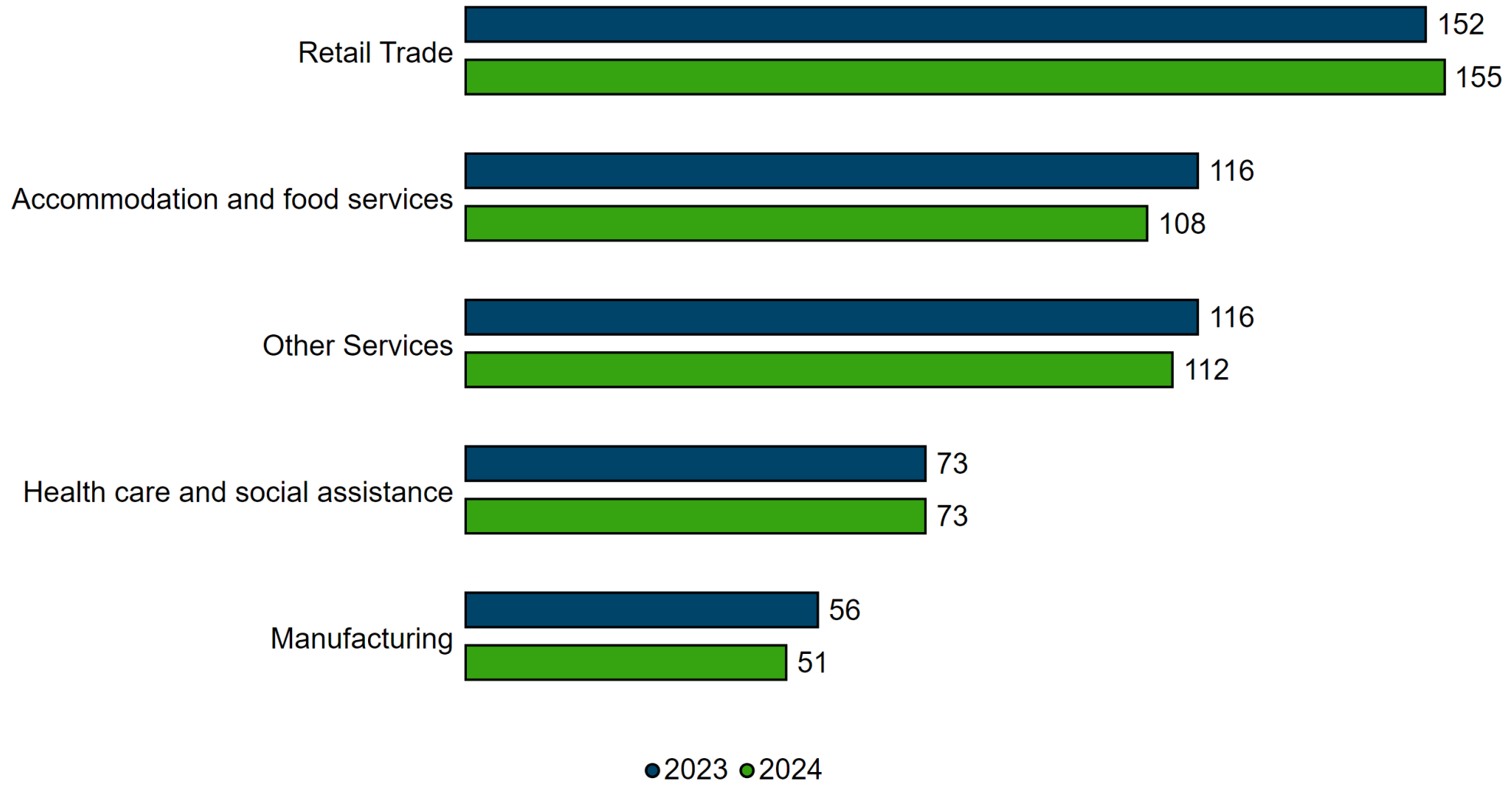
● Businesses Inventoried ● Closed Businesses



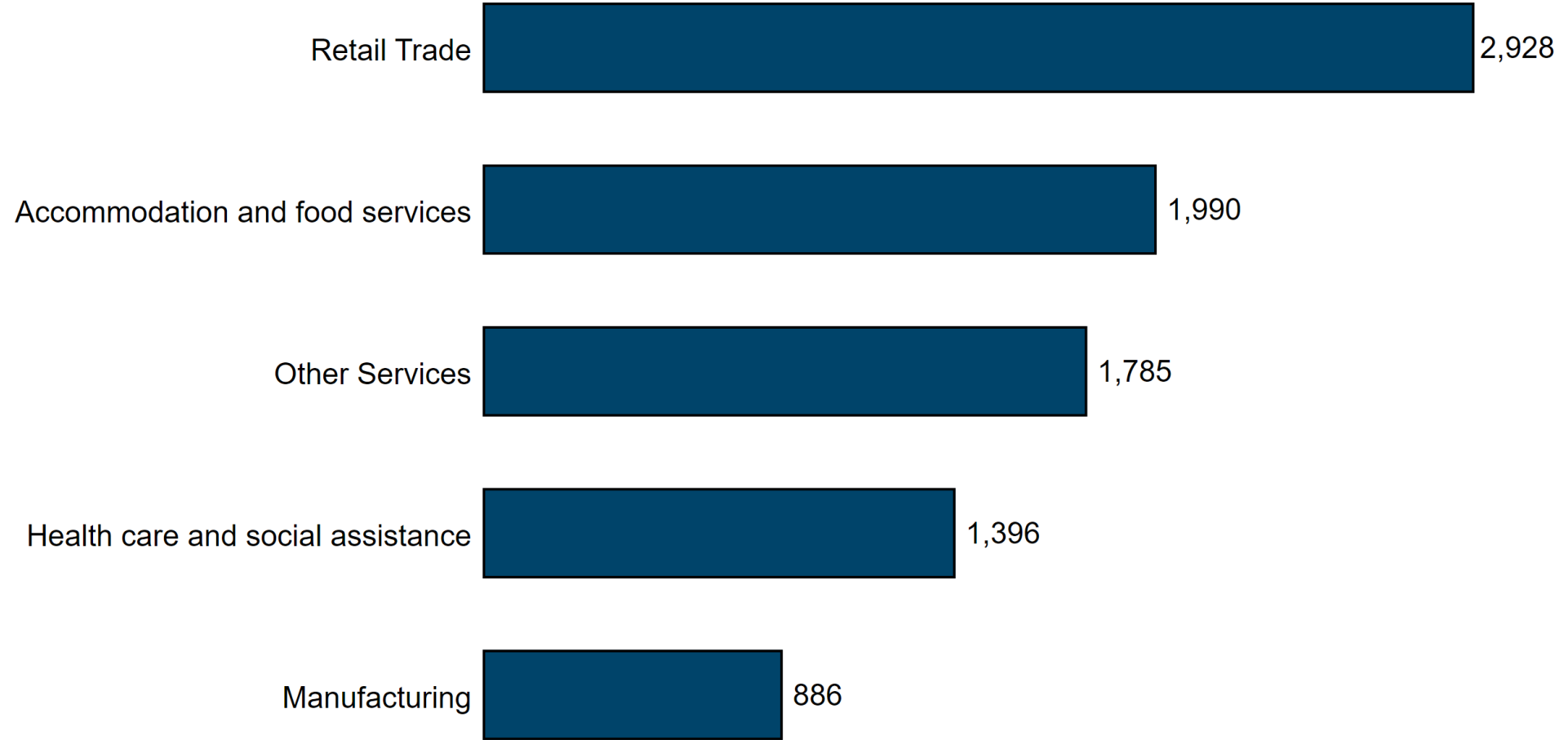
# 5-Year Full-time/Part-time Trend



# 2-Year Closed Businesses by Sector



# Top 5 NAICS Sectors: Businesses

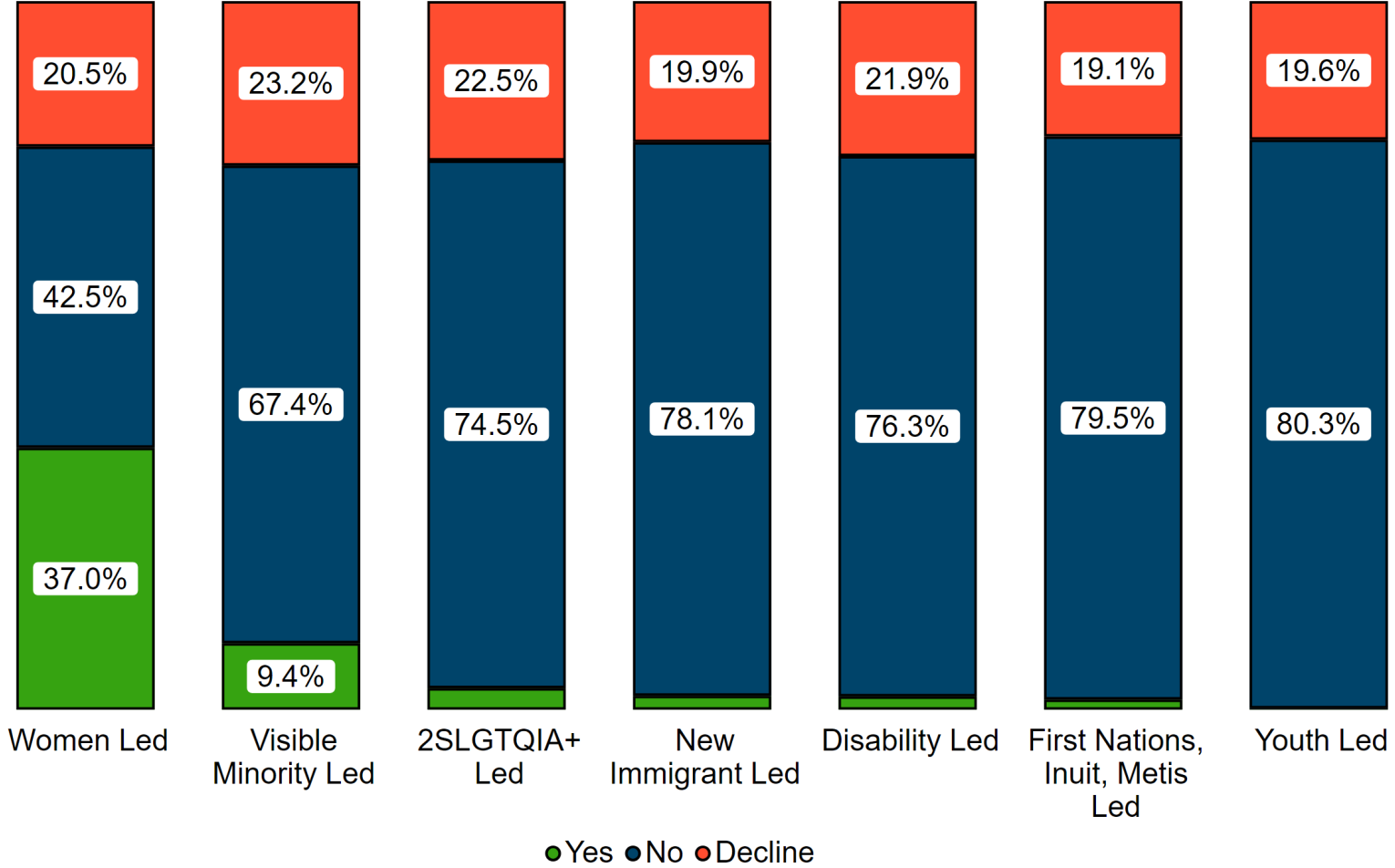


# Top 5 NAICS Sectors: Jobs

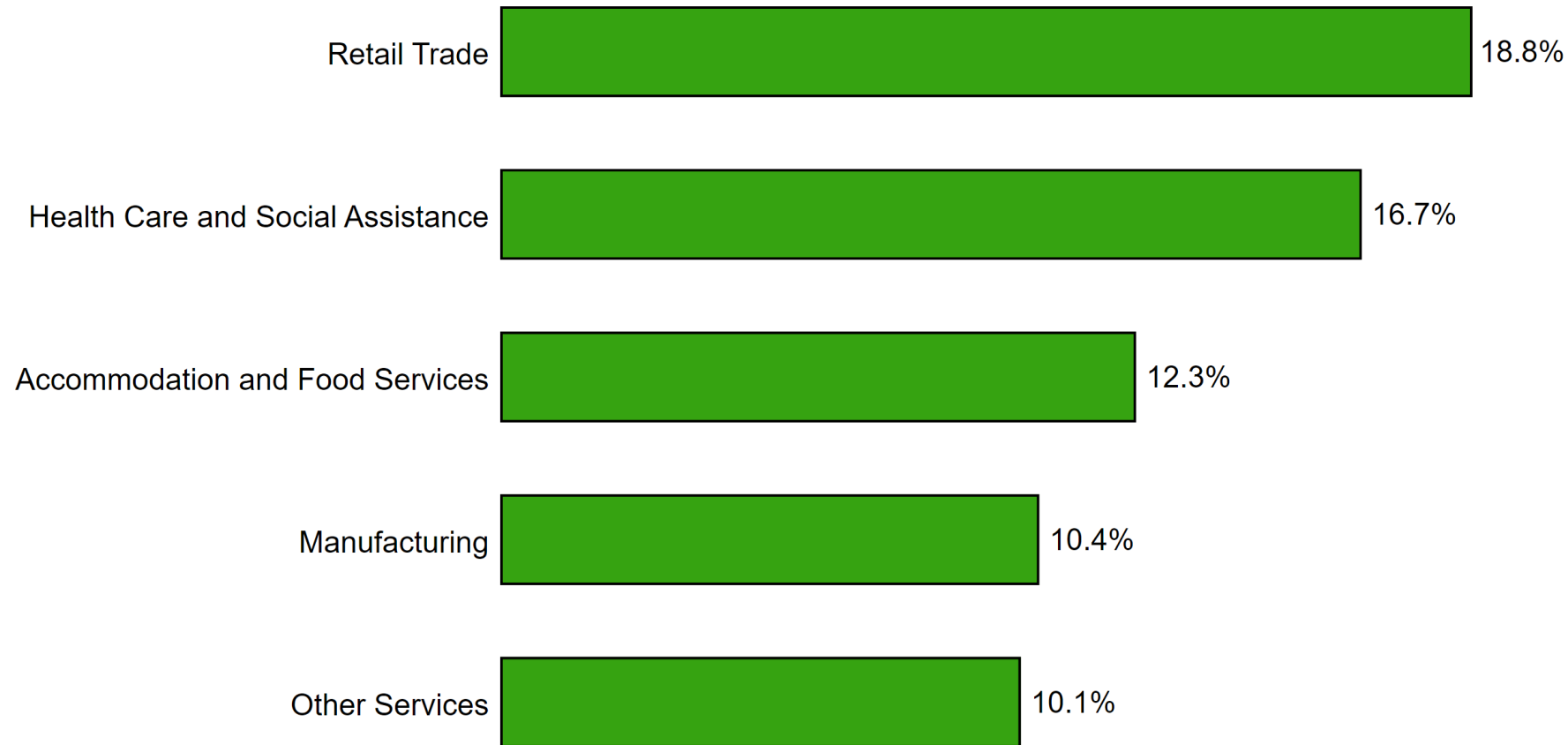


# Diversity, Equity and Inclusion Demographics:

Is your business led or owned (+50%) by any of the following?



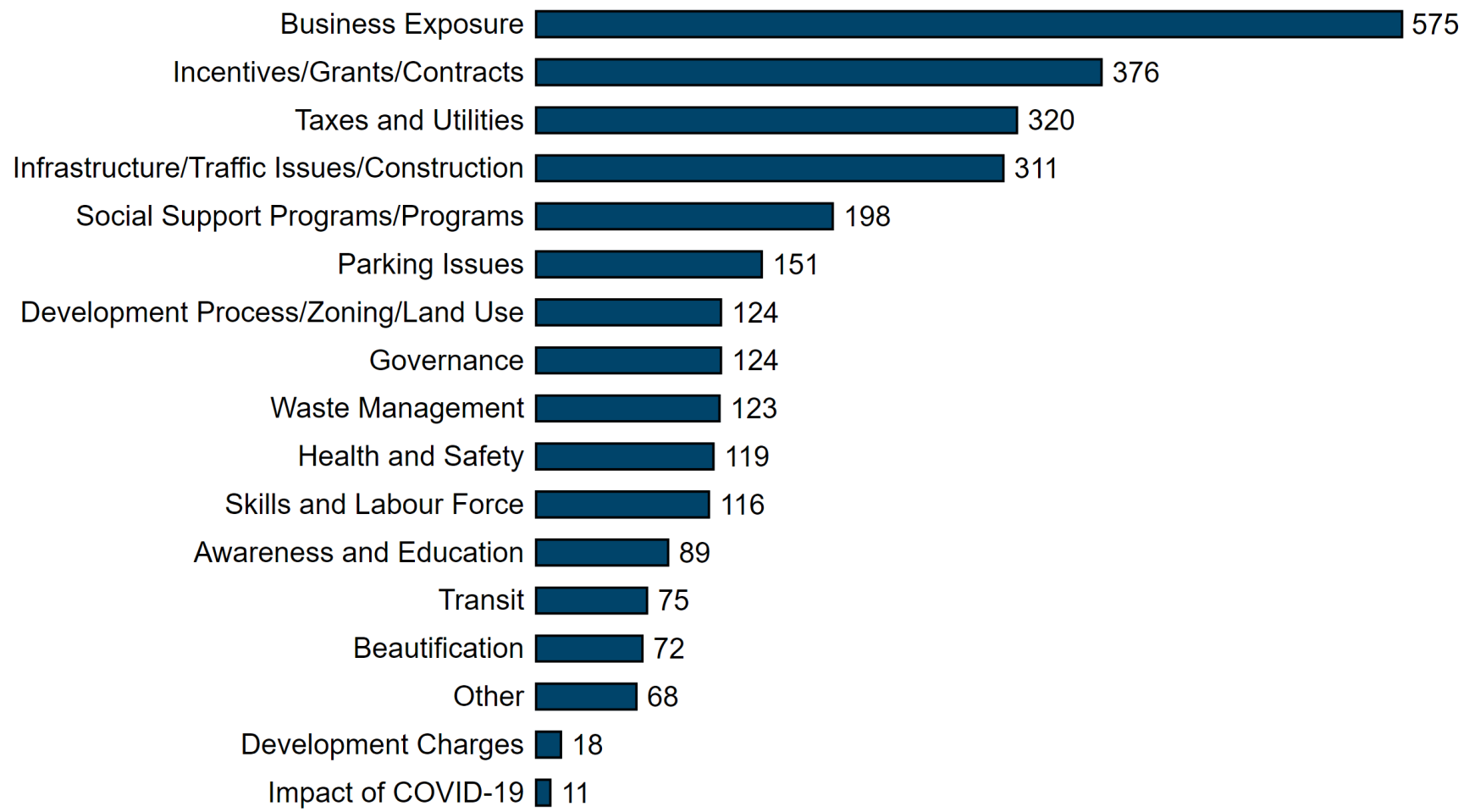
# Diversity, Equity and Inclusion Primary Sector Breakdown



# Engaging the Business Community

**“Is there anything Niagara Region can do to support your business?”**

2,870 responses received



# Key Highlights

- Participation rate increased by 6%
- 158 new businesses in 2024
- Retail trade, Accommodation, and Other Services are the top business sectors for the 3rd year in a row
- ~20% participation rate for DEI
- What Can Niagara Do (WCND) top theme: business exposure



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**Subject:** 2024 Niagara Employment Inventory Results

**Report To:** Planning and Economic Development Committee

**Report date:** Wednesday, February 5, 2025

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## Recommendations

1. That Report PDS 2-2025 **BE RECEIVED** for information.

## Key Facts

- The purpose of this report is to highlight the key results of the data collected during the 2024 Niagara Employment Inventory (NEI).
- The NEI is an annual direct data collection exercise (inventory and questionnaire) where a team of post-secondary students inventory publicly accessible businesses across Niagara.
- The Region began conducting the NEI in 2016, other than a two year pause during the COVID-19 pandemic, the survey has been carried out consistently each year, with 2025 survey preparations underway.
- The 2024 NEI team inventoried a total of 13,335 businesses throughout Niagara and received 11,529 completed responses, which captured the location of 141,674 full and part-time jobs and the associated data about the jobs reported by businesses who chose to participate in the questionnaire.
- Data captured through the NEI is shared with and is a key asset for internal regional departments, local area municipalities and other organizations. A subset of the data collected is also published to Open Data to make it available to the public.

## Financial Considerations

The NEI was funded through the Council-approved 2024 operating budget within Growth Strategy and Economic Development's base budget.

## Analysis

Niagara Region is among several municipalities in Ontario that collect workplace and employment data. Since 2016, the Region has collected primary data on the types and sizes of businesses operating in Niagara.

The NEI is conducted annually by a small team of post-secondary students between the months of May and September. The primary data collection method is through door-to-door, in-person interviews with local business owners, with additional follow-up engagement conducted through email and telephone communication.

The data collected has become vital for monitoring the Region's business and employment composition, as well as aiding decision-making and policy development. The information collected over the years has culminated into a comprehensive dataset of business information that provides the ability to research and analyze regional economic characteristics that otherwise would not be possible. The inventory is a geo-coded, spatially enabled dataset that facilitates analysis at a street-address level.

The business questionnaire was developed based on best practices from other municipalities in the Greater Toronto and Hamilton area, as well as through consultation with the following interested parties and experience gained over the years from administering the project:

- Internal Regional departments;
- Local area municipalities;
- Local economic development offices; and
- Brock University.

Each year, the NEI questionnaire features a core set of questions that are tailored to gain fundamental insight into the local business community. These questions remain unchanged each year to accurately compare results over time. The core questions are in alignment with employment questionnaires administered by our municipal counterparts in the Greater Toronto and Hamilton Area.

In 2022, two new categories were added to the questionnaire focused on (1) diversity, equity and inclusion (DEI) and (2) work from home. These questions were added to gain an understanding of the demographic characteristics of the business community, and to provide insight into the number of businesses with employees working from home. In response to challenges in the past two years with consistent collection of the DEI data, a different approach was implemented in 2024. The questions were asked in a separate survey following the end of the data collection period for NEI.

Participation in the NEI is voluntary. Despite best efforts, the project team is unable to make direct contact with all business owners or, occasionally, a business declines to participate.

## Results

Table 1 in Appendix 1 illustrates the proportion of complete and partially complete inventory records from 2016-2019, and 2022-2024. A complete inventory record indicates that a business provided responses to the inventory questionnaire from beginning to end (“complete questionnaire”), or the business was confirmed to be permanently closed or vacant.

Partially complete records indicate the inventory team was not able to make direct contact with a business representative. In these cases, the project team still captures several key attributes, such as verifying the physical location of the data point and associated sector and industry codes. The NEI continues to see a low rate (less than 2%) of businesses, who when contacted, declined to participate.

In 2024, a completion rate of 86% was achieved. The 2024 completion rate is strong with a 6% increase since 2023. A steady increase in the completion rate year-over-year can be attributed to greater familiarity with the survey and project team, a streamlined data entry methodology, and joint communication outreach conducted by our local Chambers of Commerce and other interest groups.

The NEI team inventoried 13,335 businesses and received 11,529 completed questionnaires in 2024. Compared to 2023 there is an increase of 475 businesses inventoried which captured the physical location of 141,674 full and part time jobs. There was a decrease of 5,162 part time jobs; however, an increase of 706 full time jobs were captured in the inventory.

## Job Type Results

Table 2 in Appendix 1 illustrates the number of businesses inventoried and jobs captured within complete questionnaires in the 2024 NEI by sector based on the 2-digit North American Industry Classification System (NAICS). The NAICS was established by statistical agencies of Canada, Mexico and the United States. It is a standardized industry classification system used to categorize business establishments based on the type of economic activity of the business.

Based on the number of businesses inventoried, the top three sectors observed in 2024 were: retail trade (22.0%), accommodation and food services (15.0%) and other

services (except public administration) <sup>1</sup>(13.3%). When combined, these sectors make up 50% of all the businesses captured in the inventory.

Based on the number of jobs captured in complete questionnaires, the top three sectors observed in 2024 were: retail trade (16.3%), accommodation and food services (15.1%), and health care and social assistance (13.1%). Together, these sectors make up 44% of the total jobs captured in complete questionnaires.

### **Business Closures and Openings**

In 2024, approximately 810 businesses inventoried were identified as no longer being in operation or vacant. The top three sectors that experienced business closures were retail trade; accommodation and food services; and other services (except public administration).

Over the same period, approximately 629 new businesses were identified and added to the inventory in 2024; 158 of those businesses are net new in 2024. The top three sectors that new businesses were observed in are: retail trade; accommodation and food services; and other services (except public administration).

Table 3 in Appendix 1 illustrates business closures and openings from 2022-2024, highlighting the changing economic landscape in Niagara Region.

### **Distribution of Inventoried Businesses and Number of Jobs by Municipality**

Table 4 in Appendix 1 illustrates the municipal breakdown of the number of businesses and jobs reported over the last six inventory periods. As mentioned above, the total businesses inventoried includes businesses observed to no longer be in operation or vacant, and total jobs reported are only for complete questionnaires.

Table 5 in Appendix 1 illustrates the completion rate by municipality. The completion rate includes businesses that provided responses to the inventory questionnaire from beginning to end (“complete questionnaire”), and businesses that were confirmed to be permanently closed or vacant. The top three municipalities with the highest completion rate in 2024 were: Thorold (90.0%), West Lincoln (88.6%), and Welland (88.5%).

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<sup>1</sup> Other Services includes repair shops, personal care facilities and laundry services, among other industries.

## Work from Home

In total, 1,155 businesses reported having staff working from home, representing approximately 9,127 employees. This is an increase from approximately 1,021 businesses and 7,023 employees reported in 2023. The majority of employees working from home were in the professional, scientific, and technical services (29.6%), manufacturing (14.1%), and education (13.4%).

## Diversity, Equity and Inclusion

2024 marks the third year Niagara Region has asked diversity, equity and inclusion questions to understand the demographic characteristics of the leadership teams in the Niagara business community.

Table 6 in Appendix 1 provides the responses to the questions in the DEI section. Businesses were asked whether the majority of the business (+50%) are owned or led by:

- Person who identifies as a woman
- Person who identifies as a member of the 2SLGBTQIA+<sup>2</sup> community
- Person who identifies as being disabled
- First Nations, Inuit or Métis person
- Person who identifies as a visible minority
- Youth (Less than 18 years old)
- Person who is a new immigrant (in Canada less than 5 years)

Women led businesses (37%) has consistently been identified in the top demographics followed by visible minority (9.4%) and 2SLGBTQIA+ (3.7%).

Respondents were given the opportunity to complete the DEI section online for a period of 3 weeks if they consented to receiving additional communications from Niagara Region. In total, 1,120 businesses responded to the questions in the DEI section. The top three sectors that completed the DEI section were retail trade (19.0%), health care and social assistance (16.6%), and accommodation and food services (12.2%).

Table 7 in Appendix 1 shows the municipal breakdown of businesses that consented to the DEI section and businesses that completed it. All municipalities across the Region

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<sup>2</sup> Two spirit, lesbian, gay, bisexual, transgendered, queer, questioning, intersex, asexual, and all other sexual orientations and genders.

achieved a consistent completion rate averaging 20.9% overall. The top three municipalities with the highest DEI completion rate were West Lincoln (27.5%), Port Colborne (26.4%), and Fort Erie (25.2%).

Staff in the DEI and Indigenous Relations team are reviewing the responses to develop strategies to continue to increase response rates in the future. This data will also be used to inform ongoing DEI initiatives at the Region.

### **Utilizing NEI Data**

The data collected each year through the NEI provides detailed local business information that is not available through Statistics Canada data. In most cases, Statistics Canada data is updated once every five years providing high level data. Whereas the NEI is updated on a yearly basis to capture the current locational information, excluding the two-year data gap prompted by the COVID-19 pandemic.

Statistics Canada data remains the authoritative data source for performing analysis at regional and municipal level geographies; but lacks the ability to analyze raw business data at the street address level. Collecting annual business data at the street address level allows for detailed analysis to be carried out at custom geographies and time series.

The NEI results are used in conjunction with Statistics Canada data and other data sources to accurately monitor the regional economy. This allows for a better understanding of where the Region can take action to help facilitate economic growth and understand the changes that have taken place since the two-year reporting gap.

Reliable business data is an integral resource to better understand the region's employment context. This dataset plays a significant role in supporting decisions related to population and employment growth, infrastructure investment (including public transit), economic development inquiries, and the ongoing monitoring of economic conditions and trends.

In addition to supporting decision making, the data collected over the years has been used by the Region to facilitate analysis to support and add value to various projects. Projects that the NEI data has been used for include:

- South Niagara Hospital Project Business Directory;
- Niagara Official Plan Land Needs Assessment;
- Niagara Region Waste Collection Contract Review; and,

- Brock University Active Economy and Sport Tourism Research.

Economic Development also uses the NEI data to connect businesses to supply chain opportunities, support international promotion through the Niagara Canadian Business Directory, and to assist in analyzing the regional economy.

The NEI data along with the report will be circulated by the NEI team to Local Area Municipalities, Local Economic Development Offices, The Niagara Chambers of Commerce, Brock University and Niagara College.

### **Building Relationships**

The NEI also provides key opportunities for the Region to directly connect with local businesses to further develop partnerships, foster an environment for innovation and development within the Niagara business community, and the ability to listen and address any comments or concerns. Staff turnover and changing business operations can become an obstacle when trying to engage businesses, largely because the contact information in the NEI database became outdated. Following the two year reporting gap, the project team continues to focus on building relationships with the business community. To do so, the project team sought to educate business representatives on the value of the data relative to how it is used by the Region and local municipalities.

Addressing concerns of business owners continues to be an important step in building and maintaining strong working relationships with the community. On occasion, concerns were expressed by business owners, which were addressed immediately by the project team. Where the project team could not address the concern, the business owner was referred to resources available at the Region, such as the Waste Management Info-Line or local business support services.

Table 8 in Appendix 1 highlights the responses received when business owners were asked, “Is there anything Niagara Region could do to help support your business?” For reporting purposes, the responses have been categorized into themes only. The top three themes for 2024 are business exposure (20.0%), incentives/grants/contracts (13.1%), and taxes and utilities (11.1%). The raw comments are shared with applicable internal departments, and with local municipal partners.

### **Open Data**

Each year, a subset of the NEI results is released to the public through the Niagara Region Open Data Portal. Open Data places information in the hands of the public,

promoting innovation and fostering greater transparency and accountability. The following attributes from the Employment Inventory dataset are made available to the public including, business name, location information, 6-digit North American Industry Classification System (NAICS) code, and employee size categories.

### **Alternatives Reviewed**

Council could opt not to receive and share this report. However, as the results of the NEI contribute to projects and initiatives which are actions of Council's Strategic Priorities, this option is not recommended.

### **Relationship to Council Strategic Priorities**

The NEI is a key tool that the Niagara Region uses to strengthen its economic competitiveness by better understanding its current employment landscape and workforce composition.

The NEI project supports Council's strategic priorities of Prosperous Region, Equitable Region, and Effective Region. Data collected through engaging the business community is used to inform decision-making related to population and employment growth, infrastructure investment, public transit planning, economic development, and the ongoing monitoring of economic conditions.

The Niagara Region and local area municipalities rely on this dataset as a valuable asset when developing robust business cases designed to attract investment, innovation, and entrepreneurship to Niagara and strengthen the Region's position globally.

### **Other Pertinent Reports**

- [PDS 1-2017 – Niagara Region Employment Inventory Preliminary Results](https://www.niagararegion.ca/council/Council%20Documents/2017/council-agenda-feb-09-2017.pdf) (https://www.niagararegion.ca/council/Council%20Documents/2017/council-agenda-feb-09-2017.pdf)
- [PDS 5-2018 – Niagara Region 2017 Employment Inventory Results](https://www.niagararegion.ca/council/Council%20Documents/2018/council-agenda-feb-08-2018.pdf) (https://www.niagararegion.ca/council/Council%20Documents/2018/council-agenda-feb-08-2018.pdf)
- [PDS 6-2019 – Niagara Region 2018 Employment Inventory Results](https://pub-niagararegion.escribemeetings.com/filestream.ashx?DocumentId=2512) (https://pub-niagararegion.escribemeetings.com/filestream.ashx?DocumentId=2512)
- [PDS 5-2020 – Niagara Region 2019 Employment Inventory Results](https://pub-niagararegion.escribemeetings.com/filestream.ashx?DocumentId=8594) (https://pub-niagararegion.escribemeetings.com/filestream.ashx?DocumentId=8594)



- [PDS 12-2021 – 2021 Niagara Employment Inventory Status Update](https://pub-niagararegion.escribemeetings.com/filestream.ashx?DocumentId=15406) (https://pub-niagararegion.escribemeetings.com/filestream.ashx?DocumentId=15406)
- [PDS 6–2023 – 2022 Niagara Employment Inventory Results](https://pub-niagararegion.escribemeetings.com/filestream.ashx?DocumentId=30515) (https://pub-niagararegion.escribemeetings.com/filestream.ashx?DocumentId=30515)
- [PDS 13-2024 – 2023 Niagara Employment Inventory Results](https://pub-niagararegion.escribemeetings.com/filestream.ashx?DocumentId=36722) (https://pub-niagararegion.escribemeetings.com/filestream.ashx?DocumentId=36722)

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This report was prepared in consultation with Erik Acs, Manager of Community Sustainability, Blake Landry, Economic Research and Analysis Manager, Cassie Ogunniyi, Manager, Diversity Equity and Inclusion and Indigenous Relations, Susan White, Program Financial Specialist, and reviewed by Angela Stea, Director, Strategic Initiatives.

## Appendices

Appendix 1            Data Tables

# APPENDIX 1

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## Data Tables

Table 1 – Inventory Completion Rate

<b>Year</b>	<b>Complete Inventory Record</b>	<b>Partially Complete Record</b>	<b>Declined to Participate</b>
2016	68%	30%	2%
2017	76%	22%	2%
2018	87%	12%	1%
2019	90%	9%	<1%
2022	75%	24%	<1%
2023	80%	19%	<1%
<b>2024</b>	<b>86%</b>	<b>13%</b>	<b>&lt;2%</b>

Table 2 – Number of Businesses and Jobs by NAICS Sector

NAICS Industry Sector (2-Digit)	Number of Jobs 2024	Percentage of Jobs in Region	Number of Businesses 2024	Percentage of Businesses in Region
Accommodation and food services	21,445	15.1%	1990	15.0%
Retail Trade	23,043	16.3%	2928	22.0%
Health Care and Social Assistance	18,571	13.1%	1396	10.5%
Manufacturing	14,940	10.5%	886	6.6%
Educational Services	15,681	11.1%	262	2.0%
Public Administration	7,590	5.4%	242	1.8%
Other Services (except public administration)	6,902	4.9%	1785	13.3%
Construction	4,840	3.4%	448	3.3%
Professional, Scientific, Technical Services	3,969	2.8%	882	6.6%
Arts, Entertainment and Recreation	4,831	3.4%	466	3.5%
Administrative and Supportive, Waste Management and Remediation Services	3,708	2.6%	322	2.4%
Agriculture, Forestry, Fishing and Hunting	2,907	2.0%	172	1.3%
Wholesale Trade	3,678	2.6%	291	2.2%
Finance and Insurance	2,520	1.8%	484	3.6%
Transportation and Warehousing	3,269	2.3%	232	1.7%
Real Estate, Rental and Leasing	2,372	1.7%	347	2.6%
Information and Cultural Industries	745	0.5%	145	1.1%
Utilities	498	0.4%	40	0.3%
Mining, Quarrying, and Oil and Gas Extraction	122	0.1%	8	0.0%
Management of Companies and Enterprises	43	0.0%	9	0.0%
<b>Total</b>	<b>141,674</b>	<b>100%</b>	<b>13,335</b>	<b>100%</b>

Table 3 – Business Closures and Openings

<b>Year</b>	<b>Permanently Closed Businesses</b>	<b>New Businesses Added to Database</b>	<b>New Businesses Opened Each Year</b>
2023	797	1,269	145
2024	810	629	158

Table 4 – Distribution of Inventoried Businesses and Jobs by Municipality

Municipality	2017		2018		2019		2022		2023		2024	
	Total Businesses	Total Jobs	Total Businesses	Total Jobs	Total Businesses	Total Jobs	Total Businesses	Total Jobs	Total Businesses	Total Jobs	Total Businesses	Total Jobs
Fort Erie	719	6,867	763	8,414	775	8,301	844	5,547	786	5,689	825	6,437
Grimsby	455	4,750	465	5,204	479	6,682	512	4,210	526	6,509	573	4,882
Lincoln	543	6,650	564	6,964	571	8,108	604	6,772	627	8,249	647	7,737
Niagara Falls	2,553	32,982	2,642	32,687	2,715	33,473	2,982	24,415	2,973	33,828	3044	29,304
NOTL	513	9,707	560	11,238	596	10,926	636	7,999	669	10,072	710	10,117
Pelham	301	2,275	318	2,677	334	3,202	372	2,865	393	3,724	417	3,462
Port Colborne	465	3,917	468	4,176	478	4,682	518	3,405	484	4,076	506	3,895
St. Catharines	3,771	44,254	3,966	48,130	4,051	48,726	4,396	40,107	4,292	46,594	4404	46,466
Thorold	491	5,307	523	5,674	538	6,693	582	5,425	593	7,337	632	8,352
Wainfleet	58	402	60	507	61	479	72	497	83	576	82	509
Welland	1,158	12,122	1,188	14,149	1,214	14,010	1,299	9,274	1,212	16,519	1266	17,738
West Lincoln	175	1,911	203	2,364	204	2,677	216	1,985	222	2,955	229	2,775
<b>Niagara Region</b>	<b>11,202</b>	<b>131,144</b>	<b>11,720</b>	<b>142,184</b>	<b>12,016</b>	<b>147,959</b>	<b>13,033</b>	<b>112,501</b>	<b>12,860</b>	<b>146,128</b>	<b>13,335</b>	<b>141,674</b>

Table 5 – Municipality Completion Rate

Municipality	Completion Rate	
	Complete Businesses	Completion Rate Percentage
Fort Erie	702	85.1%
Grimsby	472	82.4%
Lincoln	555	85.8%
Niagara Falls	2,628	86.3%
NOTL	591	83.1%
Pelham	361	86.6%
Port Colborne	432	85.4%
St. Catharines	3,826	86.9%
Thorold	569	90.0%
Wainfleet	67	81.7%
Welland	1,120	88.5%
West Lincoln	203	88.6%
<b>Niagara Region</b>	<b>11,526</b>	<b>86.4%</b>

Table 6 – Diversity Equity and Inclusion Responses

Response	Women Led	2SLGBTQQA+ Led	Disability Led	First Nations, Inuit, Metis Led	Visible Minority Led	Youth Led	New Immigrant Led
Yes	414	34	21	16	105	2	22
No	476	834	854	890	755	899	875
Decline	230	252	245	214	260	219	223

Table 7 – Municipality DEI Completion Rate

<b>Municipality</b>	<b>Businesses that consented to emails</b>	<b>DEI Complete Surveys</b>	<b>DEI Completion Rate</b>
Fort Erie	301	76	25.2%
Grimsby	250	59	23.6%
Lincoln	291	66	22.7%
Niagara Falls	1141	221	19.4%
NOTL	294	61	20.7%
Pelham	209	41	19.6%
Port Colborne	193	51	26.4%
St. Catharines	1776	341	19.2%
Thorold	286	68	23.8%
Wainfleet	37	7	18.9%
Welland	462	99	21.4%
West Lincoln	109	30	27.5%
<b>Total</b>	<b>5349</b>	<b>1120</b>	<b>20.9%</b>



Table 8 – “Is there anything Niagara Region could do to support your business?”

<b>Response Themes</b>	<b>Responses Received 2024</b>	<b>Proportion 2023</b>	<b>Proportion 2024</b>
Business Exposure	575	14.9%	20.0%
Incentives/Grants/Contracts	376	11.7%	13.1%
Taxes and Utilities	320	11.3%	11.1%
Infrastructure/Traffic Issues/Construction	311	12.4%	10.8%
Social Support Programs/Programs	198	7.0%	6.9%
Parking Issues	151	4.9%	5.3%
Governance	124	2.3%	4.3%
Waste Management	123	4.7%	4.3%
Development Process/Zoning/Land Use	124	4.1%	4.3%
Health and Safety	119	7.0%	4.1%
Skills and Labour Force	116	8.5%	4.0%
Awareness and Education	89	4.7%	3.1%
Transit	75	2.9%	2.6%
Beautification	72	2.2%	2.5%
Other	68	0.2%	2.4%
Development Charges	18	0.6%	0.6%
Impact of COVID-19	11	0.6%	0.4%
<b>Total</b>	<b>2,870</b>	<b>100%</b>	<b>100%</b>

# Investment Attraction Update

Planning and Economic Development Committee

ED 2-2025

Wednesday, February 5, 2025

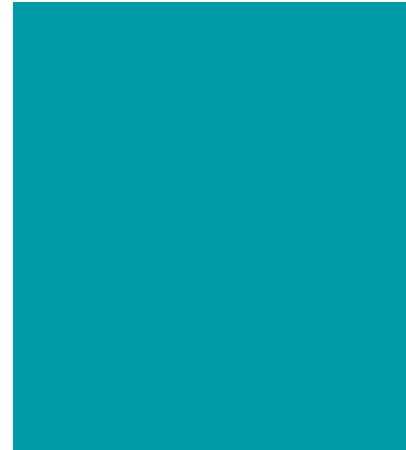
Eric Chou, Manager, Trade and Investment

# Investment Attraction Update

Eric Chou, Manager, Trade and Investment  
Planning and Economic Development Committee  
Wednesday, February 5, 2025

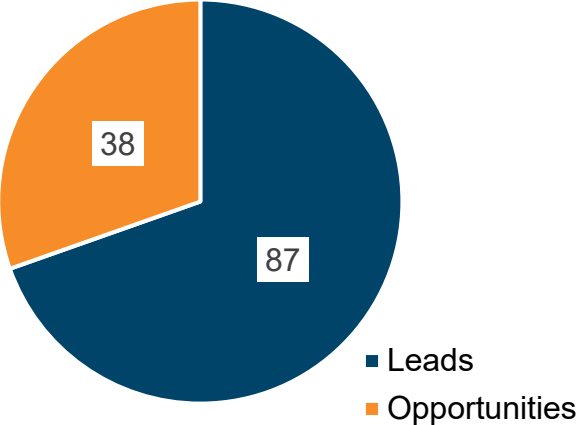
# Purpose

- Summarize **key investment attraction activities from Niagara Economic Development** from November 2024 to February 2025
- Demonstrate how investment attraction activities, including external events, hosting prospective clients and investors promote Niagara as an attractive location for investment.
- Highlight 2024 KPI metrics
- Highlight Niagara Region's largest investment with the announcement of Asahi Kasei locating to Port Colborne.
- All activities focus on attracting investment, fostering sustainable economic growth, and **positioning Niagara as a leading business destination**. Through strategic projects, Niagara is advancing toward meeting the goals of the Council 2023-2026 Strategic Plan and specifically meeting our Prosperous Region objectives.



# 2024 in Review

2024 Pipeline



**\$14.5 Billion Total Pipeline Investment Value**

**8 Site Visits**

**4 Businesses located to Niagara**

**\$1,565,000,000 Total Investment in Niagara**

**337 Projected Jobs**

# Investment Attraction Activities

- November 12, 2024
  - Consular Corps Association of Toronto Presentation
- November 14, 2024
  - Asahi Kasei Groundbreaking
- November 19, 2024
  - Infinite Harvest Technologies Demo Day
- December 10, 2024
  - SIOR Broker of the Year Awards Gala



# Asahi Kasei Groundbreaking



# Site Visits with Partners

- November 14, 2024
  - Invest in Canada Familiarization Tour
- December 2, 2024
  - Advantage Austria Familiarization Tour
- December 3, 2024
  - Canadian Polish Business Association Construction Trade Mission





# 2025 Q1 and Q2 Investment Attraction Activities



MAR 5 - 7



MAR 12 - 14



APR 8 - 11



**TCS Investment & Innovation Roadshow, Asia Pacific**

MAY 5 - 9



MAY 21 - 23



**Canada**  
Partner Country  
Pays Partenaire 2025

MAR 31 - APR 4

# Q4 2024 FDI Pipeline



**New Leads**  
Meetings with **10** new businesses expressing interest in investing in Niagara Region

**New Opportunities**  
7 new opportunities from qualified investors

**Subject:** Economic Development Foreign Direct Investment (FDi) Update

**Report to:** Planning and Economic Development Committee

**Report date:** Wednesday, February 5, 2025

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## Recommendations

1. That Report ED 2-2025 **BE RECEIVED** for information.

## Key Facts

- The objective of this report is to update the Planning and Economic Development Committee (PEDC) on Foreign Direct Investment (FDi) activities conducted from November 2024 to February 2025.
- Efforts focus on growing and diversifying the economy by attracting businesses in sectors where Niagara holds a competitive advantage, particularly in emerging areas that present a strong business case for investment.
- Key activities in this initiative include conducting lead generation and meetings in identified FDI target markets, as well as leading international investment missions with our “Team Niagara” partners.
- Economic Development staff actively partner with area municipalities, provincial and federal government officials, and FDI organizations such as Invest Canada (IC), Invest Ontario (IO), and the Consider Canada Cities Alliance (CCCA).
- Additionally, the promotion of Niagara as a Foreign Trade Zone (FTZ) point is ongoing to enhance trade programs that advance import and export activities within the region.

## Financial Considerations

The activities described in this report have been accommodated within the Council approved 2025 Economic Development budget.

## Analysis

Niagara is a Prosperous Region due to its strategic location on the U.S./Canada border, along with the region’s multi-modal transportation infrastructure, and its designation as a Canadian Foreign Trade Zone Point (FTZ) making it an attractive place for companies to invest and conduct trade. The Region also acts as a conduit for international

businesses looking to enter the North America market via international trade agreements, enhancing our regions competitiveness and global supply chain network.

**Investment Attraction Activities:**

The Economic Development team have attended several external events since November 2024. These events provide Niagara Region with face-to-face opportunities with prospective investors, educational opportunities with in-market influencers (consular offices, trade commissioners and local Chambers of Commerce). These events raise the Niagara Region profile on an international basis ensuring brand recognition.

On November 12, 2024, the Economic Development team was invited to attend the Consular Corps Association of Toronto lunch event. The event provided staff the opportunity to present on investment opportunities to Consular Generals from over 15 countries.

On November 14, 2024, Economic Development staff attended the official Asahi Kasei groundbreaking in Port Colborne. Regional and municipal staff were present at the event hosted by Asahi Kasei. The event was attended by representatives from all levels of government, including Minister François-Philippe Champagne, Minister Vic Fedeli, MP Vance Badawey, Regional Chair Jim Bradley, and Mayor Bill Steele. Japan's Ambassador to Canada, Kanji Yamanouchi was also in attendance. A meeting was convened with federal representatives to provide an overview of the project and to discuss opportunities to support infrastructure requirements.

On November 14, 2024, Economic Development staff also hosted the CEO of Invest in Canada. Invest in Canada attended the Asahi Kasei groundbreaking, while in market Economic Development staff planned a tour of Niagara and a visit to Jungbunzlauer Canada Inc., BioVeld 2 (Hamilton Oshawa Port Authority (HOPA), Niagara Ports), and Brock University's Validation Prototyping Manufacturing Institute (VPMI). The program was designed to ensure that the CEO and Invest in Canada team had a better understanding of Niagara Region's value proposition as they promote Canada to international investors.

On November 19, 2024, staff attended a Demo Day in support of Infinite Harvest Technologies at Vineland Research Institute. The agri-tech company located to Niagara Region in 2022 after participating in a Niagara Bootcamp hosted in

partnership with Global Startups. Since moving their operations to Niagara, the Infinite Harvest team has leveraged partnerships with Niagara's post secondary institutions and innovation centres.

On December 2, 2024, Economic Development staff hosted the Consul and Trade Commissioner, and Vice-Consul and Deputy Trade Commissioner from Advantage Austria. The itinerary included meetings with Niagara companies with headquarters in Austria. Site visits involved tours at Palfinger in Niagara Falls and Innio Waukesha in Welland.

Together with the City of Niagara Falls, Economic Development staff presented Niagara's value proposition and investment opportunities to a trade delegation from Poland on December 3, 2024. The group of construction businesses were introduced to staff by the Canadian Polish Business Association and had the opportunity to meet the group during their stop in Niagara Falls.

On December 10, 2024, Economic Development staff attended the SIOR Broker of the Year Awards Gala in Toronto as an event sponsor. The event brought together the top brokers in the Greater Toronto Area (GTA) market and was a great opportunity for staff to network and promote Niagara's investment opportunities.

Additional hosting opportunities have been presented to the Economic Development team. These hosting opportunities allow Niagara Economic Development to showcase the region to local influencers promoting the benefits of doing business and living in Niagara.

### **FDi Pipeline:**

The Economic Development team continues to conduct meetings with leads identified in our FDi target markets and sectors. In the fourth quarter of 2024 the team had meetings with 10 new businesses expressing interest in investing in Niagara Region. The Economic Development team distinguishes between leads and opportunities. Leads are businesses that have been introduced to Niagara Region by lead generating consultants or have reached out for information on their own. Opportunities are qualified leads that come from our partners, such as Invest Ontario, or Invest in Canada, or have been converted from leads. Opportunities that have been converted from leads are those that the Economic Development team has had multiple contact with and/or have

been provided a list of potential sites for investment in Niagara. In the fourth quarter of 2024 there were seven (7) total new opportunities.

All leads and opportunities are input into the Economic Development Customer Relationship Management (CRM) system for continuous tracking and follow-up and to ensure a robust system to monitor activities in the pipeline and to provide accurate reporting of outcomes.

### **Alternatives Reviewed**

Foreign Direct Investment (FDI) is a key function of Regional Economic Development and the tactics being used are consistent with accepted economic development practices.

### **Relationship to Council Strategic Priorities**

FDI initiatives support Council's strategic priorities for an Effective and Prosperous Region.

### **Other Pertinent Reports**

- ED 2-2025: Economic Development Foreign Direct Investment (FDI) Update

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#### **Prepared by:**

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Economic Development

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#### **Recommended by:**

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Director  
Economic Development

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#### **Submitted by:**

Ron Tripp, P.Eng.  
Chief Administrative Officer

This report was prepared in consultation with Marco Marino and Susan White.

### **Appendices**

N/A

## Memorandum

**PDS-C 1-2025**

**Subject:** Regional Environmental Impact Study Guidelines

**Date:** Wednesday, February 5, 2025

**To:** Planning and Development Committee

**From:** Rachel Daniels, Planning Ecologist

---

The purpose of this memo is to inform Council of the recently completed Niagara Region Environmental Impact Study (EIS) Guidelines (Appendix 1).

These guidelines provide clear direction for landowners considering development or site alteration within or near the Niagara Natural Environment System (NES) and to assist the Area Municipalities during development review. They also offer guidance for Environmental Impact Statement (EIS) professionals on when and how to conduct an EIS. The guidelines help proponents identify and avoid conflicts between proposed development and natural heritage features through a constraints analysis before finalizing development plans. Additionally, they define the roles and responsibilities of relevant agencies and provide tools and templates to streamline the process, including options for avoiding or waiving the EIS where applicable. Ultimately, these guidelines ensure consistent application of regional and local policies, fostering a balanced approach to development and conservation across the Region.

### Consultation

The new Niagara Official Plan (NOP) was approved in November 2022. Subsequently, the Region's EIS Guidelines were revised to align with the new plan and help proponents and practitioners meet natural heritage management requirements. The goal was to create a consistent approach to Environmental Impact Studies (EIS) across the Region, providing technical guidance for reviewing EIS in support of development applications.

In Fall 2022, Regional staff, in collaboration with the Niagara Peninsula Conservation Authority (NPCA), initiated the project, which included both public and development industry engagement. In Winter 2022, a survey was posted on the project website to gather preliminary feedback from practitioners on the challenges of the current guidelines and potential solutions or opportunities for the update.

Based on consultation feedback, the EIS guideline framework was developed, outlining the roles and responsibilities of all parties involved. It also introduced a Project Screening Tool and a Waiving Tool, designed to streamline the EIS process for both practitioners and reviewers.

On November 20, 2023, a workshop was held where practitioners, agencies, and other stakeholders reviewed the draft Guidelines and associated tools. Feedback from the workshop was used to refine and finalize the EIS Guidelines.

### **EIS Guideline Highlights**

The Guideline offers a step-by-step overview of the EIS process, ensuring clarity and consistency for applicants, planners, EIS professionals, and Conservation Authority representatives. It also clarifies the roles and responsibilities of commenting agencies in the approval process, providing consultants with a clear framework for understanding expectations and review timelines, which helps streamline and improve the efficiency of the approval process.

To make the EIS process efficient for both the Applicant and the Approval Authority, several tools have been created, including:

- EIS Project Screening Tool
- EIS Waiving Assessment Tool
- EIS Terms of Reference Checklist Tool
- EIS Comment and Response Template Tool
- EIS Final Submission Checklist Tool

The development of these five tools aims to streamline and standardize the environmental review process for consultants. The screening tool helps consultants quickly determine whether a project requires an EIS by providing clear guidelines based on regulatory criteria, ensuring timely decision-making. The Terms of Reference (TOR) checklist and Submission Checklist improve submission completeness, ensuring all necessary components are included at the time of application, reducing delays and preventing incomplete documentation. Finally, the Comment and Response Matrix standardizes the review process, fostering efficient communication between stakeholders and reducing the need for multiple submissions, ultimately saving time and resources while enhancing project outcomes.



Additionally, the guidelines provide comprehensive direction on the structure, technical content, and methodology for completing an EIS, ensuring that all key aspects of the assessment process are fully addressed. It outlines the minimum submission requirements for a complete and acceptable EIS, with clear expectations for each section of the report. The guidelines also cover critical topics such as:

- The application of appropriate buffer zones;
- The use of a mitigation hierarchy to avoid, minimize, or mitigate adverse impacts;
- The incorporation of enhancement or restoration measures, where applicable; and,
- The definition of a monitoring plan to assess the effectiveness of mitigation measures throughout the project's phases (pre-construction, construction, and post-construction).

The updated EIS Guideline will be posted on the Region's website and shared with the 12 Area Municipalities at pre-consultation meetings for future planning applications. By providing contemporary EIS Guidelines for the Niagara Region, it will help proponents and practitioners navigate the complex, interconnected requirements for natural heritage management. This will ensure that new developments identify constraints early in the process, incorporate best management practices, consider restoration opportunities, and plan for effective monitoring. These guidelines will also support the Area Municipalities in conducting natural heritage reviews after the proclamation, when they assume planning responsibilities of the Niagara Official Plan.

Respectfully submitted and signed by

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Rachel Daniels  
Planning Ecologist  
Public Works Department

Appendix 1 Niagara Region Environmental Impact Study (EIS) Guidelines

# Niagara Region Environmental Impact Study

## GUIDELINES

Niagara Region // March, 2024

# Niagara Official Plan Environmental Impact Study Guidelines

The Niagara Official Plan (N.O.P.) is the Regional Municipality of Niagara’s long-term land use planning framework for managing growth coming to Niagara. The N.O.P. includes land use policies for Niagara’s natural environment system, agricultural system, climate change, resource needs, growth allocations, housing, transportation, urban design and employment lands, to list a few of the policy areas that guide land use planning and development.

This Environmental Impact Study (E.I.S.) Guideline is a guidance document to help inform, clarify and support the implementation of the N.O.P. policies. These Guidelines do not introduce additional policy requirements. In the even that there is a conflict between the E.I.S. Guidelines and the N.O.P., the N.O.P. shall prevail.

The overall purpose of this E.I.S. Guidelines is to facilitate the consistent application of regional and local environmental impact study related policy, which will contribute to a balanced approach to development and conservation across the Region.

These Guidelines identify E.I.S. requirements under the Greenbelt Plan, Provincial Policy Statement, Regional Official Plan, local Official Plans and By-laws and support the objectives of the Niagara Escarpment Plan and Niagara Peninsula Conservation Authority Policies and Regulations. These Guidelines can facilitate the review of E.I.S.’s by Niagara Region, Local Area Municipalities and the Conservation Authority.

## Table of Contents

Introduction.....	1
How to Use the Guideline .....	1
1.0 E.I.S Process .....	2
1.1 Roles & Responsibilities.....	4
1.2 Step 1   Project Screening.....	8
1.2.1 E.I.S. Triggers, Prohibitions and Exemptions .....	10
1.2.1.1 Triggers for the Environmental Impact Study Process.....	11
1.2.1.2 Prohibitions.....	12
1.2.1.3 Exemptions.....	13
1.2.2 Avoiding or Waiving the E.I.S. Requirement.....	15
1.2.2.1 Waiving.....	15
1.3 Step 2   Scoping the E.I.S. ....	17
1.3.1 Terms of Reference .....	17
1.4 Step 3   Information Gathering & E.I.S. Preparation.....	18
1.5 Step 4   Draft E.I.S. Submission.....	19
1.5.1 Comment and Response Matrix Template .....	19
1.6 Step 5   Final E.I.S. & Data Package Submission .....	20
2.0 E.I.S. Content .....	21
2.1 Introduction .....	21
2.2 Planning Context.....	21
2.3 Methods.....	22
2.4 Existing Conditions.....	23
2.4.1 Species at Risk (S.A.R.) .....	24
2.5 Evaluation of Features and Functions.....	25
2.5.1 Delineation and Refinement of Components of the N.E.S.....	26
2.5.2 Supporting Features and Areas.....	27
2.6 System Management .....	27
2.6.1 Features .....	28

- 2.6.1.1 Natural Heritage Features and Functions .....28
- 2.6.1.2 Supporting Features and Areas .....28
- 2.6.2 Linkages .....30
- 2.6.3 Buffers .....30
- 2.6.3.1 Preliminary Buffer Recommendations .....32
- Establishing Buffer Requirement(s) .....32
- Buffer Width.....32
- Refinement Opportunities .....33
- 2.6.4 Enhancement Opportunities .....34
- 2.7 Description of the Proposed Development or Site Alteration .....34
- 2.8 Impact Assessment.....35
- 2.8.1 Types of Impacts .....36
- 2.8.2 Applying the Mitigation Hierarchy .....38
- 2.8.2.1 Avoid.....38
- 2.8.2.2 Minimize .....38
- 2.8.2.3 Mitigate.....39
- Buffers .....39
- 2.8.2.4 Residual Impacts .....40
- 2.8.3 System Enhancements.....40
- 2.9 Delineation and Refinement of System Boundaries .....41
- 2.9.1. Natural Environment System Boundary.....41
- 2.9.2 Greenbelt Natural Heritage System Boundary.....41
- 2.9.3 Growth Plan Natural Heritage System Boundary.....41
- 2.10 Policy Assessment .....41
- 2.11 Monitoring Plan .....42
- 2.12 Conclusions.....42
- 2.13 References.....43
- 2.14 Appendices & Supporting Material Requirements.....43

## Introduction

These guidelines present best practices for the preparation of Environmental Impact Studies (E.I.S.) in Niagara Region. They provide a clear outline of what is expected through the E.I.S. process and requirements for approach for and content of an E.I.S. These guidelines will facilitate the consistent application of regional and local environmental impact study related policy, which will contribute to a balanced approach to development and conservation across the Region.

This E.I.S. Guideline intends to:

- Establish a standardized set of study guidelines specific to natural heritage features and key hydrologic features;
- Establish a standardized set of study guidelines specific to natural heritage features and key hydrologic features;
- Avoid conflicts between proposed development and natural heritage features and / or key hydrologic features through constraints analysis prior to establishing development layout;
- Provide a planning tool that can be used by the applicant to address environmental consideration throughout the development process;
- Ensure high quality, consistent studies and reporting methods; and
- Facilitate and expedite the environmental review process by Local Area Municipalities (or their designate) and / or the N.P.C.A.

## How to Use the Guideline

The E.I.S. Guideline provides the following:

- **direction** to landowners considering development or site alteration in or adjacent to the Niagara Natural Environment System (N.E.S.);
- **direction** to E.I.S. Professionals to determine when an E.I.S. is required and the course of action to complete an E.I.S.;
- **direction** to agencies engaged in the E.I.S. process through a summary of the roles and responsibilities; and
- **tools & templates** to improving the process and consider options for E.I.S. avoidance or waiving, where appropriate.

The Guideline is divided into the following sections, which are briefly outlined below as a quick reference guide when using this document.

1. **Section 1 | E.I.S. Process:** This section provides an overview of the entire E.I.S. process (i.e., triggers to submission) and outlines the steps and tools used with each.
2. **Section 2 | E.I.S. Content:** This section provides direction on the technical content and approach to completing an E.I.S., including minimum submission requirements for a complete E.I.S.

Many technical terms are used through the guideline; Appendix 1 provides definitions for many of the commonly used terms. Where these terms are also in the N.O.P., the definitions are to be consistent; in the event of a discrepancy, it is the definition of the N.O.P. that shall prevail.

## 1.0 E.I.S Process

This section provides a step-by-step overview of the E.I.S. process to provide clarity and consistency for individuals participating in the E.I.S. process as a(n) Applicant, planner, (facilitating an E.I.S. process for a client, or as a reviewer), E.I.S. Professional, Conservation Authority representative.

The E.I.S. process consists of 5 major steps:

- **Step 1** | Project Screening
- **Step 2** | Scoping the E.I.S.
- **Step 3** | Information Gathering & Draft E.I.S. Preparation
- **Step 4** | Draft<sup>1</sup> E.I.S. Submission
- **Step 5** | Final<sup>2</sup> E.I.S. & Data Package Submission

The E.I.S. process is also represented in several figures, including:

- **Figure 1** E.I.S. Process and Schedule in Relation to Planning Act and Non-Planning Act Applications;
- **Figure 2** E.I.S. Process: Key Elements and Outcomes for the Five Major Steps
- **Appendix 2** E.I.S. Process Overview flow chart with decision points and outcomes.

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<sup>1</sup> 'Draft' refers to E.I.S. submitted for review, but not yet accepted by the Approval Authority.

<sup>2</sup> 'Final' refers to E.I.S. that have been accepted by the Approval Authority.

As a means to make the E.I.S. process efficient for both the Applicant and the Approval Authority, several tools have been created, including:

- E.I.S. Project Screening Tool (**Appendix 3**)
- E.I.S. Waiving Assessment Tool (**Appendix 4**)
- E.I.S. Terms of Reference Checklist Tool (**Appendix 5**)
- E.I.S. Comment and Response Template Tool (**Appendix 6**)

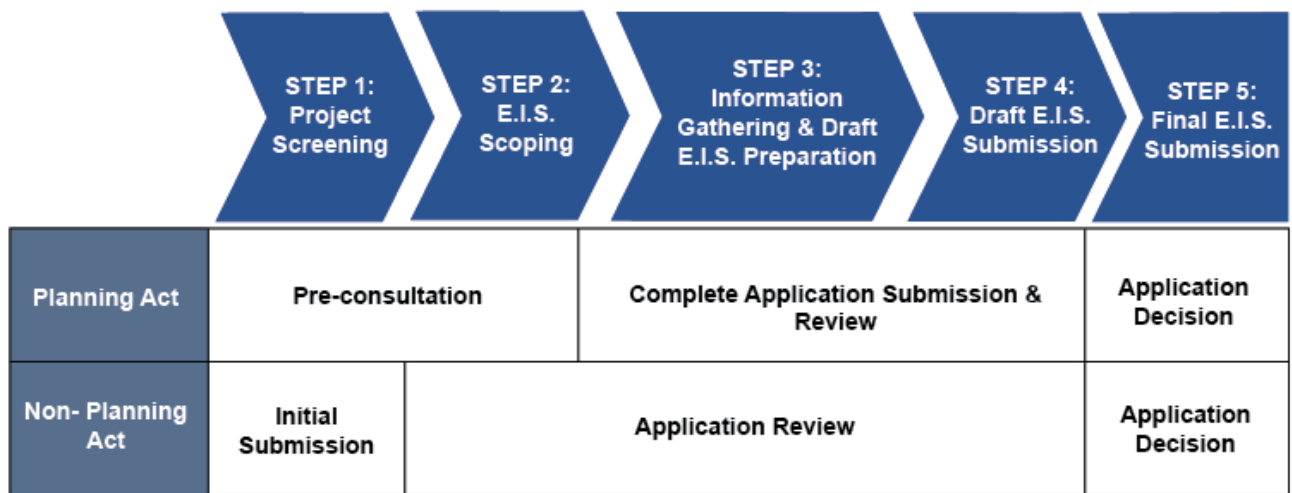


Figure 1. E.I.S. Process and Schedule in Relation to Planning Act and Non-Planning Act Applications



## 1.1 Roles & Responsibilities

The Approval Authority and other approval or commenting agencies have a responsibility to coordinate the requirements set out for the study. Similarly, each have specific roles / jurisdictions within the technical review and approval of an E.I.S. A general summary of roles in the E.I.S. process is provided below (Table 1.1).

Table 1.1. Roles and Responsibilities in the E.I.S. Process

Organization	Roles in the E.I.S. Process
<p><b>The Approval Authority</b></p>	<p>The Approval Authority is the agency / municipality to whom a development or site alteration application which triggered the E.I.S. requirement is to be submitted for approval. Generally, this will be the local area municipality or Niagara Escarpment Commission (N.E.C.); in the case of a Regional Official Plan Amendment the Approval Authority is the Region.</p> <p>The Approval Authority (or its delegate) coordinates the One-Study process, engaging with other agencies, as applicable, and acts as the primary liaison with the Applicant through the E.I.S. Process (Section 1.0). Where appropriate, the Approval Authority may engage external agencies or consultants to support certain coordination and technical review roles and responsibilities relating to the E.I.S. process (e.g., Niagara Region, technical consultant(s) on retainer).</p>
<p><b>Local Area Municipality</b></p>	<p>Within settlement areas, the Local Area Municipality (L.A.M.) is responsible to ensure that:</p> <ul style="list-style-type: none"> <li>• An E.I.S. is prepared in accordance with an approved terms of reference (T.O.R.) and the policies of the Niagara Official Plan (N.O.P.)</li> <li>• The conclusions of the E.I.S. are considered through the development approval process and appropriate conditions are established to implement the recommendations of the study and/or evaluation.</li> </ul> <p>In carrying out this responsibility, the L.A.M. shall work in consultation with the Region and Conservation Authority. They are also responsible for liaising with the Applicant.</p> <p>Technical review requirements relating to pre-consultation, project screening, T.O.R., E.I.S. waiving, the protection of the N.E.S. through</p>

Organization	Roles in the E.I.S. Process
<p><b>Niagara Region</b></p>	<p>natural feature boundary delineation, review of inventory work, review of E.I.S', mitigation strategies, etc. may be delegated to others (e.g., to the Region of Niagara (e.g., through a memorandum of understanding) or an external consultant).</p>
	<p>Outside of settlement areas, regardless of who is the Approval Authority for an application, it is the responsibility of the Region to ensure that:</p> <ul style="list-style-type: none"> <li>• An E.I.S. is prepared in accordance with an approved terms of reference (T.O.R.) and the policies of the Niagara Official Plan (N.O.P.)</li> <li>• The conclusions of the E.I.S. are considered through the development approval process and appropriate conditions are established to implement the recommendations of the study and/or evaluation.</li> </ul> <p>In carrying out this responsibility, the Region shall work in consultation with the L.A.M. and Conservation Authority.</p>
	<p>For Regional Official Plan Amendments, the Region is the Approval Authority.</p> <p>The Region will also act as a commenting agency on Regional policy matters to ensure that Regional interests related to the identification and protection of the N.E.S. are addressed in accordance with applicable policy through the One-Study process.</p> <p>Where refinements to the boundaries of the N.E.S. are proposed through an E.I.S. they must be accepted by the Region. However, some decisions with respect to delineation of specific N.E.S. components, such as wetlands, watercourses, fish habitat, or endangered and threatened species habitat, will be made in consultation the responsible regulatory authority (e.g., C.A., M.E.C.P.), where appropriate.</p>
<p><b>Conservation Authority (C.A.)</b></p>	<p>Under Section 28 of the Conservation Authorities Act (C.A. Act), C.A.s regulate development or activities in or adjacent to river or stream valleys, shorelines, watercourses, hazardous lands (e.g., floodplains, steep slopes, karst), wetlands and other areas around wetlands.</p>

Organization	Roles in the E.I.S. Process
	<p>Where development, as defined under the C.A. Act, is proposed within a C.A. regulated area, and no municipal or N.E.C. approvals relating to development and site alteration are required under the Planning Act or Niagara Escarpment Planning and Development Control Act, the works would require C.A. approvals. C.A. regulatory policies identify specific study requirements for permit submissions.</p> <p>Where development or site alteration is located within a C.A. regulated area and requires municipal or N.E.C. approvals, the C.A. will administer their regulatory requirements through the E.I.S. approval process. The Approval Authority will coordinate with the C.A. to integrate requirements under their regulations, as appropriate to support the One-Study approach.</p> <p>The N.E.C. administers the Niagara Escarpment Plan (N.E.P. 2021). Projects within the N.E.P. area may require a Development Permit from the N.E.C. The N.E.P. contains policies that may trigger the requirement for a Natural Heritage Evaluation (N.H.E.) if deemed necessary by staff. Where an E.I.S. is also triggered under municipal policies, staff from the municipality and N.E.C. will work together to coordinate this process.</p> <p>The N.E.C. may act as a commenting agency for E.I.S.'s if / as appropriate. The N.E.C. may suggest additional study requirements relating to their N.H.E. for inclusion in an E.I.S. Terms of Reference (T.O.R.) in keeping with the One Study approach.</p>
<p><b>Niagara Escarpment Commission (N.E.C.)</b></p>	
<p><b>Ministry of Environment, Conservation and Parks (M.E.C.P.)</b></p>	<p>Where potential for the habitat of endangered species and threatened species is identified, M.E.C.P. shall be contacted by the applicant for technical advice and to delineate and confirm the presence of habitat.</p> <p>It is the responsibility of the Applicant to work directly with M.E.C.P. to determine that the E.S.A. has been, or will be, complied with as a condition of any permit received from the M.E.C.P.</p> <p>Assessment for and potential impacts to Species at Risk are to be considered through the E.I.S. to ensure a holistic / complete assessment.</p>

Organization	Roles in the E.I.S. Process
<b>Ministry of Natural Resources and Forestry (M.N.R.F.)</b>	<p>Note: The M.E.C.P. is the regulatory agency for the provincial Endangered Species Act<sup>3</sup> (E.S.A. 2007) at the time of preparation of this guideline. In the event responsibility shifts to a different ministry, the above shall apply to the Provincial Ministry with jurisdiction.</p>
	<p>M.N.R.F. has prepared guidance documents applicable to many projects requiring an E.I.S. (e.g., Natural Heritage Resource Manual, Significant Wildlife Habitat Technical Guide and Ecoregion Criteria Schedules, Natural Environment Report Standards for Aggregate License Applications). The M.N.R.F. may be engaged as a commenting agency (e.g., advisory role) for implementation of guidance documents and may provide feedback to be considered by an Applicant in relation to the E.I.S. submission and approval process under the One Study Approach (e.g., fisheries timing windows).</p> <p>The M.N.R.F. may act as a commenting agency with respect to delineation of some natural heritage features and areas, as appropriate (e.g., Areas of Natural and Scientific Interest, Significant Wildlife Habitat).</p>
<b>Department of Fisheries and Oceans (D.F.O.)</b>	<p>The federal D.F.O. administers the Fisheries Act. Lands where fish habitat occurs must have regard for the Act. Consultation with and / or authorization from D.F.O. may be required based on proposed works.</p>

<sup>3</sup> M.E.C.P. regulates other Acts and policies that may apply to *development* (e.g., water quality requirements for stormwater management). Only those that pertain specifically to natural heritage are provided here.

## 1.2 Step 1 | Project Screening

Projects may not be required to proceed past Step 1: Project Screening. It is through this initial step that E.I.S. triggers are assessed, and project exemptions or waiving are considered. All projects should proceed through initial screening using the E.I.S. Project Screening Tool (Appendix 3) to ensure that the potential for natural environment impacts is considered.

Project screening should occur through:

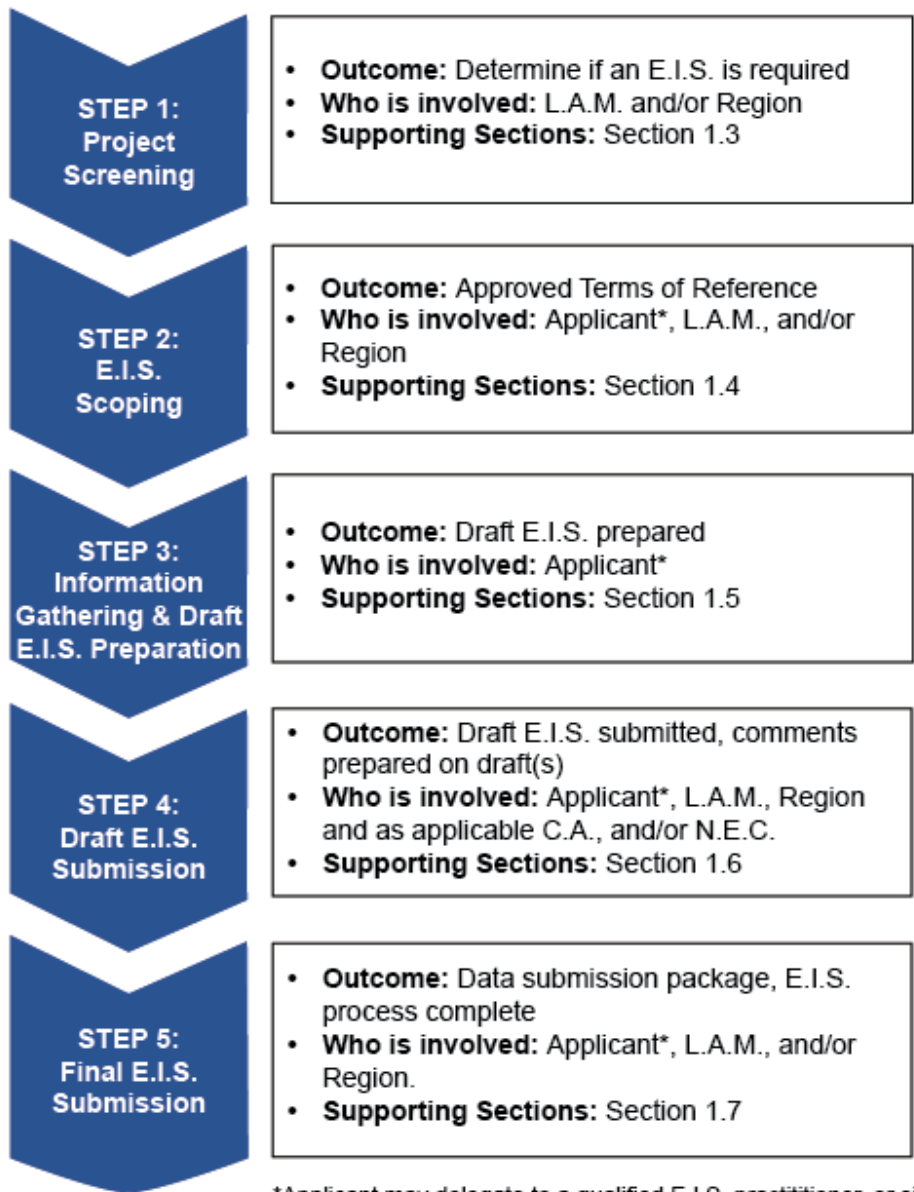
- **Pre-consultation – all Planning Act applications** should be screened through pre-consultation process(es) to ensure that comprehensive study requirements are identified early.
- **At the time of application** – this should only apply where **no formal pre-consultation is required** (i.e., non-Planning Act application(s)). Site alteration projects and development permit applications under the Niagara Escarpment Plan are examples of application processes which do not require mandatory pre-consultation.

If a Planning Act application is received without having proceeded through pre-consultation, the requirement for an E.I.S., and undertaking this and / or other necessary studies, should still be identified and be required; where missing, application(s) should be deemed incomplete.

### Natural Heritage Evaluation (N.H.E.) vs. Environmental Impact Study (E.I.S.)

These two terms are often used interchangeably. The intent of both reports is to demonstrate that the proposed development or site alteration will protect the natural heritage features or the related functions of that feature.

- The Niagara Escarpment Plan (N.E.P.) uses the term N.H.E., which may be triggered for projects within the N.E.P. area, if deemed necessary by the Niagara Escarpment Commission (N.E.C.).
- The Niagara Official Plan (N.O.P.) uses the term E.I.S., which states the study is to be prepared in accordance with this Guideline.
- It is possible for both an E.I.S. and N.H.E. to be triggered. Staff from the municipality and N.E.C. will work together to coordinate the process. The N.E.C. may act as a commenting agency for E.I.S.s if / as appropriate. The N.E.C. may suggest additional study requirements relating to their N.H.E. for inclusion in an E.I.S. Terms of Reference (T.O.R.) in keeping with the One Study approach.



\*Applicant may delegate to a qualified E.I.S. practitioner, or similar

Figure 2. E.I.S. Process: Key Elements and Outcomes for the Five Major Steps

Project screening may require input from multiple agencies where they have natural heritage management and/or protection policies that apply to the project area or where an agency has been designated to provide technical review (e.g., on behalf of the Approval Authority). The Approval Authority (or their designate) shall coordinate input, as appropriate, to ensure all relevant policies and requirements are met and to avoid duplication or conflict. Similarly, where a development proposal involves two or more applications, only one E.I.S. will be required. For example, a proposed subdivision requiring a zoning by-law amendment and subdivision approval will require only one E.I.S. to be prepared which addresses all planning requirements.

Proceeding through the E.I.S. process does not indicate, imply, or guarantee that a project will be supported and / or approved. Projects with high risk of not being supported should be identified through Project Screening (Step 1) and discussed with the Applicant.

### 1.2.1 E.I.S. Triggers, Prohibitions and Exemptions

The Approval Authority screens the project against applicable natural environment policies to determine if an E.I.S. is triggered and, if triggered, whether the project is exempt from the E.I.S. requirement, or if the proposed activity (development or site alteration) is prohibited under Natural Environment policies.

**Exemptions** should be confirmed with all applicable planning agencies; this may include one or more of the following: Local Area Municipality, Niagara Region, the N.E.C., and Conservation Authority.

There may be situations where a proposed development or site alteration is prohibited under Natural Environment policies; these policy-conflicts are to be identified at the screening stage to ensure Applicants are notified early and potential to amend a proposed activity may be considered.

It is the responsibility of the Approval Authority to ensure all applicable planning agencies are consulted, as appropriate.

### 1.2.1.1 Triggers for the Environmental Impact Study Process

The E.I.S. process is triggered when development or site alteration is proposed wholly or partially within, or on adjacent lands (Table 2.1. provides summary of adjacent lands. Triggers are illustrated in Figure 3) to:

- Key hydrological feature(s) outside of settlement areas<sup>1</sup>
- Features and Components of the Region's Natural Environment System<sup>6</sup>
- Local Area Municipality N.H.S.', W.R.S' and/or N.E.S.' as identified / appropriate based on local area municipal policies.

Table 2.1. Adjacent Lands to Components of the N.E.S.

Feature / Component of the N.E.S.	Adjacent Lands – Provincial (m)	Adjacent Lands – Niagara N.O.P. (m)
Provincially Significant Wetland	120	120
Significant Coastal Wetland	120	120
Significant Woodland	120	120
Other Woodland	n/a	50
Significant Valleyland	120	50
Significant Wildlife Habitat	120	50
Habitat for END/THR Species	120	50
Life Science A.N.S.I.	120	50

Not all features of the N.E.S. are mapped through Official Plan schedules (e.g., s. 3.1.3 of the Niagara Official Plan) or through other sources. Screening for triggers is to be done using several tools / resources including, but not limited to:

- Regional Official Plan schedules and any associated online mapping
- Local Official Plan schedules and any associated online mapping

<sup>6</sup> S. 3.1.2, Schedule L of the N.O.P., s. 3.1.1.2, S 3.1.9



- Watershed Plan(s) and/or Subwatershed Plans
- Ortho / aerial / satellite imagery of the project area (to screen for unmapped and potential features of the N.E.S. or features potentially triggering the E.I.S. process)
- Conservation Authority mapping, as available
- Land Information Ontario mapping, as available

Through review of these materials, consideration is to be given to potential features and areas that require assessment through an E.I.S., including a visual review of the Subject Lands or Study Area using available imagery (e.g., satellite imagery).

### 1.2.1.2 Prohibitions

Development and site alteration are prohibited from occurring in certain components of the N.E.S. Some exceptions exist for infrastructure and some prescribed or permitted activities. Planning documents applicable to the project area will contain policies and should be considered when screening an application (e.g., Growth Plan, N.E.P., Official Plan(s)).

Generally, development or site alteration shall not be permitted in:

- Key natural heritage feature(s) of the Greenbelt Area.
- Key hydrologic features outside of settlement areas<sup>5</sup>
- Vegetation Protection Zones within the Greenbelt Area or key hydrologic features outside of settlement areas.<sup>8</sup>
- Minimum buffers to natural heritage features and areas outside of settlement areas<sup>9</sup>
- Provincially Significant Wetlands
- Significant Coastal Wetlands
- Fish Habitat<sup>10</sup>, except in accordance with Provincial and Federal requirements
- Habitat for Endangered and Threatened Species<sup>11</sup>, except in accordance with Provincial and Federal requirements
- Lands Outside of the N.E.P.A.<sup>12</sup>
- Significant Woodlands (where associated Niagara Region policies apply)

<sup>8</sup> Exceptions are provided in N.O.P. s. 3.1.5.7.3

<sup>9</sup> Exceptions are provided in N.O.P. s. 3.1.9.9.3. Minimum buffers are prescribed in N.O.P. Table 3-2

<sup>10</sup> Exception provided in N.O.P. s. 3.1.12.1

<sup>11</sup> Exception provided in N.O.P. s. 3.1.13.1

<sup>12</sup> Permitted uses: s. 3.1.9.5.3

Exceptions to these prohibitions are provided for in the policies and listed in the footnotes to this section. If a conflict occurs between policy documents, it is the most restrictive that shall apply. Where a proposed activity is prohibited in policy, there may be opportunity to modify a proposal to address the prohibition (i.e., through modifying the proposal to avoid an area, alter the activity, etc.). Applicants may choose to re-submit with a revised plan which addresses the prohibition, where appropriate.



### 1.2.1.3 Exemptions

There are some limited circumstances where a project or activity is exempt from the requirement to complete an E.I.S. Generally, this will occur where:

- The activity has been authorized under an environmental assessment process, including a Class Environmental Assessment, carried out in accordance with provincial or federal legislation.
- The only natural heritage feature is habitat for Endangered or Threatened species, and the activity has been approved / authorized through provincial and/or federal legislation.
- The only natural heritage feature is fish habitat, and the activity has been approved / authorized through provincial and/or federal legislation.
- A study that meets or exceeds the requirements of an E.I.S. has been completed within 5 years of the proposed activity occurring or within the timeframe of the project approval set out in that study (e.g., comprehensive subwatershed study).
- The activity is associated with the continuation of existing agricultural uses and some agricultural buildings and diversified uses where certain conditions are met.

**Does the *Development or Site Alteration* Trigger an E.I.S.?**

The diagrams below are an illustrative guide to situations that trigger the E.I.S. process. The 'house' symbol represents any form, scale and / or scope of *development and site alteration*. They do not indicate that a *development or site alteration* will necessarily be supported; only where E.I.S. study trigger(s) occur.

Legend:  E.I.S. Process Not Triggered  E.I.S. Process Triggered

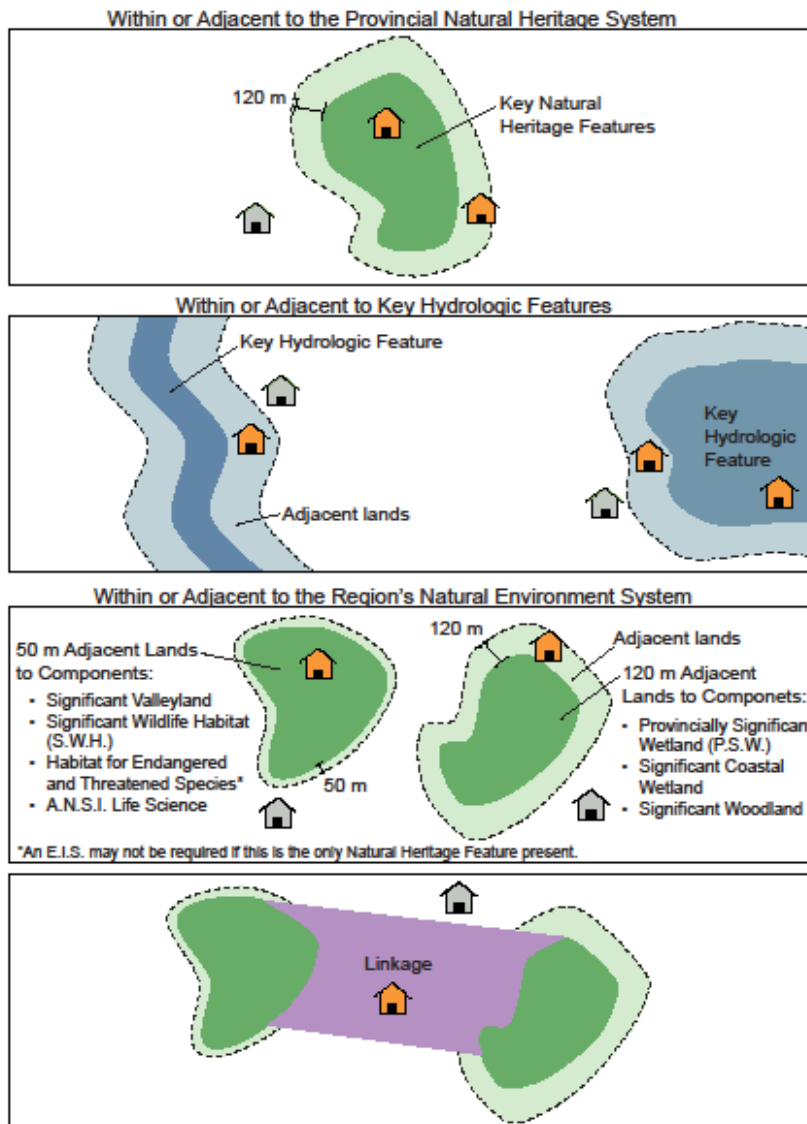


Figure 2. E.I.S. Process: Key Elements and Outcomes for the Five Major Steps

## 1.2.2 Avoiding or Waiving the E.I.S. Requirement

If an E.I.S. is triggered, the proposed activity is not prohibited, and the project is not exempt from requirement for an E.I.S. then opportunities to avoid or waive the requirement for a standard E.I.S. shall be considered.

An E.I.S. **may be avoided** if an Applicant modifies their proposal to avoid triggers for the E.I.S. process (per Section 1.3.1).

The need for a standard E.I.S. may be waived if it is determined that there is no, or a very low risk of impacts from a proposed activity and that they can be identified and addressed through implementing a combination of standard best management practices, mitigation measures and conditions of approval without the need to undertake an E.I.S. Not all projects are considered eligible for waiving.

A development or site alteration must conform to all applicable policies of provincial, regional, and local planning documents and any applicable legislation and regulations. Avoiding or waiving the requirement for a standard E.I.S. (per above) does not remove or replace the requirement for policy conformity, and other permits or approvals as may be applicable to the proposed development or site alteration (e.g., Conservation Authority permit).

Should the project not be exempt, and avoidance or waiving is not possible, the requirement for a standard E.I.S. is confirmed; these projects then proceed to Step 2 of the E.I.S. process.

### 1.2.2.1 Waiving

Determination of whether a project can have the requirement for a standard E.I.S. waived is made using the Waiving Assessment Tool (Appendix 4). Waiving assessments may be completed by the Approval Authority (or their designate), or a qualified individual on behalf of an Applicant. Where a Waiving Assessment is completed by a representative for the Applicant, it must be completed to the satisfaction of the Approval Authority. Waiving Assessment(s) may be subject to revision or may not be accepted by the Approval Authority. Not all projects are eligible for consideration of waiving the requirement for a standard E.I.S.

The Waiving Assessment Tool (Appendix 4) is, in effect, a streamlined E.I.S. It is a standardized, very scoped review of features and functions, proposed development or site alteration, potential impacts, and mitigation measures to ensure applicable policies are met. Where there is confidence that the project meets policy requirements for the natural features and areas within the Subject Lands or Study Area and that the proposed project presents no, or

very low risk of impact, it may have the requirement for a more detailed, standard E.I.S. waived. Conditions may be applied to waiving; these conditions must be implemented for the waiving to be approved / valid. Conditions may include specific provisions to avoid or minimize environmental impacts, such as modifications to the project (e.g., site plan or design) and / or mitigation measures (e.g., tree protection fencing, buffers, etc.).

Where, through the assessment tool, the risks not confirmed to be low or no-risk, or additional information is required to inform the assessment, the requirement for a standard E.I.S. is not waived.

If a standard E.I.S. has been waived and changes are then made to the proposal, the project must be re-screened to ensure that it continues to meet the waiving requirements for a standard E.I.S.

Changes which would require re-review include, but are not limited to, one or more of the following:

- Footprint of building(s) including main and accessory buildings;
- Drainage including the direction water moves / drains, changes an outlet, increases, or decreases drainage, etc.;
- Limits of impact / development footprint (e.g., any changes that will increase the area of disturbance, removal of vegetation, etc.); or
- Affect the ability for waiving conditions to be implemented.

Changes to a site plan / project / activity may result in a project no longer being suitable for waiving and thus require a standard E.I.S.

### **Streamlined vs. Standard E.I.S.**

Two forms of E.I.S.' are used in Niagara. A standard E.I.S. is a typical study scoped to the conditions of a site and scale of development and completed by an E.I.S. practitioner (E.I.S. process described herein). A streamlined E.I.S. is completed through a waiving assessment. The streamlined E.I.S. is only applied to small scale projects where the risk to the N.E.S. is considered very low.

## 1.3 Step 2 | Scoping the E.I.S.

The need for a standard E.I.S. is confirmed through pre-consultation with the Approval Authority after screening through exemptions, and opportunities to avoid or waive the requirement for a standard E.I.S. (Step 1 | Project Screening).

Scoping of the E.I.S. ensures that studies focus on works that will inform key issues relevant to the land use planning decision-making process, thus making efficient use of time and resources. The scope of an E.I.S. will be adjusted based on consideration of the following:

- Pertinent legislative, regulatory and policy requirements;
- Existing information and relevant previous studies and plans;
- The scale and nature of the development proposal;
- The significance and character of the features or components of the N.E.S.;
- Potential linkages among surface water features, groundwater features, hydrologic functions and natural heritage features and ecological functions;
- The specific attributes and rationale for the type of natural heritage designation;
- The setting and the site's relationship to the surrounding landscape;
- The availability of previous plans and technical studies providing planning guidelines or technical information needed to assess the proposal (e.g., watershed studies, secondary plans, inventories and other planning studies);
- The need for site specific natural heritage and hydrological information; and
- Reliance on other studies to be submitted with the application (e.g., stormwater management, noise, etc.)

The scope of an E.I.S. is confirmed through the preparation of a Terms of Reference (T.O.R.).

### 1.3.1 Terms of Reference

A T.O.R. is used to establish the field investigations required to inform an assessment and analysis of existing conditions, site sensitivities, features and functions (e.g., for significance, linkages), inform preparation of an impact assessment and support identification of appropriate mitigation measures for the proposed project / activity.

A Terms of Reference (T.O.R.) for an E.I.S. in Niagara is prepared using the T.O.R. Checklist (Appendix 5). The form provides a streamlined, standardized approach to scoping and the preparation of T.O.R.

Applicants (or a consultant on their behalf) fill out the T.O.R. Checklist and submit it for review and approval by the Approval Authority. The Approval Authority will review the T.O.R. with other involved agencies, as appropriate, and identify any modifications required. Iterative submission(s) may be necessary to achieve a T.O.R. that is acceptable to all parties. Once approved, the completed form is the accepted T.O.R. for the E.I.S. A site visit may be required to facilitate scoping of the E.I.S.

Preparation of the T.O.R. Checklist requires collection and detailed review of available background and secondary source information to inform the scope of the E.I.S. Preliminary Species at Risk and Significant Wildlife Habitat Screening assessments are to be appended to the T.O.R. Checklist.

During the completion of the E.I.S., features and / or functions unanticipated during the scoping exercise may be identified. If this occurs, the Applicant shall contact the Approval Authority and review agency as soon as possible to discuss policy implications and determine if additional studies may be required.

## 1.4 Step 3 | Information Gathering & E.I.S. Preparation

Through this step, qualified E.I.S. Professionals execute the approved T.O.R. This includes:

- Additional collection and review of background and secondary source information sources (if / as available)
- Undertaking the field program (per the T.O.R.) to establish existing conditions
- Identification and evaluation of significance for features and functions (e.g., S.W.H., significant woodlands, etc.)
- Review and integration of information from other studies (e.g., stormwater management plan, hydrogeological, site plan, etc.) to inform an assessment of potential impacts associated with the proposed development or site alteration
- Identification of and providing recommendations for appropriate avoidance and mitigation measures to meet policy requirements (e.g., no negative impact) for the N.E.S.
- Identify and recommend opportunities for enhancement or restoration to improve the N.E.S.

Detailed guidance for the preparation of an E.I.S. is provided Section 2.0 E.I.S. Content of this Guideline.

## 1.5 Step 4 | Draft E.I.S. Submission

The Approval Authority will confirm that the E.I.S. meets submission requirements and has been prepared in accordance with an approved T.O.R. If the submitted draft E.I.S. does not meet the submission standards or was not prepared in accordance with the approved T.O.R., the Approval Authority may return the submission to the Applicant.

The Approval Authority will coordinate review of, and comments on, the E.I.S. and will liaise with the Applicant. Commenting agencies, in conjunction with the Approval Authority, if applicable, will consider how the E.I.S. demonstrates compliance with applicable Federal, Provincial and Municipal policy and legislation related to environmental protection and/or management.

Review of the E.I.S. is often an iterative process. Based on the nature and extent of comments, a re-submission(s) of the E.I.S., addenda, or alterations to the site plan may be required to address key issues and comments identified by the approval and commenting agencies (as appropriate). Providing a complete and high-quality draft E.I.S. will assist in reducing the total review process timeline. The Applicant may elect to request a meeting with the Approval Authority to discuss preliminary findings and proposed mitigation prior to submitting an E.I.S. to reduce potential comments or issues identified through review.

### 1.5.1 Comment and Response Matrix Template

A Comment and Response Matrix is provided in **Appendix 6**. Approval, review agencies and Applicants are encouraged to use this, or a similar comment matrix, to manage the review process. Applicants are required to provide a cover letter documenting how agency comments on the E.I.S. have been addressed. The Comment and Response Matrix, or a comparable comment response matrix, is to be used to track comment responses. The use of Track Changes, a built-in feature in Microsoft Word, is also encouraged for ease of review for re-submissions.

#### Draft and Final E.I.S. – Terminology

‘Draft’ refers to E.I.S. submitted for review, but not yet accepted by the Approval Authority.  
‘Final’ refers to E.I.S. that have been accepted by the Approval Authority.



## 1.6 Step 5 | Final E.I.S. & Data Package Submission

The E.I.S. is considered final when all substantive comments have been addressed to the satisfaction of the appropriate approval authority. The Approval Authority, in consultation with the other relevant agencies, will provide approval of the E.I.S. to the Applicant.

The Approval Authority will consider the final E.I.S. in preparing comments on the development or site alteration proposal. Applicants should note that while an approved E.I.S. is a pre-condition for development or site alteration approval, an approved E.I.S. does not secure or guarantee the approval of a development or site alteration application. It should also be noted that entering the E.I.S. process does not imply or guarantee that an E.I.S. will be approved, or a project supported.

The Applicant is required to submit a data package upon approval of the E.I.S., which includes:

- The approved E.I.S. report with any associated addenda;
- A finalized development or site alteration proposal (if required) and/or table that identifies how the final E.I.S. recommendations will be implemented;
- G.I.S. data package (ESRI compatible format);
- Survey results tables (.xls or compatible format); and
- Survey Datasheets.

The Final E.I.S. Submission Package Checklist (Appendix 7) outlines the requirements of the final E.I.S. and data package to be submitted by Applicants. A complete data package must be provided for the final submission of the E.I.S. to be considered complete.

## 2.0 E.I.S. Content

The following sections outline the structure and content of a typical E.I.S. This outline shall be interpreted as the minimum standard for content in an E.I.S. The actual fieldwork, supporting studies and content required for an E.I.S. will be determined on a case-by-case basis through scoping and confirmed through the approval of the T.O.R. for the E.I.S.

### 2.1 Introduction

The introduction to the E.I.S. shall:

- a) Briefly describe the site location, existing land uses on the site and surrounding area;
- b) Briefly describe the proposed development or site alteration;
- c) Define and differentiate the selected terminology used to describe the Study Area, the Subject Lands, the project footprint, etc. The following terminology and definitions are often used:
  - a. Subject Lands – the land area being considered for development or site alteration and subject to approvals;
  - b. Study Area – the land area which must be considered to inform the assessment of features, functions and impacts;
- d) Identify why an E.I.S. is required for the proposed development or site alteration (i.e., the Regional and/or Local Municipality policy requirement, N.E.P.A. requirement (where applicable), Greenbelt Plan requirement (where applicable), N.P.C.A. regulated areas requirement (where applicable) and the portion of the N.E.S. triggering the E.I.S.); and
- e) Describe the scoped issues and tasks required for the E.I.S. based on the approved T.O.R. and if applicable, a description of any previous pre-consultation meetings, agency meetings or site visits (the approved T.O.R. shall be included as an appendix to the E.I.S.).

### 2.2 Planning Context

Briefly describe the natural heritage planning context for the proposed project, if applicable:

- a) Clearly identify applicable and current Federal and Provincial legislations, regulations, plans and policies which apply to the Study Area, such as, but not limited to:
  - Provincial Planning Statement (2024);

- Niagara Escarpment Plan (2021);
  - Greenbelt Plan (2017) and Technical Paper (2012);
  - Regional Official Plan policies;
  - Official Plan policies of local area municipalities;
  - Conservation authority regulations and policies;
  - Provincial Endangered Species Act (2007) and associated regulations recovery strategies and government response statements;
  - Federal Fisheries Act (1985) and associated regulations;
  - Federal Migratory Birds Convention Act (1994) and associated regulations; and
  - Federal Species at Risk Act (2002) and associated regulations and recovery documents.
- b) Identify the current land use designation(s) and zoning;
- c) Identify the proposed land use designation and zoning to support proposed development or site alteration.
- d) List consultation undertaken as part of the project:
- Agencies (e.g., M.E.C.P., M.N.R.F., D.F.O., Conservation authority); and
  - Public or stakeholder groups (if any) (record of consultation shall be included as an appendix to the E.I.S.).

## 2.3 Methods

Describe the process through which information about the existing conditions of the Subject Lands and Study Area was obtained. This shall include:

- a) All relevant background and secondary sources used to prepare the E.I.S. For example:
- Review and include all relevant natural heritage secondary sources (e.g., species atlases, Land Information Ontario database, citizen science databases, provincial species at risk screening) (see Appendix 8 | List of Background Sources, for a list of suggested background sources);
  - List relevant existing studies, plans, etc.; and
  - Identify data gaps.
- b) All relevant field survey investigations, protocols and results in accordance with an approved T.O.R. (Appendix 5). For example:
- Confirm survey protocol methods approved through the T.O.R. were used to complete E.I.S. field investigations.

- If methods other than those approved through the T.O.R. are used, details shall be included explaining why a different method was applied and how the method was applied;
  - Collected data shall also include the number of survey station(s), area(s) location(s), dates/times and weather conditions; and
  - Results should be included in table format for each survey method and each survey station or area.
- c) All relevant guidelines and technical documents used to inform the assessment of results. For example:
- Natural Heritage Reference Manual Second Edition (Ministry of Natural Resources and Forestry, O.M.N.R. 2010);
  - Significant Wildlife Habitat Technical Guide (O.M.N.R. 2000);
  - Significant Wildlife Habitat Mitigation Support Tool (2014);
  - Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E (M.N.R.F. 2015);
  - Conservation Authority guidelines;
  - Official Plan definitions and criteria for components of the Region's natural environment system (Schedule L, Table 4-1)

It is recognized that methods and practices may change over time, and methods other than those presented in the E.I.S. Terms of Reference Checklist (**Appendix 5**) may be recommended by a qualified E.I.S. Professional with supporting rationale and justification; alternate methods must be included and approved through the T.O.R. as outlined **Section 1.3.1**. The level of effort and extent of field surveys shall be determined and detailed through scoping with the Approval Authority and any other relevant agencies in the approved T.O.R.

## 2.4 Existing Conditions

This section of an E.I.S. documents and describes the features, functions, and relationships (i.e., interactions, dependencies, and functional relationships) within a Study Area as they are on the landscape 'right now' (i.e., the existing condition). It presents results without policy-based interpretation(s) applied.

Existing conditions will be informed by both background information and field investigation results. Schedule L of the Niagara Official Plan provides a list of components of the Region's integrated N.E.S. that should be used when describing existing conditions.

The existing conditions section(s) shall include, but not necessarily be limited to:

- a) Survey details: type, date(s), start / finish time, weather conditions (as applicable), surveyors (personnel involved in undertaking field work)<sup>13</sup>
- b) Physiography (topography, soils, bedrock)
- c) Survey results (e.g., E.L.C. communities present, fauna diversity / community, etc.)
- d) Identification and delineation of all natural heritage features, areas and functions present on the Subject Lands, adjacent lands and / or within areas as defined by the agreed upon boundary of the Study Area as determined through the T.O.R. Secondary vs primary data sources (i.e., data from agencies and previous studies vs data collected in the field) should be clearly indicated.
- e) Identification and description of relationships, interactions and/or functional relationships between features and their functions on the Subject Lands and to features and areas on adjacent lands and/or within areas as defined by the agreed upon boundary of the Study Area as determined through the T.O.R. (e.g., wildlife movement, habitat needs, hydrologic interactions, etc.) to inform potential linkages.
- f) Identification and mapping of known existing designations (e.g., A.N.S.I., P.S.W., etc.)
- g) Report figure(s) that clearly and accurately show the location of natural features and, where possible, natural functions, overlaid on recent aerial photography (or satellite imagery) of the Study Area. Appendix 8 lists sources for some of the natural heritage features and other information that should be illustrated on report figures.
- h) Consultation with agencies (e.g., D.F.O., M.E.C.P., M.N.R.F., the Conservation Authority) as it relates to existing conditions should be discussed here, and a record of consultation shall be provided as an appendix to the E.I.S.
- a) Integration of relevant data from other studies (e.g., geotechnical, geomorphological, hydrogeological, etc.), as appropriate to inform and support the description of existing conditions.

Note: Data tables in excel format and Esri compatible G.I.S. files are to be submitted as part of the final E.I.S. submission package. Refer to the Final E.I.S. Submission Checklist (Appendix 6) for submission requirements. Provision of this information may be a condition of approval.

### 2.4.1 Species at Risk (S.A.R.)

The E.I.S. forms a comprehensive impact assessment process and is to include Species at Risk (S.A.R.). Survey methods, observations, habitat, impacts, and any required mitigation and/or authorization associated with S.A.R. are to be documented in the E.I.S.

<sup>13</sup> This may be included as a table within the main document body or included as an appendix with general text and a reference to the appropriate appendix in the main document body.

As part of the E.I.S., a Species of Risk Screening Assessment is to be completed (Appendix 10).

Consultation with M.E.C.P. may be required with respect to survey methods, species presence / absence determinations, habitat delineation, potential impacts and any resultant mitigation, registration, authorization or permitting under the E.S.A. (2007) and its amendments or successor legislation. Any applicable correspondence with M.E.C.P. shall be appended to the E.I.S.

Decisions with respect to the E.S.A. (2007) reside with M.E.C.P. The Approval Authority's role is to ensure that development or site alteration is in compliance with applicable policy, which includes consideration of the habitat of endangered and threatened species. In this capacity, the Approval Authority shall ensure that compliance with the E.S.A. (2007) is demonstrated in the E.I.S. (e.g., demonstration of absence, and / or include outcome of consultation with M.E.C.P. and / or method of authorization) and may require that the Applicant provide record of consultation with M.E.C.P.

**Note:** Where project reports will become part of the public record, a separate report which removes or generalizes sensitive information with respect to S.A.R. may be required. This may include complete removal of location references, generalization of locations to the Natural Heritage Information Centre's 1 km<sup>2</sup> grid mapping open polygons, etc. Decisions with respect to data sensitivity will be made on a case-by-case basis in consultation with M.E.C.P. and/or in accordance with standards of practice.

## 2.5 Evaluation of Features and Functions

Through this section, the E.I.S. evaluates all features, functions, and relationships present within the Study Area (documented through Existing Conditions) within the context of applicable policies to identify / confirm natural environment policy-based status and inform management of the N.E.S. (Section 2.6).

The evaluation of features and functions shall, at a minimum:

- a) Assess the significance of all features identified on the Subject Lands and within the Study Area. Assessment of significance is to be done in accordance with applicable provincial guidance documents, regional and/or local Official Plan policies and other relevant policies, guidelines, or guidance documents, as applicable.

- For Significant Wildlife Habitat, the E.I.S. is to include a Screening Assessment. A template is provided in Appendix 9.
- b) Identify and delineate the precise boundaries of the components of the N.E.S. features and areas, as defined in Table 4-1, Schedule L.
- c) Identify and delineate locations where linkages will be required for the N.E.S. on the Subject Lands and within the Study Area (Schedule L).
- d) Prepare figure(s) showing constraints to development or site alteration based on the results of this evaluation. These figures must establish the boundary of the features and N.E.S. and identify other areas, should they be identified, for protection and restoration that collectively provide long term protection of natural habitats and native biodiversity.
- e) Outcomes from consultation(s) and/or processes with agencies (e.g., D.F.O., M.E.C.P., M.N.R.F., the Conservation Authority) should be discussed here as they pertain to defining constraints to development, and a record of consultation shall be provided as an appendix to the E.I.S.

Regional definitions for individual components of the N.E.S., as well as criteria for the identification of features are provided in Table 4-1 of Schedule L in the Official Plan. Section 3.1.18 and 3.1.19 of the N.O.P. address natural features which have been disturbed, and cultural and regenerating woodlands, respectively. These policies may have bearing on some applications.

### **2.5.1 Delineation and Refinement of Components of the N.E.S.**

Features and components of the N.E.S. are to be precisely delineated and confirmed in consultation with Niagara Region and other regulatory agencies. Features requiring delineation and / or review in-field with appropriate agencies or a site visit to review the staked feature limits may include:

- Woodland(s);
- Wetland(s); and/or
- Stable or physical top of bank.

Generally, feature limits will be flagged or staked and confirmed in the field and surveyed to a sub-meter level of accuracy. This accuracy requirement may be waived for small projects on a case-by-case basis, allowing for alternative methods of delineation, as appropriate; waiving of the requirement must be confirmed with the Approval Authority and/or the agency responsible for the feature being delineated. Digital dataset(s) (i.e., georeferenced C.A.D. or G.I.S. dataset(s), NAD83, UTM Zone 17N) of the confirmed feature limits are to be provided to the

Approval Authority and / or other agencies, as appropriate, as part of the final E.I.S. submission package.

Delineation and refinement of features and components of the N.E.S. is to be completed using accepted standard protocols and methodologies (e.g., Ontario Wetland Evaluation System [O.W.E.S.]) and in consideration of applicable definitions, plans, policies, and guidelines for the feature type to ensure the appropriate criteria are applied. Criteria may apply to defining the limit of a feature and / or definitions of significance (Table 4-1 of Schedule L). Significance criteria met or satisfied will vary based on planning context and site-specific conditions and shall also be considered, as appropriate, through this analysis.

### 2.5.2 Supporting Features and Areas

Supporting features and areas include existing features or areas on the landscape that **do not** meet the definition(s) or criteria to be considered natural heritage features but **do** support or contribute to the biodiversity and ecological function(s) of the N.E.S. Supporting features can include grasslands, cultural meadows, wooded areas, cultural thickets, small valleys, wildlife habitat, enhancement areas and restored areas.

The E.I.S., therefore, must identify and describe the ecological contribution of these components to the N.E.S. Supporting features and areas should be delineated and their size calculated.

## 2.6 System Management

Existing conditions (Section 2.4) described what is present on the landscape. The evaluation of features & functions (Section 2.5) assesses / categorized those features, areas, and functions through a policy lens to determine their status under applicable policies, regulations, and legislation. This section (system management) of the E.I.S. considers how the system will be managed within the changing land use.

System management encompasses both policy conformity and a more holistic, system-based system management which includes consideration for supporting or enhancing resilience and biodiversity of the N.E.S. through the land use planning process.

It is mandatory for an E.I.S. to screen for, identify and assess supporting features and areas. Where supporting features and areas occur, the E.I.S. must provide an analysis of these features and areas and management recommendations for them based on the ecological and



hydrological function(s) provided by the feature(s) and the relationship, interactions and supportive role(s) provided to nearby features.

Specifically, through this section the E.I.S. will:

- Set out recommendations for feature management (natural heritage features and areas, supporting features & areas, and (as applicable) features that have been disturbed<sup>14</sup> and/or cultural and regenerating woodlands<sup>15</sup>)
- Confirm and define system linkages (location(s), width(s) and design target(s))
- Recommend ecological buffers and vegetation protection zone(s)
- Identify potential opportunities for enhancement of the N.E.S.

Recommendations made through this section of the E.I.S. are not commitments to implement. They represent ecologically-based recommendations to assist in prioritizing and considering these opportunities through development planning.

## 2.6.1 Features

### 2.6.1.1 Natural Heritage Features and Functions

Clearly identify how each natural heritage feature is to be managed. As a priority, natural heritage features are to be protected in-situ. The policy ‘test’ for each feature should be clearly identified (e.g., prohibition, no negative impact). If / where exceptions may apply, such as opportunities to relocate (e.g., a watercourse) or remove a feature (e.g., destruction of habitat for endangered or threatened habitat) with appropriate provincial or federal authorization(s) obtained, these features and the requirements for the exemption should be clearly identified.

### 2.6.1.2 Supporting Features and Areas

Supporting features and areas are defined as lands that have been restored or have the potential of being restored. Supporting features and areas include grasslands, meadows, and thickets (defined in accordance with Ecological Land Classification for Southern Ontario); other valleylands; and other wildlife habitat; and enhancement areas where they are determined to contribute to the biodiversity and ecological function of the natural environment system. Opportunities to maintain the functions and benefits to the N.E.S. provided by these areas are to

<sup>14</sup> Per s. 3.1.18 of the N.O.P.

<sup>15</sup> Per s. 3.1.19 of the N.O.P.

be considered. Generally, recommendations for feature management of supporting features and areas may be generally classified as:

- **Protect:** Feature(s) provide a strong benefit to Natural Heritage Features and / or their functions. It is recommended that consideration be given to protecting these feature(s) wholly or partially, in-situ to maintain the existing function(s). Generally, this may include supporting features and areas contiguous to Natural Heritage Features and providing a direct beneficial relationship such as foraging, habitat diversity, hydrologic, etc. Mechanisms for protection can include encompassing all or portions of the feature(s) within buffers, extending the proposed limit of the N.E.S. to include the feature(s), protecting important portion(s) of the feature to protect / maintain the primary feature(s) or function(s) which provide the benefit to the N.E.S.
- **Conserve:** Feature(s) provide a benefit to Natural Heritage Features and / or their functions. It is recommended that consideration be given to conserving the form (i.e., the feature type) or function(s) (e.g., meadow foraging habitat) on the landscape, however there are opportunities to replicate the feature / function within the subject lands to a) provide a greater system benefit (e.g., where the feature(s) is not contiguous to a Natural Heritage Feature), or b) to accommodate land use planning & design.
- **Mitigation:** This category is generally applicable to supporting features and areas which provide a primarily hydrologic benefit. Opportunities to mitigate for this function are recommended to be explored through planning and design.
- **No Management:** Where it is determined that a supporting feature provides minimal benefit to the N.E.S., it may be recommended that no management is required. These features and their functions receive no further consideration.

It is recommended that the management recommendations be ranked or prioritized to assist land use planning (e.g., high priority, moderate priority, low priority). Additionally, supporting rationale and potential mechanisms or opportunities to achieve the recommendation should be identified (e.g., retain all / portion in-situ, enhance / widen buffer, opportunity to integrate into park(s), etc.).

## 2.6.2 Linkages

Building upon the assessment of existing conditions and evaluation of features and functions which identified known and inferred functional relationships between features and areas of the N.E.S., this section of the E.I.S., must identify the linkages for the N.E.S. in accordance with s. 3.1.17 and Schedule L of the N.O.P. Linkages are to be considered at local and regional scales and include both linkages occurring within and to areas outside of the Subject Lands and Study Area.

Linkages are grouped into three size categories, with defining criteria provided for each in Table 4-1, Schedule L:

1. Large linkages (outside settlement areas)
2. Medium linkages (outside settlement areas)
3. Small linkages (both inside and outside of settlement areas)

Schedule C2 of the N.O.P. maps some linkages of the N.E.S. Opportunities for additional, ecologically appropriate linkages are to be identified through the E.I.S.

Linkages are to be identified between natural heritage features and areas, key natural heritage features and key hydrologic features. They provide and maintain ecological connectivity and support a range of community and ecosystem processes. Linkages enable the movement of plants and wildlife, in some cases over multiple generations, supporting the long-term sustainability of the larger N.E.S.

Recommendation(s) for management of lands within a linkage are to be provided. Generally, linkages are to be planted and left as natural self-sustaining vegetation or remain in agricultural use. Policies of the N.O.P. s. 3.1.17 provide exceptions and compatible uses which may be permitted in linkages.

## 2.6.3 Buffers

In all cases, the E.I.S. must identify appropriate buffers and / or vegetation protection zones (V.P.Z.) to protect components of the N.E.S. Within Niagara Region, buffers and V.P.Z.'s can be placed in one of the following types:

**Vegetation Protection Zones (V.P.Z.)** are prescribed through provincial plan policies for the Greenbelt Plan. V.P.Z.'s apply within the Greenbelt Plan Area and to any key hydrologic feature outside of a settlement area in Niagara. The width of V.P.Z.'s are prescribed through policy. Refer to the N.O.P. and provincial plan policies for specific details applicable to a proposed project and Subject Lands. V.P.Z.'s are a prescribed minimum buffer (i.e., they may be determined to be larger in order to protect a feature or function) and are included as part of the integrated N.E.S.

**Minimum prescribed buffers** are applied outside of settlement areas in accordance with Table 3-2 of the N.O.P. Where minimum prescribed buffers apply, the buffer shall not be less than the required minimum stated in the applicable policies. It may be determined that a buffer larger than the minimum is required to mitigate potential impacts through an environmental impact study, hydrologic evaluation, or subwatershed study.

**Mandatory buffers** are applied where the presence of a buffer is required but minimum buffers are not prescribed through Policy (within settlement areas). The width of the buffer is determined through an environmental impact study and / or hydrologic evaluation at the time an application for development is made. Establishing recommended buffer widths through an E.I.S. is split into two parts. **Preliminary buffer recommendations** based on ecological form and function are provided as ranges to inform the development design (this section). These are then refined or confirmed into **proposed N.E.S. buffers (Section 2.8.2.3)** based on opportunities to address some impacts through other mechanisms (e.g., LIDs) and informed by the proposed development design or site alteration.

The term **Vegetation Protection Zone (V.P.Z.)** applies to key natural heritage features within the Greenbelt Area and to any key hydrologic feature outside of a settlement area. Elsewhere in the region the term **buffer** is used.

**Buffer:** An area of land located adjacent to natural heritage features and areas, other wetlands, and watercourses and usually bordering lands that are subject to development or site alteration. The purpose of a buffer is to protect the features and areas and their ecological functions by mitigating impacts of the proposed development or site alteration. Buffers shall consist of natural self-sustaining vegetation as a condition of development (except where certain agricultural uses are exempt from the requirement of a buffer).

**Vegetation Protection Zone (V.P.Z.):** A vegetated buffer area surrounding a key natural heritage feature or key hydrologic feature (Greenbelt Plan, 2017).

### 2.6.3.1 Preliminary Buffer Recommendations

Buffers are an important component of constraints and opportunities identification as input to land use planning and design. This section of the E.I.S. is intended as input to that process, supporting early integration and consideration of the N.E.S.

#### Establishing Buffer Requirement(s)

Buffers are required for woodlands, wetlands and watercourses and some headwater drainage features retained as of the N.E.S. The width of an ecologically appropriate buffer is to be determined through the E.I.S. The width of the buffer is to be based on the sensitivity of the ecological functions from the proposed development or site alteration, and the potential for impacts to the feature and ecological functions as a result of the proposed change in land use.

The E.I.S. is to identify which features require or warrant buffers. Supporting rationale is to be clearly documented. Consideration should be given to both Natural Heritage Features and Supporting Features and Areas, as appropriate. The status of the feature (i.e., Natural Heritage Feature vs. Supporting Feature or Area) may also inform recommendations.

#### Buffer Width

Buffer width(s) are to be informed by sensitivities and functions of the natural heritage feature and its contribution to the long-term ecological functions of the N.E.S., the type of development and its potential impacts. Where minimum buffers / 's are stipulated in policy, these must be met and may be exceeded based on the outcomes of the buffer assessment process, where ecological drivers justify an increased buffer. The status of the feature (i.e., Natural Heritage Feature vs. Supporting Feature or Area) may also inform recommendations.

Features, even within a similar type (e.g., wetlands, woodlands) will vary in their form and function. As a result, their sensitivity to different types of pressures resulting from development will similarly vary. Additionally, position on the landscape and other factors can influence overall sensitivity of a feature or complex of features to changes on adjacent lands and the broader landscape. These considerations are to be used to support planning of buffer widths.

At a minimum, it is expected that an E.I.S. will apply the following functional elements to inform the range of recommended buffer width(s):

1. **Feature Hydrology** – is the feature supported by groundwater, surface water or a combination of both? What are the sources of water which support the existing form and function of the feature (catchment, inputs, outlets, etc.)? Are there species or wildlife functions which rely on a specific range of hydrologic conditions (e.g., vernal pools, seeps

& springs). How sensitive or vulnerable is the feature and its functions to changes in hydrologic conditions?

2. **Habitat requirements** – consider the species present within the feature(s) under existing conditions to identify / inform habitat requirements of the species residing in or utilizing the feature (or complex of features). Species with specialist habitat requirements (e.g., narrow range of habitat preferences, specific host plant(s)) will generally be more sensitive to changes in habitat conditions and thus may warrant wider buffers.
3. **Species behavior** – behavioral traits can influence a species’ sensitivity or tolerance to human activities. Changes in types or level of activity in adjacent lands and the landscape may affect behaviors important to the continued presence or success of species in a given area. For example, communication, altered patterns of movement (aversion or attraction to certain areas), subsidization of predators (e.g., raccoons), nest abandonment, etc.
4. **Fragmentation** – consider the influence of existing and potential fragmentation of the landscape. As natural heritage features and areas become more fragmented, sensitivity to new pressures and impacts increases.

In assessing the above, it is expected that changes to impervious cover, reductions to landscape permeability (i.e., to movement) and occupancy-associated impacts typical of the proposed development type (i.e., residential, employment) are considered. Buffer widths may vary to respond to feature type and sensitivities, feature status (i.e., Natural Heritage Features and Areas vs. Support Features and Areas) and the functional element of concern.

Buffer width ranges resulting from the above are based on potential impacts. Opportunities to avoid, minimize or mitigate some or all of a given impact through design and management within the proposed development or site alteration will inform the proposed N.E.S. buffers (see Section 2.8.2).

#### Refinement Opportunities

Buffer width range(s) are based on potential design outcomes such as adjacent land use and development design, stormwater management / water balance, buffer design, etc. The E.I.S. should identify potential opportunities available to reduce buffer widths, where appropriate.

**NOTE:** Buffer minimum sizes and refinement opportunities must be ecologically sound and based on a level of confidence that the feature(s) form and function(s) will be protected in accordance with applicable policies.

## 2.6.4 Enhancement Opportunities

Enhancement opportunities can include both enhancement areas as defined in Table 4-1, Schedule L and per s. 3.1.16 of the N.O.P. and other opportunities to enhance the N.E.S. as may be identified through site specific study.

Enhancement areas are intended to consist of natural self-sustaining vegetation with the objective of increasing the ecological resilience and function of individual key natural heritage features, key hydrologic features and/or natural features and areas or groups of such features. This can include enhancement to existing features or creating new or restoring impacted areas. Generally, enhancement areas will include opportunities to:

- Increase the size of an existing feature or area.
- Connect features and/or areas to create larger, contiguous natural areas.
- Improve the shape to create or increase interior habitat conditions.
- Include critical function zones and important catchment areas for sustaining ecological functions.

This section of the E.I.S. is to identify potential opportunities and actions to enhance the N.E.S. that are realistic and implementable on a given site in the context of the planned land use. Section 3.1.16.3 of the N.O.P. sets expectations for the identification and consideration of enhancement areas through an E.I.S. and other studies.

Listing potential opportunities and actions is **not** a commitment to implementation. Policy directs that land use planning 'improve where possible' the natural environment and system(s). As such, identification of potential opportunities ensures that consideration is given to integrating enhancement opportunities within the land use planning and design process, where possible. Opportunities to integrate / implement enhancements are refined through Section 2.8.3.

## 2.7 Description of the Proposed Development or Site Alteration

An adequate description of the proposed development or site alteration is important to facilitate review of the impact assessment and decision making on the outcomes of the E.I.S. by approval and review agencies.

In the context of the Study Area, a description of the proposed development or site alteration, shall be provided including:

- a) The proposed site plan, drawn to scale, accurately overlaid (i.e., georeferenced, NAD 83, Zone 17N) on the constraints map, applying recent aerial photography (orthoimagery) of the subject lands. This should show (as applicable to the project):
  - a. Precise location of the Subject Lands and Study Area boundaries / property limit;
  - b. Development or site alteration footprint including:
    - i. Development limit and site preparation footprints;
    - ii. Precise location of proposed lots (lot lines / fabric);
    - iii. Locations of buildings and other structures
    - iv. Locations of amenity areas;
    - v. Roads and parking areas;
    - vi. Other transportation facilities (i.e., transit; trails, etc.);
    - vii. Grading;
    - viii. Servicing;
    - ix. Stormwater management and drainage facilities, including outfall locations;
    - x. Proposed water takings;
    - xi. Associated site alteration works, such as work on stream banks, watercourse alterations, additional tree and vegetation removal, earth moving, grade changes, etc.;
  - c. The N.E.S. and its individual components, including:
    - i. Staked / surveyed features, including agencies present and dates;
    - ii. V.P.Z.s and buffers, linkages and / or supporting features and / or enhancement areas<sup>16</sup>; and
    - iii. Setbacks (e.g., from top of bank).
- b) Phasing and timing / schedule of the development or site alteration (e.g., site preparation, construction and completion, occupation and operation of the proposed use);
- c) Current land use designations and zoning; and
- d) Relevant information integrated from other studies (i.e., hydrogeological, geotechnical, stormwater engineering, etc.) in describing the proposed development or site alteration, as appropriate.

## 2.8 Impact Assessment

The impact assessment is to consider Key Natural Heritage Features, Key Hydrologic Features, Natural Heritage Features and Areas and Supporting Features & Areas and components of the N.E.S. to inform the cumulative impact to the N.E.S. and its functions.

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<sup>16</sup> Buffer and linkage widths (in meters) and area of Supporting Features and Areas, including Enhancement Areas (in hectares) should be indicated on the site plan.



The impact assessment may be presented in table or text format. Figure(s) are to be provided that show the proposed N.E.S., the proposed development and illustrate the methods to avoid, minimize and mitigate to support the documentation of the impact assessment. The sections below outline expected content and provide some guidance on opportunities for avoiding, minimizing, and mitigating impacts.

### 2.8.1 Types of Impacts

Generally, impacts may be categorized under Wildlife (Avifauna, Herpetofauna, Insects, Mammals), Vegetation (vegetation communities [including wetlands], plant species), Connectivity / Fragmentation, Fish and Fish Habitat. Species at Risk and Significant Wildlife Habitat may be addressed under these categories / headings or may be considered as separate categories / headings. Potential impacts from the proposed development or site alteration on the N.E.S. must be determined through the impact assessment. The E.I.S. must include direct, indirect and cumulative impacts that may result from the proposed development or site alteration.

Impacts are to be quantified wherever possible (e.g., area(s) of vegetation removed by vegetation type and / or feature). This may include integration of data and analyses from other reports to inform the assessment of ecological / environmental impacts (e.g., pre- and post-feature-based water balances). All conclusions (impact or 'no impact') shall be science-based and defensible and include evidence to support the conclusion (e.g., empirical evidence, references, etc.). Not only should the impact assessment address impacts to the N.E.S. on the Subject Lands specifically, but also on the Study Area, adjacent lands and broader landscape.

The impact assessment is to address the following minimum requirements:

- a) Identify all components of the N.E.S. and assess for direct, indirect and cumulative impact(s);
- b) Identify all aspects of the proposed development or site alteration that could result in direct, indirect and cumulative impacts. Examples may include:
  - Earth works, grading and stockpiling;
  - Equipment storage, maintenance and refueling;
  - Servicing (linear infrastructure alignments, features crossings, maintenance, etc.);
  - Stormwater management, including pond locations, thermal impacts, outlets and maintenance;

- Roads and transportation, including temporary construction access and watercourse crossings and permanent infrastructure, maintenance and use impacts;
  - Form, type and density of proposed development including lot limits and layouts, trails and recreation, parks, open space.
- c) Identify all direct impacts, which may include:
- Encroachment, fragmentation or removal of habitat;
  - Reduction or removal of corridors or linkages;
  - Changes to the quantity, quality, timing or direction of flow of surface or groundwater;
  - Changes to the water table or soil moisture;
  - Changes to stream forms or shorelines;
  - Mortality or removal of vegetation;
  - Soil erosion or compaction;
  - Deposition of sediment;
  - Slope failure;
  - Creation of a harmful alteration, disruption or destruction of fish habitat pursuant to the Canada Fisheries Act.
- d) Identify all indirect impacts, which may include:
- Impacts due to occupancy (i.e., increased disturbance, increased access, pets, lighting, garden escapes, etc.);
  - Increased potential for the introduction or spread of non-native and / or invasive species;
  - Reductions in the population or reproductive capacity of plant and wildlife species;
  - Disruption of communication and other life processes due to increased noise levels.
- e) Identify and discuss cumulative impacts. Cumulative impacts refer to a combined or incremental effect of individual impacts that could result from a combination of different types of impacts, from incremental effects of a series of impacts over time or from the combined effects of existing and planned impacts over time. Therefore, impacts should be assessed in the context of existing and planned development in the surrounding areas and that consideration must be given to how different types of impacts may combine and interact.

## 2.8.2 Applying the Mitigation Hierarchy

The mitigation hierarchy is a sequential approach to planning and decision-making with respect to potential or known negative impacts associated with an activity. Emphasis is placed on avoidance as a priority, followed by minimization and mitigation to achieve policy thresholds / requirements (e.g., prohibitions against development or site alteration, no negative impact, etc.). Where supporting features and areas provide an important role in the form or function of a Natural Heritage Feature, the impact assessment is to consider the feature(s) in this context in the assessment.

The mitigation hierarchy is to be reflected in the impact assessment of an E.I.S. through presentation of mechanisms associated with, or actions taken within each category (avoid, minimize, mitigate).

### 2.8.2.1 Avoid

Typically, avoidance is the first step in the mitigation hierarchy, which is to avoid, minimize then mitigate. Proposed development or site alteration should consider how best to avoid negatively impacting the N.E.S., and if that is not feasible, then the proposed impacts should be minimized and finally mitigated, ultimately achieving a no negative impact.

Avoidance is often incorporated into a proposed development or site alteration application in the earlier days of the planning process. Avoidance of known natural heritage features and areas, identified through secondary sources in the background review, often occurs at the outset. As the existing conditions data is collected and evaluated, additional significant features are also to be avoided.

The E.I.S. should identify / summarize where and how avoidance measures were incorporated in relation to the proposed development or site alteration and its effects on the N.E.S. as identified, confirmed, and evaluated through data collection and evaluation.

Proceeding sections of the impact assessment are to focus on what impacts are anticipated after avoidance measures have been applied and how the anticipated impacts will be minimized or mitigated.

### 2.8.2.2 Minimize

Minimization of impacts is the second priority in the mitigation hierarchy. This can be achieved through a variety of potential mechanisms including, but not limited to:

- Reconfiguring the layout of a proposed development or site alteration to reduce the potential impact(s);
- Selection of locations of the N.E.S. (e.g., by roads or other linear infrastructure) at narrow points, or points of reduced impact to form / function(s);
- Narrowing infrastructure corridors where they are adjacent to / crossing the N.E.S.;
- Designing to retain portions / larger portions of supporting features and areas;
- Placement of higher-impact land uses or activities away from sensitive features / functions;
- Placement of lower-impact or complimentary land uses (e.g., parks) adjacent to features of the N.E.S.;
- Using land use planning / design to minimize the need for mitigation measure(s) or reduce reliance on more complex or intensive mitigation (e.g., planning parks in areas where infiltration of groundwater is critical to maintaining form and/or function rather than relying on a series of infiltration measures which could clog or become less effective over time).

The E.I.S. should identify and describe in detail how negative impacts from the proposed development or site alteration on the N.E.S. have been minimized, as applicable.

### 2.8.2.3 Mitigate

The application of mitigation measures is the third priority in the mitigation hierarchy. A list of potential mitigation measures is provided in Appendix 11. The list is not to be considered exhaustive or prescriptive; mitigation measures other than those included in the table can be presented for consideration.

The E.I.S. should identify and describe in detail how negative impacts from the proposed development or site alteration on the N.E.S. have been mitigated and/or proposed mitigation measures to be implemented through detailed design (e.g., bird strike avoidance measures).

### Buffers

The impact assessment must provide supporting rationale for the recommended buffers incorporated into the proposed development or site alteration. Recommendations and supporting rationale should include reference back to preliminary recommendations and how the development or site alteration integrated any 'opportunities for refinement' to support the proposed buffer width, as applicable.

Recommendations for buffer design should also be provided. Buffer design is to consider physical and biological elements that will support mitigation efforts and opportunities to support the N.E.S. Some design considerations are listed below; these do not represent an exhaustive

list. Best practices, new and innovative ideas, and current research available at the time of the proposed development should be considered, as appropriate.

- Topographic variability to reflect a more natural condition, such as:
  - Microtopographic elements (hummocks / rises, small depressions)
  - Physical methods to support water retention or other specific mitigation or enhancements being implemented (e.g., support infiltration, wetlands)
  - Use of topography to increase mitigation efficacy (e.g., light, noise) in some instances (e.g., a berm, slopes, etc.).
- Consider integration or use of diverse habitat types or selection of habitat types that will provide the greatest benefit to site-level features or the N.E.S. in the Study Area.
- Implementation planning should consider the potential need or benefit of using a cover crop, or other restoration support methods to facilitate establishment of target vegetation.
- Provide recommendations for seed mixes, including read-made mixes which may be more readily available for a range of habitat types (e.g., meadow, wet meadow, riparian) and may be suitable for application in restoration and buffer plantings.

#### **2.8.2.4 Residual Impacts**

Residual impacts represent those impacts that cannot be fully addressed through the implementation of the proposed minimization and mitigation measures. Despite the applied avoidance, minimization and mitigation measures, residual impacts may still occur. Generally, residual impacts may include some occupancy-related impacts, introduction of invasive species, etc. The scope, scale and magnitude of residual impacts should be discussed and wherever possible, should include quantitative measures.

#### **2.8.3 System Enhancements**

Opportunities to enhance the N.E.S. should be incorporated where possible. Through this section of the E.I.S., proposed system enhancements are identified. These may include one or several of the potential opportunities identified in Section 2.6.4.

System enhancements are not mitigation measures; these components go beyond mitigating impacts, contributing to the long-term protection, resiliency and ecological integrity of the N.E.S. They are to be presented and considered after demonstration of policy conformity (per Section 2.6.2).

Location(s) for proposed enhancements, as well as other relevant information (e.g., size, composition, design, etc.) should be described and represented in a figure(s).

## 2.9 Delineation and Refinement of System Boundaries

The E.I.S. should include a summary of recommendations for delineation or refinement of system boundaries based on the outcomes of works presented in the E.I.S., as appropriate to the applicable plans and policies for the Subject Lands.

### 2.9.1. Natural Environment System Boundary

The N.E.S. boundary shown on Schedules C1, C2 and C3 of the N.O.P. is based on geospatial data available for the individual components of the N.E.S. at the time of plan preparation. As additional features are identified and / or mapping becomes available for previously unmapped features, refinements to the boundary may be possible. More precise delineation of the N.E.S. boundary for the Subject Lands of an E.I.S. will be required based on field investigations. Delineation of the N.E.S. boundary includes incorporation of all N.E.S. components (Table 4-1, Schedule L).

### 2.9.2 Greenbelt Natural Heritage System Boundary

Refinements to the boundaries of the Greenbelt Natural Heritage System (G.B.N.H.S.) are not permitted unless as a result of amendments to the Greenbelt Plan.

## 2.10 Policy Assessment

Based on the preceding sections of the E.I.S. Guidelines, assess, and provide an opinion as to the ability of the proposed development or site alteration to conform to the applicable legislation, plans, policies and guidelines identified in Section 2.2.

This section includes an assessment of the proposed development or site alteration against any prohibitions (i.e., development and site alteration shall not be permitted in provincially significant wetlands; significant coastal wetlands (O.P. 2020; P.P.S. 2024); and significant woodlands (O.P. 2020) and restrictive policies (i.e., development and site alteration shall not be permitted in certain natural heritage features and areas unless it has been demonstrated through the preparation of an E.I.S. that there will be no negative impacts on the natural features or their

ecological functions (O.P. 2020; P.P.S. 2020) as informed by the current and applicable plans, policies, legislation and regulations.

## 2.11 Monitoring Plan

A monitoring plan, where required, is intended to assess the implementation and efficacy of the proposed mitigation measures. The E.I.S. should outline a monitoring plan, including:

- Whether it is phased (i.e., monitoring requirements during pre-construction (i.e., pre-development), during construction and post construction)<sup>17</sup>;
- Specific targets or thresholds;
- Reporting schedule and protocols;
- Adaptive management plan, should targets/thresholds not be met; and
- Details on the person / people responsible for completing the monitoring plan.

Requirement(s) for monitoring are to be confirmed with the Approval Authority.

## 2.12 Conclusions

The key findings of the report including existing conditions, assessment of impacts and opportunities for environmental enhancements shall be summarized. A summary table documenting all commitments, mitigation measures, enhancement opportunities, and monitoring requirements to be implemented through the proposed development and site alteration and detailing the timing for their implementation should be included. Where details are to be addressed / resolved through later planning / design stages (e.g., at detailed design), recommended conditions of approval to ensure successful implementation should be identified.

The conclusions should include a final recommendation to support / not support the development or site alteration proposal based on the results of the study and identify mechanisms that the recommendations of the E.I.S. will be implemented to achieve policy conformity for the Subject Lands.

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<sup>17</sup> Typically, post-construction monitoring is considered to be initiated at 90% build-out or 90% completion of the construction activities.

## 2.13 References

A list of all relevant references, background information sources, etc. used in the preparation of the E.I.S. shall be included in the report.

## 2.14 Appendices & Supporting Material Requirements

The E.I.S. will include numerous appendices and some supporting materials will be required as part of the submission. Below is a list of the minimum requirements:

- All submissions (i.e., initial through to final):
  - Approved Terms of Reference (T.O.R.)
  - Record of Consultation
  - Data Tables (field surveys / existing conditions)
  - Figures 18
  - Supporting Materials (as appropriate)
- Final Submission
  - Esri compatible G.I.S. files (NAD 83, UTM Zone 17T) of all relevant natural heritage data (e.g., Significant Wildlife Habitat, features boundaries, significant species locations, etc.); and
  - Digital copies of data tables (i.e., inventory results) in .xls or .csv format.

Note that items other than those listed may be included as appendices to streamline the main body text, where appropriate. For example, an impact assessment, mitigation and residual impact table may be included in the body of the report, or as an appendix.

Appendices and supporting materials required as part of a submission package for the approved and completed E.I.S. in the E.I.S. Final Submission Checklist (Appendix 7).

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<sup>18</sup> These may be provided as an appendix or nested in appropriate sections of the report.



## Appendix 1 | Definitions

## **Alvars**

Means naturally open areas of thin or no soil over essentially flat limestone, dolostone or marble rock, supporting a sparse vegetation cover of mostly shrubs and herbs (Greenbelt Plan, 2017).

## **Areas of Natural and Scientific Interest (A.N.S.I.)**

Areas of land and water containing natural landscapes or features that have been identified as having life science or earth science values related to protection, scientific study or education (P.P.S., 2024).

Life Science A.N.S.I. means an area identified as being high quality example(s) of ecological form and function in each Ecodistrict in the province (provincially significant) and the region (regionally significant) and are generally defined by natural heritage features (e.g., a woodland, valley top of bank, etc.) and generally exclude anthropogenic land uses (e.g., residential areas / properties). Life Science A.N.S.I.'s include areas identified as provincially significant and regionally significant by the Ontario Ministry of Natural Resources and Forestry using evaluation procedures established by the Province, as amended from time to time.

Earth Science A.N.S.I. means an area that represent the best examples of geologic and geomorphic landforms and areas (e.g., a moraine) in each Ecodistrict in the province (provincially significant) and the region (regionally significant). They may encompass a single feature or a group of related features (e.g., a drumlin field). As geologic / geomorphic landforms, the overlying land use may include a composite of natural and anthropogenic uses (e.g., woodland, agricultural, rural residential, etc.). Earth Science A.N.S.I.'s include areas identified as provincially significant and regionally significant by the Ontario Ministry of Natural Resources and Forestry using evaluation procedures established by the Province, as amended from time to time.

## **Buffer**

An area of land located adjacent to natural heritage features and areas, other wetlands, and watercourses and usually bordering lands that are subject to development or site alteration. The purpose of a buffer is to protect the features and areas and their ecological functions by mitigating impacts of the proposed development or site alteration. Buffers shall consist of natural self-sustaining vegetation as a condition of development (except where certain agricultural uses are exempt from the requirement of a buffer).

## **Coastal Wetland**

- a) Any wetland that is located on one of the Great Lakes or their connecting channels (Lake St. Clair, and the St. Marys, St. Clair, Detroit, Niagara, and St. Lawrence Rivers); or

- b) any other wetland that is on a tributary to any of the above-specified water bodies and lies, either wholly or in part, downstream of a line located 2 km upstream of the 1:100 year floodline (plus wave run-up) of the large water body to which the tributary is connected (P.P.S., 2024).

### **Connectivity**

The degree to which key natural heritage features, natural heritage features and areas and/or key hydrologic features are connected to one another by links such as plant and animal movement corridors, hydrologic and nutrient cycling, genetic transfer and energy flow through food webs.

### **Core Areas**

An individual natural features and areas, or a group of features and areas in close proximity to each other (i.e., less than or equal to 30 m distance in settlement areas, less than or equal to 60 m distance outside of settlement areas) that have functional ecological connectivity (i.e., their proximity to each other supports ecological functions, such as wildlife habitat, exchange of genetic material, etc.).

### **Cultural and Regenerating Woodland**

Woodlands where the ecological functions of the site are substantially compromised as a result of prior land use activity and would be difficult to restore and/or manage as a native woodland and which provide limited ecological function and ecosystem services.

### **Development**

The creation of a new lot, a change in land use, or the construction of buildings and structures requiring approval under the Planning Act but does not include:

- a) activities that create or maintain infrastructure authorized under an environmental assessment process or identified in provincial standards; or,
- b) works subject to the Drainage Act

(Based on P.P.S., 2024).

### **Ecological Function**

The natural processes, products or services that living and non-living environments provide or perform within or between species, ecosystems and landscapes. These may include biological, physical and socio-economic interactions (P.P.S., 2024).

### **Ecological Integrity**

Includes hydrological integrity, and means a condition that is determined to be characteristic of its natural region and likely to persist, including abiotic components and the composition and abundance of native species and biological communities, rates of change and supporting processes.

### **Endangered Species**

A species that is classified as “Endangered Species” on the Species at Risk in Ontario List, as updated and amended from time to time.

### **Enhancement Areas**

Ecologically supporting areas adjacent to natural heritage features and areas, key natural heritage features, key hydrologic features. Enhancement areas can also be measured internal to features that increase the ecological resilience and function of individual features or groups of natural features and areas. Enhancements areas are identified where they:

- connect natural features and areas to create larger contiguous natural areas;
- Reduce edge habitat and increase proportion of interior conditions (> 100 m from edge); and
- Include critical function zones and important catchment areas critical to sustaining ecological functions.

### **Environmental Impact Study**

A science-based study of ecological features and functions, and impacts to those features and functions resulting from development and/or site alteration, prepared in accordance with the Region’s environmental impact study guidelines.

The purpose of an environmental impact study is to:

- collect and evaluate the appropriate information in order to have a complete understanding of the boundaries, attributes, and functions of components of the Natural Environment System;
- determine whether there are any additional components;
- undertake a comprehensive impact analysis;
- propose appropriate mitigation measures;
- clearly articulate any impacts that cannot be avoided or mitigated;
- where appropriate, recommend monitoring provisions;
- consider climate change, cumulative and/or watershed impacts where possible; and
- demonstrate that ecological enhancement to the Natural Environment System is achieved.

## **Fish**

As defined in the Fisheries Act, includes fish, shellfish, crustaceans, and marine animals, at all stages of their life cycles.

## **Fish Habitat**

As defined in the Fisheries Act, means spawning grounds and any other areas, including nursery, rearing, food supply, and migration areas on which 'fish' depend directly or indirectly in order to carry out their life processes (P.P.S., 2024).

## **Flooding Hazards**

The inundation, under the conditions specified below, of areas adjacent to a shoreline or a river or stream system and not ordinarily covered by water:

- a) along the shorelines of the Great Lakes - St. Lawrence River System and large inland lakes, the flooding hazard limit is based on the one hundred year flood level plus an allowance for wave uprush and other water related hazards;
- b) along river, stream and small inland lake systems, the flooding hazard limit is the greater of:
  1. the flood resulting from the rainfall actually experienced during a major storm such as the Hurricane Hazel storm (1954) or the Timmins storm (1961), transposed over a specific watershed and combined with the local conditions, where evidence suggests that the storm event could have potentially occurred over watersheds in the general area;
  2. the one hundred year flood; and
  3. a flood which is greater than 1. or 2. which was actually experienced in a particular watershed or portion thereof as a result of ice jams and which has been approved as the standard for that specific area by the Minister of Natural Resources and Forestry;

except where the use of the one hundred year flood or the actually experienced event has been approved by the Minister of Natural Resources and Forestry as the standard for a specific watershed (where the past history of flooding supports the lowering of the standard) (P.P.S., 2024).

## **Floodplains**

For river, stream and small inland lake systems, means the area, usually low lands adjoining a watercourse, which has been or may be subject to flooding hazards (P.P.S., 2024).

### **Floodway**

For river, stream and small inland lake systems, means the portion of the flood plain where development and site alteration would cause a danger to public health and safety or property damage. Where the one zone concept is applied, the floodway is the entire contiguous flood plain. Where the two zone concept is applied, the floodway is the contiguous inner portion of the flood plain, representing that area required for the safe passage of flood flow and/or that area where flood depths and/or velocities are considered to be such that they pose a potential threat to life and/or property damage. Where the two zone concept applies, the outer portion of the flood plain is called the flood fringe (P.P.S., 2024).

### **Greenbelt Plan Natural Heritage System**

The natural heritage system mapped and issued by the Province in accordance with the Greenbelt Plan.

### **Habitat of Endangered Species and Threatened Species**

Habitat within the meaning of Section 2 of the Endangered Species Act, 2007 (P.P.S., 2024).

### **Hazardous Lands**

Means property or lands that could be unsafe for development due to naturally occurring processes. Along the shorelines of the Great Lakes – St. Lawrence River System, this means the land, including that covered by water, between the international boundary, where applicable, and the furthest landward limit of the flooding hazard, erosion hazard or dynamic beach hazard limits. Along the shorelines or large inland lakes, this means the land, including that covered by water, between a defined offshore distance or depth and the furthest landward limit of the flooding hazard, erosion hazard or dynamic beach hazard limits. Along river, stream and small inland lake systems, this means the land, including that covered by water, to the furthest landward limit of the flooding hazard or erosion hazard limits (P.P.S., 2024).

### **Hazardous Sites**

Property or lands that could be unsafe for development and site alteration due to naturally occurring hazards. These may include unstable soils (sensitive marine clays [leda], organic soils) or unstable bedrock (karst topography).

### **Highly Vulnerable Aquifers**

Aquifers, including lands above the aquifers, on which external sources have or are likely to have a significant adverse effect (Greenbelt Plan, 2017).

## Hydrologic Evaluation

A science-based study of hydrologic features and areas, and impacts to those features and hydrologic functions resulting from development and/or site alteration.

The purpose of a hydrologic evaluation is to:

- collect and evaluate the appropriate information in order to have a complete understanding of the boundaries, attributes of permanent and intermittent streams, inland lakes and their littoral zones, seepage areas and springs, wetlands, groundwater features, surface water features, floodplains, flooding hazards, floodways, shoreline areas, and related hydrologic functions;
- determine whether there are any additional hydrologic features and areas;
- assess the significance and sensitivity of hydrologic features and their hydrologic functions;
- undertake a comprehensive impact analysis;
- propose appropriate mitigation measures;
- identify planning, design and construction practices that will maintain and, where possible, enhance or restore the health, diversity and size of the hydrologic feature and functions and its connectivity with other hydrologic features, natural heritage features and areas and key natural heritage features;
- clearly articulate any impacts that cannot be avoided or mitigated;
- where appropriate, recommend monitoring provisions to evaluate the long-term effectiveness of the identified mitigation measures; and
- consider climate change, cumulative and/or watershed impacts where possible.

## Hydrologic Functions

The functions of the hydrological cycle that include the occurrence, circulation, distribution and chemical and physical properties of water on the surface of the land, in the soil and underlying rocks, and in the atmosphere, and water's interaction with the environment including its relation to living things (P.P.S., 2024).

## Infrastructure

Physical structures (facilities and corridors) that form the foundation for development.

Infrastructure includes: sewage and water systems, septage treatment systems, stormwater management systems, waste management systems, electricity generation facilities, electricity transmission and distribution systems, communications/telecommunications, transit and transportation corridors and facilities, oil and gas pipelines and associated facilities.

### **Inland Lakes and their Littoral Zones**

Any inland body of permanently standing water larger than a pool or pond or a body of water filling a depression in the earth's surface, where their water levels and hydrologic functions are not directly influenced by either Lake Erie or Lake Ontario.

Inland lakes do not include storm water management ponds, ponds constructed for irrigation purposes, such as those on a golf course or used for agriculture, lakes that have been constructed and managed with the sole purpose of supporting essential infrastructure, and where their ecological function is not a consideration in their management.

### **Intermittent Stream**

Stream-related watercourses that contain water or are dry at times of the year that are more or less predictable, generally flowing during wet seasons of the year but not the entire year, and where the water table is above the stream bottom during parts of the year (Greenbelt Plan, 2017).

### **Key Hydrologic Area**

Significant groundwater recharge areas, highly vulnerable aquifers, and significant surface water contribution areas that are necessary for the ecological and hydrologic integrity of a watershed.

### **Key Hydrologic Features**

Permanent streams, intermittent streams, inland lakes and their littoral zones, seepage areas and springs, and wetlands.

### **Key Natural Heritage Features**

Habitat of endangered species and threatened species; fish habitat; wetlands; life science areas of natural and scientific interest (A.N.S.I.'s), significant valleylands, significant woodlands; significant wildlife habitat (including habitat of special concern species); sand barrens, savannahs, and tallgrass prairies; and alvars (Greenbelt 2017).

### **Lake**

Any inland body of standing water, usually fresh water, larger than a pool or pond or a body of water filling a depression in the earth's surface.

### **Landform Features**

Distinctive physical attributes of land such as slope, shape, elevation and relief.



### **Large Inland Lakes**

Those waterbodies having a surface area of equal to or greater than 100 square kilometres where there is not a measurable or predictable response to a single runoff event.

### **Linkages**

An area, that may or may not be associated with the presence of existing natural features and areas, that provides and maintains ecological connectivity between core areas consisting of natural features and areas, and supports a range of community and ecosystem processes enabling plants and animals to move among natural heritage features, in some cases over multiple generations, thereby supporting the long-term sustainability of the overall natural environment system.

### **Municipal Comprehensive Review**

A new official plan, or an official plan amendment, initiated by the Region under Section 26 of the Planning Act, 1990 that comprehensively applies Provincial policies and plans and the applicable policies of this Plan.

### **Natural Environment System**

An ecologically integrated system made up of the Provincial natural heritage systems, natural heritage features and areas, other wetlands, key natural heritage features, key hydrologic features, key hydrologic areas, shoreline areas, hydrologic functions, supporting features and areas, hazardous lands, and linkages intended to provide connectivity and support natural processes which are necessary to maintain biological and hydrological diversity, ecological functions, ecosystem services, viable populations of indigenous species, and ecosystems.

### **Natural Heritage Features and Areas**

Features and areas, including significant wetlands, significant coastal wetlands, other coastal wetlands, fish habitat, significant woodlands, significant valleylands, habitat of endangered species and threatened species, significant wildlife habitat, and significant areas of natural and scientific interest, which are important for their environmental and social values as a legacy of the natural landscapes of an area (modified from P.P.S., 2024). For the purposes of this definition, natural heritage features and areas includes other woodlands, earth science areas of natural and scientific interest (provincial and regional), and life science areas of natural and scientific interest (provincial and regional).

### **Natural Heritage System**

A system made up of natural heritage features and areas, wetlands, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems. These systems can include key natural heritage features, key hydrologic features, federal and provincial parks and conservation reserves, other natural heritage features and areas, lands that have been restored or have the potential to be restored to a natural state, associated areas that support hydrologic functions, and working landscapes that enable ecological functions to continue.

### Negative impacts

- a) In regard to water, degradation to the quality or quantity of surface or groundwater, key hydrologic features or vulnerable areas and their related hydrologic functions, due to single, multiple or successive development or site alteration activities;
- b) In regard to fish habitat, any permanent alteration to, or destruction of fish habitat, except where, in conjunction with the appropriate authorities, it has been authorized under the Fisheries Act; and
- c) In regard to other natural heritage features and areas, degradation that threatens the health and integrity of the natural features or ecological functions for which an area is identified due to single, multiple or successive development or site alteration activities (Greenbelt Plan, 2017).

### One Hundred Year Flood

For river, stream and small inland lake systems, means that flood, based on an analysis of precipitation, snow melt, or a combination thereof, having a return period of 100 years on average, or having a 1% chance of occurring or being exceeded in any given year.

### One Hundred Year Flood Level

- a) For the shorelines of the Great Lakes, the peak instantaneous still water level, resulting from combinations of mean monthly lake levels and wind setups, which has a 1% chance of being equalled or exceeded in any given year;
- b) In the connecting channels (St. Mary's, St. Clair, Detroit, Niagara and St. Lawrence Rivers), the peak instantaneous still water level which has a 1% chance of being equalled or exceeded in any given year; and
- c) For large inland lakes, lake levels and wind setups that have a 1% chance of being equalled or exceeded in any given year, except that, where sufficient water level records do not exist, the one hundred year flood level is based on the highest known water level and wind setups.

### Other Water-Related Hazards

Water-associated phenomena other than flooding hazards and wave uprush which act on shorelines. This includes, but is not limited to ship-generated waves, ice piling and ice jamming.

### Other Wetlands

Lands that meet the definition of a wetland, and which have not been evaluated as a provincially significant wetland.

### **Other Woodlands**

Woodlands determined to be ecologically important in terms of features, functions, representation, or amount, and contributing to the quality and diversity of an identifiable geographic area or natural heritage system. Other woodlands include all terrestrial treed vegetation communities where the percent tree cover is >25%. Other woodlands would not include woodlands meeting the criteria as significant woodlands.

### **Permanent Streams**

Watercourses that contain water during all times of the year.

### **Provincial and Federal Requirements**

- a) In regard to Section 3.1.12 of this Plan, legislation and policies administered by the federal or provincial governments for the purpose of fisheries protection (including fish and fish habitat), and related, scientifically established standards such as water quality criteria for protecting lake trout populations; and
- b) In regard to Section 3.1.13 of this Plan, legislation and policies administered by the provincial government or federal government, where applicable, for the purpose of protecting species at risk and their habitat.

### **Provincially Significant Wetlands**

Those wetlands identified as provincially significant by the Ontario Ministry of Natural Resources and Forestry using evaluation procedures established by the Province, as amended from time to time (P.P.S., 2024).

### **River, Stream and Small Inland Lake Systems**

All watercourses, rivers, streams, and small inland lakes or waterbodies that have a measurable or predictable response to a single runoff event.

### **Rural Areas**

A system of lands within local municipalities that may include rural settlements, rural lands, prime agricultural areas, natural heritage features and areas, and resource areas (P.P.S., 2024).

### **Rural Settlements**

Communities located in rural areas, as delineated on Schedule B of the Niagara Official Plan, that are serviced by individual private on-site water and/or private wastewater systems, contain a limited amount of undeveloped lands that are designated for development, and are to accommodate limited growth. All settlement areas that are identified as hamlets in the Greenbelt

Plan, or as minor urban centres in the Niagara Escarpment Plan are considered rural settlements for the purposes of this Plan, including those that would not otherwise meet this definition.

### **Sand Barren**

Land (not including land that is being used for agricultural purposes or no longer exhibits sand barren characteristics) that:

- a) has sparse or patchy vegetation that is dominated by plants that are:
  - i. adapted to severe drought and low nutrient levels; and
  - ii. maintained by severe environmental limitations such as drought, low nutrient levels, and periodic disturbances such as fire;
- b) has less than 25 per cent tree cover;
- c) has sandy soils (other than shorelines) exposed by natural erosion, depositional process, or both; and
- d) has been further identified, by the Ministry of Natural Resources and Forestry or by any other person, according to evaluation procedures established by the Ministry of Natural Resources and Forestry, as amended from time to time (Greenbelt Plan, 2017).

### **Savannah**

Means land (not including land that is being used for agricultural purposes or no longer exhibits savannah characteristics) that:

- a) has vegetation with a significant component of non-woody plants, including tallgrass prairie species that are maintained by seasonal drought, periodic disturbances such as fire, or both;
- b) has from 25 per cent to 60 per cent tree cover;
- c) has mineral soils; and
- d) has been further identified, by the Ministry of Natural Resources and Forestry or by any other person, according to evaluation procedures established by the Ministry of Natural Resources and Forestry, as amended from time to time (Greenbelt Plan, 2017).

### **Seepage Areas and Springs**

Sites of emergence of groundwater where the water table is present at the ground surface (Greenbelt Plan, 2017).

### **Setback**

A physical separation that forms a boundary by establishing an exact distance from a fixed point, such as a property line, an adjacent structure, or a natural feature, within which development and/or site alteration is prohibited in accordance with the policies of the Conservation Authority.

### **Settlement Areas**

Urban areas and rural settlements within local municipalities (such as cities, towns, villages and hamlets) that are:

- a) built up areas where development is concentrated and which have a mix of land uses; and
- b) lands which have been designated in an Official Plan for development in accordance with the policies of this Plan. Where there are no lands that have been designated for development, the settlement area may be no larger than the area where development is concentrated.

### **Shoreline Areas**

The interface between terrestrial and aquatic environments, allowing for interactions between them, providing: specialized habitats (e.g., natural beach, overhanging cover, bird stopover or nesting, etc.), natural cover, areas of shoreline erosion or accretion, nutrient and sediment filtration / buffering, shading, foraging opportunities.

### **Significant Areas of Natural and Scientific Interest**

Those areas of natural and scientific interest identified as provincially significant and regionally significant by the Ontario Ministry of Natural Resources and Forestry using evaluation procedures established by the Province, as amended from time to time.

### **Significant Coastal Wetlands**

Those coastal wetlands identified as provincially significant by the Ontario Ministry of Natural Resources and Forestry using evaluation procedures established by the Province, as amended from time to time (P.P.S., 2024).

### **Significant Groundwater Recharge Area**

An area that has been identified as:

- a) a significant groundwater recharge area by any public body for the purposes of implementing the P.P.S.;

- b) a significant groundwater recharge area in the assessment report required under the Clean Water Act, 2006; or
- c) an ecologically significant groundwater recharge area delineated in a subwatershed study or equivalent in accordance with provincial guidelines.

For the purposes of this definition, ecologically significant groundwater recharge areas are areas of land that are responsible for replenishing groundwater systems that directly support sensitive areas like cold water streams and wetlands (Greenbelt Plan, 2017).

Groundwater recharge areas are also classified as “significant” where they supply more water to an aquifer than the surrounding area (N.P.C.A., 2013). In other words, a recharge area is considered significant when it helps to maintain the water level in an aquifer that supplies a community with drinking water, or supplies groundwater recharge to a coldwater ecosystem that is dependent on this recharge to maintain its ecological function (N.V.C.A., 2015b).

### **Significant Surface Water Contribution Areas**

Areas, generally associated with headwater catchments that contribute to baseflow volumes which are significant to the overall surface water flow volumes within a watershed (Greenbelt Plan, 2017).

Significant surface water contribution areas include headwater drainage features classified as protection, conservation and mitigation.

### **Significant Valleylands**

Valleyland which is ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or natural heritage system. These are to be identified using criteria established by the Province (P.P.S., 2024).

### **Significant Wetlands**

An area identified as provincially significant by the Ontario Ministry of Natural Resources and Forestry using evaluation procedures established by the Province, as amended from time to time (P.P.S., 2024).

### **Significant Wildlife Habitat**

Wildlife habitat that is ecologically important in terms of features, functions, representation, or amount, and contributing to the quality and diversity of an identifiable geographic area or natural

heritage system. These are to be identified using criteria established by the Province (P.P.S., 2024).

### **Significant Woodlands**

Woodlands that are ecologically important in terms of features such as species composition, age of trees and stand history; functionally important due to its contribution to the broader landscape because of its location, size or due to the amount of forest cover in the planning area; or economically important due to site quality, species composition, or past management history (P.P.S., 2024).

### **Site Alteration**

Activities, such as grading, excavation and the placement of fill that would change the landform and natural vegetative characteristics of a site (P.P.S., 2024).

### **Stormwater Management Facility**

A facility for the treatment, retention, infiltration or control of stormwater.

### **Subwatershed Planning**

Planning that reflects and refines the goals, objectives, targets, and assessments of watershed planning, as available at the time subwatershed planning is completed, for smaller drainage areas, is tailored to subwatershed needs and addresses local issues.

Subwatershed planning typically includes: the consideration of existing development and the evaluation of the impacts of any potential or proposed land uses and development; the identification hydrologic features, areas, linkages, and functions; the identification of natural features, areas, and related hydrologic functions; and a plan for protecting, improving, or restoring the quality and quantity of water within a subwatershed.

Subwatershed planning is based on pre-development monitoring and evaluation; is integrated with natural heritage protection; and identifies specific criteria, objectives, actions, thresholds, targets, and best management practices for development, for water and wastewater servicing, for stormwater management, for managing and minimizing impacts related to severe weather events, and to support ecological needs.

### **Subwatershed Study**

The plan or outcome from a subwatershed planning exercise.



### **Supporting Features and Areas**

Lands that have been restored or have the potential of being restored. Supporting features and areas include grasslands, meadows, and thickets (defined in accordance with Ecological Land Classification for Southern Ontario); other valleylands; and other wildlife habitat; and enhancement areas where they are determined to contribute to the biodiversity and ecological function of the natural environment system.

### **Surface Water Feature**

Water-related features on the earth's surface, including headwaters, rivers, stream channels, inland lakes, seepage areas, recharge/discharge areas, springs, wetlands, and associated riparian lands that can be defined by their soil moisture, soil type, vegetation, or topographic characteristics (P.P.S., 2024).

### **Sustainable**

Meeting the needs of the present without compromising the ability of future generations to meet their own needs.

### **Vegetation Protection Zones**

A vegetated buffer area surrounding a key natural heritage feature or key hydrologic feature (Greenbelt Plan, 2017).

### **Water Resource System**

A system consisting of groundwater features and areas and surface water features (including shoreline areas), and hydrologic functions, which provide the water resources necessary to sustain healthy aquatic and terrestrial ecosystems and human water consumption. The water resource system comprises of key hydrologic features and key hydrologic areas.

### **Wetlands**

Lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the surface. In either case the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic plants or water tolerant plants. The four major types of wetlands are swamps, marshes, bogs and fens. Periodically soaked or wet lands being used for agricultural purposes which no longer exhibit wetland characteristics are not considered to be wetlands for the purposes of this definition (P.P.S., 2024).

**Wildlife Habitat**

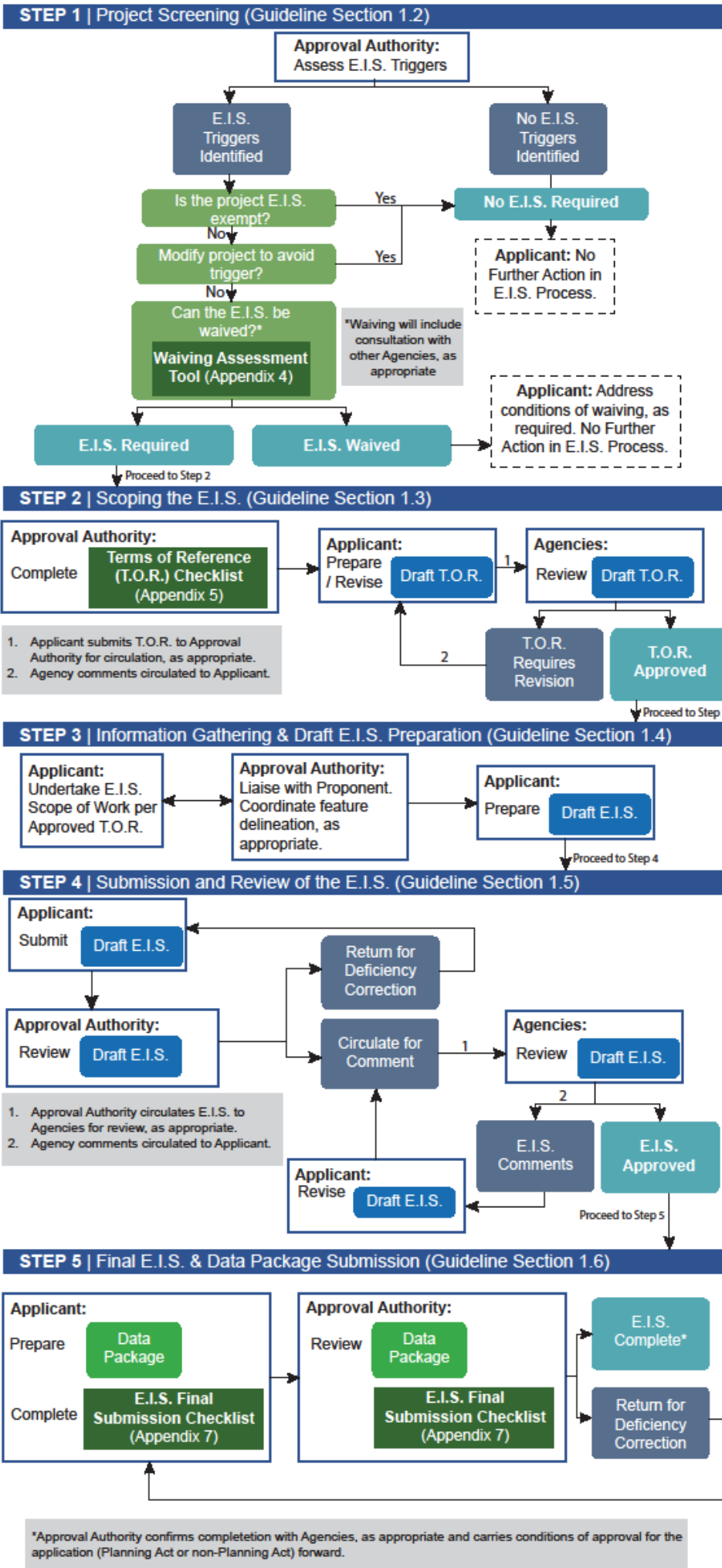
Areas where plants, animals and other organisms live, and find adequate amounts of food, water, shelter, and space needed to sustain their populations. Specific wildlife habitats of concern may include areas where species concentrate at a vulnerable point in their annual or life cycle; and areas which are important to migratory or non-migratory species (P.P.S., 2024).

**Woodlands**

Treed areas that provide environmental and economic benefits to both the private landowner and the general public, such as erosion prevention, hydrological and nutrient cycling, provision of clean air and the long-term storage of carbon, provision of wildlife habitat, outdoor recreational opportunities, and the sustainable harvest of a wide range of woodland products. Woodlands include treed areas, woodlots or forested areas and vary in their level of significance at the local, regional and provincial levels. Woodlands will be delineated according to the Province's Ecological Land Classification system definition for forest (P.P.S., 2024). For the purposes of this definition, forests include terrestrial vegetation communities as defined in accordance with the Ecological Land Classification (E.L.C.) system, where the tree cover is greater than 60%.



## Appendix 2 | E.I.S. Process Diagram





## **Appendix 3 | E.I.S. Project Screening Tool**

# Project Screening Tool | Environmental Impact Study

## INTRODUCTION

The Project Screening Tool supports and documents initial screening of a proposed project / application either at pre-consultation, or upon submission, as applicable for the type of project (refer s. 1.2 of the Guideline). **All development and site alteration projects should be screened.** Project screening is to occur through Pre-consultation on all Planning Act applications, or at the time of application where no formal pre-consultation is required (non-planning act applications).

Screening is to be completed by a municipal Planner, Environmental Planner, or Natural Heritage Planner with appropriate knowledge, experience, and background in natural heritage, from the Approval Authority or their designate.

## PROJECT INFORMATION

### Proponent

Name:

### Project Contact

Name:

Email:

Title:

Phone:

### Subject Lands

Street Address:

Location

Description:

Municipality:

Lot & Concession:

### Project Summary

Project Type<sup>1</sup>:

---

<sup>1</sup> Please indicate the project type from the following list or specify the type if not listed below.

- Agricultural structure or building
- New single detached dwelling: existing lot **or** lot severance
- New accessory structure **or** development (e.g., garage, shed, swimming pool, driveway)
- Re-build – same footprint **or** larger or altered footprint
- Addition(s) to / expansion of existing building(s) **or** accessory building or development
- Septic system or other servicing
- Site alteration (grading, fill, etc.)
- Multi-unit / subdivision development

---

Project Description<sup>2</sup>:

---

## PROJECT SCREENING

This project screening is being completed at:

- Pre-consultation
- Submission

Please list the information provided by the applicant that is informing this project screening:

## ASSESSMENT RESOURCES

Project screening is to consider both mapped (Per Schedule C2 of the N.O.P.) and unmapped features and functions. Multiple resources are required to inform screening. Please select all that were used in preparing this screening assessment:

- Niagara Official Plan schedules and associated online mapping
- Local Area Municipality schedules and any associated online mapping
- Watershed Plan(s) and/or Subwatershed Plan(s)
- Aerial / satellite imagery of the project area (to screen for unmapped features / potential features)
- Conservation Authority mapping (e.g., regulated areas, wetlands, etc.)
- Land Information Ontario (L.I.O.)

---

<sup>2</sup> Provide a brief description of the proposed project. Include relevant information which informs the scope, scale or factors influencing the assessment of the proposed project for waiving.



- Natural Heritage Information Centre (N.H.I.C.)
- Department of Fisheries and Oceans (D.F.O.) Species at Risk mapping
- Other: \_\_\_\_\_

Please list specific plans (e.g., watershed or subwatershed plans), as applicable, for reference:

## PROCESS TRIGGERS

Does the project or activity wholly or partially occur within / overlap any of the following?

- Key hydrological feature(s) outside of settlement areas
- Features and Components of the Niagara Region Natural Environment System (per section 3.1.1 and 3.1.2 of the N.O.P.)
- Local Area Municipality N.H.S', W.R.S' and/or N.E.S' as identified / appropriate based on local area municipal policies.
- Potential habitat for Endangered or Threatened Species.
- Potential Significant Wildlife Habitat
- Adjacent Lands to a component of the N.E.S. (Table A3-1 of the N.O.P.)
- Unmapped feature(s) requiring further assessment to determine status.

If **yes** to any of the above, the E.I.S. Process is triggered.

Proceed to Prohibitions.

If **no** to all the above, the E.I.S. Process is not triggered.

No further action required.

## PROHIBITIONS TO DEVELOPMENT & SITE ALTERATION

### PROHIBITIONS

Development and/or site alteration are prohibited through policy from occurring in certain features and areas. Complete the checklist below to confirm the proposed activity is not prohibited.

Does the proposed development or site alteration occur wholly or partially within or include direct changes to one or more of the following (select all that apply)?

- Key hydrologic features outside of settlement areas
- Vegetation Protection Zones to features within the Greenbelt Plan Area or key hydrologic features outside of settlement areas
- Provincially Significant Wetlands
- Significant Coastal Wetlands
- Fish Habitat, except in accordance with *Provincial and Federal requirements*
- Habitat for Endangered and Threatened Species, except in accordance with *Provincial and Federal requirements*
- Lands Outside the Provincial N.H.S. and Outside of the N.E.P.A.
  - Significant Woodlands (where associated Niagara Region policies apply)

If **yes** to any of the above.

Proceed to  
Exceptions.

If **no** to all the above.

Proceed to  
Exemptions.

If / where a proposed activity is prohibited, there may be opportunity to modify a proposal to avoid the prohibition. Proponents may choose to re-submit with a revised plan which addresses the prohibition, where appropriate.

### EXCEPTIONS

There are some limited exceptions to the prohibitions identified above. The policies listed below identify exceptions to the prohibitions stated above. A development or site alteration must meet all applicable exceptions to remove the prohibition.

Yes	No	n/a	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	For key natural heritage features within the Greenbelt Plan Area and Key Hydrologic Features outside of settlement areas per section 3.1.5.5 of the N.O.P.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	For Vegetation Protection Zones of the per section 3.1.5.7.3 of the N.O.P.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	For Fish Habitat per section 3.1.12.1 of the N.O.P.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	For Habitat of Endangered Species and Threatened Species per section 3.1.13.1 of the N.O.P.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Permitted uses in natural heritage features and areas per section 3.1.9.5.3 of the N.O.P.

Note: There are no exceptions for Provincially Significant Wetlands or Significant Coastal Wetlands.

If yes to **all applicable** prohibition exceptions, proceed to exemptions.

If no to any applicable prohibition exceptions, the proposed activity is prohibited.

If a conflict occurs between policy documents, it is the most restrictive that shall apply.

## EXEMPTIONS TO THE REQUIREMENT FOR AN EIS

A limited number of conditions may exempt a proposed development or site alteration from requiring an E.I.S.

### NIAGARA-WIDE EXEMPTIONS

A development or site alteration is exempt from the requirement for an E.I.S. where it **meets one or more of the following:**

- The activity has been authorized under an environmental assessment (E.A.) process, including a Class Environmental Assessment, carried out in accordance with provincial or federal legislation.

<sup>3</sup> Where a proposal, as submitted is prohibited, the lead planner may enter dialogue with the applicant to identify potential opportunities to modify the proposal to avoid the prohibition. Not all proposals will have suitable opportunities to modify and avoid the prohibition(s).

- A study that meets or exceeds the requirements of an E.I.S. has been completed within 5 years of the proposed activity occurring or within the timeframe of the project approval set out in that study (e.g., comprehensive *subwatershed study*).
- The activity is associated with the continuation of existing *agricultural uses*.
- The activity is for new building(s) and structure(s) for agricultural, agriculture-related uses, or on-farm diversified uses, **and** a minimum 30m VPZ or buffer (as applicable) is provided from any key natural heritage feature(s) or key hydrologic feature(s).
- The only key feature is habitat for Endangered or Threatened species, and the activity has been approved / authorized through provincial and/or federal legislation<sup>7</sup>
- The only key feature is Fish Habitat, and the activity has been approved / authorized through provincial and/or federal legislation.

### AREA-SPECIFIC EXEMPTIONS

For Niagara Peninsula Tender Fruit and Grape Area in the Greenbelt Plan.

New buildings or structures for agricultural, agriculture-related and on-farm diversified uses, where<sup>8</sup>:

- The only feature is a permanent or intermittent stream that also functions as an agricultural swale, roadside ditch, or municipal drain as determined through provincially approved mapping, **and** a minimum 15m VPZ is provided between the building or structure and the permanent or intermittent stream.

<p>If <b>yes</b> to one or more exemptions.</p> <p>An E.I.S. is not required.</p>	<p>If <b>no</b> exemptions are met.</p> <p>The E.I.S. process is triggered, proceed to waiving or scoping<sup>8</sup>.</p>
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<sup>4</sup> S. 3.1.5.7.5 and 3.1.9.8.4 of the N.O.P.

<sup>5</sup> S. 3.1.5.7.4 and S. 3.1.9.8.3 of the N.O.P.

<sup>6</sup> S. 3.1.12.1 and S. 3.1.12.2 of the N.O.P.

<sup>7</sup> S. 3.1.6.1 of the N.O.P.

<sup>8</sup> The decision to proceed to waiving or scoping will be determined by the planner and communicated to the applicant.



## ASSESSMENT SIGN-OFF

For records purposes, please identify who completed the project screening.

### Screening Completed By

### Reviewed and Accepted By

---

Name

---

Name

---

Position

---

Position

---

Company/Organization

---

Organization

---

Date

---

Date



## **Appendix 4 | E.I.S. Waiving Assessment Tool**

# Waiving Assessment Tool | Environmental Impact Study

## INTRODUCTION

The Waiving Assessment Tool facilitates review of **eligible** development and site alteration projects to determine if the requirement for a standard Environmental Impact Study (E.I.S.) may be waived in accordance with Section 3.1.33.3 of the Niagara Official Plan (N.O.P.). The Waiving Assessment functions as a streamlined E.I.S. and includes typical information in a condensed format to assess project risk and potential impacts to the Natural Environment System. Waiving only applies to the requirement for an E.I.S., should a hydrologic evaluation be required, that is not addressed through this tool. Waiving is only permitted where there is no, or low risk of impact to the Natural Environment System **and** that the potential impacts are well understood and can be mitigated through standard measures. Waiving will include conditions; this can include specific mitigation and / or other measures to ensure policy requirements are met (e.g., no impact, no negative impact). All conditions must be met by the proponent to support waiving.

Completion of a waiving assessment **does not** guarantee that a project will have the E.I.S. requirement waived. It is a tool to inform the decision to waive or confirm the requirement for a standard E.I.S.

The Waiving Assessment Tool is to be used by the Approval Authority to document an assessment of a project and forms part of the formal project record. It may also be used as a reference for landowners, architects, consultants (engineers, ecologists, etc.) to understand what projects may be appropriate for waiving assessment and inform design to support potential waiving of the requirement for an E.I.S.

## OVERVIEW

The Waiving Assessment Tool proceeds through several steps to summarize existing conditions, identify features on or adjacent to the Subject Lands, assess the project to determine risks and potential impacts to the Natural Environment System and its functions, and identify mitigation measures and conditions.

Each step includes content to be filled out and concludes with a decision/outcome providing direction on how to proceed at the conclusion of the step. A project may be deemed ineligible to proceed at various steps of the Waiving Assessment. Refer to **Figure 1** for an illustrative summary of the steps, key decision points and potential outcomes.

## USING THE TOOL

The Waiving Assessment Tool is to be completed by a qualified representative of the Approval Authority (or their designate), including:

- Land Use Planners with support from Natural Heritage technical reviewers,
- Natural Heritage / Environment Planners, and/or
- Natural Heritage technical reviewers providing support services on behalf of the Approval Authority (or their designate).

**OR**

A qualified E.I.S. professional with demonstrated E.I.S. experience on behalf of a proponent.

Where the waiving tool is completed by an E.I.S. professional, the waiving tool **must** be reviewed and accepted by an appropriate and qualified representative of the Approval Authority.

## IMPORTANT NOTES

In completing the waiving assessment tool:

- A completed Waiving Assessment Tool forms part of the project review file and should be retained in project records.
- Technical matters may be addressed through the waiving process to facilitate the assessment process or assist a project in having the E.I.S. requirement waived (e.g., Site Plan modification), as such, it is important that the individual leading the process can access relevant technical support.
- Always refer to the most current, in-force Planning documents (Official Plan(s), Provincial Policy Statement, etc.) to complete a Waiving Assessment.



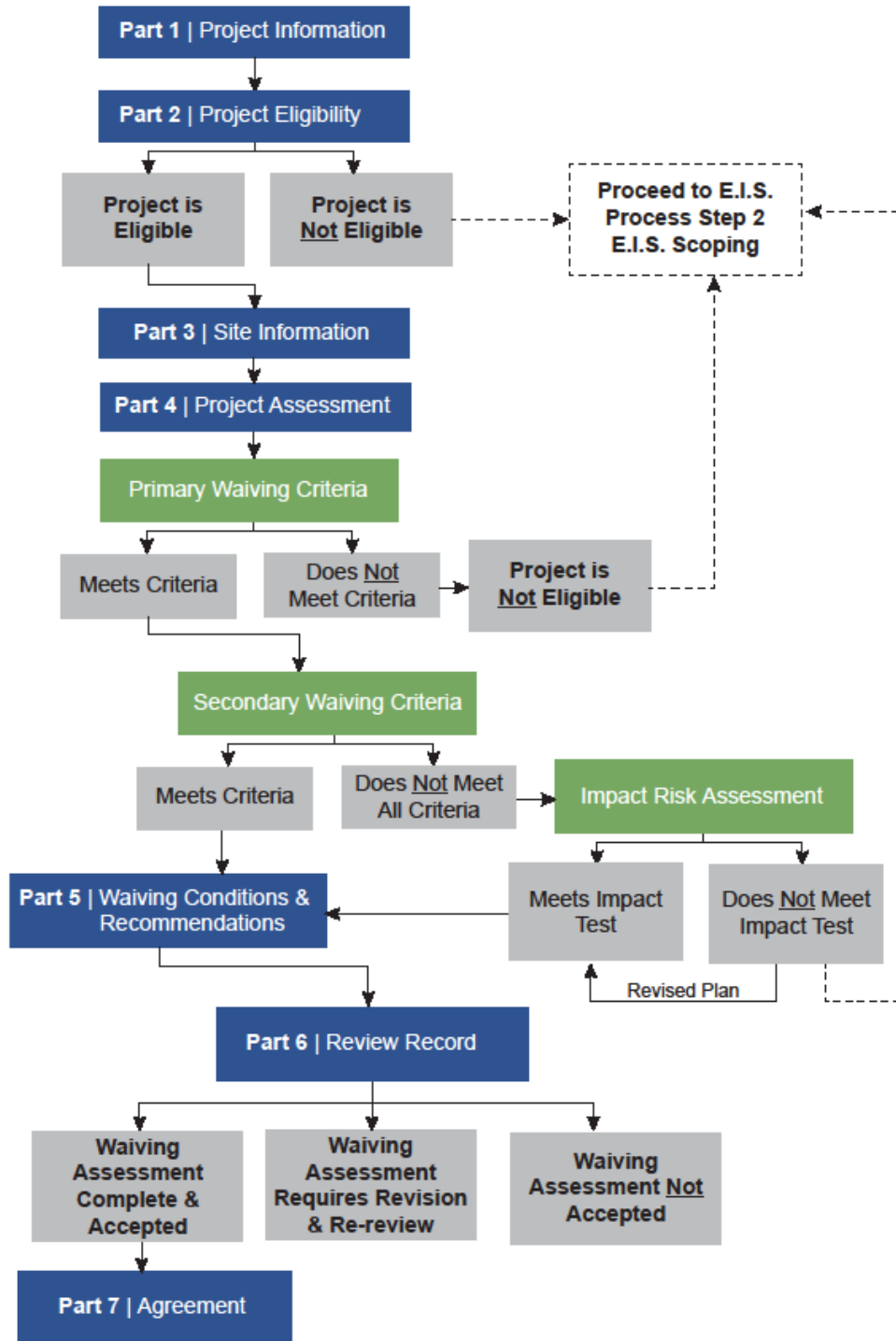


FIGURE LEGEND:

Decision or Direction

Process Step

Process Sub-Step

## PART 1 | PROJECT INFORMATION

### Proponent

Name:

### Project Contact

Name:

Email:

Title:

Phone:

### Subject Lands

Street Address:

Location Description:

Municipality:

Lot & Concession:

Current OP  
Designation:

Assessment Roll  
Number (if  
available):

Current Zoning:

### Project Summary

Project Type<sup>1</sup>:

Application Type:

Project description<sup>2</sup>:

Map/Figure Attached: Yes  No

<sup>1</sup> Please enter the project type to the field from the following list or specify the type if not listed below.



- Agricultural structure or building
- New single detached dwelling: existing lot **or** lot severance
- New accessory structure **or** development (e.g., garage, shed, swimming pool, driveway)
- Re-build – same footprint **or** larger or altered footprint
- Addition(s) to / expansion of existing building(s) **or** accessory building or development
- Septic system or other servicing
- Site alteration (grading, fill, etc.)
- Multi-unit / subdivision development

<sup>2</sup> Provide a brief description of the proposed project. Include relevant information which informs the scope, scale or factors influencing the assessment of the proposed project for waiving.

## PART 2 | PROJECT ELIGIBILITY

### INELIGIBLE PROJECT TYPES

Some projects are ineligible due to scale, or due to an elevated potential risk to natural heritage features and areas. These projects require further assessment through an E.I.S.

Is the project one (or more) of the following?

- Medium-large scale development (residential, commercial, institutional)
- Large-scale agricultural development
- Medium-large scale recreational development
- Medium-Large scale site alteration
- Aggregate resource or other extractive industries
- Industrial development

Refer to **Attachment A** for examples of projects which may qualify as one of the above.

If **yes**, the project is ineligible for waiving. An E.I.S. is required.

Proceed to '**E.I.S. Scoping**' (Step 2 of E.I.S. Process).

If **no**, the project is eligible for proceeding through the waiving assessment.

Proceed to '**Site Information**'.

**Note:** Eligible projects may continue through the waiving assessment; it does not indicate or otherwise imply that the project will have the requirement for an E.I.S. waived.

## PART 3 | SITE INFORMATION

This section provides information on the land within and surrounding the proposed activity to support the project assessment (Part 4). Ensure that pertinent information and notes are added which describe the conditions, potential sensitivities, connections / interactions, etc. to create a complete picture of the site.

### SITE VISIT

A site visit is strongly recommended to support completion of this section. A site visit access authorization form and record of site visit form are provided in Attachment B. Please complete the information below.

A site visit was requested:

- Yes
- No, it was determined to not be required for this project / site.
- No, other (provide reason)

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If requested, was the site visit completed?

- Yes, refer to site visit authorization and record of site visit (Attachment B).
- No, access was not granted.
- No, other (provide reason)

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## EXISTING LAND USE(S) / LAND COVER

- This section provides context for the current, existing land use(s)<sup>1</sup> / land cover present on the subject lands (proposed project area or property), and lands within 120m of the subject lands. Provide brief written descriptions below. Append a map / image showing the area.

### SUBJECT LANDS

### LANDS WITHIN 120m

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<sup>1</sup> This may include, but is not limited to descriptors such as agricultural building cluster(s), active agricultural fields (cropped), pasture, fallow field, natural feature / area (e.g., meadow, wetland, forest), manicured lawn / areas, recreational (e.g., golf course, campground), residential (rural, estate, urban), commercial, industrial, institutional, park or open space, paved / impermeable surfaces, etc.

## NATURAL HERITAGE FEATURES AND AREAS

Using available mapping and information, complete the table(s) below to identify features and areas associated with the N.E.S. occurring on or adjacent to the proposed activity.

Is all or a portion of the Subject Property regulated by N.P.C.A.?  **Yes**  **No**

If **yes**, consultation with N.P.C.A. is required to a) determine if additional study requirements apply and b) establish if permitting is required.

Have other Environmental or Ecological Studies<sup>2</sup> been completed that contain information relevant to the Subject Lands or adjacent lands?  **Yes**  **No**

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If **yes**, please list these in the space below<sup>3</sup>:

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Complete the tables and question below to identify features and functions known to, or with potential to occur wholly or partially on the Subject Lands or within Adjacent Lands.

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<sup>2</sup> This may include other E.I.S.'s, Environmental Assessments, Subwatershed Studies, etc.

<sup>3</sup> Previous studies should be used to inform the waiving assessment. Age of any previous reports should be considered in how they may inform the assessment. Studies with field data / observational data >5 years old should be considered as background information.

**Table 1: Components of the N.E.S.**

Feature Present	Feature / Function <sup>4</sup>	Distance from Limit of Activity (m) <sup>5</sup>	Notes <sup>6</sup>
<input type="checkbox"/>	Area(s) of Natural and Scientific Interest (A.N.S.I.) – Life Science		
<input type="checkbox"/>	Area(s) of Natural and Scientific Interest (A.N.S.I.) – Earth Science		
<input type="checkbox"/>	Woodland(s) – Significant / potentially significant		
<input type="checkbox"/>	Woodland(s) – Other		
<input type="checkbox"/>	Woodland(s) – Cultural or Regenerating Woodland		
<input type="checkbox"/>	Wetland(s) – Provincially Significant		
<input type="checkbox"/>	Wetland(s) – Significant Coastal		

<sup>4</sup> Refer to Schedule L to the N.O.P. for a list, definitions, and criteria for components of the N.E.S.

<sup>5</sup> For distances over 30m, estimates to the nearest 10m is acceptable. For distances up to 30m, estimates to the nearest 5m are acceptable (e.g., <5m, ~10m). If the distance varies due to shape / limit of a feature, provide a range (e.g., 5-10m, 10-25m) to represent the nearest and greatest extent.

<sup>6</sup> Describe the general land cover / condition of the lands between the feature and the proposed activity, features or species of note, feature quality, type, condition, relationships, and interactions between features, etc.

Feature Present	Feature / Function <sup>4</sup>	Distance from Limit of Activity (m) <sup>5</sup>	Notes <sup>6</sup>
<input type="checkbox"/>	Wetland(s) – Other		
<input type="checkbox"/>	Valleyland(s) – Significant		
<input checked="" type="checkbox"/>	Valleyland(s) – Other		
<input type="checkbox"/>	Thickets and/or Meadows		
<input type="checkbox"/>	Sand Barren		
<input type="checkbox"/>	Savannah		
<input type="checkbox"/>	Tallgrass Prairie		
<input type="checkbox"/>	Alvar		
<input type="checkbox"/>	Habitat for Endangered Species and Threatened Species <sup>7</sup>		
<input type="checkbox"/>	Significant Wildlife Habitat <sup>8</sup>		
<input type="checkbox"/>	Fish Habitat		
<input type="checkbox"/>	Linkage(s)		

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<sup>7</sup> Per secondary source information and completion of the Preliminary Species at Risk Screening

<sup>8</sup> Per secondary source information and completion of the Preliminary Significant Wildlife Habitat Screening



**Table 2: Key Hydrologic Features**

Feature Present	Feature / Function <sup>9</sup>	Distance from Limit of Activity (m) <sup>4</sup>	Notes <sup>5</sup>
<input type="checkbox"/>	Permanent and/or Intermittent Stream(s)		
<input type="checkbox"/>	Riparian Lands		
<input type="checkbox"/>	Floodplain, Flooding Hazard(s), Floodway(s)		
<input type="checkbox"/>	Inland Lake(s) and their Littoral Zone(s)		
<input type="checkbox"/>	Shoreline Areas		
<input type="checkbox"/>	Seepage Areas and Springs		
<input type="checkbox"/>	Headwater Drainage Feature(s)		

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<sup>9</sup> Refer to Schedule L to the N.O.P. for a list, definitions, and criteria for components of the N.E.S.

**Table 3: Key Hydrologic Areas and Other Hydrologic Areas**

Feature Present	Feature / Function <sup>10</sup>	Distance from Limit of Activity (m) <sup>4</sup>	Notes <sup>5</sup>
<input type="checkbox"/>	Significant Groundwater Recharge Area(s)		
<input type="checkbox"/>	Highly Vulnerable Aquifer(s)		
<input type="checkbox"/>	Significant Surface Water Contribution Area(s)		
<input type="checkbox"/>	Other Hydrologic Function(s)		
<input type="checkbox"/>	Floodplain, Flooding Hazard, or Floodway		
<input type="checkbox"/>	Areas regulated by N.P.C.A.		

NOTES

<sup>10</sup> Refer to Schedule L to the N.O.P. for a list, definitions, and criteria for components of the N.E.S.

## NATURAL FEATURES THAT HAVE BEEN DISTURBED

Features which have been affected by natural or anthropogenic disturbances are to be considered in the context of section 3.1.18 of the Niagara Official Plan. Please indicate if either policy applies to the Subject Lands:

Yes	No	Criterion
<input type="checkbox"/>	<input type="checkbox"/>	There is evidence that all or portions of a feature have been removed without authorization.
<input type="checkbox"/>	<input type="checkbox"/>	There is evidence of direct anthropogenic disturbance, but not removal of the feature.

If **yes** to **A** or **B** the project is ineligible for waiving. An E.I.S. is required.

Proceed to **'E.I.S. Scoping'**  
(Step 2 of E.I.S. Process).

If **no** to **A** and **B**, the project is eligible for proceeding through the waiving assessment.

Proceed to **'Project Assessment'**.



## PART 4 | PROJECT ASSESSMENT

Through this section, the proposed activity is assessed against a set of standardized criteria to determine if the eligible project meets the test for 'no' or 'low risk' to the Natural Environment System, its features, and functions, allowing the requirement for an E.I.S. to be waived. Conditions for waiving, which may include modifications to the proposed activity and / or mitigation measures will also be established.

### NATURAL HERITAGE POLICY & REGULATORY CONTEXT

Assessment criteria are, in part, associated with the policy context for the subject lands. As such, it is important to identify which natural heritage policies apply.

The project occurs wholly or partially:

- Outside settlement area(s)
  - within the Greenbelt Plan Area
  - within the Niagara Escarpment Plan area
  - outside of the above-noted areas
- Within settlement area(s)
- Within areas Regulated by the Niagara Peninsula Conservation Authority (N.P.C.A)

## PRIMARY WAIVING CRITERIA

Complete the table below for all applicable<sup>11</sup> criteria. If a criterion does not apply, select 'n/a'. If it is unknown and cannot be easily determined without more detailed work, the criterion is not met; select 'no'.

Yes	No	n/a	Criterion
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The activity is wholly located outside of Natural Heritage Features and Areas <sup>12</sup> , except in accordance with provincial or federal authorization(s) <sup>13</sup> .
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The activity is wholly located outside of key hydrologic features, except in accordance with provincial or federal authorization(s) <sup>7</sup> .
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The activity is wholly located outside of mandatory Vegetation Protection Zones for the Greenbelt Plan Area and key hydrologic features outside of settlement areas.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The activity will not significantly <sup>14</sup> alter the existing direction <sup>15</sup> , quantity <sup>16</sup> , or quality <sup>17</sup> of surface water or groundwater.

<sup>11</sup> Applicability is based on policy context as informed by the proceeding section 'Natural Heritage Policy Context'.

<sup>12</sup> If the only key natural heritage feature is habitat for endangered species or threatened species, select n/a.

<sup>13</sup> This may include Fisheries Act Authorization for activities in Fish Habitat, Provincial permit(s) or authorizations. These must be 'in-hand' to be accepted in the waiving process.

<sup>14</sup> 'Significantly' in this context refers to changes in the direction, quantity or quality of water that will or has potential to cause changes in the form or function of the natural heritage feature(s) being considered through the waiving process (i.e., a negative impact).

<sup>15</sup> This may be assessed using information on grading, stormwater management plan(s), and feature catchment area(s), etc.

<sup>16</sup> This may be influenced by changes in pervious vs. impervious cover, stormwater management, etc.

<sup>17</sup> Quality may include thermal impacts, contamination, sediment, etc. Consideration should be given to mitigation measures being proposed, their efficacy and risk of failure.

If **all applicable Primary Criteria are met**, proceed to Secondary Criteria.

If **one or more Primary Criteria are not met**, the project not eligible for waiving. Do not proceed through waiving assessment.

## SECONDARY WAIVING CRITERIA

Secondary waiving criteria support waiving of no and very low risk development and site alteration activities where site conditions (existing and proposed) provide a high level of confidence that there will be no negative impacts or that the potential nature and risk of impact(s) can be easily mitigated through uncomplicated measures.

Numerous factors influence the potential for a proposed development or site alteration to negatively impact natural heritage feature(s) and their function(s). This section identifies some conditions which reduce or eliminate the risk of creating new impact(s) and supporting the conclusion that a proposed development or site alteration is of no or low risk of impacting natural heritage feature(s) and their function(s).

### NOTE:

- It is strongly recommended that natural heritage subject matter experts are consulted for or complete this section; interpretation and assessment are required.
- Where uncertainty exists regarding whether a proposed development or site alteration meets a criterion, the precautionary principle is to be applied and the criterion assessed as 'not met'.

Complete all sections based on the proposed activity and existing land use(s).

**A | EXISTING BARRIERS<sup>18</sup>** | Presence of some existing land uses between a proposed activity and natural heritage feature(s) reduce the potential risk that the proposed activity will create a new or increase impacts to natural heritage feature(s) and / or their function(s).

Yes	No	n/a	Criteria
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	An existing road <sup>19</sup> serves as a continuous barrier between the proposed activity and the feature(s). <b>Or</b> Existing development <sup>20</sup> of equal or greater density to that being proposed separates the proposed activity and the feature(s).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The proposed activity will not alter the road / intervening land use.

**B | POSITIONING** | Where the proposed activity is a re-build / re-development of an existing structure, an addition to an existing structure, or construction of an accessory structure, the position of the proposed activity may provide sufficient buffering / separation to reduce or avoid potential risks of impact to natural heritage feature(s) or function(s).

Yes	No	n/a	Criteria
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The proposed development is wholly contained within the existing building footprint(s) (e.g., adding a second story, re-development of a building within the same footprint). <b>Or</b> The proposed expansion or accessory building extends away from the feature(s).

<sup>18</sup> Barriers in this context refers to barriers to movement of plants and/or animals or where an existing use acts as the interface between natural and built environments and are the primary source of existing impact(s).

<sup>19</sup> 'Road' is defined as linear public or private infrastructure, at the site or landscape scale constructed for the purpose of providing regular vehicular passage. It has a constructed bed and surface material which support long-term use by vehicles. Driveway and access laneways are not considered 'Roads' in this context. Private roads where they are <20m wide are not considered a barrier in this assessment.

<sup>20</sup> 'Existing development' includes residential development(s), commercial development(s), and industrial development(s). Natural, open space, agricultural lands (e.g., fields, pasture, grazing lands, etc.) and other similar uses do not qualify as effective barrier(s) in this context.

**C | SEPARATION DISTANCE / BUFFER(S)** | Separation between a proposed development or site alteration and natural heritage feature(s) provides buffering from potential impacts.

NOTE: Mandatory V.P.Z.'s to key natural heritage features within the Greenbelt Plan Area and key hydrologic features outside of settlement areas must be met (per Primary Waiving Criteria). The buffers provided below apply areas where these provincially prescribed buffers do not apply.

Yes	No	n/a	Criteria
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30+ meters from a Provincially Significant Wetland (P.S.W.) or a Provincially Significant Coastal Wetland
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15+ meters from other wetland(s)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20+ meters from the dripline of a significant woodland
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10+ meters from the dripline of an 'other woodland'
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15+ meters from a Significant Valleyland
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20+ meters from a Life Science Area of Natural and Scientific Interest
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30+m from a watercourse

**EXCEPTIONS TO MINIMUM SEPARATION DISTANCES / BUFFERS**

There are **limited** occurrences where an exception to the separation distances listed above will apply. Exceptions shall only be considered where:

The proposed development or site alteration is <b>one</b> of the following:	
<input type="checkbox"/>	An addition or modification to an existing structure, where the structure is already wholly or partially located within the separation distance applicable (per above).
<input type="checkbox"/>	An accessory structure that does not require servicing.
<input type="checkbox"/>	Minor site alteration to facilitate activities occurring outside of the buffer / separation distance.
<b>and</b>	
The proposed development or site alteration meets <b>all</b> the following	



<input type="checkbox"/>	There is no, or very-low risk to features and their functions as a result of the proposed activity;
<input type="checkbox"/>	There are no reasonable alternatives to undertaking the activity outside of the buffer / separation distance;
<input type="checkbox"/>	There is confidence that adequate opportunities to mitigate potential impacts are available.

Where an exception is applicable, provide a brief description of the site-specific considerations and rationale for the exception in the space below.

---

**SECONDARY WAIVING OUTCOME**

If **yes** to:

- All of A or B, **and**
  - All applicable criteria under C (i.e., yes for all features present) **or** where an exception to C is granted
- The project may be waived.

**Proceed to Waiving Conditions.**

If **no** to:

- A, **and** B, or
- One or more of the applicable criteria under C, and no exception is granted

**Proceed to Impact Risk Assessment.**

## IMPACT RISK ASSESSMENT

Where an eligible project meets the Primary Waiving Criteria, but does **not** meet the Secondary Waiving Criteria, further assessment of impacts and impact risk is required to inform waiving.

**This assessment is to be completed by individual(s) with expertise in natural heritage features, functions and potential impacts associated with development and site alteration** (e.g., an ecologist, biologist, etc.).

### EXISTING IMPACTS

High	Moderate	Low	-
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	What is level of existing impact to the natural heritage feature(s) based on site conditions for the current land use(s) present on the subject lands and adjacent lands to the feature(s)?

**Describe:**

---

### FEATURE SENSITIVITY

High	Moderate	Low	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	What is the sensitivity of the natural heritage feature(s) present to the proposed development or site alteration? If multiple features present, check all applicable boxes and detail below.

**Describe:**

### SUMMARY OF POTENTIAL IMPACTS

Please identify the potential impacts, the risk they pose and if they can be **reasonably** avoided or mitigated through basic actions (conditions). Additional notes or context can be added to the text box below the table.

Potential Impact			Risk to Feature(s) / Function(s)			Avoid or mitigate?	
			High	Mod	Low	Yes	No
<input type="checkbox"/>	<input type="checkbox"/>	Noise / light	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Soil compaction and/or root damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Introduction or spread of invasive species	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Removal or disturbance to natural vegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Removal or disturbance to wildlife habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Tree removal(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Dumping or backyard creep	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Creation of new edge / edge impacts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Fragmentation of natural feature(s) or function(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Impact to corridor or linkage function(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Occupancy impacts (e.g., increased dumping, informal trail building, domestic animals, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Change in water direction, quantity, or quality <sup>21</sup> to natural feature(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Risk to slope stability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>21</sup> Impacts to water quality include thermal impacts, turbidity, contaminants (including salt), etc.

Potential Impact			Risk to Feature(s) / Function(s)			Avoid or mitigate?	
<input type="checkbox"/>	<input type="checkbox"/>	Erosion, sedimentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

NOTES

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**PROPOSED SETBACK, BUFFER AND/OR VEGETATION PROTECTION ZONE**

What is the proposed distance (set-back) between the limit of the proposed activity and the natural heritage feature(s) / function(s)? \_\_\_\_\_ m

Is a buffer / vegetation protection zone proposed<sup>22</sup> to be implemented?  Yes  No

If yes, how wide is the proposed buffer? \_\_\_\_\_ m

<sup>22</sup> Buffers and vegetation protection zones are to be comprised of natural, self-sustaining vegetation.

## IMPACT ASSESSMENT OUTCOME

Based on the impact risk assessment, please select the appropriate conclusion for the proposed development or site alteration:

- I am **confident** that with the application of mitigation measures, there is no, or very low risk of negative impact to the natural heritage feature(s) on and adjacent to the Subject Lands and/or their function(s).
- I am **not confident** that the application of mitigation measures will be sufficient to achieve no or very low risk of negative impact to the natural heritage feature(s) on or adjacent to the Subject Lands or their function(s).

I am **confident** that with the application of mitigation measures, there is no, or very low risk of negative impact to the natural heritage feature(s) on and adjacent to the Subject Lands and/or their function(s).

**Proceed to Conditions.**

I am **not confident** that the application of mitigation measures will be sufficient to achieve no or very low risk of negative impact to the natural heritage feature(s) on or adjacent to the Subject Lands or their function(s).

**The project is not appropriate for waiving:**

- An E.I.S. is required. Proceed to E.I.S. scoping.
- With revisions, the project / activity may be re-assessed for waiving\*.

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\* Some projects may not be appropriate / suitable for waiving as submitted but have potential for waiving with revision(s). Please provide direction / comments on potential revisions in the space below:

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**NOTE:** Waiving is not guaranteed on initial or subsequent submissions.

## **PART 5 | CONDITIONS & RECOMMENDATIONS**

Conditions include mitigation measures and other recommendations necessary to support the conclusion that waiving the requirement for an E.I.S. is appropriate for a given project or activity. This section also provides an opportunity to identify recommended actions which would support an improvement or overall benefit to the natural heritage feature(s) and /or their functions. Recommendations are not considered mandatory but are strongly encouraged.

## CONDITIONS

Conditions are measures that **must** be implemented by the proponent for the proposed development or activity to have the requirement for an E.I.S. waived. Conditions include mitigation measures to support no negative impact, measures to avoid impacts, etc.

In determining conditions, refer to potential impacts (Part 4). Select all items necessary to ensure no or low risk of negative impact to the natural heritage feature(s) and their functions for the Subject Lands. Conditions are broken down into mitigation measures and general conditions; complete both tables.

**This assessment is to be completed by individual(s) with expertise in natural heritage features, functions and potential impacts associated with development and site alteration (e.g., an ecologist, biologist, etc.).**

### AVOIDANCE AND MITIGATION MEASURE(S)

Condition <sup>23</sup>	Notes <sup>24</sup>
<input type="checkbox"/> Physical set-back	
<input type="checkbox"/> Vegetated buffer / ecological buffer / vegetation protection zone	
<input type="checkbox"/> Dark sky lighting standards	
<input type="checkbox"/> Sediment & erosion control <ul style="list-style-type: none"> <li><input type="checkbox"/> Fencing</li> <li><input type="checkbox"/> Filter socks</li> <li><input type="checkbox"/> Stabilization of exposed soil(s)</li> </ul>	

<sup>23</sup> Refer to Attachment C for definitions and descriptions.

Provide notes to describe, clarify or specify application to the project / activity. This assists in clarifying the condition.

Condition	
<input type="checkbox"/> Energy dissipation of outfall(s) / outlet(s)	
<input type="checkbox"/> Soil scarification / decompaction	
<input type="checkbox"/> Timing restrictions / windows <ul style="list-style-type: none"> <li><input type="checkbox"/> Breeding Bird / bird nesting</li> <li><input type="checkbox"/> Bats</li> <li><input type="checkbox"/> Turtles</li> <li><input type="checkbox"/> Amphibians</li> <li><input type="checkbox"/> Fish</li> </ul>	
<input type="checkbox"/> Bird friendly window treatment(s)	
<input type="checkbox"/> Invasive species removal / management	
<input type="checkbox"/> Planting guideline(s)	
<input type="checkbox"/> Barrier Plantings	
<input type="checkbox"/> Construction demarcation / exclusionary fencing	
<input type="checkbox"/> Permanent demarcation / exclusionary fencing	



**GENERAL CONDITIONS**

Condition	Notes
<input type="checkbox"/> Record of Agency Communication <ul style="list-style-type: none"> <li><input type="checkbox"/> M.E.C.P.<sup>25</sup></li> <li><input type="checkbox"/> D.F.O.<sup>26</sup></li> <li><input type="checkbox"/> M.N.R.F.<sup>27</sup></li> <li><input type="checkbox"/> N.E.C.</li> <li><input type="checkbox"/> N.P.C.A.</li> </ul>	
<input type="checkbox"/> Proof of Authorization / Permit <ul style="list-style-type: none"> <li><input type="checkbox"/> Fisheries Act Authorization or L.O.A.</li> <li><input type="checkbox"/> Endangered Species Act</li> <li><input type="checkbox"/> Species at Risk Act</li> <li><input type="checkbox"/> Conservation Authority Fill Permit</li> </ul>	
<input type="checkbox"/> Submittal & acceptance of: <ul style="list-style-type: none"> <li><input type="checkbox"/> Updated feature boundaries as confirmed through site visit(s) (ESRI compatible format)</li> <li><input type="checkbox"/> E.S.C. Plan</li> </ul>	

<sup>25</sup> For administration of the Endangered Species Act – communication record is to include confirmation of conclusions regarding compliance with the E.S.A. (e.g., that conclusion of no impact is supported).

<sup>26</sup> For administration of the Fisheries Act – this may include written confirmation that an L.O.A. or authorization is not required, where applicable.

<sup>27</sup> For timing windows regarding in-water works / protection of fish and fish habitat and, as applicable guidance regarding wetland evaluations.

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Buffer / Planting Plan

Restoration Plan

Photometric Plan

Grading Plan

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## SUPPLEMENTARY MITIGATION MEASURES

In addition to conditions, supplementary mitigation measures may be identified. Supplementary mitigation measures are based on site specific conditions, opportunities to enhance feature(s) and/or function(s) of a natural heritage feature or area and / or the N.E.S. The identification of supplementary mitigation measures is to take into consideration and be appropriate to the type, scope and scale of development or activity being proposed.

Recommendation	Notes
<input type="checkbox"/> Bird friendly window treatment(s)	
<input type="checkbox"/> Invasive Species Management	
<input type="checkbox"/> Beneficial Plantings <ul style="list-style-type: none"> <li><input type="checkbox"/> Mast producing species</li> <li><input type="checkbox"/> Pollinator friendly species</li> <li><input type="checkbox"/> Native species-focused</li> </ul>	
<input type="checkbox"/> Enhancement or Restoration of Existing Habitat / Feature(s) <sup>28</sup>	
<input type="checkbox"/> Habitat Elements <ul style="list-style-type: none"> <li><input type="checkbox"/> Bat box</li> <li><input type="checkbox"/> Bird / Nest Box</li> <li><input type="checkbox"/> Perching Pole(s)</li> <li><input type="checkbox"/> Logs / Woody Debris</li> </ul>	

<sup>28</sup> There are several resources and funding opportunities associated with enhancement and restoration works. N.P.C.A. offers grant programs for restoration: <https://npca.ca/restoration>

<input type="checkbox"/> Other (please identify in notes)	
<input type="checkbox"/> Dark sky lighting standards	

## PART 6 | REVIEW RECORD

This section provides a record of the preparation of the waiving assessment and any iterative review(s) conducted.

### Waiving Assessment Completed By

### Approval Authority Reviewer

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Position

\_\_\_\_\_  
Position

\_\_\_\_\_  
Company/Organization

\_\_\_\_\_  
Company / Organization

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

### REVIEW OUTCOME

To be completed by the Approval Authority Reviewer.

- Waiving Assessment is complete & accepted. Proceed to Agreement.
- Waiving Assessment requires revision & re-review. Refer to comments and/or edits.
- Waiving Assessment is not accepted. Refer to comments.

### COMMENTS

## PART 7 | AGREEMENT

This section is to be completed for **complete & accepted** Waiving Assessments only (per Part 6).

This agreement is based on the plans, designs and other information submitted to the Approval Authority for review as part of the Waiving Assessment. In signing this document, you (the proponent) confirm that the plans and associated information are true and accurate. Changes in design, conditions, or issues in meeting the agreed to Conditions trigger a requirement to re-submit for review. Changes to plans, designs, etc. may result in a project no longer being eligible for waiving.

By signing this Waiving Assessment Agreement, you (the proponent) are agreeing to the contents of the form, and agreeing to complete, to the satisfaction of the Approval Authority, Conditions identified in Part 5 of this assessment.

I / we have the authority to bind the individual, corporation or organization.

**Proponent**

Name	Phone
Position	Email
Company/Organization	Address
Date	Address

## ATTACHMENT A | INELIGIBLE DEVELOPMENT EXAMPLES

Medium and Large-Scale development and site alteration are generally ineligible for waiving. Scale of development is informed by several factors and is site and activity specific.

The following provides some examples of development and site alteration which would be considered **ineligible** for waiving assessment. The information provided in this attachment is not exhaustive; other projects / project types not listed here may be considered ineligible based on scale or risk of impact to the Natural Environment System, significant feature(s), or significant function(s). The information provided here should be used as guidance for assessing project eligibility to proceed through the waiving assessment process.

Factors considered in determining if a project is ineligible include:

- Number of units (e.g., residential development)
- Areal extent (e.g., square meters, or hectares)
- Extent and nature of landscape change
- Magnitude, extent and duration factors that inform risk of impact(s)

Examples of ineligible non-agricultural projects include:

- Estate development(s)<sup>29</sup>
- Residential subdivision(s) or development(s) with >20 units<sup>30</sup>
- Secondary plans
- Industrial development
- New or major expansions to an existing golf course, campground, or other recreational facility
- Marinas (new or alterations to)
- Subdivisions or multi-unit developments along shorelines
- Grading or site alteration (including placement of fill) which will alter catchment areas and/or the contribution of flow (surface or ground water) to an H.D.F., watercourse or wetland.

Examples of ineligible agricultural projects include new or major expansions to:

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<sup>29</sup> Low density, large lot, developments proposed outside of settlement area boundaries.

<sup>30</sup> Developments proposed within settlement area boundaries including greenfield, brown-field and/or re-development.

- Large livestock facilities
- Abattoir
- Processing facilities
- Medium to large scale winery facilities (e.g., restaurant, touring facility, event spaces, etc.)
- Medium to large scale greenhouse installations
- On-farm diversified uses requiring large buildings, large parking capacity, servicing or new or major expansions to existing recreational facilities

## ATTACHMENT B | SITE VISIT AUTHORIZATION & VISIT RECORD

A site visit is strongly recommended to support the E.I.S. waiving assessment process. Site visit(s) provide an opportunity for the Approval Authority (or their designate) to observe the site conditions, develop a spatial understanding of the site and the proposed project. Most importantly, it provides an opportunity to inform the evaluation of the natural heritage feature(s) present on / adjacent to the subject lands and their potential sensitivity to support both the waiving assessment and potential conditions of waiving (e.g., mitigation measures).

This attachment provides two forms:

- A **standardized site access authorization request / agreement** which may be used by the Approval Authority to request access to a subject lands / site. This form provides a general description of activities during a site visit, can assist in identifying any conditions for site access and act as a documented record of site access request(s).
- A **record of site visit** to document the date, duration and attendees of a site visit. There is some space to record key observations, however other methods of recording information (e.g., photographs, annotating maps, digital data collection, paper data forms, etc.) should be employed, as appropriate.





## SITE ACCESS AUTHORIZATION REQUEST / AGREEMENT

### ACCESS REQUEST

To support the preparation, or review of the Waiving Assessment for the Subject Lands, a site visit is being requested.

The site visit will include the following activities:

- Visual identification and assessment of feature(s) present (types, condition, landform, etc.).
- Recording of observational data (e.g., plants, animals, insects, habitat features, etc.)
- Records of site condition through photography, digital data collection and notes.
- Delineation of feature boundaries by G.P.S. or similar device
- Delineation of feature boundaries with staking / flags
- Review of the proposed activity or development area.
- Other: \_\_\_\_\_

Attendance at a site visit may be coordinated with other applicable agencies:

- Niagara Region
- Local Municipality: \_\_\_\_\_
- Niagara Peninsula Conservation Authority (N.P.C.A.)
- Niagara Escarpment Commission (N.E.C.)
- Other Agency: \_\_\_\_\_

A date(s) for a site visit, where access is granted will be coordinated through email and/or phone between the Approval Authority and the Proponent or their designate.

### Access Request By:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Company / Organization

\_\_\_\_\_  
Position

\_\_\_\_\_  
Date

\_\_\_\_\_  
Email

\_\_\_\_\_  
Phone



## ACCESS AGREEMENT

I/we have the authority to grant or deny access to the Subject Lands.

I / we have reviewed the site access request and:

- Grant access, without condition(s)
- Grant access, with condition(s)
- Do not grant access

\_\_\_\_\_  
Name

\_\_\_\_\_  
Company / Organization

\_\_\_\_\_  
Position

\_\_\_\_\_  
Date

\_\_\_\_\_  
Email

\_\_\_\_\_  
Phone

### CONDITIONS OF ACCESS

The following conditions apply to site access:

- 24 hours-notice prior to access
- Coordinate site visit date / time with proponent or their designate
- I / we, or our designate must accompany any site visit(s)

### ADVISORY INFORMATION FOR ACCESS

Please be advised of the following site conditions and/or risks for accessing the site:

- Dog(s)
- Physical risks (please specify and where possible, identify on a map)
- Tenants
- Other: \_\_\_\_\_

COMMENTS

## RECORD OF SITE VISIT

Date	Start / End Times
Completed By (Name)	Position
Organization	Email

### ATTENDEES

Name	Company / Organization <sup>31</sup>

Where representation for the Approval Authority was delegated, please indicate these relationships / delegations:

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<sup>31</sup> Where a consultant is acting / attending on behalf of a municipality or proponent, please indicate.

## KEY OUTCOMES & OBSERVATIONS

The following activities were undertaken / data collected:

- Representative site photos were taken
- Map(s) were annotated with observations
- Delineation of feature boundaries:
  - Wetland(s)
  - Woodland(s)
  - Other: \_\_\_\_\_
- GPS tracks and/or surveyed feature limits
  - Collected by proponent, to be provided to Approval Authority
  - Collected by Approval Authority, to be provided to Proponent
- Ecological Land Classification and/or other ecological data
  - Collected by proponent, to be provided to Approval Authority
  - Collected by Approval Authority, to be provided to Proponent
- Review of the proposed activity or development area.
- Other: \_\_\_\_\_

Provide a summary of key observations, site sensitivity, existing conditions / impacts, outcomes and/or discussions.

## **SITE VISIT LIMITATIONS**

Identify any limitations<sup>32</sup> to the site visit which may have adversely affected purpose and outcome(s) of the site visit.

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<sup>32</sup> Limitations may include items such as prohibition on accessing certain areas / features, safety concerns for access / inaccessible areas due to safety concerns, etc.

## ATTACHMENT C | MITIGATION MEASURES & RECOMMENDATIONS - DESCRIPTIONS

This attachment provides general descriptions of mitigation measures and recommendations from Part 5 of the Waiving Assessment.

### **Aesthetic Lighting**

In the context of the waiving assessment, aesthetic lighting refers to any light generating sources or fixtures in outdoor spaces (e.g., around a building, on a building, garden lighting, etc.) that are not required as a necessary safety measure.

### **Barrier Plantings**

Barrier plantings are plantings designed to prevent or deter people from accessing a natural area. Generally, barrier plantings must be comprised of species which provide sufficient density / difficulty of physical passage or possess thorns (or similar physical deterrents) which deter human access. Barrier plantings are to be comprised of native species where they occur near natural heritage features and areas.

### **Bird Friendly Guidelines**

Bird strikes on windows are a significant cause of death and injury to birds. Birds cannot see the glass and external reflections create the visual impression that there is vegetation, sky, etc. for birds causing them to collide with windows during flight. The Fatal Light Awareness Program (FLAP) provides guidance on how homeowners and building managers can help avoid these issues through application of window treatments. Please visit their website for up-to-date information: <https://flap.org/> Additional opportunities to create bird friendly spaces are also encouraged.

### **Dark Sky Lighting Standards**

Light pollution affects night sky observation and wildlife behaviour. Responsible use of outdoor lighting can help avoid minimize light pollution and mitigate light impacts on wildlife living in areas near you. Please visit the Dark Sky organization website and follow the Five Principles for Responsible Outdoor Lighting: <https://darksky.org/resources/guides-and-how-tos/lighting-principles/>

### **Demarcation / exclusionary fencing**

Demarcation fencing is used to delineate an edge or limit; for the purposes of the waiving assessment, this is referring to demarcation either during construction to clearly identify the limit of disturbance, or permanently to demarcate the limit of a manicured or managed yard. In both

cases, the demarcation fence is used as a visual reminder and limit to avoid encroachment into buffers or natural areas.

Exclusionary fencing is used to prevent access. This fencing type is specifically intended to prevent people or animals from accessing natural areas. This should be used where there is concern regarding undesirable access.

### **Energy dissipation of outfall(s) / outlet(s)**

Erosion can occur where water flows and can entrain (pick up) sediment and wear away vegetation. Energy dissipation measures are used to prevent erosion at points of intentional water flow outletting (e.g., eaves, outfalls, outlets). Various measures can be used and are selected based on volume and velocity of water, site conditions and location.

### **Invasive Species Removal / Management**

The Ontario Invasive Plant Council tracks, educates and provides expertise on invasive plant species found in Ontario (<https://www.ontarioinvasiveplants.ca/>). Managing invasive plant species on your property provides valuable benefits to biodiversity both on your property and in the local landscape. Guidance on management and removal, alternatives to common garden invasives, etc. can be found on the website.

### **Sediment & Erosion Control Fencing**

Sediment & erosion control fencing is used to avoid the transport of sediment out of a designated construction area. It is recommended along limits of construction where there is risk that sediment may move into a natural area or into our water courses during rainfall events. This fencing is used during construction and is removed at the end of construction when soil stabilization and plantings are completed.

### **Filter Socks**

Filter socks are a linear, cylindrical sediment control measure often used in areas where installation of sediment fencing is not appropriate (e.g., on slopes, in treed areas, etc.).

### **Slope Stabilization**

This may be necessary for sediment and erosion control. Slopes pose an increased risk of erosion and sediment transport into natural areas or watercourses. Slope stabilization measures may be appropriate in some situations and will be informed by professionals qualified in sediment & erosion control design.

### **Stabilization of exposed soils**

Exposed soils are a primary source of sediment. Exposed soils should be stabilized as quickly as possible, and the duration of soil exposure should be minimized to the extent possible. Soil stabilization may include planting or use of fabrics / materials designed for this purpose.

### **Compaction Mitigation**

Movement of machinery and other construction related activities can result in soil compaction. Compaction can negatively impact tree roots for existing trees and affect new plantings and drainage. Where soil compaction may impact existing vegetation, compaction mitigation measures may be required. Generally, these include temporary materials placed to absorb compaction (e.g., wood chips, mats) which are removed at the completion of construction and the area is then restored.

### **Soil scarification / decompaction**

Where soil compaction has occurred, the soil can be scarified or de-compacted using mechanical methods to reduce the impact of the compaction. This approach is less preferred than mitigating the impact through compaction mitigation measures.

### **Physical set-back**

This refers to the physical distance between an activity (e.g., the limit of grading or disturbance associated with construction) and a natural feature or function. There is no implied condition or composition associated with the lands within the set-back.

### **Planting Guideline(s)**

Invasive species should not be used in plantings. Plantings should include and where possible, be primarily comprised of native species and/or species with biodiversity benefits. There are various tools and references to help homeowners and businesses identify better plants and seed mixes for their use. Some resources include:

<https://www.ontarioinvasiveplants.ca/resources/grow-me-instead/>

[https://npca.ca/images/uploads/common/Native\\_Plant\\_Guide.pdf](https://npca.ca/images/uploads/common/Native_Plant_Guide.pdf)

### **Timing Restrictions / Windows**

Most species have periods during their life cycles during which they are most vulnerable to impact. Many species have Laws and Regulations which protect them and restrict / inform certain activities or their timing. Sensitive periods are most often associated with breeding or hibernation / overwintering. Sensitivity during breeding is due to the risk of impact to eggs and/or young and the physical demands of breeding. Sensitivity during hibernation and overwintering is due to the low mobility of animals during this time, energy needs (i.e., conserving energy as they do not have access to food during this period), and the harsh environmental conditions they may be exposed to if disturbed during these periods. The following is a list of general timing windows; all timing windows should be confirmed with appropriate agencies or qualified professionals prior to implementation.

- Breeding Bird / Nesting Period: Late May through End of August
- Bat Roosting Period: May through September





- Reptile & Amphibian Overwintering: Mid-October through April or May
- Fish & Fish Habitat: Spring, or Fall Spawning Periods (variable)

Not all timing windows apply to all works. Certain activities represent risks to animals during these periods and it is those activities which are restricted during these periods.

### **Vegetated Buffer / Ecological Buffer / Vegetation Protection Zone**

Buffers or Vegetation Protection Zones are a mitigation measure intended to reduce various common impacts associated with development including encroaching, water quality, invasive species, etc. Buffers are a portion of land immediate adjacent to and along the length of a natural heritage feature that is to be established as self-sustaining, natural (native) vegetation.

## Appendix 5 | E.I.S. Terms of Reference Checklist

# Terms of Reference | Environmental Impact Study

## INTRODUCTION

This form serves two purposes:

1. **Scoping.** Through preparation, review and approval of this form, the study requirements (e.g., field work) for an Environmental Impact Study (E.I.S.) are established.
2. **Terms of Reference.** Once approved, this document is accepted as the Terms of Reference for the E.I.S. The proponent (and their consultant) are to meet, at a minimum, the conditions set out through this document and any amendments as may be required for features or species not that could not be reasonably be accounted for at the time of preparation (e.g., unmapped features, Species at Risk, Significant Wildlife Habitat).

Initial preparation of this form may be undertaken by the Approval Authority or their designate, or a qualified E.I.S. professional. Approval may only be granted by the Approval Authority (or their designate). Reaching approval may be an iterative process, requiring multiple submissions.

## TERMS & EXPECTATIONS

**Subject Lands:** This is typically the subject property, or a defined area within which the activity will be wholly contained – note this must include all associated works including access routes, stormwater, grading, etc. The Subject Lands is the focus of intensive survey(s) and generally requires the collection of primary data through on-site data collection as part of an E.I.S. Secondary sources of information (e.g., satellite imagery, eBird, G.B.I.F., N.H.I.C.) are to be used to supplement characterization of the Subject Lands.

**Study Area:** This includes all lands within 120m or 240m from the Subject Lands; Study Area distance is informed by the policy area in which the proposed activity is to occur. The Study Area may include some primary data collection, where appropriate (e.g., contiguous woodland, wetland or other feature which extends beyond the Subject Lands or has an increased potential of being impacted by the proposed development or site alteration). Limitations in site access may affect what / how surveys may be completed (e.g., roadside only). Secondary sources of information (e.g., satellite imagery, eBird, G.B.I.F., N.H.I.C.) are to be used to inform characterization of the Study Area.

## PROJECT INFORMATION

### Proponent

Name:

### Project Contact

Name:

Email:

Title:

Phone:

### Subject Lands

Street Address:

Location

Description:

Municipality:

Lot & Concession:

### Project Summary

Project Type<sup>1</sup>:

<sup>1</sup> Please indicate the project type from the following list or specify the type if not listed below.

- Agricultural structure or building
- New single detached dwelling: existing lot **or** lot severance
- New accessory structure **or** development (e.g., garage, shed, swimming pool, driveway)
- Re-build – same footprint **or** larger or altered footprint
- Addition(s) to / expansion of existing building(s) **or** accessory building or development
- Septic system or other servicing
- Site alteration (grading, fill, etc.)
- Multi-unit / subdivision development

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Project Description<sup>2</sup>:

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<sup>2</sup> Provide a brief description of the proposed project. Include relevant information which informs the scope, scale or factors influencing the assessment of the proposed project for waiving.

## SITE CONTEXT & SECONDARY RESOURCES

### NATURAL HERITAGE POLICY & REGULATORY CONTEXT

Study requirements and expectations are informed in part by policy context for the subject lands.

The project occurs wholly or partially:

- Outside settlement area(s)
  - within the Greenbelt Plan Area (Protected Countryside)
  - within the Niagara Escarpment Plan area
  - outside of the above-noted areas
- Within settlement area(s)
- Within areas Regulated by the Niagara Peninsula Conservation Authority (N.P.C.A.)

### BACKGROUND & SECONDARY SOURCES

The E.I.S. is to be scoped to consider both mapped (Per Schedule C2 of the N.O.P.) and unmapped features and functions. Multiple resources are required to inform study scoping. Please select all that were used in preparing this screening assessment:

- Niagara Official Plan schedules and associated online mapping
- Local Area Municipality schedules and any associated online mapping
- Watershed Plan(s) and/or Subwatershed Plan(s)
- Aerial / satellite imagery of the project area (to screen for unmapped features / potential features)
- Conservation Authority mapping (e.g., regulated areas, wetlands, etc.)
- Land Information Ontario (L.I.O.)
- Natural Heritage Information Centre (N.H.I.C.)
- Department of Fisheries and Oceans (D.F.O.) Species at Risk mapping
- eBird
- iNaturalist
- Ontario Reptile and Amphibian Atlas (Ontario Nature)
- Ontario Butterfly Atlas (Toronto Entomologists' Association)
- Atlas of the Breeding Birds of Ontario (Birds Canada)
- Other: \_\_\_\_\_

Please list specific plans (e.g., watershed or subwatershed plans), as applicable, that will inform or

## FEATURES & FUNCTIONS (PRELIMINARY)

A preliminary assessment of features and functions known to occur or with potential to occur is important for scoping study requirements (e.g., field investigations). Complete all sections below.

### PRELIMINARY SPECIES AT RISK SCREENING

Using secondary source / background information and a desktop assessment of features and conditions to inform habitat potential, complete a preliminary screening for Species at Risk. The outcome of this preliminary assessment is to be used to inform field investigation requirements, timing, etc. The preliminary screening assessment should include, at minimum, the following:

- A comprehensive list of Species at Risk known to, or with potential to occur in the general area (aquatic and terrestrial)
- A brief habitat description for each species
- A brief description of habitat potential on the Subject Lands and within the Study Area
- Recommendation for survey(s) to assess habitat suitability and/or species occurrence, as appropriate.

A Species at Risk Screening Assessment table template is provided in the main E.I.S. Guideline (**Appendix 10**). This table can be partially completed to address this preliminary assessment. An alternative to the table may be used if it provides the minimum requirements set out above.

### PRELIMINARY SIGNIFICANT WILDLIFE HABITAT SCREENING

Using secondary source / background information and a desktop assessment of features and conditions, complete a preliminary screening for Significant Wildlife Habitat. The outcome of this preliminary screening will identify preliminary candidate habitats to inform field investigation requirements, timing, etc. The preliminary screening assessment should include, at minimum, the following:

- A comprehensive list of Significant Wildlife Habitats for Ecoregion 7E and their candidacy criteria (per the Criteria Schedules for Ecoregion 7E)
- Outcomes of a brief assessment of the features and areas which occur wholly or partially within the Subject Lands and Study Area for candidacy in accordance with the above

Where candidate habitat is identified, two options for field investigations is available:

- Assume the S.W.H. type is present and proceed based on this precautionary principle.
- Complete the appropriate survey(s) to inform presence / absence of S.W.H.

Generally, the first option is appropriate where the feature(s) providing the habitat will be protected in place with appropriate mitigation measures to support no negative impact (e.g., buffers, linkages, etc., as appropriate to the specific conditions and activity).

A Significant Wildlife Habitat Screening Assessment table is provided in the main E.I.S. Guideline (**Appendix 9**). This table can be partially completed to address this preliminary assessment (i.e., complete the candidate column). An alternative to the table may be used if it provides the minimum requirements set out above.



## SUMMARY OF FEATURES AND FUNCTIONS

Complete both tables in this section using all applicable secondary sources and preliminary assessments (Species at Risk, Significant Wildlife Habitat).

Components of the N.E.S. known to, or with potential to occur:

Subject Lands	Study Area	Feature / Function <sup>3</sup>
<input type="checkbox"/>	<input type="checkbox"/>	Area(s) of Natural and Scientific Interest (A.N.S.I.) – Life Science
<input type="checkbox"/>	<input type="checkbox"/>	Area(s) of Natural and Scientific Interest (A.N.S.I.) – Earth Science
<input type="checkbox"/>	<input type="checkbox"/>	Woodland(s) – Significant / potentially significant
<input type="checkbox"/>	<input type="checkbox"/>	Woodland(s) – Other
<input type="checkbox"/>	<input type="checkbox"/>	Woodland(s) – Cultural or Regenerating Woodland
<input type="checkbox"/>	<input type="checkbox"/>	Wetland(s) – Provincially Significant
<input type="checkbox"/>	<input type="checkbox"/>	Wetland(s) – Significant Coastal
<input type="checkbox"/>	<input type="checkbox"/>	Wetland(s) – Other
<input type="checkbox"/>	<input type="checkbox"/>	Valleyland(s) - Significant
<input type="checkbox"/>	<input type="checkbox"/>	Valleyland(s) - Other
<input type="checkbox"/>	<input type="checkbox"/>	Thickets and/or Meadows
<input type="checkbox"/>	<input type="checkbox"/>	Sand Barren
<input type="checkbox"/>	<input type="checkbox"/>	Savannah
<input type="checkbox"/>	<input type="checkbox"/>	Tallgrass Prairie
<input type="checkbox"/>	<input type="checkbox"/>	Alvar
<input type="checkbox"/>	<input type="checkbox"/>	Habitat for Endangered Species and Threatened Species <sup>4</sup>
<input type="checkbox"/>	<input type="checkbox"/>	Significant Wildlife Habitat <sup>5</sup>
<input type="checkbox"/>	<input type="checkbox"/>	Fish Habitat
<input type="checkbox"/>	<input type="checkbox"/>	Linkage(s)

<sup>3</sup> Refer to Schedule L to the N.O.P. for a list, definitions, and criteria for components of the N.E.S.

<sup>4</sup> Per secondary source information and completion of the Preliminary Species at Risk Screening

<sup>5</sup> Per secondary source information and completion of the Preliminary Significant Wildlife Habitat Screening

**Key Hydrologic Features known to or with potential to occur:**

Subject Lands	Study Area	Feature / Function <sup>6</sup>
<input type="checkbox"/>	<input type="checkbox"/>	Permanent and/or Intermittent Stream(s)
<input type="checkbox"/>	<input type="checkbox"/>	Riparian Lands
<input type="checkbox"/>	<input type="checkbox"/>	Floodplain, Flooding Hazard(s), Floodway(s)
<input type="checkbox"/>	<input type="checkbox"/>	Inland Lakes and their Littoral Zones
<input type="checkbox"/>	<input type="checkbox"/>	Shoreline Areas
<input type="checkbox"/>	<input type="checkbox"/>	Seepage Areas and Springs
<input type="checkbox"/>	<input type="checkbox"/>	Headwater Drainage Feature(s)

Notes:

<sup>6</sup> Refer to Schedule L to the N.O.P. for a list, definitions, and criteria for components of the N.E.S.

## FIELD INVESTIGATION(S) & ASSESSMENTS

### SUBJECT LANDS

Informed by the preceding sections and in consideration of the nature of the proposed activity, identify the scope of surveys to be undertaken to inform the E.I.S. for the Subject Lands.

In completing this section:

- Check all surveys that are to be undertaken to support the E.I.S.
- A list of accepted survey methods for Niagara are provided in **Appendix 1**. Methods include commonly accepted protocols, survey timing and number of visits required for most survey types.
  - Where the number of visits or timing is not set for a given survey type, or multiple methods are listed, these are to be provided in the tables below.
- Unless an alternative is indicated in the Approach & Supporting Rationale column, is assumed that the survey(s) will be in accordance with **Appendix 1**.
  - Some surveys require further detail be provided (e.g., timing or number of surveyed informed by species)
- Alternatives to methods set out in **Appendix 1** may be acceptable where the alternative(s) meets or exceeds the efficacy of the methods set out therein.
- Scoping of surveys is generally acceptable where:
  - It reflects the site conditions (e.g., no fall vegetation survey where the only feature is forest)
  - There is pre-existing information which can adequately inform the E.I.S. in place of primary field collection (e.g., fish community sampling)
  - Where it is confirmed that a feature will not be impacted by the proposed activity and any connections to a feature will be maintained (linkages, wildlife movement, etc.), a precautionary principle may be applied in lieu of primary field data collection. Under this approach, there is an assumption of significance (e.g., for Significant Wildlife Habitat) and it is managed in accordance with this assumed level of significance through the E.I.S.
  - The scoping reflects the scope, scale and risk of impact to the N.E.S. of the development.
- Sufficient rationale must be provided to support alternatives and/or scoping. Any alternatives and/or scoping must be accepted by the Approval Authority (or their designate).

Complete each table below.

**Vegetation & Feature Delineation**

<b>Survey Required</b>	<b>Survey Type</b>	<b>Scoping Requested</b>	<b>Alternative Requested</b>
<input type="checkbox"/>	Ecological Land Classification (E.L.C.)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Botanical Inventory	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Woodland delineation	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Wetland delineation	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Valleyland (T.O.B.) delineation	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Ontario Wetland Evaluation System (O.W.E.S.)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Woodland Assessment (stem density)	<input type="checkbox"/>	<input type="checkbox"/>

Supporting Rationale for Alternatives and/or Scoping (attach additional pages, if required):

**Terrestrial Wildlife**

Survey Required	Survey Type	Scoping Requested	Alternative Requested
<input type="checkbox"/>	Breeding Birds – Open Country	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Breeding Birds – Other	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Marsh Birds	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Owls	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Other Crepuscular	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Raptors	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Amphibian Breeding – anurans	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Amphibian Breeding – salamanders	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Snakes	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Turtles	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Mammals	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Bats	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Terrestrial Crayfish	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Insects	<input type="checkbox"/>	<input type="checkbox"/>

Supporting Rationale for Alternatives and/or Scoping (attach additional pages, if required):

**Aquatic**

Survey Required	Survey Type	Scoping Requested	Alternative Requested
<input type="checkbox"/>	Aquatic Habitat Assessment	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Fish community sampling	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Benthic Invertebrate Sampling	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Headwater Drainage Assessment	<input type="checkbox"/>	<input type="checkbox"/>

Supporting Rationale for Alternatives and/or Scoping (attach additional pages, if required):

## STUDY AREA

It is appropriate / acceptable to assess the Study Area through secondary source and/or edge (e.g., roadside, limit of property) observation(s) under most situations. Field surveys may be warranted where:

- There is a risk of impact to a feature within the Study Area as a result of the proposed development or site alteration that cannot be adequately assessed without field survey(s); or
- There is a connection or relationship between features within the Subject Lands and Study Area that cannot be adequately evaluated without field survey(s)

Application of the precautionary principle may be an appropriate approach where the above conditions are identified and field surveys cannot be undertaken (e.g., where site access cannot be obtained).

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Please provide a summary of the approach to be used for assessing the features and functions of

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## MAP / FIGURE

Attach a map / figure to the T.O.R. with the following key elements:

- Air photo / satellite imagery base
- Subject Lands and Study Area limits
- N.E.S. features (using available datasets / where initial mapping is available)
- Show proposed locations of field investigations, where appropriate (e.g., amphibian calling stations). Where surveys occur through a feature / features, this can be stated in the notes of this form (e.g., Ecological Land Classification).
- Basic information such as property address, scale, legend, north arrow, etc.

**Map attached:** Yes

## REPORTING REQUIREMENTS

The E.I.S. is to be prepared in accordance with the Niagara E.I.S. Guideline (per **Section 2.0**). Through acceptance and approval of this T.O.R., the applicant (or their designate) agrees to this requirement.

A brief list of Minimum Requirements for E.I.S. components is provided below. Monitoring may not be required for all E.I.S. Please confirm this requirement by checking the box, where required.

### Minimum Requirements

- Introduction
- Planning Context
- Existing Conditions
- Evaluation of Features and Functions
- System Management
- Description of the Proposed Development or Site Alteration
- Impact Assessment & Mitigation Hierarchy
- Delineation and Refinement of System Boundaries
- Policy Assessment
- Conclusions
- References
- Conclusions
- Maps & Figures
- Approved T.O.R. (Appendix)
- Final Submission Checklist (**Appendix 7** to the E.I.S. Guideline) and all associated deliverables.



Monitoring Program (required, if checked)

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Direction regarding monitoring program, where required:

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## AGREEMENT

**Note:** This agreement should only be signed by the Approval Authority where the contents are deemed acceptable and meet the requirements set out in the E.I.S. Guidelines. Iterations may be required to reach an acceptable Terms of Reference.

Once approved, this document is the accepted Terms of Reference for the E.I.S. The proponent (and their consultant) agrees to meet, at a minimum, the conditions set out through this document and any amendments as may be required for features or species not that could not be reasonably be accounted for at the time of preparation (e.g., unmapped features, Species at Risk, Significant Wildlife Habitat not anticipated through preliminary screening). The E.I.S. professional agrees to adhere to commonly accepted standards of practice and be accountable for good professional practice.

**T.O.R. Completed By**

**Reviewed and Accepted By**

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Position

\_\_\_\_\_  
Position

\_\_\_\_\_  
Company/Organization

\_\_\_\_\_  
Organization

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

## APPENDIX 1: Accepted Survey Methods

The following table outlines generally accepted survey methods for Niagara Region. Methods include commonly accepted protocols, survey timing and number of visits required for most survey types. Detailed methods for field data collection and data analysis are necessary for the completion of an E.I.S. Alternatives to methods set out in **Table 1** below may be acceptable where the alternative(s) meets or exceeds the efficacy of the methods set out therein.

Data collection requirements, protocols, and associated resources and references may be updated with time and **Table 1** may not reflect the most current versions / editions. The applicant should contact Niagara Region to confirm the most current versions.

Repeated sampling may be required to determine species presence and abundance for some taxa. Refer to the Optimal Periods and Number / Frequency of Surveys to determine the level of effort and timing required. Multiple years of survey may be warranted in some circumstances (e.g., where species at risk which require multiple seasons / years). The E.I.S. should describe the methods used and include date, time, location, weather conditions, staff, and other incidental information for all field surveys conducted.

**Table 1. List of field surveys and the optimal period when surveys should be performed, number or frequency of survey(s), and associated resources and reference.**

Focus of Field Survey	Optimal Periods* for Field Surveys in Niagara Region	Number / Frequency of Surveys	Recognized Field Survey Methods	Resources and References
<b>Water Temperature</b>	<ul style="list-style-type: none"> <li>July 1 to September 10, provided air temperature does not exceed 24.5°C and has not exceeded 24.5°C for previous 48 hours (daily maximum temperature)</li> <li>Any date, provided sampling date is preceded by three days without rainfall that could affect baseflow (spot temperature measurements)</li> </ul>	<ul style="list-style-type: none"> <li>30 minutes sampling intervals</li> <li>Frequency and length of monitoring is dependent on purpose of water temperature monitoring and the type of project</li> </ul>	<ul style="list-style-type: none"> <li>Data loggers or manually collected</li> </ul>	<ul style="list-style-type: none"> <li>Jones, N.E. and L. Allin. 2009. Measuring Stream Temperature Using Data Loggers: Laboratory and Field Techniques. MNR River and Stream Ecology Lab, Peterborough, Ontario.</li> <li>Chu et al. 2009. Evaluation of a Simple Method to Classify the Thermal Characteristics of Streams Using a Nomogram of Daily Maximum Air and Water Temperatures. North American Journal of Fisheries Management V29:1605–1619.</li> </ul>
<b>Headwater Drainage Feature (H.D.F.)</b>	<ul style="list-style-type: none"> <li>Early spring (late March to mid-April), spring (late April to mid-May), and summer (July to August).</li> </ul>	<ul style="list-style-type: none"> <li>Three sampling events that align with the three optimal periods: early spring, spring, and summer.</li> </ul>	<ul style="list-style-type: none"> <li>T.R.C.A &amp; C.V.C.'s Headwater Drainage Features Guideline</li> <li>Section 4, Module 10 of the Ontario Stream Assessment Protocol (O.S.A.P.)</li> </ul>	<ul style="list-style-type: none"> <li>T.R.C.A. 2014. Evaluation, Classification and Management of Headwater Drainage Features Guideline. Toronto and Region Conservation Authority and Credit Valley Conservation, TRCA Approval July 2013 (Finalized January 2014).</li> <li>Stanfield, L. 2017. Ontario Stream Assessment Protocol, Version 10. M.N.R.F. Fisheries Policy Section, Peterborough, Ontario.</li> </ul>
<b>Aquatic Habitat</b>	<ul style="list-style-type: none"> <li>April to June for general habitat</li> <li>Inventory of permanent features may occur throughout the spring and summer</li> <li>Habitat assessments and habitat mapping to occur during snow/ice free conditions</li> </ul>	<ul style="list-style-type: none"> <li>Minimum of one sampling event within the optimal period</li> </ul>	<ul style="list-style-type: none"> <li>Ontario Stream Assessment Protocol (O.S.A.P.)</li> <li>MTO Fish Habitat Assessment Protocol</li> </ul>	<ul style="list-style-type: none"> <li>Stanfield, L. 2017. Ontario Stream Assessment Protocol, Version 10. M.N.R.F. Fisheries Policy Section, Peterborough, Ontario.</li> <li>M.T.O. 2009. Environmental Guide for Fish and Fish Habitat. M.T.O., Toronto, Ontario.</li> </ul>
<b>Fish Community</b>	<ul style="list-style-type: none"> <li>April to June (most fish)</li> <li>Various seasons for specific taxa</li> <li>Fisheries inventories for intermittent and ephemeral systems, should be completed in the spring</li> <li>Fisheries inventories for permanent systems, can be conducted throughout the summer</li> </ul>	<ul style="list-style-type: none"> <li>Minimum of one sampling event within the optimal period</li> <li>Spawning surveys timing and frequency is dependent on species of interest</li> </ul>	<ul style="list-style-type: none"> <li>Ontario Stream Assessment Protocol (O.S.A.P.)</li> <li>M.T.O. Fish Habitat Assessment Protocol</li> </ul>	<ul style="list-style-type: none"> <li>Stanfield, L. 2017. Ontario Stream Assessment Protocol, Version 10. M.N.R.F. Fisheries Policy Section, Peterborough, Ontario.</li> <li>M.T.O. 2009. Environmental Guide for Fish and Fish Habitat. M.T.O., Toronto, Ontario.</li> </ul>

Focus of Field Survey	Optimal Periods* for Field Surveys in Niagara Region	Number / Frequency of Surveys	Recognized Field Survey Methods	Resources and References
	<ul style="list-style-type: none"> <li>Spawning surveys timing dependent on species of interest</li> </ul>			
<b>Benthos</b>	<ul style="list-style-type: none"> <li>Spring and / or Fall</li> </ul>	<ul style="list-style-type: none"> <li>One sampling event within the optimal period</li> <li>Scope and specific data analysis to be determined on a project specific basis with appropriate regulatory agencies</li> </ul>	<ul style="list-style-type: none"> <li>Ontario Benthos Biomonitoring Network (O.B.B.N.) Protocols</li> <li>Ontario Stream Assessment Protocol (O.S.A.P.)</li> </ul>	<ul style="list-style-type: none"> <li>Jones, C., K.M. Somers, B. Craig and T.B. Reynoldson. 2007. Ontario Benthos Biomonitoring Network: Protocol Manual. Ontario Ministry of the Environment, Dorset, Ontario.</li> <li>Stanfield, L. 2017. Ontario Stream Assessment Protocol, Version 10. M.N.R.F. Fisheries Policy Section, Peterborough, Ontario.</li> </ul>
<b>Mussels</b>	<ul style="list-style-type: none"> <li>June 1 to September 30, providing water temperature is warmer than 16°C</li> <li>Best time for sampling is during low flows (water velocity at base flow, minimal turbidity)</li> </ul>	<ul style="list-style-type: none"> <li>Minimum of one sampling event within the optimal period</li> </ul>	<ul style="list-style-type: none"> <li>Protocol for the Detection and Relocation of Freshwater Mussel Species at Risk in Ontario-Great Lakes Area</li> </ul>	<ul style="list-style-type: none"> <li>Mackie, G., T.J. Morris and D. Ming. 2008. Protocol for the Detection and Relocation of Freshwater Mussel Species at Risk in Ontario-Great Lakes Area (O.G.L.A.). D.F.O., Burlington, Ontario.</li> </ul>
<b>Vegetation Community Classification</b>	<ul style="list-style-type: none"> <li>April through November</li> </ul>	<ul style="list-style-type: none"> <li>Typically paired with flora inventory surveys, two or three visits depending on whether a fall season survey is needed (e.g., presence of meadow, alvar, prairie, potentially rare / uncommon hawthorns)</li> </ul>	<ul style="list-style-type: none"> <li>E.L.C. System for Southern Ontario (1998, with updates)</li> </ul>	<ul style="list-style-type: none"> <li>Lee, H., W. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario. M.N.R., Peterborough, Ontario.</li> <li>University of Guelph Department of Land Resource Studies. 2003. Field Manual for Describing Soils in Ontario. University of Guelph, Guelph, Ontario.</li> </ul>
<b>Flora Inventory</b>	<ul style="list-style-type: none"> <li>April to June (spring ephemerals)</li> <li>June to August (early summer flora)</li> <li>August to September (late summer/fall flora)</li> </ul> <p>Of note: If a single season for vegetation survey(s) has been accepted through an approved T.O.R., it should be completed during the summer flora period (June to August).</p>	<ul style="list-style-type: none"> <li>Two or three surveys depending on whether a fall season survey is recommended / required</li> </ul>	<ul style="list-style-type: none"> <li>Record species within each E.L.C. polygon;</li> <li>Include G.P.S. coordinates for any provincially rare or at risk species</li> </ul>	<ul style="list-style-type: none"> <li>N.H.I.C. provincial conservation status ranks for plants and plant communities</li> <li>Oldham, M.J. and S.R. Brinker. 2009. Rare Vascular Plants of Ontario, Fourth Edition. M.N.R.F., Peterborough, Ontario.</li> <li>Oldham, M.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.</li> <li>University of Guelph Department of Land Resource Studies. 2003. Field Manual for Describing Soils in Ontario. University of Guelph, Guelph, Ontario.</li> </ul>
<b>Wetlands</b>	<ul style="list-style-type: none"> <li>Various components require surveys at different times of year</li> </ul>	<ul style="list-style-type: none"> <li>Minimum of one sampling event within the optimal period depending on the wetland communities present (e.g., the</li> </ul>	<ul style="list-style-type: none"> <li>Ontario Wetland Evaluation System (O.W.E.S.), Southern Manual (2022)</li> </ul>	<p>Notes: wetland evaluation requires inventories of plants and wildlife – follow protocols for taxa as outlined in this table</p>

Focus of Field Survey	Optimal Periods* for Field Surveys in Niagara Region	Number / Frequency of Surveys	Recognized Field Survey Methods	Resources and References
	<ul style="list-style-type: none"> <li>Delineation for sites with challenging feature limits should occur during the wet growing season</li> </ul>	<p>presence of permanent open water)</p>	<ul style="list-style-type: none"> <li>E.L.C. System for Southern Ontario (1998, with updates)</li> </ul>	<ul style="list-style-type: none"> <li>M.N.R.F. 2022. Ontario Wetland Evaluation System, Southern Manual, 4<sup>th</sup> Edition.</li> </ul>
<b>Birds</b>	<ul style="list-style-type: none"> <li>May 24 to July 10 (most breeding birds); other dates for birds with different life histories (e.g., owls, waterfowl)</li> <li>February to March – owl breeding</li> <li>March to April (migratory waterfowl)</li> <li>April to May (spring migrants)</li> <li>November to March (overwintering birds, such as raptors)</li> </ul>	<ul style="list-style-type: none"> <li>Breeding Bird Surveys: typically two surveys, a third may be required if grassland species or habitat is present.</li> <li>Migrants and over wintering bird surveys are site specific</li> <li>Marsh Monitoring Program – two rounds between May 20<sup>th</sup> and July 5<sup>th</sup>, with at least 10 days apart</li> </ul>	<ul style="list-style-type: none"> <li>Ontario Breeding Bird Atlas protocol</li> <li>Forest Bird Monitoring Program</li> <li>Marsh Monitoring Program</li> <li>Taxon-specific protocols developed by M.N.R.F. or M.E.C.P. (e.g., winter raptors, migratory waterfowl, S.A.R. birds)</li> </ul>	<p>References:</p> <ul style="list-style-type: none"> <li>Marsh Monitoring Protocol (Canadian Wildlife Service and Bird Studies Canada)</li> <li>Ontario Forest Bird Monitoring Program protocol (Birds Canada, formerly Canadian Wildlife Service)</li> <li>Ontario Breeding Bird Atlas protocols and conventions (Cadman et al. 2007 and on-line summaries at <a href="http://www.birdsontario.org/atlas/index.jsp">http://www.birdsontario.org/atlas/index.jsp</a>)</li> <li>Migratory Birds Convention Act (1994)</li> </ul>
<b>Bats</b>	<ul style="list-style-type: none"> <li>Leaf-off (i.e., November to April) for bat habitat</li> <li>June (acoustic bat surveys)</li> </ul>	<ul style="list-style-type: none"> <li>Refer to protocol provided by M.E.C.P.</li> </ul>	<ul style="list-style-type: none"> <li>Bat survey protocols (M.N.R.F.)</li> </ul>	<ul style="list-style-type: none"> <li>Bat habitat and bat acoustic survey protocols are continuously being updated. Please consult with the M.E.C.P. Species at Risk Branch (or equivalent) for the most current protocols.</li> </ul>
<b>Amphibians</b>	<ul style="list-style-type: none"> <li>March to early April (salamanders)</li> <li>April, May and June (amphibian call count surveys)</li> </ul>	<ul style="list-style-type: none"> <li>Three sampling events within the optimal period and weather (amphibian call-count)</li> <li>Salamander survey frequency dependent on survey method.</li> </ul>	<ul style="list-style-type: none"> <li>Marsh Monitoring Program (M.M.P.) Call Count Survey Protocol</li> <li>Western Chorus Frog Protocols</li> <li>Salamander pond trapping (species composition, preferred)</li> <li>Egg mass surveys (Salamander)</li> </ul>	<ul style="list-style-type: none"> <li>Bird Studies Canada, Environment Canada and United States Environmental Protection Agency. 2008. Marsh Monitoring Program: Participant’s Handbook for Surveying Amphibians.</li> <li>Blazing Star Environmental. 2022. Survey Protocol for 2022 Western Chorus Frog Long-Term Monitoring Program.</li> </ul>
<b>Turtles</b>	<ul style="list-style-type: none"> <li>March to May (overwintering habitat)</li> <li>May to August (nesting habitat)</li> </ul>	<ul style="list-style-type: none"> <li>Incidental observations unless targeted surveys are warranted</li> <li>Typically 5 sampling events for basking / general detection. Higher for nesting during optimal period(s).</li> </ul>	<ul style="list-style-type: none"> <li>Active searching / vision encounter surveys</li> </ul>	<ul style="list-style-type: none"> <li>Species specific protocols for targeted surveys</li> </ul>
<b>Snakes</b>	<ul style="list-style-type: none"> <li>Spring and Fall (hibernacula – spring preferred)</li> <li>March to October (most snakes)</li> </ul>	<ul style="list-style-type: none"> <li>Incidental observations unless targeted surveys are warranted</li> <li>Area searches or cover boards: a minimum of 5 sampling events during optimal period(s).</li> </ul>	<ul style="list-style-type: none"> <li>Active searching / vision encounter surveys</li> <li>Coverboards</li> </ul>	<ul style="list-style-type: none"> <li>Species specific protocols for targeted surveys</li> </ul>

Focus of Field Survey	Optimal Periods* for Field Surveys in Niagara Region	Number / Frequency of Surveys	Recognized Field Survey Methods	Resources and References
<b>Butterflies</b>	<ul style="list-style-type: none"> <li>May to September (depending on species)</li> </ul>	<ul style="list-style-type: none"> <li>Incidental observations unless targeted surveys are warranted.</li> <li>Refer to protocols for target species, where appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Active searching</li> <li>Sweep net capture and release</li> </ul>	<ul style="list-style-type: none"> <li>Commission for Environmental Cooperation. 2009. Monarch Butterfly Monitoring in North America: Overview of Initiatives and Protocols</li> </ul>
<b>Dragonflies and Damselflies</b>	<ul style="list-style-type: none"> <li>May to September (depending on species)</li> </ul>	<ul style="list-style-type: none"> <li>Incidental observations unless targeted surveys are warranted</li> <li>Refer to protocols for target species, where appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Active searching</li> <li>Sweep net capture and release</li> </ul>	<ul style="list-style-type: none"> <li>Species specific protocols for targeted surveys</li> </ul>
<b>Species at Risk (S.A.R.) and S.A.R. Habitat</b>	<ul style="list-style-type: none"> <li>Taxon-dependent</li> </ul>	<ul style="list-style-type: none"> <li>Taxon-dependent</li> </ul>	<ul style="list-style-type: none"> <li>Survey protocols for specific S.A.R. prepared by M.N.R.F. or M.E.C.P. (e.g., Butternut Health Assessment protocol, S.A.R. Snake Survey Protocol, S.A.R. turtle protocol, S.A.R. bats, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>M.E.C.P. 2021. Butternut Assessment Guidelines: Assessment of Butternut Tree Health for the Purposes of the Endangered Species Act, 2007.</li> <li>M.N.R.F. 2016. Survey Protocol for Ontario's Species at Risk Snakes. Ontario Ministry of Natural Resources and Forestry, Species Conservation Policy Branch. Peterborough, Ontario. ii + 17 pp.</li> <li>Portt, C.B., G.A Coker, N.E. Mandrak and D.L. Ming. 2008. Protocol for the detection of fish Species at Risk in Ontario Great Lakes Area (O.L.G.A.). D.F.O., Burlington, Ontario.</li> <li>Other species-specific protocols as are available.</li> </ul>
<b>Significant Wildlife Habitat (SWH)</b>	<ul style="list-style-type: none"> <li>Habitat type and taxon-dependent</li> </ul>	<ul style="list-style-type: none"> <li>Habitat type and taxon-dependent</li> </ul>	<ul style="list-style-type: none"> <li>Varied – review S.W.H. Criteria Schedules for Ecoregion 7E</li> </ul>	<ul style="list-style-type: none"> <li>M.N.R.F. 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E.</li> <li>M.N.R.F. 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E.</li> </ul>

\*All survey periods are general and weather dependent.



## **Appendix 6 | E.I.S. Comment Response Template**





## Appendix 7 | E.I.S. Final Submission Checklist

## Appendix 7 | E.I.S. Final Submission Checklist

This checklist is to be completed by:

Applicant:	_____	Consultant:	_____
Phone:	_____	Phone:	_____
Email:	_____	Email:	_____
Address:	_____	Address:	_____
	_____		_____

Development or site alteration Application Address:

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### Reporting Standard

- The approved E.I.S. report with any associated addenda; a title page that includes: the name of the applicant, address of the subject property, lists the author(s) of the report, the consulting firm(s) and the date the report was completed
- Provide contact information for the consulting company / principle author of the report
- A revised development or site alteration proposal (if required)
- Mechanisms or plan for implementation of recommendations identified in the approved E.I.S
- G.I.S. data package including all ecological data (e.g., ELC, species points / locations, watercourses, etc. where created or modified in the preparation of the E.I.S.)
  - All geospatial data:
    - Is ESRI compatible files (preferred geodatabase, .shp acceptable). All file components must be provided.
    - Has UTM-17N, NAD-83 projection
    - Contains pertinent attributes to associate the data.
    - Has metadata provided with, at a minimum, its original source (e.g., LIO, or who created by for the purpose of the E.I.S.) and data year. If modified for the E.I.S., or prior to the E.I.S., who modified and date of modification.
- Digital copy of report, data, and shapefiles
- Species data is provided as an excel file
  - Pertinent information to be provided with the species data, including: date, observer, evidence type / code (fauna), abundance, as applicable;
  - Data is not to be generalized to the project or study area.

- Survey results tables
- Datasheets

**Appendices and Attachments**

- Approved Terms of Reference
- Mapping and Figures
- Species List
- Additional studies (as applicable)
- Addendums to the E.I.S. (as applicable)
- Correspondence and review comments / responses (as applicable)

**Files and Permissions**

- Permission is given to Niagara Region, Approval Authority, as well as the Conservation Authority (C.A.) and Niagara Escarpment Commission (N.E.C.) (as appropriate / applicable) to utilize data collected from this study.

I \_\_\_\_\_, agent for \_\_\_\_\_, confirm that the attached Draft Environmental Impact Study (E.I.S.) addresses the scope of work outlined in the approved Terms of Reference (T.O.R.), contains the above study requirements and have been completed in accordance with the Region’s E.I.S. Guidelines.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## **Appendix 8 | List of Background Sources**

## Appendix 8 | List of Background Sources

### List of Background Information Sources

The following references provide important information and guidance for species, habitats and other features that may be present and can inform field data collection requirements and analysis necessary for the completion of an E.I.S. This list is not exhaustive and represents some of the more common and most referenced resources. Other site-specific resources may be available, such as E.I.S.s completed for nearby projects, Environmental Study Reports for nearby Class Environmental Assessments (E.A.'s), subwatershed studies and other documents. Site-specific background materials may be identified in consultation with various planning or agency authorities.

### General References for all E.I.S.'s:

- Data from the Natural Heritage Information Centre (N.H.I.C.): <https://www.ontario.ca/page/get-natural-heritage-information>
- Conservation authority guideline or recommendation documents, as available, may include but are not limited to:
  - Landscaping and tree protection guidelines
  - Recommended seed mixes and / or species
  - Road ecology design guidelines
  - Monitoring protocols
  - Hydrological study guidelines
  - Wetland water balance guidelines
- Environment Canada. 2013. How Much Habitat is Enough? Third Edition. Environment Canada, Toronto, Ontario.
- Toronto and Region Conservation Authority (T.R.C.A.) and Credit Valley Conservation (C.V.C.). 2014. Evaluation, Classification and Management of Headwater Drainage Features Guidelines. Available from <http://www.trca.on.ca/dotAsset/180724.pdf>
- Land Information Ontario (LIO) geospatial data: <https://www.ontario.ca/search/data-catalogue>
- Ontario Ministry of Transportation (MTO) Habitat Mapping protocols
- A data request to the conservation authority may identify species, vegetation communities (e.g., E.L.C.), monitoring and other data relevant and applicable to an E.I.S.
- A data request to the M.E.C.P. S.A.R. Branch may provide relevant and applicable information to an E.I.S.

### Earth Sciences and Hydrology

- Chapman, L.J. and D.F. Putnam. 1984. The Physiography of Southern Ontario, Fourth Edition. Geological Survey, Special Volume 2, 270 p. Accompanied by Map P.2715 (coloured), scale 1:600 000.
- University of Guelph Department of Land Resource Studies. 2003. Field Manual for Describing Soils in Ontario. University of Guelph, Guelph, Ontario.
- Wetland water balance risk evaluation tool (T.R.C.A. 2017)  
[https://trca.ca/app/uploads/2017/12/WetlandWaterBalanceRiskEvaluation\\_Nov2017.pdf](https://trca.ca/app/uploads/2017/12/WetlandWaterBalanceRiskEvaluation_Nov2017.pdf)

### Fish and Aquatic Habitat

- Fisheries and Oceans Canada (D.F.O.) Aquatic Species at Risk (S.A.R.) mapping:  
<https://www.dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.html>
- LIO Aquatic Resources Areas and watercourse data: <https://www.ontario.ca/search/data-catalogue>

### Plants and Plant Communities

- N.H.I.C. provincial conservation status ranks for plant species and communities
- Oldham, M.J. and S.R. Brinker. 2009. Rare Vascular Plants of Ontario, Fourth Edition. M.N.R.F., Peterborough, Ontario.
- Lee, H., W. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario. M.N.R., Peterborough, Ontario.

### Wildlife and Wildlife Habitat

- N.H.I.C. provincial conservation status ranks for wildlife species
- Cadman, M., D. Sutherland and G. Beck. 2009. Atlas of the Breeding Birds of Ontario. Bird Studies Canada. Available from <http://www.birdsontario.org/atlas/index.jsp>
- Ontario Nature. 2019. Ontario Reptile and Amphibian Atlas. Available from <https://ontarionature.org/programs/citizen-science/reptile-amphibian-atlas/>
- Toronto Entomologists' Association. 2019. Ontario Butterfly Atlas. Available from [http://www.ontarioinsects.org/atlas\\_online.htm](http://www.ontarioinsects.org/atlas_online.htm)
- Citizen science data from publicly available platforms such as:
  - eBird (<https://ebird.org/home>) and
  - iNaturalist (<https://www.inaturalist.org/home>)
- Significant Wildlife Habitat (S.W.H.) Criteria Schedules for Ecoregion 7E (M.N.R.F., 2015)

- Ontario Ministry of Natural Resources (M.N.R.). 2000. Significant Wildlife Habitat Technical Guide. M.N.R., Peterborough, Ontario.
- M.N.R.. 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second Edition. M.N.R., Peterborough, Ontario.

### Significant Species Regulations and Legislation

- Species at Risk Act (S.A.R.A.), 2002, Regulations and Rankings (available from the S.A.R.A. public registry: <https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html>)
- Ontario Endangered Species Act (E.S.A.), 2007, Regulations and Rankings (available from <http://cossaroagency.ca/species/>)
- Species at Risk in Ontario (S.A.R.O.) List, O. Reg. 230/08 (available from <https://www.ontario.ca/laws/regulation/080230>) and O. Reg. 24/22 (available from <https://www.ontario.ca/laws/regulation/r22024>)
- Species at Risk (S.A.R.) Assessment Reports, Management Plans, Recovery Strategies, Government Response Statements, General Habitat Descriptions and other documentation
- Fisheries Act, 1985
- Migratory Birds Convention Act, 1994

### Guideline Documents

- M.N.R.F. 2022. Ontario Wetland Evaluation System, Southern Manual. Third Edition (Version 4).
- M.N.R.F. 2015. Significant Wildlife Habitat Mitigation Support Tool. M.N.R.F., Peterborough, Ontario.
- M.N.R.F. 2016. Guidance for Development Activities in Redside Dace Protected Habitat. M.N.R.F., Peterborough Ontario.



## Appendix 9 | Significant Wildlife Habitat Assessment Table Template

## Appendix 9 | Significant Wildlife Habitat Assessment Table Template (EcoRegion 7E)

### Seasonal Concentration Areas of Animals

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Waterfowl Stopover and Staging Areas (Terrestrial)</b></p> <p><b>Rationale:</b> Habitat important to migrating waterfowl.</p>	<p>American Black Duck Northern Pintail Gadwall Blue-winged Teal Green-winged Teal American Wigeon Northern Shoveler Tundra Swan</p>	<p>CUM1 CUT1</p> <p>Plus evidence of annual spring flooding from meltwater or run-off within these Ecosites.</p> <p>Fields with seasonal flooding and waste grains in the Long Point, Rondeau, Lake St. Clair, Grand Bend and Point Pelee areas may be important to Tundra Swans.</p>	<ul style="list-style-type: none"> <li>• Fields with sheet water during Spring (mid-March to May)</li> <li>• Fields flooding during spring melt and run-off provide important invertebrate foraging habitat for migrating waterfowl</li> <li>• Agricultural fields with waste grains are commonly used by waterfowl, these are not considered S.W.H. unless they have spring sheet water available</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Anecdotal information from the landowner, adjacent landowners or local naturalist clubs may be good information in determining occurrence.</li> <li>• Reports and other information available from Conservation Authorities</li> <li>• Sites documented through waterfowl planning processes (eg. EHJV implementation plan)</li> <li>• Field Naturalist Clubs</li> <li>• Ducks Unlimited Canada</li> <li>• Natural Heritage Information Centre (N.H.I.C.) Waterfowl Concentration Area</li> </ul>	<p>Studies carried out and verified presence of an annual concentration of any listed species, evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”</p> <ul style="list-style-type: none"> <li>• Any mixed species aggregations of 100 or more individuals required</li> <li>• The flooded field ecosite habitat plus a 100-300m radius, dependent on local site conditions and adjacent land use is the significant wildlife habitat</li> <li>• Annual use of habitat is documented from information sources or field studies (annual use can be based on studies or determined by past surveys with species numbers and dates)</li> <li>• S.W.H. M.I.S.T. Index #7 provides development effects and mitigation measures.</li> </ul>	

**Seasonal Concentration Areas of Animals**

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Waterfowl Stopover and Staging Areas (Aquatic)</b></p> <p><b>Rationale:</b> Important for local and migrant waterfowl populations during the spring or fall migration or both periods combined. Sites identified are usually only one of a few in the eco-district.</p>	<p>American Black Duck Northern Pintail Gadwall Blue-winged Teal Green-winged Teal American Wigeon Northern Shoveler Tundra Swan Canada Goose Cackling Goose Snow Goose American Black Duck Northern Pintail Northern Shoveler American Wigeon Gadwall Green-winged Teal Blue-winged Teal Hooded Merganser Common Merganser Lesser Scaup Greater Scaup Long-tailed Duck Surf Scoter White-winged Scoter Black Scoter Ring-necked duck Common Goldeneye Bufflehead Redhead Ruddy Duck Red-breasted Merganser Brant Canvasback Ruddy Duck</p>	<p>MAS1 MAS2 MAS3 SAS1 SAM1 SAF1 SWD1 SWD2 SWD3 SWD4 SWD5 SWD6 SWD7</p>	<ul style="list-style-type: none"> <li>• Ponds, marshes, lakes, bays, coastal inlets and watercourses used during migration. Sewage treatment ponds and storm water ponds do not qualify as a S.W.H., however a reservoir managed as a large wetland or pond/lake does qualify</li> <li>• These habitats have an abundant food supply (mostly aquatic invertebrates and vegetation in shallow water).</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Environment Canada</li> <li>• Naturalist clubs often are aware of staging/stopover areas.</li> <li>• O.M.N.R.F. Wetland Evaluations indicate presence of locally and regionally significant waterfowl staging.</li> <li>• Sites documented through waterfowl planning processes (e.g. EHJV implementation plan)</li> <li>• Ducks Unlimited projects</li> <li>• Element occurrence specification by Nature Serve: <a href="http://www.natureserve.org">http://www.natureserve.org</a></li> <li>• Natural Heritage Information Centre (N.H.I.C.) Waterfowl Concentration Area</li> </ul>	<p>Studies carried out and verified presence of:</p> <ul style="list-style-type: none"> <li>• Aggregations of 100 or more of listed species for 7 days, results in &gt;700 waterfowl use days</li> <li>• Areas with annual staging of ruddy ducks, canvasbacks, and redheads are S.W.H.</li> <li>• The combined area of the E.L.C. ecosites and a 100m radius area is the S.W.H.</li> <li>• Wetland area and shorelines associated with sites identified within the S.W.H.T.G. Appendix K are significant wildlife habitat.</li> <li>• Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”</li> <li>• Annual Use of Habitat is Documented from Information Sources or Field Studies (Annual can be based on completed studies or determined from past surveys with species numbers and dates recorded).</li> <li>• S.W.H. M.I.S.T. Index #7 provides development effects and mitigation measures.</li> </ul>	

**Seasonal Concentration Areas of Animals**

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Shorebird Migratory Stopover Area</b></p> <p><b>Rationale:</b> High quality shorebird stopover habitat is extremely rare and typically has a long history of use.</p>	<p>Greater Yellowlegs                      Lesser Yellowlegs                      Marbled Godwit                      Hudsonian Godwit                      Black-bellied Plover                      American Golden-Plover                      Semipalmated Plover                      Solitary Sandpiper                      Spotted Sandpiper                      Semipalmated Sandpiper                      Pectoral Sandpiper                      White-rumped Sandpiper                      Baird’s Sandpiper                      Least Sandpiper                      Purple Sandpiper                      Stilt Sandpiper                      Short-billed Dowitcher                      Red-necked Phalarope                      Whimbrel                      Ruddy Turnstone                      Sanderling                      Dunlin</p>	<p>BBO1                      BBO2                      BBS1                      BBS2                      BBT1                      BBT2                      SDO1                      SDS2                      SDT1                      MAM1                      MAM2                      MAM3                      MAM4                      MAM5</p>	<ul style="list-style-type: none"> <li>• Shorelines of lakes, rivers and wetlands, including beach area, bars and seasonally flooded, muddy and un-vegetated shoreline habitats</li> <li>• Great Lakes coastal shorelines, including groynes and other forms of armour rock lakeshores, are extremely important for migratory shorebirds in May to mid-June and early July to October</li> <li>• Sewage treatment ponds and storm water ponds do not qualify as S.W.H..</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Western hemisphere shorebird reserve network</li> <li>• Canadian Wildlife Service (C.W.S.) Ontario Shorebird Survey</li> <li>• Bird Studies Canada</li> <li>• Ontario Nature</li> <li>• Local birders and naturalist clubs</li> <li>• Natural Heritage Information Centre (N.H.I.C.) Shorebird Migratory Concentration Area</li> </ul>	<p>Studies confirming:</p> <ul style="list-style-type: none"> <li>• Presence of 3 or more of listed species and &gt;1000 shorebird use days during spring or fall migration period (shorebird use days are the accumulated number of shorebirds counted per day over the course of the fall or spring migration period)</li> <li>• Whimbrel stop briefly (&lt;24hrs) during spring migration, any site with &gt;100 Whimbrel used for 3 years or more is significant.</li> <li>• The area of significant shorebird habitat includes the mapped E.L.C. shoreline ecosites plus a 100m radius area</li> <li>• Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”</li> <li>• S.W.H. M.I.S.T. Index #8 provides development effects and mitigation measures.</li> </ul>	

**Seasonal Concentration Areas of Animals**

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Raptor Wintering Area</b></p> <p><b>Rationale:</b> Sites used by multiple species, a high number of individuals and used annually are most significant</p>	<p>Rough-legged Hawk Red-tailed Hawk Northern Harrier American Kestrel Snowy Owl</p> <p><b>Special Concern:</b> Short-eared Owl Bald Eagle</p>	<p>Hawks/Owls: Combination of E.L.C. Community Series; need to have present one Community Series from each land class; Forest: FOD, FOM, FOC. Upland: CUM, CUT, CUS, CUW.</p> <p>Bald Eagle: Forest Community Series: FOD, FOM, FOC, SWD, SWM or SWC on shoreline areas adjacent to large rivers or adjacent to lakes with open water (hunting area).</p>	<ul style="list-style-type: none"> <li>• The habitat provides a combination of fields and woodlands that provide roosting, foraging and resting habitats for wintering raptors</li> <li>• Raptor wintering (hawk/owl) sites need to be &gt;20 ha with a combination of forest and upland</li> <li>• Least disturbed sites, idle/fallow or lightly grazed field/meadow (&gt;15ha) with adjacent woodlands</li> <li>• Field area of the habitat is to be wind swept with limited snow depth or accumulation.</li> <li>• Eagle sites have open water and large trees and snags available for roosting</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• O.M.N.R.F. Ecologist or Biologist</li> <li>• Naturalist clubs</li> <li>• Natural Heritage Information Centre (N.H.I.C.) Raptor Winter Concentration Area</li> <li>• Data from Bird Studies Canada</li> <li>• Results of Christmas Bird Counts</li> <li>• Reports and other information available from Conservation Authorities</li> </ul>	<p>Studies confirm the use of these habitats by:</p> <ul style="list-style-type: none"> <li>•One or more Short-eared Owls or; One or more Bald Eagles or; At least 10 individuals and two of the listed hawk/owl species.</li> <li>•To be significant a site must be used regularly (3 in 5 years) for a minimum of 20 days by the above number of birds.</li> <li>•The habitat area for an Eagle winter site is the shoreline forest ecosites directly adjacent to the prime hunting area</li> <li>•Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”</li> <li>•S.W.H. M.I.S.T. Index #10 and #11 provides development effects and mitigation measures.</li> </ul>	

**Seasonal Concentration Areas of Animals**

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Bat Hibernacula</b></p> <p><b>Rationale:</b> Bat hibernacula are rare habitats in all Ontario landscapes.</p>	<p>Big Brown Bat</p>	<p>Bat Hibernacula may be found in these ecosites:                      CCR1                      CCR3                      CCA1                      CCA2</p> <p>(Note: buildings are not considered S.W.H.)</p>	<ul style="list-style-type: none"> <li>• Hibernacula may be found in caves, mine shafts, underground foundations and Karsts</li> <li>• Active mine sites should not be considered as S.W.H.</li> <li>• The locations of Bat Hibernacula are relatively poorly known.</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• O.M.N.R.F. for possible locations and contact for local experts</li> <li>• Natural Heritage Information Centre (N.H.I.C.) Bat Hibernaculum</li> <li>• Ministry of Northern Development and Mines for location of mine shafts.</li> <li>• Clubs that explore caves (e.g. Sierra Club)</li> <li>• University Biology Departments with bat experts.</li> </ul>	<ul style="list-style-type: none"> <li>• All sites with confirmed hibernating bats are S.W.H.</li> <li>• The area includes 200 m radius around the entrance of the hibernaculum for most development types and 1000 m for wind farms</li> <li>• Studies are to be conducted during the peak swarming period (Aug. – Sept.). Surveys should be conducted following methods outlined in the “Bats and Bat Habitats: Guidelines for Wind Power Projects”</li> <li>• S.W.H. M.I.S.T. Index #1 provides development effects and mitigation measures.</li> </ul>	

**Seasonal Concentration Areas of Animals**

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Bat Maternity Colonies</b></p> <p><b>Rationale:</b> Known locations of forested bat maternity colonies are extremely rare in all Ontario landscapes.</p>	<p>Big Brown Bat Silver-haired Bat</p>	<p>Maternity colonies considered S.W.H. are found in forested Ecosites.</p> <p>All E.L.C. Ecosites in E.L.C. Community Series: FOD, FOM, SWD, SWM</p>	<ul style="list-style-type: none"> <li>• Maternity colonies can be found in tree cavities, vegetation and often in buildings (buildings are not considered to be S.W.H.).</li> <li>• Maternity roosts are not found in caves and mines in Ontario</li> <li>• Maternity colonies located in Mature deciduous or mixed forest stands with &gt;10/ha large diameter (&gt;25cm dbh) wildlife trees</li> <li>• Female bats prefer wildlife trees (snags) in early stages of decay, class 1-3 or class 1 or 2</li> <li>• Silver-haired Bats prefer older mixed or deciduous forest and form maternity colonies in tree cavities and small hollows. Older forest areas with at least 21 snags/ha are preferred</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• O.M.N.R.F. for possible locations and contact for local experts</li> <li>• University Biology Departments with bat experts.</li> </ul>	<ul style="list-style-type: none"> <li>• Maternity colonies with confirmed use by:                             <ul style="list-style-type: none"> <li>• &gt;10 Big Brown Bats</li> <li>• &gt;5 adult female Silver-haired Bats</li> </ul> </li> <li>• The area of habitat includes the entire woodland or a forest stand E.L.C. Ecosite or an Ecoelement containing the maternity colonies</li> <li>• Evaluation methods for maternity colonies should be conducted following methods outlined in the “Bats and Bat Habitats: Guidelines for Wind Power Projects”</li> <li>• S.W.H. M.I.S.T. Index #12 provides the development effects and mitigation measures.</li> </ul>	

**Seasonal Concentration Areas of Animals**

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Turtle Wintering Areas</b></p> <p><b>Rationale:</b> Generally sites are the only known sites in the area. Sites with the highest number of individuals are most significant</p>	<p><b>Special Concern:</b> Midland Painted Turtle Northern Map Turtle Snapping Turtle</p>	<p>Snapping and Midland Painted Turtles: SW, MA, OA and SA; FEO and BOO.</p> <p>Northern Map Turtle: Open water areas such as deeper rivers or streams and lakes with current can also be used as overwintering habitat.</p>	<ul style="list-style-type: none"> <li>• For most turtles, wintering areas are in the same general areas as their core habitat. Water has to be deep enough not to freeze and have soft mud substrates.</li> <li>• Overwintering sites are permanent water bodies, large wetlands and bogs or fens with adequate dissolved oxygen.</li> <li>• Manmade ponds such as sewage lagoons or storm water ponds should not be considered S.W.H..</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• E.I.S. studies carried out by conservation authorities.</li> <li>• Field naturalists clubs.</li> <li>• O.M.N.R.F. ecologist or biologist</li> <li>• N.H.I.C.</li> </ul>	<ul style="list-style-type: none"> <li>• Presence of five overwintering Midland Painted Turtles is significant.</li> <li>• One or more Northern Map Turtle or Snapping Turtle overwintering within a wetland is significant.</li> <li>• The mapped E.L.C. ecosite area with the overwintering turtles is the S.W.H.. If the hibernation site is within a stream or river, the deep-water pool where the turtles are overwintering is the S.W.H..</li> <li>• Overwintering areas may be identified by searching for congregations (basking areas) of turtles on warm, sunny days during the fall (September to October) or spring (March to May). Congregation of turtles is more common where wintering areas are limited and therefore significant.</li> <li>• S.W.H. M.I.S.T. Index #28 provides development effects and mitigation measures for turtle wintering habitat</li> </ul>	



**Seasonal Concentration Areas of Animals**

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Reptile Hibernaculum</b></p> <p><b>Rationale:</b> Generally sites are the only known sites in the area. Sites with the highest number of individuals are</p>	<p>Snakes:                      Eastern Gartersnake                      Northern Watersnake                      Northern Red-bellied Snake                      Northern Brownsnake                      Smooth Green Snake                      Northern Ring-necked Snake</p> <p><b>Special Concern:</b>                      Milksnake                      Eastern Ribbonsnake</p>	<p>For all snakes, habitat may be found in any ecosite other than very wet ones. Talus, Rock Barren, Crevice, Cave, and Alvar sites may be directly related to these habitats.</p> <p>Observations or congregations of snakes on sunny warm days in the spring or fall is a good indicator.</p>	<ul style="list-style-type: none"> <li>• For snakes, hibernation takes place in sites located below frost lines in burrows, rock crevices and other natural or naturalized locations. The existence of features that go below frost line; such as rock piles or slopes, old stone fences, and abandoned crumbling foundations assist in identifying candidate S.W.H.</li> <li>• Areas of broken and fissured rock are particularly valuable since they provide access to subterranean sites below the frost line</li> <li>• Wetlands can also be important over-wintering habitat in conifer or shrub swamps and swales, poor fens or depressions in bedrock terrain with sparse trees or shrubs with sphagnum moss or sedge hummock ground cover.</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• In spring, local residents or landowners may have observed the emergence of snakes on their property (e.g. old dug wells).</li> <li>• Reports and other information available from Conservation Authorities.</li> <li>• Field Naturalist Clubs</li> <li>• University herpetologists</li> <li>• Natural Heritage Information Centre (N.H.I.C.)</li> </ul>	<p>Studies confirming:</p> <ul style="list-style-type: none"> <li>• Presence of snake hibernacula used by a minimum of five individuals of a snake sp. or; individuals of two or more snake spp.</li> <li>• Congregations of a minimum of five individuals of a snake sp. or; individuals of two or more snake spp. near potential hibernacula (e.g. foundation or rocky slope) on sunny warm days in Spring (Apr/May) and Fall (Sept/Oct)</li> <li>• NOTE: If there are Special Concern Species present, then site is S.W.H.</li> <li>• NOTE: Sites for hibernation possess specific habitat parameters (e.g. temperature, humidity, etc) and consequently are used annually, often by many of the same individuals of a local population (i.e. strong hibernation site fidelity). Other critical life processes (e.g. mating) often take place in close proximity to hibernacula.</li> <li>• The feature in which the hibernacula is located plus a 30 m radius area is the S.W.H.</li> <li>• S.W.H. M.I.S.T. Index #13 provides development effects and mitigation measures for snake hibernacula.</li> </ul>	

**Seasonal Concentration Areas of Animals**

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Colonially-Nesting Bird Breeding Habitat (Bank and Cliff)</b></p> <p><b>Rationale:</b> Historical use and number of nests in a colony make this habitat significant. An identified colony can be very important to local populations. All swallow population are declining in Ontario.</p>	<p>Cliff Swallow Northern Rough-winged Swallow (this species is not colonial but can be found in Cliff Swallow colonies)</p>	<p>Eroding banks, sandy hills, borrow pits, steep slopes, and sand piles Cliff faces, bridge abutments, silos, barns. Habitat found in the following ecosites: CUM1 CUT1 CUS1 BLO1 BLS1 BLT1 CLO1 CLS1 CLT1</p>	<ul style="list-style-type: none"> <li>• Any site or areas with exposed soil banks, undisturbed or naturally eroding that is not a licensed/permitted aggregate area.</li> <li>• Does not include man-made structures (bridges or buildings) or recently (2 years) disturbed soil areas, such as berms, embankments, soil or aggregate stockpiles.</li> <li>• Does not include a licensed/permitted Mineral Aggregate Operation.</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Reports and other information available from Conservation Authorities</li> <li>• Ontario Breeding Bird Atlas</li> <li>• Bird Studies Canada NatureCounts <a href="http://www.birdscanada.org/birdmon">http://www.birdscanada.org/birdmon</a></li> <li>• Field Naturalist Clubs</li> </ul>	<p>Studies confirming:</p> <ul style="list-style-type: none"> <li>• Presence of 1 or more nesting sites with 8 or more cliff swallow pairs and/or rough-winged swallow pairs during the breeding season.</li> <li>• A colony identified as S.W.H. will include a 50m radius habitat area from the peripheral nests</li> <li>• Field surveys to observe and count swallow nests are to be completed during the breeding season. Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”</li> <li>• S.W.H. M.I.S.T. Index #4 provides development effects and mitigation measures.</li> </ul>	

**Seasonal Concentration Areas of Animals**

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Colonially-Nesting Bird Breeding Habitat (Tree/Shrubs)</b></p> <p><b>Rationale:</b> Large colonies are important to local bird population, typically sites are only known colony in area and are used annually.</p>	<p>Great Blue Heron Black-crowned Night-Heron Great Egret Green Heron</p>	<p>SWM2 SWM3 SWM5 SWM6 SWD1 SWD2 SWD3 SWD4 SWD5 SWD6 SWD7 FET1</p>	<ul style="list-style-type: none"> <li>• Nests in live or dead standing trees in wetlands, lakes, islands, and peninsulas. Shrubs and occasionally emergent vegetation may also be used.</li> <li>• Most nests in trees are 11 to 15 m from ground, near the top of the tree.</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Ontario Breeding Bird Atlas colonial nest records.</li> <li>• Ontario Heronry Inventory 1991 available from Bird Studies Canada or N.H.I.C. (O.M.N.R.F.).</li> <li>• Natural Heritage Information Centre (N.H.I.C.) Mixed Wader Nesting Colony</li> <li>• Aerial photographs can help identify large heronries.</li> <li>• Reports and other information available from Conservation Authorities, M.N.R.F. District Offices and Field Naturalist Clubs.</li> </ul>	<p>Studies confirming:</p> <ul style="list-style-type: none"> <li>• Presence of 2 or more active nests of Great Blue Heron or other listed species.</li> <li>• The habitat extends from the edge of the colony and a minimum 300m radius or extent of the Forest Ecosite containing the colony or any island &lt;15 ha with a colony is the S.W.H.</li> <li>• Confirmation of active heronries are to be achieved through site visits conducted during the nesting season (April to August) or by evidence such as the presence of fresh guano, dead young and/or eggshells</li> <li>• S.W.H. M.I.S.T. Index #5 provides development effects and mitigation measures.</li> </ul>	

**Seasonal Concentration Areas of Animals**

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Colonially -Nesting Bird Breeding Habitat (Ground)</b></p> <p><b>Rationale:</b> Colonies are important to local bird population, typically sites are only known colony in area and are used annually.</p>	<p>Herring Gull Great Black-backed Gull Little Gull Ring-billed Gull Common Tern Caspian Tern Brewer’s Blackbird</p>	<p>Any rocky island or peninsula (natural or artificial) within a lake or large river (two-lined on a 1;50,000 NTS map).</p> <p>Close proximity to watercourses in open fields or pastures with scattered trees or shrubs (Brewer’s Blackbird)</p> <p>MAM1 – 6 MAS1 – 3 CUM CUT CUS</p>	<ul style="list-style-type: none"> <li>• Nesting colonies of gulls and terns are on islands or peninsulas associated with open water or in marshy areas.</li> <li>• Brewers Blackbird colonies are found loosely on the ground in or in low bushes in close proximity to streams and irrigation ditches within farmlands.</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Ontario Breeding Bird Atlas, rare/colonial species records.</li> <li>• Canadian Wildlife Service</li> <li>• Reports and other information available from Conservation Authorities.</li> <li>• Natural Heritage Information Centre (N.H.I.C.) Colonial Waterbird Nesting Area</li> <li>• M.N.R.F. District Offices.</li> <li>• Field Naturalist Clubs</li> </ul>	<p>Studies confirming:</p> <ul style="list-style-type: none"> <li>• Presence of &gt; 25 active nests for Herring Gulls or Ring-billed Gulls, &gt;5 active nests for Common Tern or &gt;2 active nests for Caspian Tern</li> <li>• Presence of 5 or more pairs for Brewer’s Blackbird</li> <li>• Any active nesting colony of one or more Little Gull, and Great Black-backed Gull is significant</li> <li>• The edge of the colony and a minimum 150m radius area of habitat, or the extent of the E.L.C. ecosites containing the colony or any island &lt;3 ha with a colony is the S.W.H.</li> <li>• Studies would be done during May/June when actively nesting. Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”</li> <li>• S.W.H. M.I.S.T. Index #6 provides development effects and mitigation measures.</li> </ul>	

**Seasonal Concentration Areas of Animals**

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Migratory Butterfly Stopover Areas</b></p> <p><b>Rationale:</b> Butterfly stopover areas are extremely rare habitats and are biologically important for butterfly species that migrate south for the winter.</p>	<p>Painted Lady Red Admiral</p> <p><b>Special Concern:</b> Monarch</p>	<p>Combination of E.L.C. Community Series; need to have present one Community Series from each landclass:</p> <p>FIELD: CUM, CUT, CUS</p> <p>FOREST: FOC, FOD, FOM, CUP</p> <p>Anecdotally, a candidate site for butterfly stopover will have a history of butterflies being observed.</p>	<ul style="list-style-type: none"> <li>• A butterfly stopover area will be a minimum of 10 ha in size with a combination of field and forest habitat present, and will be located within 5 km of Lake Erie or Lake Ontario</li> <li>• The habitat is typically a combination of field and forest, and provides the butterflies with a location to rest prior to their long migration south</li> <li>• The habitat should not be disturbed, fields/meadows with an abundance of preferred nectar plants and woodland edge providing shelter are requirements for this habitat</li> <li>• Staging areas usually provide protection from the elements and are often spits of land or areas with the shortest distance to cross the Great Lakes</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• M.N.R.F. District Offices</li> <li>• Natural Heritage Information Centre (N.H.I.C.)</li> <li>• Agriculture Canada in Ottawa may have list of butterfly experts.</li> <li>• Field Naturalist Clubs</li> <li>• Toronto Entomologists Association</li> </ul>	<p>Studies confirm:</p> <ul style="list-style-type: none"> <li>• The presence of Monarch Use Days (MUD) during fall migration (Aug/Oct). MUD is based on the number of days the site is used by Monarchs, multiplied by the number of individuals using the site. Numbers of butterflies can range from 100-500/day, significant variation can occur between years and multiple years of sampling should occur</li> <li>• Observational studies are to be completed and need to be done frequently during the migration period to estimate MUD.</li> <li>• MUD of &gt;5000 or &gt;3000 with the presence of Painted Ladies or Red Admiral's is to be considered significant.</li> <li>• S.W.H. M.I.S.T. Index #16 provides development effects and mitigation measures.</li> </ul>	

**Seasonal Concentration Areas of Animals**

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Landbird Migratory Stopover Areas</b></p> <p><b>Rationale:</b> Sites with a high diversity of species as well as high numbers are most significant.</p>	<p>All migratory songbirds</p> <p>Canadian Wildlife Service Ontario website: <a href="http://www.ec.gc.ca/nature/default.asp?lang=En&amp;n=421B7A9D-1">http://www.ec.gc.ca/nature/default.asp?lang=En&amp;n=421B7A9D-1</a></p> <p>All migrant raptor species: Ontario Ministry of Natural Resources: Fish and Wildlife Conservation Act, 1997. Schedule 7: Specially Protected Birds (Raptors)</p>	<p>All Ecosites associated with these E.L.C. Community Series: FOC FOM FOD SWC SWM SWD</p>	<ul style="list-style-type: none"> <li>• Woodlots &gt;5 ha in size and within 5 km of Lake Erie and Lake Ontario. If woodlands are rare in an area of shoreline, woodland fragments 2-5 ha can be considered for this habitat</li> <li>• If multiple woodlands are located along the shoreline those woodlands &lt;2 km from Lake Erie and Lake Ontario are more significant</li> <li>• Sites have a variety of habitats: forest, grassland and wetland complexes</li> <li>• The largest sites are more significant</li> <li>• Woodlots and forest fragments are important habitats to migrating birds, these features located along the shore and within 5 km of Lake Erie and Lake Ontario are Candidate S.W.H..</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Bird Studies Canada</li> <li>• Ontario Nature</li> <li>• Local birders and field naturalist clubs</li> <li>• Ontario Important Bird Areas (IBA) Program</li> </ul>	<p>Studies confirm:</p> <ul style="list-style-type: none"> <li>• Use of the habitat by &gt;200 birds/day and with &gt;35 species and with at least 10 bird species recorded on at least 5 different survey dates. This abundance and diversity of migrant bird species is considered above average and significant</li> <li>• Studies should be completed during spring (Mar.-May) and fall (Aug.-Oct.) migration using standardized assessment techniques. Evaluation to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”</li> <li>• S.W.H. M.I.S.T. Index #9 provides development effects and mitigation measures.</li> </ul>	

**Seasonal Concentration Areas of Animals**

Wildlife Habitat	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Deer Winter Congregation Areas</b></p> <p><b>Rationale:</b> Deer movement during winter in the southern areas of Eco-region 7E are not constrained by snow depth, however deer will annually congregate in large numbers in suitable woodlands to reduce or avoid the impacts of winter conditions</p>	<p>White-tailed Deer</p>	<p>All forested Ecosites with these E.L.C. Community Series: FOC, FOM, FOD, SWC, SWM, SWD</p> <p>Conifer plantations much smaller than 50 ha may also be used.</p>	<ul style="list-style-type: none"> <li>• Woodlots &gt;100 ha in size or if large woodlots are rare in a planning area, woodlots &gt;50 ha</li> <li>• Deer movement during winter in the southern areas of Eco-region 7E are not constrained by snow depth, however deer will annually congregate in large numbers in suitable woodlands</li> <li>• Large woodlots &gt;100 ha and up to 1,500 ha are known to be used annually by densities of deer that range from 0.1-0.5 deer/ha</li> <li>• Woodlots with high densities of deer due to artificial feeding are not significant.</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• M.N.R.F. District Offices</li> <li>• LIO/NRVIS</li> </ul>	<p>Studies confirm:</p> <ul style="list-style-type: none"> <li>• Deer management is an M.N.R.F. responsibility, deer winter congregation areas considered significant will be mapped by M.N.R.F.</li> <li>• Use of the woodlot by white-tailed deer will be determined by M.N.R.F., all woodlots exceeding the area criteria are significant, unless determined not to be significant by M.N.R.F.</li> <li>• Studies should be completed during winter (Jan./Feb.) when &gt;20 cm of snow is on the ground using aerial survey techniques, ground road surveys, or a pellet count deer survey</li> <li>• S.W.H. M.I.S.T. Index #2 provides development effects and mitigation measures</li> </ul>	

**Specialized Habitat for Wildlife**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Waterfowl Nesting Area</b></p> <p><b>Rationale:</b> Important to local waterfowl populations, sites with greatest number of species and highest number of individuals are significant.</p>	<p>American Black Duck Northern Pintail Northern Shoveler Gadwall Blue-winged Teal Green-winged Teal Wood Duck Hooded Merganser Mallard</p>	<p>All upland habitats located adjacent to these wetland E.L.C. Ecosites are Candidate S.W.H.: MAS1, MAS2, MAS3, SAS1, SAM1, SAF1, MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, SWT1, SWT2, SWD1, SWD2, SWD3, SWD4</p> <p>NOTE Includes adjacency to Provincially Significant Wetlands.</p>	<ul style="list-style-type: none"> <li>• A waterfowl nesting area extends 120 m from a wetland (&gt;0.5 ha) or a wetland (&gt;0.5 ha) and any small wetlands (0.5 ha) within 120 m or a cluster of 3 or more small (&lt;0.5 ha) wetlands within 120 m of each individual wetland where waterfowl nesting is known to occur</li> <li>• Upland areas should be at least 120 m wide so that predators such as raccoons, skunks and foxes have difficulty finding nests</li> <li>• Wood Ducks and Hooded Mergansers utilize large diameter trees (&gt;40 cm dbh) in woodlands for cavity nest sites.</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Ducks Unlimited staff may know the locations of particularly productive nesting sites</li> <li>• M.N.R.F. Wetland Evaluations for indication of significant waterfowl nesting habitat</li> <li>• Reports and other information available from Conservation Authorities</li> </ul>	<p>Studies confirmed:</p> <ul style="list-style-type: none"> <li>• Presence of 3 or more nesting pairs for listed species excluding Mallards, or;</li> <li>• Presence of 10 or more nesting pairs for listed species including Mallards.</li> <li>• Any active nesting site of an American Black Duck is considered significant.</li> <li>• Nesting studies should be completed during the spring breeding season (April - June). Evaluation methods to follow "Bird and Bird Habitats: Guidelines for Wind Power Projects"</li> <li>• A field study confirming waterfowl nesting habitat will determine boundary of the waterfowl nesting habitat for the S.W.H., this may be greater or less than 120 m from the wetland and will provide enough habitat for waterfowl to successfully nest</li> <li>• S.W.H. M.I.S.T. Index #25 provides development effects and mitigation measures.</li> </ul>	



**Specialized Habitat for Wildlife**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Bald Eagle and Osprey Nesting, Foraging and Perching Habitat</b></p> <p><b>Rationale:</b> Nest sites are fairly uncommon in Eco - region 7E and are used annually by the species. Many suitable nesting locations may be lost due to increasing shoreline development pressures and scarcity of habitat.</p>	<p>Osprey</p> <p>SPECIAL CONCERN</p> <p>Bald Eagle</p>	<p>E.L.C. Forest Community Series: FOD, FOM, FOC, SWD, SWM and SWC directly adjacent to riparian areas – rivers, lakes, ponds and wetlands.</p>	<ul style="list-style-type: none"> <li>• Nests are associated with lakes, ponds, rivers or wetlands along forested shorelines, islands, or on structures over water.</li> <li>• Osprey nests are usually at the top a tree whereas Bald Eagle nests are typically in super canopy trees in a notch within the tree’s canopy.</li> <li>• Nests located on man-made objects are not to be included as S.W.H. (e.g. telephone poles and constructed nesting platforms)</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• N.H.I.C. compiles all known nesting sites for Bald Eagles in Ontario</li> <li>• M.N.R.F. values information (LIO/NRVIS) will list known nesting locations. Note: data from NRVIS is provided as a point and does not represent all the habitat</li> <li>• Nature Counts, Ontario Nest Records Scheme data.</li> <li>• O.M.N.R.F. District.</li> <li>• Check the Ontario Breeding Bird Atlas or Rare Breeding Birds in Ontario for species documented</li> <li>• Reports and other information available from Conservation Authorities.</li> <li>• Field Naturalists clubs</li> </ul>	<p>Studies confirm the use of these nests by:</p> <ul style="list-style-type: none"> <li>• One or more active Osprey or Bald Eagle nests in an area</li> <li>• Some species have more than one nest in a given area and priority is given to the primary nest with alternate nests included within the area of the S.W.H..</li> <li>• For an Osprey, the active nest and a 300 m radius around the nest or the contiguous woodland stand is the S.W.H., maintaining undisturbed shorelines with large trees within this area is important</li> <li>• For a Bald Eagle the active nest and a 400-800 m radius around the nest is the S.W.H.. Area of the habitat from 400-800 m is dependent on sight lines from the nest to the development and inclusion of perching and foraging habitat</li> <li>• To be significant a site must be used annually. When found inactive, the site must be known to be inactive for &gt; 3 years or suspected of not being used for &gt;5 years before being considered not significant.</li> <li>• Observational studies to determine nest site use, perching sites and foraging areas need to be done from early March to mid-August.</li> <li>• Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”</li> <li>• S.W.H. M.I.S.T. Index #26 provides development effects and mitigation measures</li> </ul>	

**Specialized Habitat for Wildlife**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Woodland Raptor Nesting Habitat</b></p> <p><b>Rationale:</b> Nests sites for these species are rarely identified; these area sensitive habitats and are often used annually by these species.</p>	<p>Northern Goshawk Cooper’s Hawk Sharp-shinned Hawk Red-shouldered Hawk Barred Owl Broad-winged Hawk</p>	<p>May be found in all forested E.L.C. Ecosites.</p> <p>May also be found in SWC, SWM, SWD and CUP3.</p>	<ul style="list-style-type: none"> <li>• All natural or conifer plantation woodland/forest stands &gt;30 ha with &gt; 4 ha of interior habitat. Interior habitat determined with a 200 m buffer.</li> <li>• Stick nests found in a variety of intermediate-aged to mature conifer, deciduous or mixed forests, within tops or crotches of trees. Species such as Cooper’s Hawk nest along forest edges sometimes on peninsulas or small off-shore islands.</li> <li>• In disturbed sites, nests may be used again, or a new nest will be in close proximity to old nest</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• O.M.N.R.F. Districts.</li> <li>• Check the Ontario Breeding Bird Atlas or Rare Breeding Birds in Ontario for species documented.</li> <li>• Check data from Bird Studies Canada.</li> <li>• Reports and other information available from Conservation Authorities.</li> </ul>	<p>Studies confirm:</p> <ul style="list-style-type: none"> <li>• Presence of one or more active nests from species list is considered significant</li> <li>• Red-shouldered Hawk and Northern Goshawk – A 400 m radius around the nest or 28 ha area of habitat is the S.W.H.. The 28 ha habitat area would be applied where optimal habitat is irregularly shaped around the nest.</li> <li>• Barred Owl – A 200m radius around the nest is the S.W.H.</li> <li>• Broad-winged Hawk and Coopers Hawk, – A 100m radius around the nest is the S.W.H.</li> <li>• Sharp-Shinned Hawk – A 50m radius around the nest is the S.W.H.</li> <li>• Conduct field investigations from early March to end of May. The use of call broadcasts can help in locating territorial (courting/nesting) raptors and facilitate the discovery of nests by narrowing down the search area.</li> <li>• S.W.H. M.I.S.T. Index #27 provides development effects and mitigation measures</li> </ul>	

**Specialized Habitat for Wildlife**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Turtle Nesting Areas</b></p> <p><b>Rationale:</b> These habitats are rare and when identified will often be the only breeding site for local populations of turtles</p>	<p><b>Special Concern:</b> Midland Painted Turtle Northern Map Turtle Snapping Turtle</p>	<p>Exposed mineral soil (sand or gravel) areas adjacent (&lt;100 m) or within the following E.L.C. Ecosites: MAS1, MAS2, MAS3, SAS1, SAM1, SAF1, BOO1, FEO1</p>	<ul style="list-style-type: none"> <li>• Best nesting habitat for turtles are close to water and away from roads and sites less prone to loss of eggs by predation from skunks, raccoons or other animals.</li> <li>• For an area to function as a turtle-nesting area, it must provide sand and gravel that turtles are able to dig in and is located in open, sunny areas. Nesting areas on the sides of municipal or provincial road embankments and shoulders are not S.W.H..</li> <li>• Sand and gravel beaches adjacent to undisturbed shallow weedy areas of marshes, lakes and rivers are most frequently used.</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Use Ontario Soil Survey reports and maps to help find suitable substrate for nesting turtles (well-drained sands and fine gravels).</li> <li>• Check the Ontario Herpetofaunal Summary Atlas records or other similar atlases for uncommon turtles; location information may help to find potential nesting habitat for them.</li> <li>• Natural Heritage Information Centre (N.H.I.C.).</li> <li>• Field naturalist clubs.</li> </ul>	<p>Studies confirm:</p> <ul style="list-style-type: none"> <li>• Presence of 5 or more nesting Midland Painted Turtles.</li> <li>• One or more Northern Map Turtles or Snapping Turtles nesting is a S.W.H..</li> <li>• The area or collection of sites within an area of exposed mineral soils where the turtles nest, plus a radius of 30 to 100 m around the nesting area dependent on slope, riparian vegetation and adjacent land use is the S.W.H..</li> <li>• Travel routes from wetland to nesting area are to be considered within the S.W.H. as part of the 30 to 100 m area of habitat.</li> <li>• Field investigations should be conducted in prime nesting season typically late spring to early summer. Observational studies observing the turtles nesting is a recommended method.</li> <li>• S.W.H. M.I.S.T. Index #28 provides development effects and mitigation measures for turtle nesting habitat.</li> </ul>	

**Specialized Habitat for Wildlife**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Seeps and Springs</b></p> <p><b>Rationale:</b> Seeps/Springs are typical of headwater areas and are often at the source of coldwater streams.</p>	<p>Wild Turkey Ruffed Grouse Spruce Grouse White-tailed Deer Salamanders</p>	<p>Seeps/springs are areas where groundwater comes to the surface. Often they are found within headwater areas within forested habitats. Any forested Ecosite within the headwater areas of a stream could have seeps/springs.</p>	<ul style="list-style-type: none"> <li>• Any forested area (with &lt;25% meadow/field/ pasture) within the headwaters of a stream or river system</li> <li>• Seeps and springs are important feeding and drinking areas. Especially in the winter will support a variety of plant and animal species.</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Topographical Map.</li> <li>• Thermography.</li> <li>• Hydrological surveys conducted by Conservation Authorities and MOECC.</li> <li>• Field Naturalists Clubs and landowners.</li> <li>• Municipalities and Conservation Authorities may have drainage maps and headwater areas mapped</li> </ul>	<p>Field studies confirm:</p> <ul style="list-style-type: none"> <li>• Presence of a site with 2 or more seeps/springs should be considered S.W.H..</li> <li>• The area of an E.L.C. forest ecosite or an ecoelement within ecosite containing the seeps/springs is the S.W.H.. The protection of the recharge area considering the slope, vegetation, height of trees and groundwater condition need to be considered in delineation the habitat</li> <li>• S.W.H. M.I.S.T. Index #30 provides development effects and mitigation measures</li> </ul>	

**Specialized Habitat for Wildlife**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Amphibian Breeding Habitat (Woodland)</b></p> <p><b>Rationale:</b> These habitats are extremely important to amphibian biodiversity within a landscape and often represent the only breeding habitat for local amphibian populations</p>	<p>Eastern Newt Blue-spotted Salamander Spotted Salamander Gray Treefrog Spring Peeper Western Chorus Frog Wood Frog</p>	<p>All Ecosites associated with these E.L.C. Community Series: FOC, FOM, FOD, SWC, SWM, SWD</p> <p>Breeding pools within the woodland or the shortest distance from forest habitat are more significant because they are more likely to be used due to reduced risk to migrating amphibians.</p>	<ul style="list-style-type: none"> <li>• Presence of a wetland, pond or woodland pool (including vernal pools) &gt;500 m<sup>2</sup> (about 25 m diameter) within or adjacent (within 120 m) to a woodland (no minimum size). Some small wetlands may not be mapped and may be important breeding pools for amphibians.</li> <li>• Woodlands with permanent ponds or those containing water in most years until mid-July are more likely to be used as breeding habitat.</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Ontario Herpetofaunal Summary Atlas (or other similar atlases) for records</li> <li>• Local landowners may also provide assistance as they may hear spring-time choruses of amphibians on their property.</li> <li>• O.M.N.R.F. Districts and wetland evaluations</li> <li>• Field Naturalist clubs</li> <li>• Canadian Wildlife Service Amphibian Road Call Survey</li> <li>• Ontario Vernal Pool Association: <a href="http://www.ontariovernalpools.org">http://www.ontariovernalpools.org</a></li> </ul>	<p>Studies confirm:</p> <ul style="list-style-type: none"> <li>• Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog species with at least 20 individuals (adults or egg masses) or 2 or more of the listed frog species with Call Level Codes of 3.</li> <li>• A combination of observational study and call count surveys will be required during the spring (Mar.-Jun.) when amphibians are concentrated around suitable breeding habitat within or near the woodland/wetlands</li> <li>• The habitat is the wetland area plus a 230m radius of woodland area. If a wetland area is adjacent to a woodland, a travel corridor connecting the wetland to the woodland is to be included in the habitat.</li> <li>• S.W.H. M.I.S.T. Index #14 provides development effects and mitigation measures</li> </ul>	

**Specialized Habitat for Wildlife**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Amphibian Breeding Habitat (Wetlands)</b></p> <p><b>Rationale:</b> Wetlands supporting breeding for these amphibian species are extremely important and fairly rare within Central Ontario landscapes.</p>	<p>Eastern Newt                      American Toad                      Spotted Salamander                      Four-toed Salamander                      Blue-spotted Salamander                      Gray Treefrog                      Western Chorus Frog                      Northern Leopard Frog                      Pickerel Frog                      Green Frog                      Mink Frog                      Bullfrog</p>	<p>E.L.C. Community Classes SW, MA, FE, BO, OA and SA.</p> <p>Typically these wetland ecosites will be isolated (&gt;120 m) from woodland ecosites, however larger wetlands containing predominantly aquatic species (e.g. Bullfrog) may be adjacent to woodlands.</p>	<ul style="list-style-type: none"> <li>Wetlands &gt;500m<sup>2</sup> (about 25m diameter), supporting high species diversity are significant; some small or ephemeral habitats may not be identified on M.N.R.F. mapping and could be important amphibian breeding habitats</li> <li>Presence of shrubs and logs increase significance of pond for some amphibian species because of available structure for calling, foraging, escape and concealment from predators</li> <li>Bullfrogs require permanent water bodies with abundant emergent vegetation.</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>Ontario Herpetofaunal Summary Atlas (or other similar atlases)</li> <li>Canadian Wildlife Service Amphibian Road Surveys and Backyard Amphibian Call Count.</li> <li>O.M.N.R.F. Districts and wetland evaluations.</li> <li>Reports and other information available from Conservation Authorities</li> </ul>	<p>Studies confirm:</p> <ul style="list-style-type: none"> <li>Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog/toad species with at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog/toad species with Call Level Codes of 3 or;</li> <li>Wetland with confirmed breeding Bullfrogs are significant</li> <li>The E.L.C. ecosite wetland area and the shoreline are the S.W.H.</li> <li>A combination of observational study and call count surveys will be required during the spring (March-June) when amphibians are concentrated around suitable breeding habitat within or near the wetlands.</li> <li>If a S.W.H. is determined for Amphibian Breeding Habitat (Wetlands) then Movement Corridors are to be considered as outlined in Table 1.4.1 of this Schedule.</li> <li>S.W.H. M.I.S.T. Index #15 provides development effects and mitigation measures</li> </ul>	

**Specialized Habitat for Wildlife**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Woodland Area - Sensitive Bird Breeding Habitat</b></p> <p><b>Rationale:</b> Large, natural blocks of mature woodland habitat within the settled areas of Southern Ontario are important habitats for area sensitive interior forest song birds.</p>	<p>Yellow-bellied Sapsucker                      Red-breasted Nuthatch                      Veery                      Blue-headed Vireo                      Northern Parula                      Black-throated Green Warbler                      Blackburnian Warbler                      Black-throated Blue Warbler                      Ovenbird                      Scarlet Tanager                      Winter Wren                      Pileated Woodpecker</p> <p><b>Special Concern:</b>                      Cerulean Warbler                      Canada Warbler</p>	<p>All Ecosites associated with these E.L.C.                      Community Series: FOC, FOM, FOD, SWC, SWM, SWD</p>	<ul style="list-style-type: none"> <li>Habitats where interior forest breeding birds are breeding, typically large mature (&gt;60 yrs old) forest stands or woodlots &gt;30 ha</li> <li>Interior forest habitat is at least 200 m from forest edge habitat</li> </ul> <p>Information Sources:</p> <ul style="list-style-type: none"> <li>Local birder clubs.</li> <li>Canadian Wildlife Service (CWS) for the location of forest bird monitoring.</li> <li>Bird Studies Canada conducted a 3-year study of 287 woodlands to determine the effects of forest fragmentation on forest birds and to determine what forests were of greatest value to interior species</li> <li>Reports and other information available from Conservation Authorities.</li> </ul>	<p>Studies confirm:</p> <ul style="list-style-type: none"> <li>Presence of nesting or breeding pairs of 3 or more of the listed wildlife species.</li> <li>Note: any site with breeding Cerulean Warblers or Canada Warblers is to be considered S.W.H.</li> <li>Conduct field investigations in spring and early summer when birds are singing and defending their territories</li> <li>Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”</li> <li>S.W.H. M.I.S.T. Index #34 provides development effects and mitigation measures</li> </ul> <p>HABITATS OF SPECIES OF CONSERVATION CONCERN</p>	

**Habitat for Species of Conservation Concern (Not including Endangered or Threatened Species)**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Marsh Breeding Bird Habitat</b></p> <p><b>Rationale:</b> Wetlands for these bird species are typically productive and fairly rare in Southern Ontario landscapes.</p>	<p>American Bittern Virginia Rail Sora Common Gallinule American Coot Pied-billed Grebe Marsh Wren Sedge Wren Common Loon Green Heron Trumpeter Swan</p> <p><b>Special Concern:</b> Black Tern Yellow Rail</p>	<p>MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 SAS1 SAM1 SAF1 FEO1 BOO1</p> <p>For Green Heron: all SW, MA and CUM1 sites</p>	<ul style="list-style-type: none"> <li>• Nesting occurs in wetlands.</li> <li>• All wetland habitat is to be considered as long as there is shallow water with emergent aquatic vegetation present</li> <li>• For Green Heron, habitat is at the edge of water such as sluggish streams, ponds and marshes sheltered by shrubs and trees. Less frequently, it may be found in upland shrubs or forest a considerable distance from water</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• O.M.N.R.F. District and wetland evaluations.</li> <li>• Field Naturalist clubs</li> <li>• Natural Heritage Information Centre (N.H.I.C.) Records.</li> <li>• Reports and other information available from Conservation Authorities.</li> <li>• Ontario Breeding Bird Atlas</li> </ul>	<p>Studies confirm:</p> <ul style="list-style-type: none"> <li>• Presence of 5 or more nesting pairs of Sedge Wren or Marsh Wren or breeding by any combination of 4 or more of the listed species</li> <li>• Note: any wetland with breeding of 1 or more Black Terns, Trumpeter Swan, Green Heron or Yellow Rail is S.W.H.</li> <li>• Area of the E.L.C. ecosite is the S.W.H..</li> <li>• Breeding surveys should be done in May/June when these species are actively nesting in wetland habitats.</li> <li>• Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”</li> <li>• S.W.H. M.I.S.T. Index #35 provides development effects and mitigation measures</li> </ul>	



**Habitat for Species of Conservation Concern (Not including Endangered or Threatened Species)**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Open Country Bird Breeding Habitat</b></p> <p><b>Rationale;</b> This wildlife habitat is declining throughout Ontario and North America. Species such as the Upland Sandpiper have declined significantly the past 40 years based on CWS (2004) trend records.</p>	<p>Upland Sandpiper Grasshopper Sparrow Vesper Sparrow Northern Harrier Savannah Sparrow</p> <p><b>Special Concern:</b> Short-eared Owl</p>	<p>CUM1 CUM2.</p>	<ul style="list-style-type: none"> <li>• Large grassland areas (includes natural and cultural fields and meadows) &gt;30 ha</li> <li>• Grasslands not Class 1 or 2 agricultural lands, and not being actively used for farming (i.e. no row cropping or intensive hay or livestock pasturing in the last 5 years)</li> <li>• Grassland sites considered significant should have a history of longevity, either abandoned fields, mature hayfields and pasturelands that are at least 5 years or older.</li> <li>• The Indicator bird species are area sensitive requiring larger grassland areas than the common grassland species</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Agricultural land classification maps, Ministry of Agriculture.</li> <li>• Local bird clubs.</li> <li>• Ontario Breeding Bird Atlas</li> <li>• E.I.S. Reports and other information available from Conservation Authorities</li> </ul>	<p>Field studies confirm:</p> <ul style="list-style-type: none"> <li>• Presence of nesting or breeding of 2 or more of the listed species</li> <li>• A field with 1 or more breeding Short-eared Owls is to be considered S.W.H.</li> <li>• The area of S.W.H. is the contiguous E.L.C. ecosite field areas</li> <li>• Conduct field investigations of the most likely areas in spring and early summer when birds are singing and defending their territories</li> <li>• Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”</li> <li>• S.W.H. M.I.S.T. Index #32 provides development effects and mitigation measures</li> </ul>	

**Habitat for Species of Conservation Concern (Not including Endangered or Threatened Species)**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Shrub/Early Successional Bird Breeding Habitat</b></p> <p><b>Rationale;</b> This wildlife habitat is declining throughout Ontario and North America. The Brown Thrasher has declined significantly over the past 40 years based on CWS (2004) trend records.</p>	<p>Indicator Species: Brown Thrasher Clay-coloured Sparrow</p> <p>Common Species: Field Sparrow Black-billed Cuckoo Eastern Towhee Willow Flycatcher</p> <p><b>Special Concern:</b> Yellow-breasted Chat Golden-winged Warbler</p>	<p>CUT1, CUT2, CUS1, CUS2, CUW1, CUW2</p> <p>Patches of shrub ecosites can be complexed into a larger habitat for some bird species</p>	<ul style="list-style-type: none"> <li>• Large field areas succeeding to shrub and thicket habitats &gt;10 ha in size</li> <li>• Shrub land or early successional fields, not class 1 or 2 agricultural lands, not being actively used for farming (i.e. no row-cropping, haying or live-stock pasturing in the last 5 years)</li> <li>• Shrub thicket habitats (&gt;10 ha) are most likely to support and sustain a diversity of these species</li> <li>• Shrub and thicket habitat sites considered significant should have a history of longevity, either abandoned fields or pasturelands</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Agricultural land classification maps, Ministry of Agriculture.</li> <li>• Local bird clubs.</li> <li>• Ontario Breeding Bird Atlas</li> <li>• Reports and other information available from Conservation Authorities</li> </ul>	<p>Field studies confirm:</p> <ul style="list-style-type: none"> <li>• Presence of nesting or breeding of 1 of the indicator species and at least 2 of the common species</li> <li>• A habitat with breeding Yellow-breasted Chat or Golden-winged Warbler is to be considered as Significant Wildlife Habitat</li> <li>• The area of the S.W.H. is the contiguous E.L.C. ecosite field/thicket area.</li> <li>• Conduct field investigations of the most likely areas in spring and early summer when birds are singing and defending their territories</li> <li>• Evaluation methods to follow “Bird and Bird Habitats: Guidelines for Wind Power Projects”</li> <li>• S.W.H. M.I.S.T. Index #33 provides development effects and mitigation measures</li> </ul>	

**Habitat for Species of Conservation Concern (Not including Endangered or Threatened Species)**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Terrestrial Crayfish</b></p> <p><b>Rationale:</b> Terrestrial Crayfish are only found within SW Ontario in Canada and their habitats are very rare.</p>	<p>Chimney or Digger Crayfish; (<i>Fallicambarus fodiens</i>)</p> <p>Devil Crayfish or Meadow Crayfish; (<i>Cambarus diogenes</i>)</p>	<p>MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, MAS1, MAS2, MAS3, SWD, SWT, SWM</p> <p>CUM1 with inclusions of above meadow marsh ecosites can be used by terrestrial crayfish</p>	<ul style="list-style-type: none"> <li>Wet meadow and edges of shallow marshes (no minimum size) should be surveyed for terrestrial crayfish</li> <li>Constructs burrows in marshes, mudflats, meadows, the ground can't be too moist. Can often be found far from water</li> <li>Both species are a semi-terrestrial burrower which spends most of its life within burrows consisting of a network of tunnels. Usually the soil is not too moist so that the tunnel is well-formed.</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>Information sources from "Conservation Status of Freshwater Crayfishes" by Dr. Premek Hamr for the WWF and CNF, March, 1998</li> </ul>	<p>Studies confirm:</p> <ul style="list-style-type: none"> <li>Presence of 1 or more individuals of species listed or their chimneys (burrows) in suitable meadow marsh, swamp or moist terrestrial sites</li> <li>Area of E.L.C. ecosite or an ecoelement area of meadow marsh or swamp within the larger ecosite area is the S.W.H.</li> <li>Surveys should be done April to August in temporary or permanent water. Note the presence of burrows or chimneys are often the only indicator of presence, observance or collection of individuals is very difficult</li> <li>S.W.H. M.I.S.T. Index #36 provides development effects and mitigation measures</li> </ul>	

**Habitat for Species of Conservation Concern (Not including Endangered or Threatened Species)**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Special Concern and Rare Wildlife Species</b></p> <p><b>Rationale:</b> These species are quite rare or have experienced significant population declines in Ontario.</p>	<p>All Special Concern and Provincially Rare (S1, S2, S3, SH) plant and animal species. Lists of these species are tracked by the N.H.I.C.</p>	<p>All plant and animal element occurrences (EOs) within a 1 km or 10 km grid.</p> <p>Older EOs were recorded prior to GPS being available, therefore location information may lack accuracy</p>	<ul style="list-style-type: none"> <li>• When an element occurrence is identified within a 1 or 10 km grid for a Special Concern or provincially Rare species; linking candidate habitat on the site needs to be completed to E.L.C. Ecosites</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Natural Heritage Information Centre (N.H.I.C.) will have Special Concern and Provincially Rare (S1-S3, SH) species lists with element occurrences data.</li> <li>• N.H.I.C. Website “Get Information”: <a href="http://nhic.mnr.gov.on.ca">http://nhic.mnr.gov.on.ca</a></li> <li>• Ontario Breeding Bird Atlas</li> <li>• Expert advice should be sought as many of the rare spp. Have little information available about their requirements</li> </ul>	<p>Studies confirm:</p> <ul style="list-style-type: none"> <li>• Assessment/inventory of the site for the identified special concern or rare species needs to be completed during the time of year when the species is present or easily identifiable.</li> <li>• The area of the habitat to the finest E.L.C. scale that protects the habitat form and function is the S.W.H., this must be delineated through detailed field studies. The habitat needs be easily mapped and cover an important life stage component for a species e.g. specific nesting habitat or foraging habitat.</li> <li>• S.W.H. M.I.S.T. Index #37 provides development effects and mitigation measures</li> </ul>	

**Rare Vegetation Communities**

Rare Vegetation Community	E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Description	Candidate S.W.H. Detailed Information and Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Cliffs and Talus Slopes</b></p> <p><b>Rationale:</b> Cliffs and Talus Slopes are extremely rare habitats in Ontario</p>	<p>Any E.L.C. Ecosite within Community Series: TAO TAS TAT CLO CLS CLT</p>	<p>A Cliff is vertical to near vertical bedrock &gt;3 m in height.</p> <p>A Talus Slope is rock rubble at the base of a cliff made up of coarse rocky debris..</p>	<ul style="list-style-type: none"> <li>• Most cliff and talus slopes occur along the Niagara Escarpment</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• The Niagara Escarpment Commission has detailed information on location of these habitats</li> <li>• O.M.N.R.F. Districts</li> <li>• Natural Heritage Information Centre (N.H.I.C.) has location information available on their website</li> <li>• Field Naturalist Clubs</li> <li>• Conservation Authorities</li> </ul>	<ul style="list-style-type: none"> <li>• Confirm any E.L.C. Vegetation Type for Cliffs or Talus Slopes</li> <li>• S.W.H. M.I.S.T. Index #21 provides development effects and mitigation measures</li> </ul>	

**Rare Vegetation Communities**

Rare Vegetation Community	E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Description	Candidate S.W.H. Detailed Information and Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Sand Barren</b></p> <p><b>Rationale:</b> Sand barrens are rare in Ontario and support rare species. Most Sand Barrens have been lost due to cottage development and forestry</p>	<p>E.L.C. Ecosites: SBO1 SBS1 SBT1</p> <p>Vegetation cover varies from patchy and barren to continuous meadow (SBO1), thicket-like (SBS1), or more closed and treed (SBT1). Tree cover always &lt;60%</p>	<p>Sand barrens typically are exposed sand, generally sparsely vegetated and caused by a lack of moisture, periodic fires and erosion. Usually located within other types of natural habitat such as forest or savannah. Vegetation can vary from patchy and barren to tree covered but less than 60%.</p>	<ul style="list-style-type: none"> <li>• A sand barren area &gt;0.5 ha in size</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• The Niagara Escarpment Commission has detailed information on location of these habitats</li> <li>• O.M.N.R.F. Districts</li> <li>• Natural Heritage Information Centre (N.H.I.C.) has location information available on their website</li> <li>• Field Naturalist Clubs</li> <li>• Conservation Authorities</li> </ul>	<ul style="list-style-type: none"> <li>• Confirm any E.L.C. Vegetation Type for Sand Barrens</li> <li>• Site must not be dominated by exotic or introduced species (&lt;50% vegetative cover are exotic spp.)</li> <li>• S.W.H. M.I.S.T. Index #20 provides development effects and mitigation measures</li> </ul>	

**Rare Vegetation Communities**

Rare Vegetation Community	E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Description	Candidate S.W.H. Detailed Information and Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Alvar</b></p> <p><b>Rationale:</b> Alvars are extremely rare habitats in Ecoregion 7E.</p>	<p>ALO1 ALS1 ALT1 FOC1 FOC2 CUM2 CUS2 CUT2-1 CUW2</p> <p><b>Five Alvar Indicator Species:</b> 1) <i>Carex crawei</i> 2) <i>Panicum philadelphicum</i> 3) <i>Eleocharis compressa</i> 4) <i>Scutellaria parvula</i> 5) <i>Trichostema brachiatum</i></p> <p>These indicator species are very specific to Alvars within Ecoregion 7E</p>	<p>An Alvar is typically a level, mostly unfractured calcareous bedrock feature with a mosaic of rock pavements and bedrock overlain by a thin veneer of soil. The hydrology of alvars is complex, with alternating periods of inundation and drought. Vegetation cover varies from sparse lichen-moss associations to grasslands and shrublands and comprising a number of characteristic or indicator plants. Undisturbed alvars can be phyto- and zoogeographically diverse, supporting many uncommon or are relict plant and animal species. Vegetation cover varies from patchy to barren with a less than 60% tree cover</p>	<ul style="list-style-type: none"> <li>• An Alvar site &gt;0.5 ha in size</li> <li>• Alvar is particularly rare in Ecoregion 7E where the only known sites are found in the western islands of Lake Erie</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Alvars of Ontario (Federation of Ontario Naturalists, 2000)</li> <li>• Conserving Great Lakes Alvars (Ontario Nature)</li> <li>• O.M.N.R.F. Districts</li> <li>• Natural Heritage Information Centre (N.H.I.C.) has location information available on their website</li> <li>• Field Naturalist Clubs</li> <li>• Conservation Authorities</li> </ul>	<ul style="list-style-type: none"> <li>• Field studies identify that four of the five <b>Alvar Indicator Species</b> at a Candidate Alvar Site is significant</li> <li>• Site must not be dominated by exotic or introduced species (&lt;50% vegetative cover are exotic spp.)</li> <li>• The alvar must be in excellent condition and fit in with surrounding landscape with few conflicting land uses</li> <li>• S.W.H. M.I.S.T. Index #17 provides development effects and mitigation measures</li> </ul>	

**Rare Vegetation Communities**

Rare Vegetation Community	E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Description	Candidate S.W.H. Detailed Information and Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Old Growth Forest</b></p> <p><b>Rationale:</b> Due to historic logging practices and land clearance for agriculture, old growth forest is rare in Ecoregion 7E.</p>	<p>Forest Community Series: FOD FOC FOM SWD SWC SWM</p>	<p>Old Growth Forests are characterized by heavy mortality or turnover of over-storey trees resulting in a mosaic of gaps that encourage development of a multi-layered canopy and an abundance of snags and downed woody debris.</p>	<ul style="list-style-type: none"> <li>• Woodland area is &gt;0.5 ha</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• O.M.N.R.F. Forest Resource Inventory mapping</li> <li>• O.M.N.R.F. Districts</li> <li>• Field Naturalist Clubs</li> <li>• Conservation Authorities</li> <li>• Sustainable Forestry License (SFL) companies will possibly know locations through field operations</li> <li>• Municipal forestry departments</li> </ul>	<p>Field studies will determine:</p> <ul style="list-style-type: none"> <li>• If dominant tree species of the forest are &gt;140 years old, then the area containing these trees is S.W.H.</li> <li>• The forested area containing the old growth characteristics will have experienced no recognizable forestry activities (cut stumps will not be present)</li> <li>• The area of forest ecosites combined or an ecoelement within an ecosite that contain the old growth characteristics is the S.W.H.</li> <li>• Determine E.L.C. vegetation types for the forest area containing the old growth characteristics</li> <li>• S.W.H. M.I.S.T. Index #23 provides development effects and mitigation measures</li> </ul>	



**Rare Vegetation Communities**

Rare Vegetation Community	E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Description	Candidate S.W.H. Detailed Information and Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Savannah</b></p> <p><b>Rationale:</b> Savannahs are extremely rare habitats in Ontario.</p>	<p>TPS1 TPS2 TPW1 TPW2 CUS2</p>	<p>A Savannah is a tallgrass prairie habitat that has tree cover between 25-60%</p> <p>In Ecoregion 7E, known tallgrass prairie and savannah remnants are scattered between Lake Huron and Lake Erie, near Lake St. Clair, north of and along the Lake Erie shoreline, in Brantford and in the Toronto area (north of Lake Ontario).</p>	<ul style="list-style-type: none"> <li>• No minimum size to site</li> <li>• Site must be restored or a natural site.</li> </ul> <p>Remnant sites such as railway right-of-ways are not considered S.W.H.</p> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Natural Heritage Information Centre (N.H.I.C.) has location information available on their website</li> <li>• Field Naturalist Clubs</li> <li>• Conservation Authorities</li> </ul>	<p>Field studies confirm:</p> <ul style="list-style-type: none"> <li>• One or more of the Savannah indicator species listed in Appendix N should be present. Note: savannah plant spp. List from Ecoregion 7E should be used.</li> <li>• Area of the E.L.C. Ecosite is the S.W.H.</li> <li>• Site must not be dominated by exotic or introduced species (&lt;50% vegetative cover are exotic spp.)</li> <li>• S.W.H. M.I.S.T. Index #18 provides development effects and mitigation measures.</li> </ul>	

**Rare Vegetation Communities**

Rare Vegetation Community	E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Description	Candidate S.W.H. Detailed Information and Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Tallgrass Prairie</b></p> <p><b>Rationale:</b> Tallgrass Prairies are extremely rare habitats in Ontario</p>	<p>TPO1 TPO2</p>	<p>A tallgrass prairie has ground cover dominated by prairie grasses. An open tallgrass prairie habitat has &lt;25% tree cover.</p> <p>In Ecoregion 7E, known tallgrass prairie and savannah remnants are scattered between Lake Huron and Lake Erie, near Lake St. Clair, north of and along the Lake Erie shoreline, in Brantford and in the Toronto area (north of Lake Ontario).</p>	<ul style="list-style-type: none"> <li>• No minimum size to site</li> <li>• Site must be restored or a natural site.</li> </ul> <p>Remnant sites such as railway right-of-ways are not considered S.W.H.</p> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• Natural Heritage Information Centre (N.H.I.C.) has location information available on their website</li> <li>• Field Naturalist Clubs</li> <li>• Conservation Authorities</li> </ul>	<p>Field studies confirm:</p> <ul style="list-style-type: none"> <li>• One or more of the Prairie indicator species listed in Appendix N should be present. Note: savannah plant spp. List from Ecoregion 7E should be used.</li> <li>• Area of the E.L.C. Ecosite is the S.W.H.</li> <li>• Site must not be dominated by exotic or introduced species (&lt;50% vegetative cover are exotic spp.)</li> <li>• S.W.H. M.I.S.T. Index #19 provides development effects and mitigation measures.</li> </ul>	

**Rare Vegetation Communities**

Rare Vegetation Community	E.L.C. Ecosite Codes	Candidate S.W.H. Habitat Description	Candidate S.W.H. Detailed Information and Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Other Rare Vegetation Communities</b></p> <p><b>Rationale:</b> Plant communities that often contain rare species which depend on the habitat for survival.</p>		<p>Provincially rare (S1, S2, S3) vegetation communities are listed in Appendix M of the Significant Wildlife Habitat Technical Guide (M.N.R.F., 2000). Any E.L.C. Ecosite Code that has a possible E.L.C. Vegetation Type that is provincially rare is candidate S.W.H..</p> <p>Rare Vegetation Communities may include beaches, fens, forest, marsh, barrens, dunes and swamps.</p>	<ul style="list-style-type: none"> <li>E.L.C. Ecosite codes that have the potential to be a rare E.L.C. Vegetation Type as outlined in Appendix M of the Significant Wildlife Habitat Technical Guide (M.N.R.F., 2000).</li> <li>M.N.R.F./N.H.I.C. will have up to date listing for rare vegetation communities.</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>Natural Heritage Information Centre (N.H.I.C.) has location information available on their website</li> <li>Field Naturalist Clubs</li> <li>Conservation Authorities</li> </ul>	<ul style="list-style-type: none"> <li>Field studies should confirm if an E.L.C. Vegetation Type is a rare vegetation community based on listing within Appendix M of the Significant Wildlife Habitat Technical Guide (M.N.R.F., 2000).</li> <li>Area of the E.L.C. Vegetation Type polygon is the S.W.H..</li> <li>S.W.H. M.I.S.T. Index #37 provides development effects and mitigation measures.</li> </ul>	

**Animal Movement Corridors**

Habitat Type	Wildlife Species	Candidate S.W.H. E.L.C. Ecosites Codes	Candidate S.W.H. Habitat Criteria and Information Sources	Confirmed S.W.H. Defining Criteria	Assessment of Habitat in E.I.S. Study Area
<p><b>Amphibian Movement Corridors</b></p> <p><b>Rationale:</b> Movement corridors for amphibians moving from their terrestrial habitat to breeding habitat can be extremely important for local populations.</p>	<p>Eastern Newt American Toad Spotted Salamander Four-toed Salamander Blue-spotted Salamander Gray Treefrog Western Chorus Frog Northern Leopard Frog Pickerel Frog Green Frog Mink Frog Bullfrog</p>	<p>Corridors may be found in all ecosites associated with water.</p> <p>Corridors will be determined based on identifying the significant breeding habitat for these species in Table 1.1</p>	<ul style="list-style-type: none"> <li>• Movement corridors between breeding habitat and summer habitat</li> <li>• Movement corridors must be determined when amphibian breeding habitat is confirmed as S.W.H. (Amphibian Breeding Habitat, Wetland)</li> </ul> <p><u>Information Sources</u></p> <ul style="list-style-type: none"> <li>• M.N.R.F. District Office.</li> <li>• Natural Heritage Information Centre (N.H.I.C.).</li> <li>• Reports and other information available from Conservation Authorities.</li> <li>• Field Naturalist Clubs</li> </ul>	<ul style="list-style-type: none"> <li>• Field Studies must be conducted at the time of year when species are expected to be migrating or entering breeding sites</li> <li>• Corridors should consist of native vegetation, with several layers of vegetation. Corridors unbroken by roads, waterways or bodies, and undeveloped areas are most significant</li> <li>• Corridors should have at least 15m of vegetation on both sides of waterway or be up to 200m wide of woodland habitat and with gaps &lt;20m</li> <li>• Shorter corridors are more significant than longer corridors, however amphibians must be able to get to and from their summer and breeding habitat</li> <li>• S.W.H. M.I.S.T. Index #40 provides development effects and mitigation measures</li> </ul>	

## Appendix 10 | Species at Risk Screening Assessment Table

**Endangered and Threatened Species**

Species	Source	Status	Habitat Description	Habitat Present on Site	Surveys Conducted	Likelihood of Occurrence and Rationale	Potential to be Impacted by Proposed Activities	Anticipated/Confirmed Compliance Requirements	Authorizing Agency Consultation/Status
<b>Plants</b>									
		SARA-ESA-							
<b>Insects</b>									
		SARA-ESA-							
<b>Amphibians</b>									
		SARA-ESA-							
<b>Reptiles</b>									
		SARA-ESA-							
<b>Birds</b>									
		SARA-ESA-							
<b>Mammals</b>									
		SARA-ESA-							

**Special Concern Species**

Species	Source	Status	Habitat Description	Habitat Present on Site	Surveys Conducted	Likelihood of Occurrence and Rationale	Potential to be Impacted by Proposed Activities
<b>Plants</b>							
		SARA- ESA-					
<b>Insects</b>							
		SARA- ESA-					
<b>Amphibians</b>							
		SARA- ESA-					
<b>Reptiles</b>							
		SARA- ESA-					
<b>Birds</b>							
		SARA- ESA-					
<b>Mammals</b>							
		SARA- ESA-					

## Appendix 11 | Potential Mitigation Measures



## Appendix 11 | Potential Mitigation Measures

Mitigation measures are intended to maintain the health, features and function of the N.E.S. components and contribute to reducing or eliminating potential short or long-term impacts from development or site alteration on the N.E.S. New strategies and methods for the mitigation of development or site alteration impacts can be expected to continuously emerge, and as such, Applicants should refer to and cite recent scientific literature. Examples of mitigation measures may include, but are not limited to, the following:

1. Buffers and/or setbacks adequate to reduce impacts and preserve ecological functions along edges of natural features;
2. Consider use of 'living fences' to deter access into sensitive features or areas;
3. Installation of functional ecopassages for roads that cross natural areas to allow movement of resident plants and animals;
4. Construction timing restrictions to avoid critical periods such as fish spawning, bird breeding and nesting or bat roosting;
5. Effective temporary stormwater management and sediment control during construction;
6. Ministry of the Environment and Climate Change (M.E.C.P.)'s Stormwater management plan and S.W.M.P. design;
7. Innovative infiltration measures suitable for the site such as infiltration trenches, porous pavements, catchment cisterns, etc.;
8. Institute strategies to reduce salt application to roads that cross or are located adjacent to waterways;
9. Consider adoption of on-site stormwater management including green roofs;
10. Low impact development techniques;
11. Urban design guidelines that consider factors such as window treatments to prevent bird strikes, lighting that does not impact adjacent natural areas, street and lot orientation that provides additional separation from natural features;

12. Salvaging and relocation strategies for plants and animals that will be directly impacted by development or site alteration;
13. Trail siting and design that considers ecological sensitivities and principles;
14. Promotion of stewardship initiatives;
15. Installation of temporary and permanent fencing;
16. Posting securities for environmental damage repair; and
17. Promotion of public awareness through the development of homeowners' guides and the creation and installation of information signage.

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**Subject:** Economic Development Update Q3 and Q4

**Report to:** Planning and Economic Development Committee

**Report date:** Wednesday, February 5, 2025

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## Recommendations

1. That Report ED 1-2025 **BE RECEIVED** for information.

## Key Facts

- The purpose of this report is to provide Regional Council with an update on the Division's activities for Q3 and Q4 of 2024.
- Economic Development continues to implement on the 10 Year Economic Development Strategy 2022-2032 (Inspire, Invest, Grow) ratified by Regional Council in 2022.
- Economic Development core activities include Investment Attraction; Strategic Marketing; Business and Economic Research and Analysis; Strategic Growth Services; Area Municipality (AM) and Sector Support; and Strategic Economic Initiatives.

## Financial Considerations

The activities described in this report are within the Council approved 2024 Economic Development operating budget.

## Analysis

### Strategy 1: Investment Attraction

Niagara Economic Development (NED) targeted and proactive foreign direct investment lead generation strategy includes markets in United States (New York City / Boston / Chicago, Los Angeles), Greater Toronto Area (GTA) and Europe (Germany, Italy, France, Spain, Nordics, UK).

In the third and fourth quarters of 2024 the team has had meetings with 31 new businesses expressing interest in investing in Niagara Region and there were 15 new investment opportunities progressing through the sales pipeline.

## **Confirmed Investments**

The official ground-breaking at the Asahi Kasei site in Port Colborne took place on November 14, 2024. The event celebrated the official start of construction for Asahi Kasei's \$1.56 Billion battery separator manufacturing facility in Port Colborne. Government officials from all levels of government were present including Premier Doug Ford, Minister François-Philippe Champagne, Minister Vic Fedeli, Minister Filomena Tassi and other local and regional delegates.

There have been additional companies that have confirmed investments in Niagara Region due to the efforts of Economic Development staff. An agriculture technology company will be locating to Niagara-on-the-Lake, investing \$2 Million and creating 25 jobs. A manufacturer of cable trays has invested \$5 Million in a 3-acre site, creating 10 new jobs, and an existing hydraulics company will be expanding in Welland creating 14 new jobs with a \$6.5 Million capital investment contributing to Niagara's growing industrial sector.

**Foreign Direct Investment Prospecting International:** Through the Hamilton-Niagara Partnership, staff hosted Global Startups and 15 international companies to learn about Niagara's tech ecosystem. Of the 15 companies participating, two have expressed specific interest in locating to Niagara Region.

Niagara Economic Development participated in Global Affairs Canada Investment and Innovation Roadshow to Italy and Spain. During the weeklong mission, Niagara Region met with 11 companies with expansion plans. The program also included events with local chambers of commerce and federal trade commission offices.

Niagara Economic Development also hosted the CEO of Invest in Canada in November for a tour of the region. This itinerary included stops at a large Niagara manufacturer and meetings with partners such as post secondary institutions and other private sector organizations showcasing Niagara's value proposition with our valued Federal Investment Attraction Agency partner.

**Foreign Direct Investment Prospecting USA/ North America:** Economic development staff continue to build relationships in the US market. Staff joined a reception with Mary Ng, Minister of Export Promotion, International Trade and Economic Development, in Buffalo NY. This event was an opportunity to connect with businesses and manufacturers in Western New York and promote trade.

During the third quarter economic development staff had a presence at the Site Selectors Guild Fall Forum held in Detroit Michigan. This event allowed staff to connect with site selectors from across USA and Canada. Five connections were made during this event.

### **Strategic Marketing: Q3 Update**

**Website Engagement:** In Q3, Strategic Marketing focused on maintaining Niagara's visibility as a key business destination through its digital platforms. The Niagara region's website saw 21,317 visits, with 11,870 unique visitors and 210 returning visitors. The majority of traffic was from the United States, which contributed 7,808 visits, followed by Ireland with 252 visits, China with 161 visits, the United Kingdom with 117 visits, and Germany with 116 visits.

**Social Media Engagement:** Our social media presence continued to strengthen throughout Q3. The number of Facebook followers increased to 733, while Twitter/X followers rose to 645. LinkedIn demonstrated notable growth and interaction, achieving 3,522 followers, 3,130 reactions, 110 comments, and 40 reposts. These metrics highlight the positive engagement and reach of our content within the business professional community.

**Email Marketing:** Email marketing efforts during Q3 were effective, with a total of 2,029 emails sent to a targeted subscriber base of 624. These campaigns achieved a strong open rate of 54.5%, reflecting high interest and engagement among recipients.

**Programmatic Campaign Performance:** Our targeted programmatic advertising campaigns in Q3 were a crucial part of our strategy to drive awareness and engagement. Google ads generated 55,806 impressions and 5,801 clicks to NiagaraCanada.ca, achieving an impressive 10.39% clickthrough rate. Typically, a good click-through rate (CTR) for Google Ads is usually between 6% and 8%, but it depends on the industry. The average CTR for Google search ads across all industries is 6.11%.

LinkedIn ads complemented these efforts, resulting in 18,056 impressions and 273 clicks, further supporting the visibility and appeal of the Niagara region as a business hub.

These comprehensive marketing efforts have played an essential role in promoting Niagara as a top destination for business investment and aligning with the goals of the 10-Year Economic Development Strategy (Inspire, Invest, Grow).

### **Strategy 3: Business and Economic Research and Analysis**

These initiatives focus on Niagara's economy through regional economic and business research and analysis and inform policy development and economic development initiatives. This work includes support to area municipalities with economic data, and support to businesses, investors, and other economic development partners in Niagara.

Research projects and collaborations for this period involved the Niagara Economic Update report, Wilson Foundation Project with Brock's Niagara Community Observatory, Niagara Active Economy update with Brock's Centre for Sport Capacity, Niagara Tourism Profile update, Niagara Agriculture Economic Action Plan, S&P Credit Rating Review, and the Value of the Visitor Economy in Niagara Falls report.

Research inquiries and responses to data and information requests involved 74 inquiries from a variety of organizations. These requests supported inquiries from Brock University, Niagara College, Niagara Region (Community Services, Planning, Finance, Public Health, Public Works), private businesses, prospective investors, the news media, and economic development partners (ex. Greater Niagara Chamber of Commerce, Tourism Partnership of Niagara, Niagara Industrial Association, HOPA Ports, local tourism organizations, and area municipalities).

Presentations and public outreach activities involved eight (8) presentations on economic-related information as requested by economic development partners.

### **Strategy 4: Strategic Growth Services**

NED collaborates with internal departments and municipalities to enable and support new industrial and residential investment to grow communities across Niagara.

Strategic Sites: Since its launch earlier this year, the Niagara Signature Sites application has attracted substantial web traffic, demonstrating strong interest from investors and developers. The interactive map, originally designed to showcase key industrial and commercial sites across Niagara, has expanded to feature 12 sites, each spanning at least 50 acres. With these additions, the platform now highlights over 1,200 acres of Employment Area, providing comprehensive insights into the development potential of Niagara's prime properties. This growth underscores the strategic importance of the platform in positioning Niagara as a leading destination for industrial and commercial investment.

Industrial Use RDC Grant Program Applications: Niagara Region has approved three (3) Industrial Use Development Grant Applications. This has resulted in a total estimated 408 jobs being created or retained. These three (3) grants supported over \$1,560,550,000 in new construction value and capital expenditures and will create an additional 663,777 square feet of industrial space in the Niagara Region.

**Gateway CIP Tax Increment Grant Program Applications:** Niagara Region has approved one (1) Gateway CIP Tax Increment Grant Application. This investment may result in a total estimated 1,010 manufacturing jobs being created over three (3) phases of development. This application supported an estimated \$5,000,000,000 in new construction and capital expenditures and may create an additional 2,000,000 square feet of industrial space in the Niagara Region.

**Electric Mobility Sector Development:** The Electric Mobility Specialist, has actively strengthened Niagara's position as a growing hub for clean technology and electric vehicle (EV) manufacturing. Strategic meetings with key industry associations were held, including the Niagara Industrial Association and the Auto Parts Manufacturers Association of Canada, to discuss collaborative opportunities and promote Niagara's success in attracting EV companies. Additionally, support was given to innovative Niagara-based companies that are exploring ways to pivot their manufacturing to meet the demands of the EV supply chain. Extending outreach beyond the region, the Electric Mobility Specialist engaged with potential partners in the Hydrogen, Battery and Chemical industries, furthering Niagara's efforts to attract investment and innovation in the electric mobility sector.

### **Strategy 5: Local Area Municipality (LAM) Fund Administration**

This year, a total of \$7,833.33 annually per municipality can be leveraged for projects that advance the defined priorities outlined in the Niagara Economic Development 10-Year Strategy (Inspire, Invest, Grow 2032).

These projects intend to support the municipalities of Niagara in furthering their plans to facilitate opportunities for creating jobs and growing the economy by developing strategies to expand business and investment. The fund also supports Business Retention and Expansion efforts through Buy Local campaigns.

Total Number of applications to date as of October 30<sup>th</sup>, 2024:

<b>Municipality</b>	<b>Project Name</b>	<b>Funding Issued</b>	<b>Application Approval</b>
City of Welland	Made in Welland Magazine	\$7,833.33	March 2024
Town of Fort Erie	Fort Erie Tourism Strategy	\$7,833.33	April 2024
City of Port Colborne	Digital Savings Pass	\$2,500	May 2024
City of St. Catharines	Large-Scale Marketing Activation	\$7,833.33	August 2024
City of Niagara Falls	Annual Report Business Publication	\$7,833.33	September 2024
City of Port Colborne	Electric Power Needs Assessment	\$4,000	October 2024
City of Port Colborne	Marine Career and Skilled Trades Fair	\$1,333.33	October 2024
Township of West Lincoln	Showcase Display at 2025 International Plowing Match	\$7,833.33	October 2024
Town of Lincoln	Harvest Hop – Jordan Village Improvement Project Grand Opening	\$7,833.33	October 2024

Total amount of LAM Funding committed to date as of October 30<sup>th</sup>, 2024: \$54,833.31

### **Strategy 6 – Strategic Initiatives:**

**Labourforce Coalition:** This group has been formed to discuss how the region is meeting the demands of industry (business leaders and employers) and the workforce (employees, job seekers and learners) in this period of transformation. With that in mind a new Workforce Coalition has been launched in partnership with the Workforce Collective, post secondary institutions, school boards, employment agencies and community partners to collectively tackle the labour force gaps in hiring and retaining talent.



**Customer Relationship Management System (CRM):** In order to better track priority projects, the investment funnel, marketing activities, incentive applications and ensure succession and better reporting, Economic Development continues to utilize Microsoft Dynamics to ensure better service delivery.

### **Alternatives Reviewed**

N/A

### **Relationship to Council Strategic Priorities**

Economic development activities described in this report directly support two of Council's Growing Better Together 2023-2026 Strategic Priorities:

- **Effective Region** – By developing new and nurturing existing partnerships in industry we are able to leverage expertise and skill sets both internally and outside of the organization. By harnessing additional research and data inputs we are also able to develop a 2025 Work Plan that aligns with current market conditions.
- **Prosperous Region** – Niagara Economic Development continues to meet the challenge of branding Niagara globally through targeted marketing efforts, and facilitating new investment within the region in conjunction with our area partners by activating on specific tactics that bolster our position in the Investment Attraction space.

### **Other Pertinent Reports**

#### [ED 9-2024 Economic Development Update Q1 & Q2](https://pub-niagararegion.escribemeetings.com/Meeting.aspx?Id=900a3803-1a2c-4638-8898-e4257ed3a3e2&Agenda=Merged&lang=English&Item=13&Tab=attachments)

(<https://pub-niagararegion.escribemeetings.com/Meeting.aspx?Id=900a3803-1a2c-4638-8898-e4257ed3a3e2&Agenda=Merged&lang=English&Item=13&Tab=attachments>)

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This report was prepared in consultation with Economic Development Staff and reviewed by George Spezza, Director of Economic Development.

**Appendices**

N/A