Council Agenda

Tuesday, October 16, 2018

7:00 p.m.

Council Chambers

Pages

1. Call to Order

2. Disclosure of Pecuniary Interests Under the Municipal Conflict of Interest Act

3. Minutes of Previous Meeting

   a. Previous Minutes of the October 2, 2018 Council Meeting 1

4. Additional Items Disclosed as Other Business

5. Resolution Moving Council into Committee of the Whole to Consider Public Meetings, Delegations, Public Question Period, Correspondence, Reports, Motions for Which Notice Has Been Previously Given and Other Business

6. Public Meeting

7. Delegations

   a. Palmerston Marlins U12 Girls Provincial C Champions

   b. Blessings to You, 2018 Community Champion Award

8. Public Question Period

9. Correspondence Received for Information or Requiring Direction of Council

   a. Township of Montague, Request for Consultation 9

   b. Maitland Valley Conservation Authority, Council Correspondence Maitland Valley Conservation Authority Draft Cost Sharing Proposal 12

10. Reports of Committees and Town Staff, Matters Tabled and Motions for Which Notice Has Been Previously Given

a. Committee Minutes for Receipt- None

b. Committee Minutes for Approval - None

c. Staff Reports

d. Other Business Disclosed as Additional Items

11. Motion to Return To Regular Council

12. Notices of Motion

13. Resolution Adopting Proceedings of Committee of the Whole

14. By-laws

15. Adjournment

Council Minutes
Tuesday, October 2, 2018 3:00 p.m.
Council Chambers

Council Present:
Mayor George A. Bridge
Deputy Mayor Ron Faulkner
Councillor Mary-Lou Colwell
Councillor Dave Turton
Councillor Judy Dirksen
Councillor Jean Anderson
Councillor Ron Elliott

Staff Present:
Bill White, C.A.O. Clerk
Annilene McRobb, Deputy Clerk, Recording Secretary
Chris Harrow, Fire Chief
Wayne Metzger, Water Foreman
Belinda Wick-Graham, Business & Economic Manager
Gordon Duff, Treasurer
Allan Carr, Facilities Manager
Matt Lubbers, Recreation Services Manager
Mark Robertson, Waste Water Foreman
Todd Rogers, DWQMS Coordinator

1. **Call to Order 2:30 p.m.**

2. **Disclosure of Pecuniary Interests Under the Municipal Conflict of Interest Act** –None

3. **Motion to Convene into Closed Session**

RESOLUTION: 2018-192
Moved By: Deputy Mayor Faulkner; Seconded By: Councillor Elliott
THAT the Council of the Town of Minto conduct a meeting Closed to the Public to discuss the following:

- Previous Minutes of the September 18, 2018 Closed Session

- Labour Relations or Employee Negotiations- Succession Plan

Carried

4. Motion to Convene into Open Session 3:07 pm

RESOLUTION: 2018-193
Moved By: Councillor Turton; Seconded By: Councillor Anderson
THAT the Council of the Town of Minto resume into open Council.

Carried

5. Minutes of Previous Meeting

a. Previous Minutes of the September 18, 2018 Council Meeting

RESOLUTION 2018-194
Moved By: Councillor Dirksen; Seconded By: Councillor Turton
THAT the minutes of the September 18, 2018 Council Meeting be approved.

Carried

6. Additional Items Disclosed as Other Business

Mayor Bridge presented By-law Officer Cam Forbes with a pin from the Municipal Law Enforcement Officers Association and Council congratulated Cam on his achievement.

7. Resolution Moving Council into Committee of the Whole to Consider Public Meetings, Delegations, Public Question Period, Correspondence, Reports, Motions for Which Notice Has Been Previously Given and Other Business

RESOLUTION: 2018-195
Moved By: Councillor Colwell; Seconded By: Councillor Dirksen
THAT the Town of Minto Council convenes into Committee of the Whole.

Carried

8. Public Meeting None

9. Delegations

a. Wellington County OPP Scott Lawson

Inspector Lawson and Constable Bruce Aitkin presented a report on drug enforcement in the community describing partnerships, training and other actions and tools to combat drug issues County wide. They described some of the implications of Cannabis legalization which requires the OPP to work with Council and the community to implement. CAO Clerk White outlined a process by which the next Council could respond to the opting out requirements regarding retail outlets which would include a public meeting January 8th. The OPP would attend to assist in answering community questions

Deputy Mayor Faulkner assumed the Chair

b. Wellington County Fire Training Officer, Jan to Sept 2018 Report

Training Officer Charles Hamilton presented his report noting training initiatives and accomplishments including Driver Certification Program and PTSD for both firefighters and their significant others.

MOTION: COW 2018-232
Moved By: Councillor Dirksen; Seconded By: Councillor Elliott
THAT Council receives the Wellington County Fire Training Officer's report for January to September 2018 for information.

Carried

Mayor George Bridge resumed the Chair

10. Public Question Period - None

11. Correspondence Received for Information or Requiring Direction of Council

a. Town of Aurora, Greenbelt Protection
b. Crime Stoppers Guelph-Wellington, Fall Newsletter 2018
c. Mapleton Seniors Centre For Excellence, October Calendar & Newsletter
d. Local Planning Appeal Support Centre, Introduction Letter, Posters & Interim Guide to Services and Eligibility
e. Crime Stoppers Guelph Wellington, 2018 Shredding Event

MOTION: COW 2018-233
Moved By: Councillor Turton; Seconded By: Deputy Mayor Faulkner
THAT Council receives the correspondence for information.

Carried

12. Reports of Committees and Town Staff, Matters Tabled and Motions for Which Notice Has Been Previously Given

a. Committee Minutes for Receipt – none
b. Committee Minutes for Approval
1. Cultural Roundtable Minutes of September 24, 2018

The Business & Economic Manager noted a quorum was not present.

MOTION: COW 2018-234
Moved By: Councillor Anderson; Seconded By: Councillor Elliott
THAT Council receives the Cultural Roundtable Minutes of September 24, 2018 for information.

Carried

2. Parks and Recreation Advisory Committee Minutes of June 25, 2018
3. Parks and Recreation Advisory Committee Minutes of September 24, 2018

The Facilities Manager and Recreation Service Manager spoke to the minutes noting renovation of Harriston pool was under budget and PRAC is recommending that the unused budgeted funds be used in 2019 for a splash pad and the grass cutting contract be extended for an additional year. Council discussed the extension to the contract and the Clifford Recreation Association funding of work at the Clifford Ballfield.

MOTION: COW 2018-235
Moved By: Councillor Turton; Seconded By: Councillor Dirksen
THAT the Council of receives the Parks and Recreation Advisory Committee Minutes of June 25 and recommendations contained herein be approved.

Carried

MOTION: COW 2018-236
Moved By: Deputy Mayor Faulkner; Seconded By: Councillor Dirksen
THAT the Council receives the Parks and Recreation Advisory Committee Minutes of September 24, 2018 and recommendations contained herein be approved subject to the final decision on the grass cutting being considered at a future meeting with a report from staff regarding service levels and options, and that Council directs staff to proceed this year with improvements to the Clifford Ball diamond funded by the Clifford Recreation Association as budgeted.

Carried

c. Staff Reports
1. Recreation- Year in Review
Recreation Services Manager Matt Lubbers and Recreation Assistant Grace Wilson presented highlighted activities this past year including central booking, online registrations and 2018 programs. They also previewed fall and winter programs noting the after-school program has almost reached their goal of 20 registrants.

MOTION: COW 2018-237
Moved By: Councillor Colwell; Seconded By: Councillor Elliott
THAT Council receives the Recreations Year in Review presentation for information.

Carried

Councillor Turton assumed the Chair

2. Wastewater Foreman, Results, Sanitary Sewer CCTV Inspection, Harriston
The Wastewater Foreman reviewed his report and noting 15 kms of sanitary main and 9 km of laterals were inspected.

MOTION: COW 2018-238
Moved By: Councillor Anderson; Seconded By: Councillor Dirksen
THAT Council receives the October 2nd, 2018 report from the Wastewater Foreman regarding Results Sanitary Sewer CCTV Inspection, Harriston.

Carried

3. DWQMS Coordinator, Minto Water System Sampling Update

DWQMS Coordinator Todd Rogers noted the additional water testing and sampling issues.

MOTION: 2018-239
Moved By: Mayor Bridge; Seconded By: Deputy Mayor Faulkner
THAT the Council of the Town of Minto receives the Compliance Coordinators September 27, 2018 report Minto Water System Sampling Update.

Carried

Mayor Bridge reassumed the Chair

4. C.A.O. Clerk, Extension Request Shrimp Canada

C.A.O. Clerk White presented his report regarding the request noting the completion date in the signed site plan agreement would not change even if the extension is approved.

MOTION: COW 2018-240
Moved By: Councillor Elliott; Seconded By: Councillor Dirksen
THAT Council receives the September 24, 2018 report from the C.A.O. Clerk regarding the extension request from Shrimp Canada and approves an extension to the covenant for First Right of Refusal and the covenant for obtaining a building permit to September 19, 2019 only, and that the completion date for the building under the covenant be changed from July 10, 2019 to the same completion date as is in the site plan agreement being July 2, 2020.

Carried

5. C.A.O. Clerk and Roads & Drainage Manager, Cemetery Design Options, Cremations

CAO Clerk White and Roads & Drainage Manager McIsaac reviewed the design options prepared by Hilton Landmarks. A one-day set of meetings for all three communities is planned for November with the final report to the next Council at budget.

MOTION: COW 2018-241
Moved By: Councillor Turton; Seconded By: Deputy Mayor Faulkner
That Council receive the presentation from the CAO Clerk and Roads & Drainage Manager regarding Hilton Landmarks Design Options; Interring Cremated Remains Clifford, Harriston, Palmerston Cemeteries, and that Council direct staff to proceed to public comment on the proposed designs presented.

Carried

Councillor Turton assumed the Chair

6. Roads and Drainage Manager, Sidewalk Policy Presentation

Roads and Drainage Manager McIsaac provided information on new minimum maintenance standards for sidewalks and a proposed Town policy.

MOTION: COW 2018-242
Moved By: Councillor Elliott; Seconded By: Mayor Bridge
THAT Council of the Town of Minto receives the Road Managers presentation and implements the updated Town of Minto Sidewalk Policy.

Carried

Councillor Colwell assumed the Chair

7. Treasurer and Tax Collector, Tax Sale Process

Treasurer Duff reviewed changes to the Municipal Act allowing tax sales at two years in arrears and other amendments.

MOTION: COW 2018-243
Moved By: Councillor Anderson; Seconded By: Deputy Mayor Faulkner
THAT Council of receives the Tax Collector and Treasurer's report dated September 26, 2018 and endorses this improved cash management policy change.

Carried

8. Treasurer, Cybersecurity Insurance

Treasurer Duff reviewed policy options and costs. Council discussed implementation and the annual insurance renewal.

MOTION: COW 2018-244
Moved By: Councillor Turton; Seconded By: Councillor Elliott
THAT Council receives the report dated September 25, 2018 from the Treasurer/Deputy CAO and direct staff to purchase an additional insurance policy for up to six months at $2,000.

Defeated

MOTION: COW 2018-245
Moved By: Councillor Turton; Seconded By: Deputy Mayor Faulkner
THAT Council receives the report dated September 25, 2018 from the Treasurer/Deputy CAO and direct staff to purchase insurance against cybercrimes for up to $2 million

coverage at a cost of $4,000 for one year, or a lesser amount so that the policy renews with the Town's annual coverage each March if possible.

Carried

9. Treasurer, Approval of Accounts

Treasurer Duff highlighted payments for flow testing for the Fire Department, netting, slide, and Water Department Wastewater equipment.

MOTION: COW 2018-246
Moved By: Councillor Elliott; Seconded By: Mayor Bridge
THAT Council receives the Treasurer's report regarding Approval of Accounts, and approves accounts by Department for September 28, 2018 as follows: Administration $93,806.01, Building $4,037.23, Economic Development $6,359.30, Incubator $1,102.27, Fire $17,981.05, Roads $58,516.41, Waste Water $15,657.47, Streetlights $2,588.70, Water $14,414.03, Town Landscaping Care $429.08, Recreation $12,141.10, Clifford $3,103.52, Harriston $27,121.83, Palmerston $21,156.10, Norgan $2,705.86 for a total of $281,119.96

Carried

d. Other Business Disclosed as Additional Items

Mayor Bridge will be attending the unveiling of the new electronic sign at the Palmerston Lions Park tonight at 7 pm and the unveiling of a plaque for a heritage tree. The Lions Park and Museum in Palmerston has been nominated for the Architectural Conservancy of Ontario Heritage Award. 277 people attended the Cultural Days and 300 participated in the Journey for Jasper walk raising $51,000.

13. Motion to Return To Regular Council

RESOLUTION: 2018-196
Moved By: Councillor Anderson; Seconded By: Deputy Mayor Faulkner
THAT the Committee of the Whole convenes into Regular Council meeting.

Carried

14. Notices of Motion - None

15. Resolution Adopting Proceedings of Committee of the Whole

RESOLUTION 2018-197
Moved By: Councillor Dirksen; Seconded By: Councillor Turton
THAT the Council of the Town of Minto ratifies the motions made in the Committee of the Whole.

Carried

16. By-laws

a. 2018-80, Confirming Proceedings of October 2, 2018 Committee of the Whole/Council Meeting

RESOLUTION: 2018-198
Moved By: Deputy Mayor Faulkner; Seconded By: Councillor Anderson
THAT By-law 2018-80; To confirm actions of the Council of the Corporation of the Town of Minto Respecting a meeting held October 2, 2018; be introduced and read a first, second, third time and passed in open Council and sealed with the seal of the Corporation.

Carried

17. Adjournment

RESOLUTION: 2018-199
Moved By: Councillor Colwell; Seconded By: Councillor Turton
THAT the Council of the Town of Minto adjourn to meet again at the call of the Mayor.

Carried

_____ _____

Mayor George A. Bridge C.A.O. Clerk Bill White

THE CORPORATION OF THE
TOWNSHIP OF MONTAGUE

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September 19th, 2018

Honourable Doug Ford, Premier of Ontario
Legislative Building
Queen's Park
Toronto ON, M7A 1A1
VIA EMAIL

Hello,

Please be advised the Council of the Township of Montague passed the following resolution at its regular meeting of September 4th, 2018:

MOVED BY: V. Carroll — RESOLUTION NO:192-2018
SECONDED BY: J. Abbass — DATE: September 04, 2018

That the Council of the Township of Montague hereby support the Association of Municipal Clerks and Treasurers of Ontario in requesting that the Provincial Government undertake consultation with municipalities prior to modifying legislation that effects municipal governments.

And that this resolution be circulated to the Association of Municipal Clerks and Treasurers of Ontario and the Ontario Premier.

CARRIED

Please contact me if you have any additional questions.

Thank you,

Jasmin Ralph
Clerk Administrator

Cc: Association of Municipal Clerks and Treasurers of Ontario
All Ontario Municipalities
Honourable Randy Hillier MPP, Lanark-Frontenac-Kingston

Jasmin Ralph

From: AMCTO <broadcasts@amcto.com>
Sent: July 30, 2018 3:35 PM
To: Jasmin Ralph
Subject: AMCTO Responds to Announcement of The Better Local Government Act

AMCTO
THE MUNICIPAL EXPERTS

&# 160; ***July 30, 2018***

AMCTO RESPONDS TO ANNOUNCEMENT OF THE BETTER LOCAL GOVERNMENT ACT

Dear AMCTO Members:

Last week several municipal reforms with significant ramifications, were put forward by the Honourable Premier Doug Ford and Minister of Municipal Affairs and Housing, Steve Clark. While we look forward to reviewing the upcoming legislation, the announcement and several aspects of the proposed legislation has created widespread concern within our sector, regarding timing, implementation, and lack of engagement with local government professionals.

Reserving any specific comment on the policy, AMCTO is concerned with how these reforms were brought forward, notably:

- This legislation will be introduced on the eve of the 2018 municipal elections and will impact provisions within the Municipal Elections Act. AMCTO has long believed that senior orders of government should engage local government professionals and representative associations, early and more importantly, provide the appropriate amount of time to ensure that public policy implementation is effective at the local level. The timing of this legislation will make this extremely challenging.

- This new legislation will create changes to existing election processes within the sector. Ambiguity exists with how to balance the currently enforced rules and regulations with those of the new legislation. Naturally, this ambiguity hinders the ability of local government professionals to implement provincial public policy in a fair and effective manner.

- Finally, AMCTO is concerned that the lack of engagement or notice for these reforms to municipal legislation signals a step backwards in the belief that the municipal sector is recognized as a mature, responsible order of government.

AMCTO staff and members will review the legislation once it is released, and will look for ways to provide our technical expertise on how to support public policy implementation at the local level. We continue to believe this value is best served when our members and association are engaged early in the policy development process.

AMCTO – The Municipal Experts
2680 Skymark Avenue Suite # 610, Mississauga ON L4W-5L6
Phone - 905-602-4294 | Fax - 905-602-4295

From:	Phil Beard
To:	Annilene McRobb
Cc:	Dave Turton; Stephen Jackson; Pettapiece-co, Randy; John.Nater.A3@parl.gc.ca
Subject:	RE: Town of Minto Council Correspondence Maitland Valley Conservation Authority Draft Cost Sharing Proposal
Date:	October 1, 2018 3:46:47 PM
Attachments:	BOD-48-18.pdf

Hi Annilene: With respect to Council's question about the future cost sharing would apply any projects undertaken to mitigate flooding in Harriston. At the present time the Provincial Water And Erosion Control Infrastructure Program does not apply to new flood control projects. The only funding program that MVCA is aware of that may apply is the National Disaster Mitigation and Adaptation Fund that the Federal Government established this year. However John Nater has advised us that they fund will only apply to projects that are $20 million dollars and up. It will only provide 40% funding to municipalities. The deadline for applications to be submitted was July 2018. See attached report on the National Disaster Mitigation and Adaptation Fund.
MVCA is trying to get a meeting with Randy Pettapiece, MPP for Perth Wellington to discuss the shortfall in funding for the Provincial Water and Erosion Control Program and the need for funding for new flood control projects.
We would encourage council to advise both Mr. Nater and Mr. Pettapiece that there is an urgent need for such a program to be established to help small rural municipalities. MVCA has recommended that if such a program is established that rural municipalities be eligible for up to a 85% grant from senior levels of government.

If you have any further questions please feel free to contact Dave or I.

Phil

Phil Beard, RPP, MCIP
General Manager/Secretary-Treasurer
Maitland Valley Conservation Authority
1093 Marietta Street
Wroxeter, Ontario
N0G 2X0

519-335-3557 ext. 231

From: Annilene McRobb [mailto:annilene@town.minto.on.ca]
Sent: September-06-18 2:48 PM
To: pbeard@mvca.on.ca
Subject: FW: Town of Minto Council Meeting Tuesday September 4, 2018 Item 12 c) Correspondence Maitland Valley Conservation Authority Draft Cost Sharing Proposal

Good Afternoon:

The Council of the Town of Minto met on September 4 to consider the above noted and passed the following motion:

MOTION: COW 2018-201
Moved By: Councillor Turton; Seconded By: Councillor Elliott
That Town of Minto Council receives correspondence from Maitland Valley Conservation Authority regarding Draft Cost Sharing Proposal, and advises the Town has no objection to cost sharing as outlined, that the Federal and Provincial Government be called upon to increase funding so they are partners in maintaining water and erosion control infrastructure, and that the Conservation Authority clarify how cost sharing might apply to installing and maintaining new water and erosion control infrastructure that may be needed upstream, downstream and within Harriston to help mitigate flooding.

Attached is the correspondence the Town of Minto received and considered.

I look forward to hearing back from you in regards to the clarification the Town of Minto is requesting.

Annilene McRobb, Dipl. M.M., CMO
Deputy Clerk
Town of Minto
T 519.338.2511 x 230
F 519.338.2005
E annilene@town.minto.on.ca
www.town.minto.on.ca

BOARD OF DIRECTORS REPORT #48/18

TO: **Directors, Maitland Valley Conservation Authority**
FROM: **Phil Beard, General Manager/Secretary-Treasurer**
DATE: **August 27, 2018 (to be presented September 19, 2018)**

SUBJECT: **Improving the National Disaster Mitigation and Adaptation Fund**

PURPOSE:

- To provide an overview of the National Disaster Mitigation and Adaptation Fund
- To identify the improvements needed to this program so that rural flood/erosion prone municipalities can obtain assistance from this program.
- To summarize the follow up actions recommended by John Nater, MP for Perth-Wellington Riding.

BACKGROUND:

On August 13, 2018 the Chair and two Vice Chairs, Kriss Snell, CAO from the Municipality of North Perth met with John Nater, MP for Perth Wellington, his Communications Assistant and a representative from Ben Lobb's office (MP for Huron Bruce). The purpose of the meeting was to identify ways to improve the National Disaster Mitigation and Adaptation Fund.

National Disaster Mitigation and Adaption Fund

The National Disaster Mitigation and Adaptation Fund will support large scale infrastructure projects with a minimum cost of $20 million.

These projects will safeguard public health and safety, protect people's homes, make sure access to essential services is not interrupted and help communities protect their residents way of life.
Funding Available: $2 billion dollars over 10 years.
Cost Share Limits: Municipalities/Regional Government up to 40%
Provinces up to 50%

Eligible Projects: New construction of public infrastructure, including natural infrastructure; modification and/or reinforcement of existing public infrastructure including natural infrastructure.

Conditions: Must meet at least one national significance criterion, including reducing impacts on:

Critical infrastructure and essential services
Health and safety of Canadians
Significant Disruptions on economic activity
Costs of recovery and replacement
Vulnerable regions
Project completion by 2027-2028
Timelines: Expression of Interest: May-July 2018
Full Application: Sept-Dec. 2018
Contribution Agreement: March 2019.

According to Mr. Nater, Infrastructure Canada is only planning on accepting one intake of applications, a second may be considered if the funding is not all committed from the first intake of applications.

MVCA representatives and representative from North Perth expressed the concern that this Fund will not help rural municipalities. Mr. Nater agreed with this concern.
The meeting then turned to how this Fund could be improved so that rural flood/erosion prone municipalities could obtain assistance to develop appropriate and affordable flood/erosion control projects.

Improving the National Disaster Mitigation and Adaptation Fund

MVCA representatives made a presentation that outlined how this fund could be improved:

A copy of that presentation is attached to this report. A summary of our recommendations is outlined below:

1. Update flood standards for riverine and Great Lake Flood potential in accordance with the recommendations contained in the National Flood Plain Mapping Assessment undertaken by Public Safety Canada in 2014.
   We need appropriate standards and updated mapping in order to be able to design appropriate flood control projects for municipalities.
   Also need to review and update erosion risk standards and associated mapping for the Great Lakes shoreline.

2. Identify the risks associated with non-riverine flooding. Severe rainfall/snowmelt events associated with our changing climate are causing inland areas to flood. These risks should also be identified so that municipalities can update land use plans and develop appropriate storm water management infrastructure.

3. Need for NDMAF funding to be allocated for rural municipalities that provides smaller projects (less than $20million dollars) to be considered
   - Provides a higher grant rate to municipalities (75-85% grant)
   - Provides a longer time period to design and complete projects (15-20 years)
   - Allows land acquisition to be considered as a component of structural projects
   - Broaden the program to support flood forecasting, flood progression mapping, emergency preparedness and response

4. Other Recommendations: Need the Province to become a partner in terms of funding new and existing flood/erosion control projects.

FOLLOW UP ACTIONS:

Mr. Nater indicated that he would take our recommendations and contact the appropriate Federal Ministers and ask their consideration for changes to the National Disaster Mitigation and Adaptation Fund (Infrastructure Canada); Public Safety Canada and Environment Canada.

Mr. Nater recommended that MVCA consider sending a letter to the appropriate Federal Departments with our recommendations.

He also recommended that MVCA consider meeting with the Minister of Infrastructure for Ontario, Monte McNaughton, MPP for Lambton, Kent, Middlesex to ask the Provincial Government to consider developing a Provincial Flood/Erosion Control Infrastructure Program in partnership with the Federal Government.

CONSIDERATIONS:

One of Conservation Ontario's responsibilities is to lobby the Provincial and Federal Governments on behalf of conservation authorities.

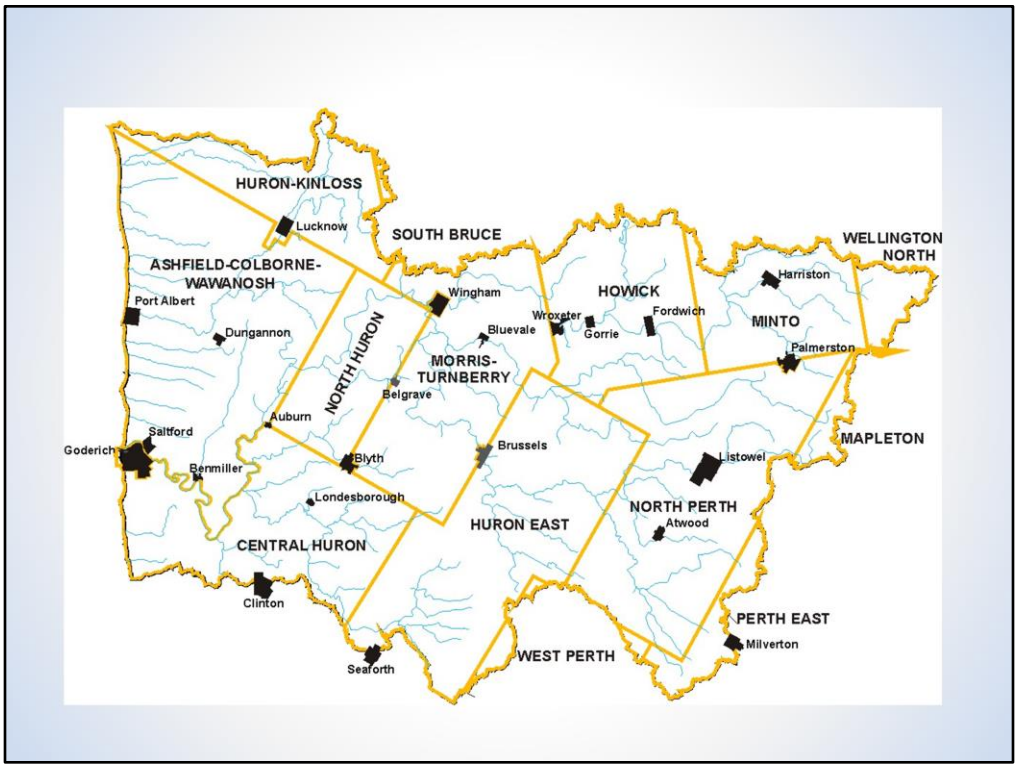
Should we contact Conservation Ontario to determine if they share our concern and discuss it with the rest of the conservation authorities before we undertake any follow up to this meeting?

The next meeting of Conservation Ontario Council is scheduled for September 25, 2018. Conservation Ontario Council also meets on December 10, 2018.

RECOMMENDATIONS:

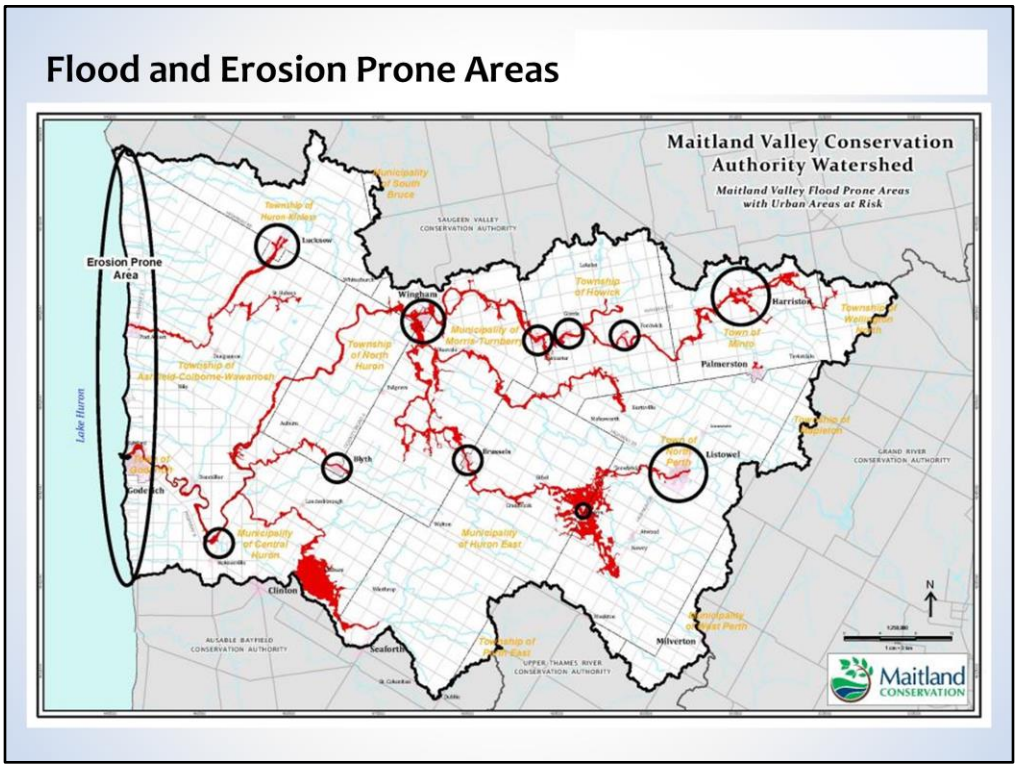
To be developed at the meeting.

Will cover background on the Maitland watershed and the areas at risk from flooding/erosion
Climate Trends/Severe weather events in Maitland watershed.
Listowel Flood Control Project: Lessons learned
Ideas for changing the Disaster Mitigation and Adaptation Fund so that Rural municipalities can obtain support for flood/erosion control projects.



Background: Maitland Valley Conservation Authority is owned, governed and mainly financed by the 15 municipalities in the Maitland/Nine Mile Watersheds. We were established by the Province at the request of the municipalities in the watershed to help them work together to develop programs for dealing with water and land related issues such as flooding, erosion and water quality.
We are one of 36 conservation authorities in Ontario.

Flood and Erosion Prone Areas



There are several thousand residents that work and live in flood and erosion prone areas in our watershed. These areas have $176 million worth of assessment, spread over 15 communities. $366 million dollars worth of land/development along the Lake Huron shoreline is at risk from bluff collapse and gully erosion. This equates to over half a billion dollars of property that is at risk from natural hazards.

Estimates based on flood and erosion risk standards developed in the 1970's! Out of date. Due to our rapidly changing climate first thing we need is updated flood/erosion risk standards and associated mapping of areas that are at risk of flooding/erosion.

Climate trends in the Maitland
Adding more energy to the atmosphere

- Warmer air, more water vapour in suspension
- Warmer/wetter winters on average
- Hotter, drier summers, interspersed with more localized intense rainfall events, more water vapor in atomsphere
- Longer periods where the weather stays the same due to weakening of the jet stream

- More severe weather events over last 10 years, three major flood events all in different months of the year(December 2008; June 2017; February 208); three Ice storms; three tornadoes and several smaller wind storms
- Increased variability in terms of precipitation from year to year and season to season.
- - 2013 wettest year in 40 years
- 2012 driest year in 30 years
- 2015 dry spring followed by 2 ½ months worth of rain in 2 weeks
- June 23rd storm resulted in highest summer flows in 48 years of records on the Maitland

Update Flood Standards

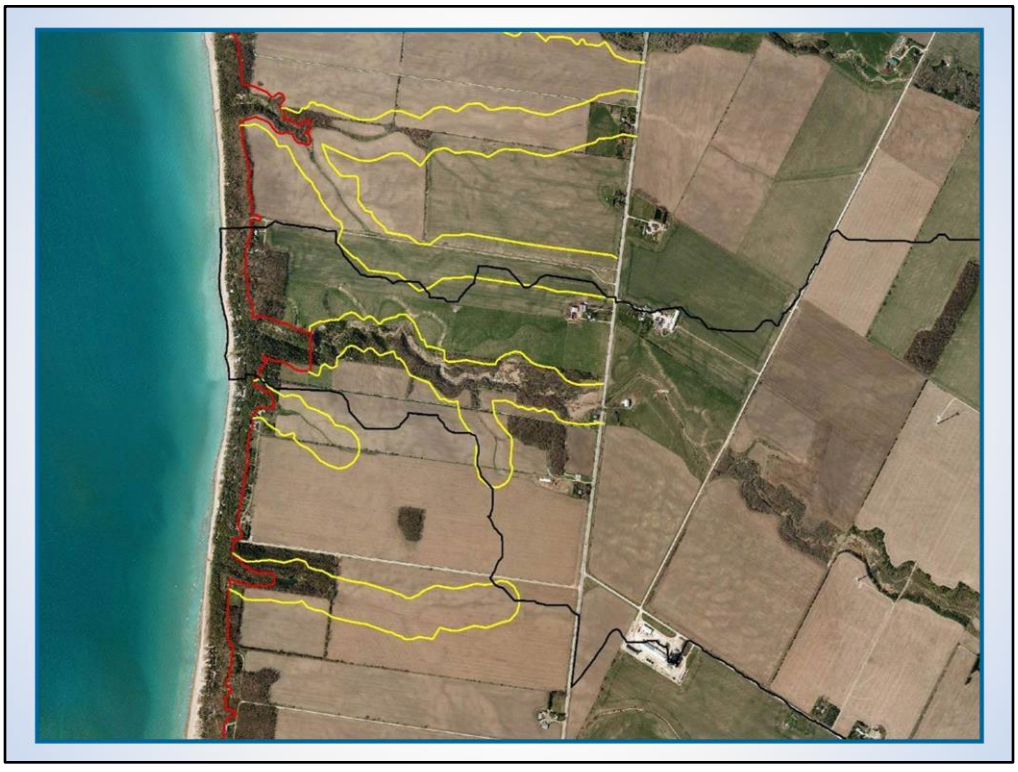
Need to update flood standards for riverine and Great Lakes Flooding.
Study by Public Safety Canada completed several years ago. No action taken with respect to recommendations for changes to flood standards.
Need to know what standards should used to map flood risks across Canada.
Then we need to update flood risk mapping.

Picture of Hwy 21 North of Goderich flooded by rainfall event on June 23rd 2017. Often when we talk about flooding, we are talking about flooding caused by rivers. However, general overland flooding is still a major issue. What will be flooded before the water even gets to the river? This is known as overland flooding or non-riverine flooding. Similar to the work that has been done in the United Kingdom, we are also recommend mapping overland flooding.

In this case, water overtopped road and flowed into a different watershed causing damage to a shoreline road and property.

Overland flood mapping is particularly useful when doing emergency planning and determining flood risk for insurance. Wouldn't you want to know if a field is susceptible to flooding from rainfall so you know it is safe to build or grow a crop there?

Study of flooding risks in Canada did not address issue of non riverine flood risks.

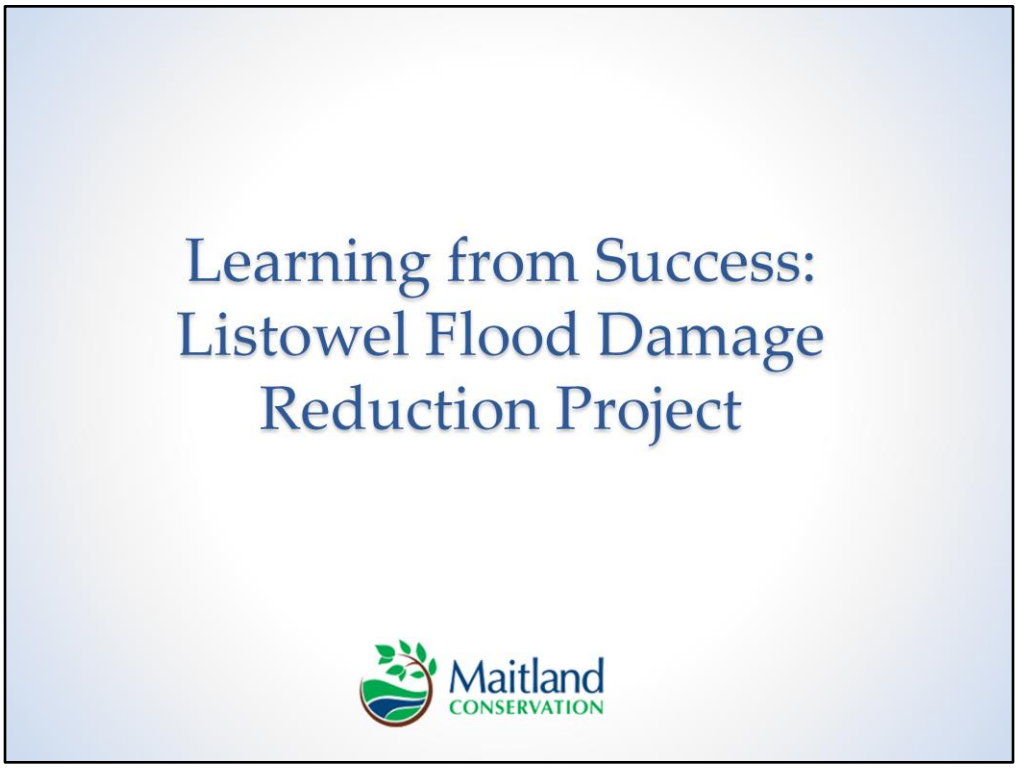


This slide illustrates the land that is and will be affected by gully erosion if no storm water management system is put in place. Red lines show development at risk from shoreline/bluff collapse.

There are 66 large gully watersheds along the Lake Huron Shoreline and 64 smaller gullies that are not large enough to show up on our maps. $366 million dollars worth of land/development located in areas at risk from shoreline erosion, bluff collapse, gully erosion along 50km stretch of shoreline within MVCA's area of jurisdiction.

Picture of some of the damage caused by the runoff from the June 23rd storm event because of flow of water from outside gully watershed.

Although urban areas have a greater density of people who are at risk, all Ontarians/Canadian deserve to know their flood risk and have it mitigated where it is feasible to do so; resources need to be allocated so that rural Ontario is included. Given the difficulty of comparing flood mitigation projects in the city to the country, it is important that rural communities across Canada can participate in the program.



The Listowel Flood Control Project: The project was completed with 85% grant dollars from the Provincial government in. This project started in the late 1970's and wasn't completed until the early 1990's.

Listowel literally settled “on top” of the river. The red dotted lines show where the river use to flow prior to settlement. In the current aerial photograph, you can’t see the river as it is buried under the town.

Over the years many schemes had been suggested to reduce the level of flooding. Both the 1954 and 1967 Maitland Valley conservation reports recommended that the Listowel conduit be reconstructed. In 1973, the Maitland Valley conservation authority undertook a study of flood control possibilities for the town of Listowel. The report was completed 2 years later.

Many different options were considered to reduce the flood threat in Listowel. The planning process occurred in a similar fashion to the current day “Environmental Assessment Process”. There needed to be a balance between the local economy, impacted residents, risk reduction and overall cost. The replacement of the conduit was recommended because it involved the least cost and it would include structural repair of the conduit to allow economic development to continue in the downtown core.

In 1977, four years after the study began, construction started on the first phase.

In the top of this photo you can see the channelization work that was done on the downstream side of Listowel to allow flood waters to quickly “get away” from the urban core. Often we talk about the need to slow water down to reduce flooding, but in this case it is important to quickly and safely move water through Listowel.

Buildings over the conduit were removed and the conduit was reconstructed to handle the 100 year flood. This meant that the flood risk went from a 15% chance of it happening in any year to a 1% chance.

The added bonus was that some of the existing buildings were heavily deteriorated due to water damage; the reconstruction was a revitalization of the urban core.

The removal and replacement of existing buildings during construction added to the overall length of the project. The legal and procedural process cannot be rushed. It is expected that any similar project in an urban area would also have the same time constraint issues.

The construction was done in 8 phases and it was finished in 1991. Construction took 12 years to complete. From the launch of the major planning stage, it took 18 years to complete. By their very nature, projects like this cannot be done quickly.

As a result of the mitigation works, a storm that use to cause this……

Now would look like this……no flooding on the streets.

The original construction cost of the Listowel Conduit was $10 million and it has a replacement value of about $30 million in today's dollars. However, it serves to protect about $30 million dollars worth of assessed land. You also need to including the value of small businesses that can now operate in the urban core without a constant flood threat.

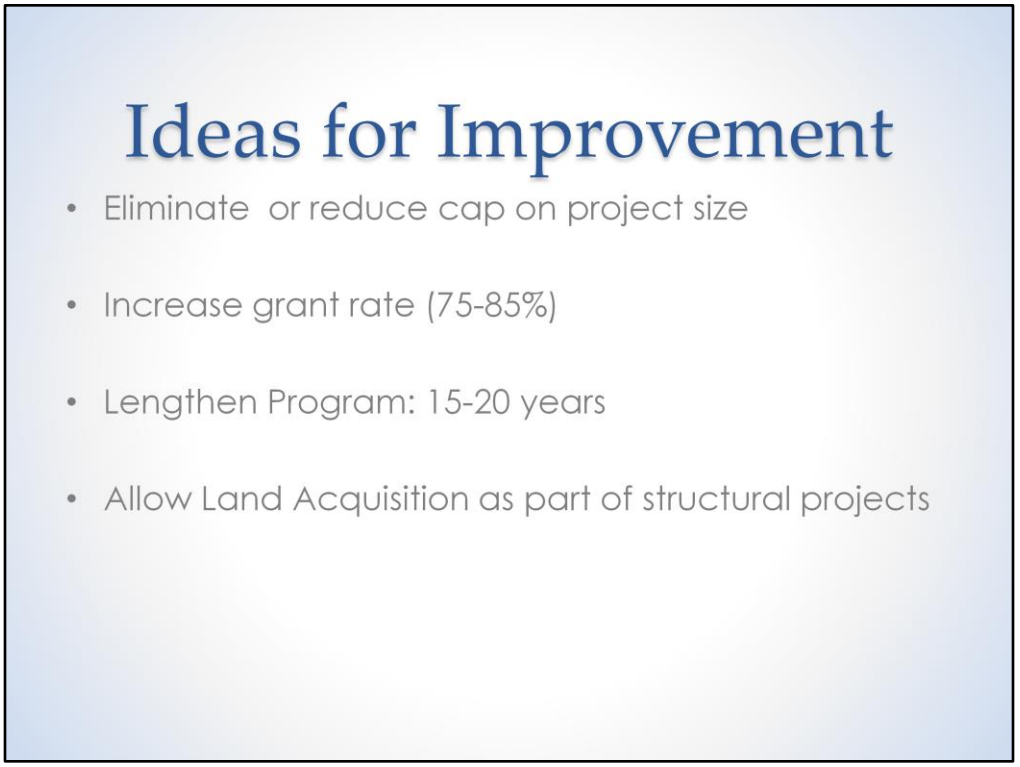
It is a great success story of dramatically reducing the annual flood risk while allowing economic prosperity to continue in a small town.

The benefit of the Listowel conduit can be demonstrated in this photo.

Imagine 4 feet 6 inches of flood water in the main street, like in the 1948 flood, before the conduit was improved.

The smaller cars would be covered and the larger cars would only have 6 inches to 12 inches visible. The water would be above the counter tops in all the shops and virtually all the merchandise would be destroyed. The interiors of all the buildings would need to be gutted, dried out, and redone to prevent mold and mildew growth. The interiors would also likely be contaminated with sewage. All the furnaces, hot water heaters and many electric components would also need to be replaced. In short, the entire downtown core would be crippled. There is not just the damage to the building and contents, but the damage to the small businesses that may be out of operation for several months or even years.

Although it is possible that there will be a flood that will exceed the capacity of improved conduit, it dramatically reduces the flood risk to the town.



Support projects that are smaller than $20million

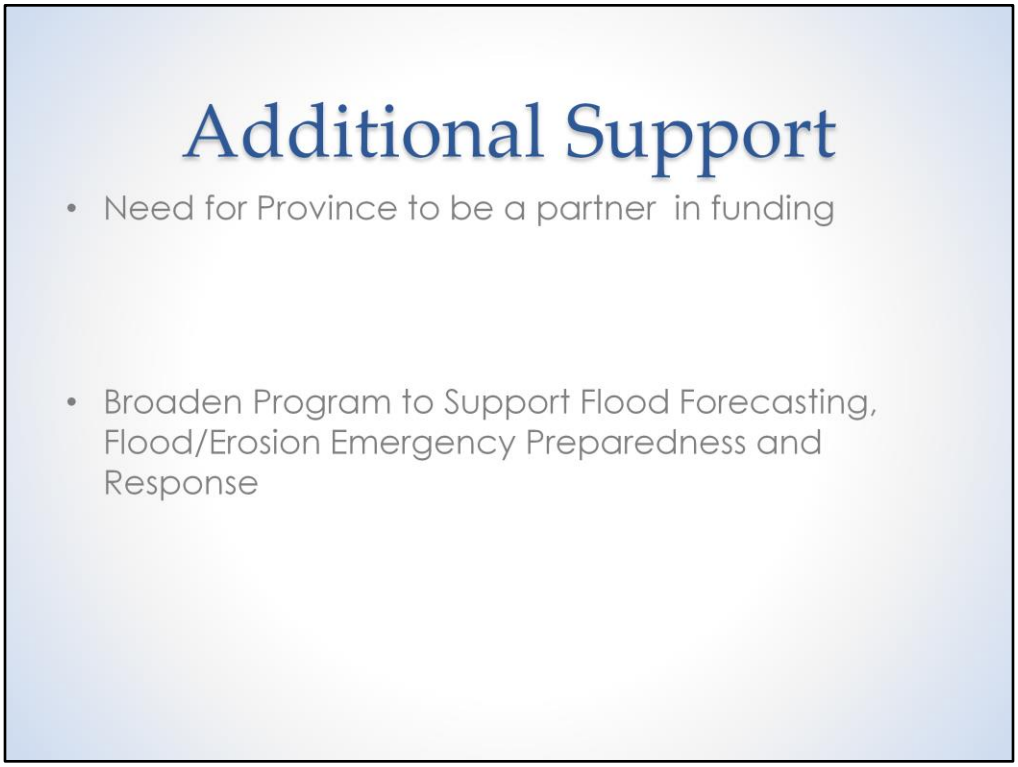
Increase the grant rate so that rural communities can afford to participate

Lengthen the program: Projects can take a long time to evaluate the risks, select the best option, design and implement.

Allow land acquisition for structural projects. Sometimes need to purchase land/homes to build dikes/widen channels or build bigger bridges. Rebuilding on top of the river is not always the best option.

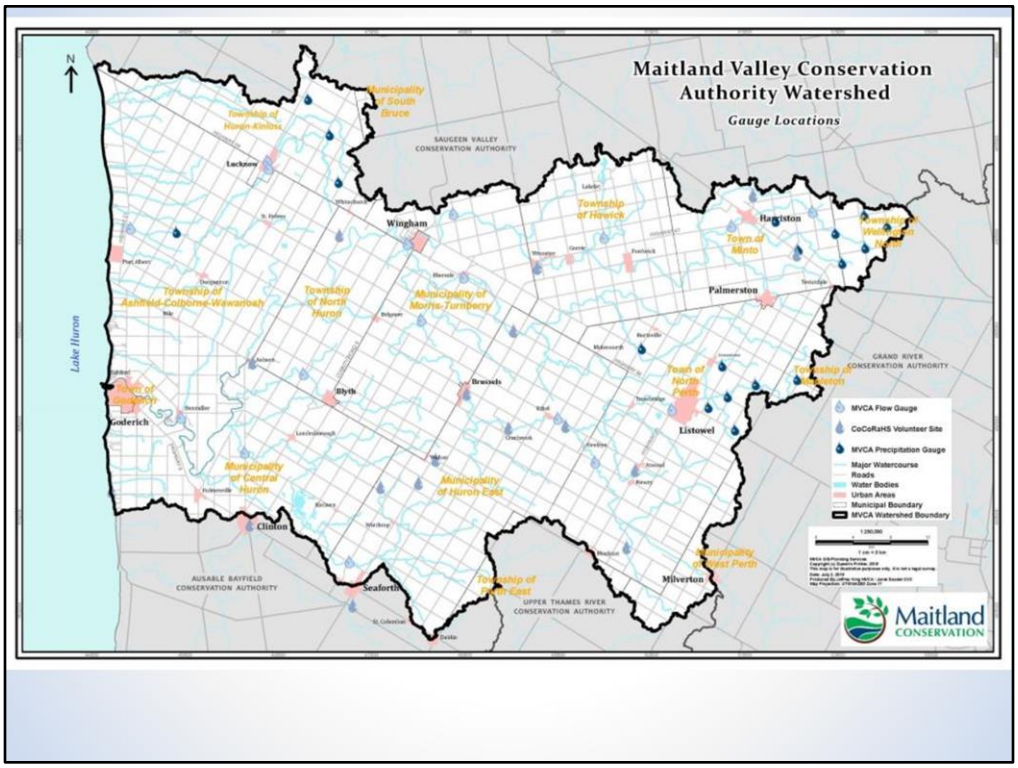
Additions to Program

- Finalize flood risk standards for riverine areas
- Develop flood risk standards for non riverine areas that are susceptible to flooding
- Update standards for erosion risks along the Great Lakes shoreline
- Support updated flood/erosion risk mapping



Need the Province to be a partner in any program as they have responsibilities as well.

Broaden Program: Won't be able to mitigate all flood prone areas. So need to invest in improving forecasting, emergency preparedness and response.
The Federal Government, Province and conservation authorities have a partnership with Environment Canada to install equipment, develop rating curves monitor stream flows, access weather information and utilize NOAA satellites to obtain data.
However our flood forecasting system also needs up to date flood plain mapping in order to develop accurate flood progression mapping for municipalities to use to develop emergency response plans.



Maitland Valley uses data from 16 stream gauges and 32 rain gauges to provide emergency responders with technical information about the timing and magnitude of expected flooding. All told, there is $500,000 worth of flood forecasting equipment and software to maintain.

Our records show that flooding can occur at any time of year. Often people think of flooding as a spring phenomena, however, intense thunderstorms can result in rapid and devastating flooding in the middle of the summer. Our flood forecast system is operated 24 hours a day 365 days a year to help keep residents and visitors safe.

In rural areas we are not going to be able to mitigate all flooding especially to roads. So providing warning to municipalities will allow them to notify residents and barricade roads to reduce the risk of loss of life is essential.

Where do we go from Here?

- Follow up Actions that we should take

NOTICE OF RECEIPT OF COMPLETE APPLICATION AND PUBLIC MEETING CONCERNING PROPOSED ZONING BY-LAW AMENDMENT

TAKE NOTICE that the Council of the Corporation of the Municipality of North Perth will hold a public meeting on **October 29th, 2018** at 7:00 p.m. in the Council Chambers at the Municipality of North Perth Municipal Offices (330 Wallace Avenue North, Listowel) to consider an amendment to the Municipality of North Perth Zoning By-law. The proposed amendment is being considered pursuant to the provisions of the Ontario Planning Act.

The proposed amendment to the North Perth Zoning By-law No. 6-ZB-1999 has been initiated by the Municipality and will replace a provision of the 'Residential Five Zone (R5)'.

The proposed amendment affects various lands throughout the Municipality.

Section 11 – Residential Zone Five (R5) will be amended to include the following:

i. Section 11.2A.2 **Lot Frontage, Minimum**

(a) Interior Lot	7 m (23 ft.)
(b) Corner Lot	13 m (43 ft.)

If approved, the minimum lot frontage for one dwelling unit of a street front townhouse dwelling on an interior lot will be changed from 10 metres (32 feet) to 7 metres (23 feet) to maintain consistent provisions throughout the R5 zone and to support cost effective development patterns and standards to minimize land consumption and servicing costs. The requirements for corner lots are unchanged.

ANY PERSON may attend the public meeting and/or make written or verbal representation either in support of or in opposition to the proposed Zoning By-law Amendment.

If a person or public body would otherwise have an ability to appeal the decision of the Municipality of North Perth Council to the Local Planning Appeal Tribunal but the person or public body does not make oral submissions at a public meeting or make written submissions to the Municipality of North Perth before the by-law is passed, the person or public body is not entitled to appeal the decision.

If a person or public body does not make oral submissions at a public meeting, or make written submissions to the Municipality of North Perth before the by-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Local Planning Appeal Tribunal unless, in the opinion of the Tribunal, there are reasonable grounds to do so.

ADDITIONAL INFORMATION relating to the proposed Zoning By-law Amendment is available for inspection during office hours at the Municipality of North Perth offices.

DATED AT THE MUNICIPALITY OF NORTH PERTH THIS 2nd DAY OF OCTOBER, 2018.

Patricia Berfelz, Clerk, Municipality of North Perth, 330 Wallace Ave North, Listowel ON N4W 1L3
Telephone: (519) 292-2062, Email: pberfelz@northperth.ca

OFFICE OF THE MAYOR
CITY OF HAMILTON

October 9, 2018

The Right Honourable Justin Trudeau
Prime Minister of Canada
House of Commons
Ottawa, ON K1A 0A6

Dear Prime Minister Trudeau,

Re: NAFTA – Dairy Supply Management Program

At its meeting of September 26, 2018 City Council supported the attached resolution from the Township of Amaranth respecting the above matter.

Sincerely,

Mayor Fred Eisenberger

cc Honourable Doug Ford, Premier of Ontario
Honourable Chrystia Freeland, Minister of International Affairs
Honourable Ernie Hardeman, Minister of Agriculture, Food and Rural Affairs
Honourable Sylvia Jones, MPP, Dufferin - Caledon
Honourable David Tilson, MP, Dufferin – Caledon
Mr. Bill McCutcheon, Dufferin Federation of Agriculture
Mr. Gord Grant, Ontario Federation of Agriculture
Ms. Susan M. Stone, CAO/Clerk-Treasurer, Township of Amaranth
The Association of Municipalities of Ontario
Via E-mail - All Ontario Municipalities

File C18-018
(5.1)

71 MAIN STREET WEST, 2ND FLOOR, HAMILTON, ONTARIO L8P 4Y5 PHONE 905.546.4200 FAX: 905.546.2340

BEN RYZEBOL, Director of Public Works
PUBLIC WORKS - TELEPHONE: (519) 941-1065
FAX: (519) 941-1802
email: bryzebol@amaranth.ca

SUSAN M. STONE, C.A.O./Clerk-Treasurer
TELEPHONE: (519) 941-1007
FAX: (519) 941-1802
email: suestone@amaranth-eastgary.ca

TOWNSHIP OF AMARANTH

374028 6TH LINE, AMARANTH, ONTARIO
L9W 0M6

August 30, 2018

The Right Honourable Justin P.J. Trudeau
Prime Minister of Canada
House of Commons
Ottawa ON K1A 0A6

Dear Prime Minister Trudeau,

Re: NAFTA – Dairy Supply Management Program

At the regular meeting of Council held August 29, 2018, the following resolution was carried:

Moved by H. Foster – Seconded by C. Gerrits

Be it Resolved That:
WHEREAS it appears that Mexico and the U.S.A have come to an agreement on trade terms and now intense scrutiny is on Canada as our negotiators attempt to come to an agreement as well, and our Dairy Management system is once more front and centre in the news;

WHEREAS supply management means that our Canadian dairy farms produce enough milk for Canadians and Canada allows 10% import of tariff free dairy products and the U.S.A caps tariff free imports at about 2.75%, so the U.S.A also protects their dairy industry;

WHEREAS we want our dairy products to continue to be produced on Canadian farms, under the strictest animal welfare, milk quality and food safety standards in the world;

NOW THEREFORE the Township of Amaranth, as a predominantly farming community, urge the Federal Government to not allow a foreign party to interfere with our Dairy Management System and that it be removed from all North American Free Trade Agreement (NAFTA) negotiations;

BEN RYZEBOL, Director of Public Works
PUBLIC WORKS - TELEPHONE: (519) 941-1065
FAX: (519) 941-1802
email: bryzebol@amaranth.ca

SUSAN M. STONE, C.A.O./Clerk-Treasurer
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email: suestone@amaranth-eastgary.ca

TOWNSHIP OF AMARANTH

374028 6TH LINE, AMARANTH, ONTARIO
L9W 0M6

AND FURTHER THAT this resolution be sent to the Prime Minister, Dufferin-Caledon, MP and MPP, the Association of Municipalities of Ontario, Minister of International Affairs, Premier of Ontario, Ontario Ministry of Agriculture Food and Rural Affairs, Dufferin Federation of Agriculture, Ontario Federation Agriculture and all municipal councils within Ontario.

Should you require anything further please do not hesitate to contact this office.

Yours truly,

Susan M. Stone

Susan M. Stone, A.M.C.T.
CAO/Clerk-Treasurer
Township of Amaranth

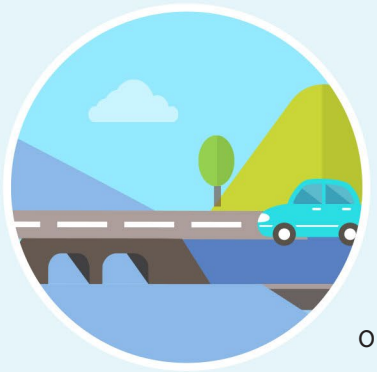
SMS/ch

The Federal Gas Tax Fund

2017 Annual Report – Part I

Association of Municipalities Ontario

Investments of the federal Gas Tax Fund supported the:



Construction, rehabilitation or replacement of nearly **3,000 lane-km** of local roads – enough to drive from Thunder Bay to Ottawa and back.

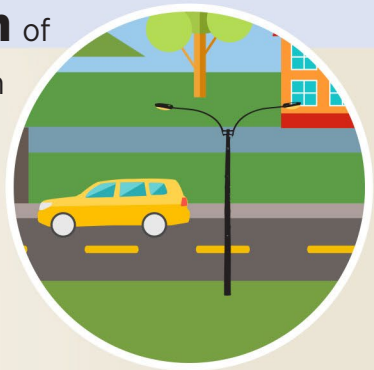
Purchase of **51 new public transit vehicles** and refurbishment or replacement of an additional **148**.

Development renovation or upgrade of **20 playgrounds**, **11 community centres** and **10 arenas** serving over **185,000 Ontarians**.

Construction, rehabilitation or replacement of more than **16 km** of sanitary and storm sewers servicing over **3,000 residents**.

Construction, rehabilitation or replacement of more than **28 km** of watermains, delivering clean water to more than **6,000 residents** and extending fire protection to **102 properties**.

Installation of energy-efficient retrofits in **32 municipal buildings** and **10,722 energy-efficient LED streetlights**, saving **7 GWh** of energy – enough to power over **700 houses** for a year.



See Appendix A for more project results reported in 2017.

Letter from the AMO President

September 28, 2018

Ontario's municipalities own much of Ontario's public infrastructure. This includes the roads, bridges and public transit systems that are essential to local productivity, recycling centres that divert waste from landfill, recreation facilities that help keep people active, and much, much more. It takes funding from all levels of government to ensure that this critical infrastructure is safe and up-to-date. The federal Gas Tax Fund provides permanent, dedicated funding to help municipal governments carry on that important work.

In 2017, Ontario's municipal governments, excluding the City of Toronto, invested $607 million from the federal Gas Tax Fund, which supported 1,165 local infrastructure and capacity-building projects worth a combined $3.1 billion. This significant investment is helping to grow local economies, promote a cleaner environment and build stronger cities and communities across Ontario.

How can we track the measurable benefits of federal investment in local infrastructure? When a municipality uses the federal Gas Tax Fund, they must report back to AMO on the specific outcomes that each project generates. For example, communities reported that investment in LED streetlight installations and building upgrades in 2017 saved enough energy to power over 700 houses for one year. Profiles of individual projects, including the benefits they produce, are evident throughout the report. A summary of benefits generated by projects completed in 2017 can be found in Appendix A.

In addition to tracking our progress, AMO shares the local benefits of the Fund with Canadians by completing communications initiatives throughout the year. AMO works directly with municipal governments to produce videos, share information through social media and more. You can learn more about these initiatives on page 19.

AMO has administered the federal Gas Tax Fund for more than a decade. Unlike most other infrastructure funding programs, the Fund is distributed on a per capita basis, without the need for an application. This successful administration model helps municipalities identify and fund local priority projects. It's a model that I'm particularly proud of.

Sincerely,

Jamie McGarvey
AMO President

Table of Contents

This report describes how Ontario's communities invested and benefited from the federal Gas Tax Fund in 2017. The report is split into two parts. Part I summarizes investments, benefits, and AMO's approach to the administration of the Fund. Part II provides detailed financial information, compliance statements, and descriptions of projects supported by the Fund.

Both parts of this report are available at **www.amo.on.ca** and **www.gastaxatwork.ca**.

The Federal Gas Tax Fund

About the Federal Gas Tax Fund

The federal Gas Tax Fund provides permanent and stable federal funding for local infrastructure projects. Canadian municipalities receive over $2 billion from the Fund each year. Ontario's communities received $782 million in 2017.

Federal Gas Tax funds can be used flexibly to address local priorities. Municipalities can invest funds in the construction, enhancement or renewal of local infrastructure, improve long-term plans and asset management systems, or bank funds to support future projects.

Investing the Fund advances national objectives. Funds can be invested across 17 project categories to promote economic growth, strengthen communities, and improve the environment. Eligible project categories are listed below.[1]

Productivity and Economic Growth	Clean Environment	Strong Cities and Communities
Broadband Connectivity	Brownfield Redevelopment	Capacity Building
Local Roads and Bridges	Community Energy Systems	Culture
Public Transit	Drinking Water	Disaster Mitigation
Regional and Local Airports	Solid Waste	Recreation
Short-Line Rail	Wastewater	Sport
Short-Sea Shipping		Tourism

Rehabilitation of Black Bridge in the Town of the Blue Mountains.

Replacement of Play Structures in the City of Cambridge.

[1] Highways are also eligible under the federal Gas Tax Fund, but are not listed in the table above because highways are provincially owned and maintained in Ontario.

The Federal Gas Tax Fund in Ontario

The flexibility of the federal Gas Tax Fund allows each province and territory to have its own agreement with the federal government. Under the Ontario Agreement (the Agreement), the provincial allocation flows directly to municipalities on a per capita basis. Allocations are distributed in two semi-annual installments in July and November.

Predictable, up-front funding from the federal Gas Tax Fund allows municipal governments to identify and fund local priority projects and plan for the long term. The Ontario model recognizes that municipalities are a duly elected, accountable and transparent order of government.

In total, Ontario's municipalities will receive $3.8 billion from the Fund for 2014-18. AMO facilitates the distribution of approximately $3.1 billion. AMO transferred almost $620 million from the Fund in 2017 alone.[2] The annual allocation that each municipality receives is contained in Part II of this report.

An additional $10.9 million in federal funding was transferred directly by AMO to Ontario's municipalities in April 2017. These funds were announced in the federal government's 2016 budget and comprise uncommitted funds from legacy federal infrastructure programs.

Municipalities may use the funds:

- Towards the full cost of an eligible project;
- To support an eligible project that benefits from other funding sources;
- To save and/or invest for future eligible projects;
- To finance long-term debt for eligible projects;
- To accrue interest which can be applied towards eligible projects;
- To develop and implement asset management plans, and;
- To collaborate with other municipalities or non-municipal entities to fund an eligible project.

Kiwanis Park Pool Renovation in the City of Kitchener.

[2] AMO administers the Fund to all municipalities in Ontario except for the City of Toronto. All subsequent references to communities, municipalities and local governments in this report are exclusive of the City of Toronto unless otherwise noted.

The Township of Wellesley's Manser Road Paving Project

LOCAL ROADS

Manser Road runs directly north and south through the Township of Wellesley. It is used by heavy trucks from local industry and also serves as a bypass route from Woodstock to Alliston. The Township replaced a gravel stretch of Manser Road with hard asphalt. Paving this road has enhanced traffic flow, reduced dust and resulted in less ongoing maintenance. With the previous gravel road, the municipality had to apply chemicals in the summer to keep dust levels low. The freshly paved surface allows for a faster, smoother ride for all drivers.

Project Results:

- 5.6 lane-km of gravel roads converted to paved roads
- Average vehicle traffic speed increased by 10 kph during peak hours (from 70 to 80 kph)

Municipality of North Perth's Steve Kerr Memorial Complex

RECREATION

The brand-new Steve Kerr Memorial Complex officially opened in November 2017. The new facility replaced the older Listowel Memorial Arena to better meet local needs and includes an ice arena, community hall, indoor track and more. In addition to a place to improve on health and fitness, it has become a community gathering place. Modern, up-to-date recreation facilities play an important role in helping communities attract and retain residents and keep the community vibrant and healthy.

Project Results:

- 5,000 residents with access to new recreation infrastructure

Construction of a Sewage Lift Station at Van Horne Ave and Wabigoon Dr

Dryden is building new wastewater infrastructure to prevent flooding and sewer back-ups. The new sewage lift station serves two subdivisions and raises pumping capacity from 27 L/s to 165 L/s - helping local residents keep dry during heavy rains.

Reconstruction of East King St and Wellington St

Sioux Lookout is improving access to the downtown core and promoting active transportation. Portions of East King St and Wellington St - both essential routes to the core - were rehabilitated, sidewalks were replaced, and bicycle lanes were installed.

Installation of a Splash Pad and Updated Recreation Equipment at Centennial Park

Red Lake is creating new opportunities for children to exercise and play. Centennial Park's new splash pad is the first in the area and attracts families from across the region. The installation of modern playground equipment gives kids of all abilities a place to play.

Replacement of a Watermain on Oxford St

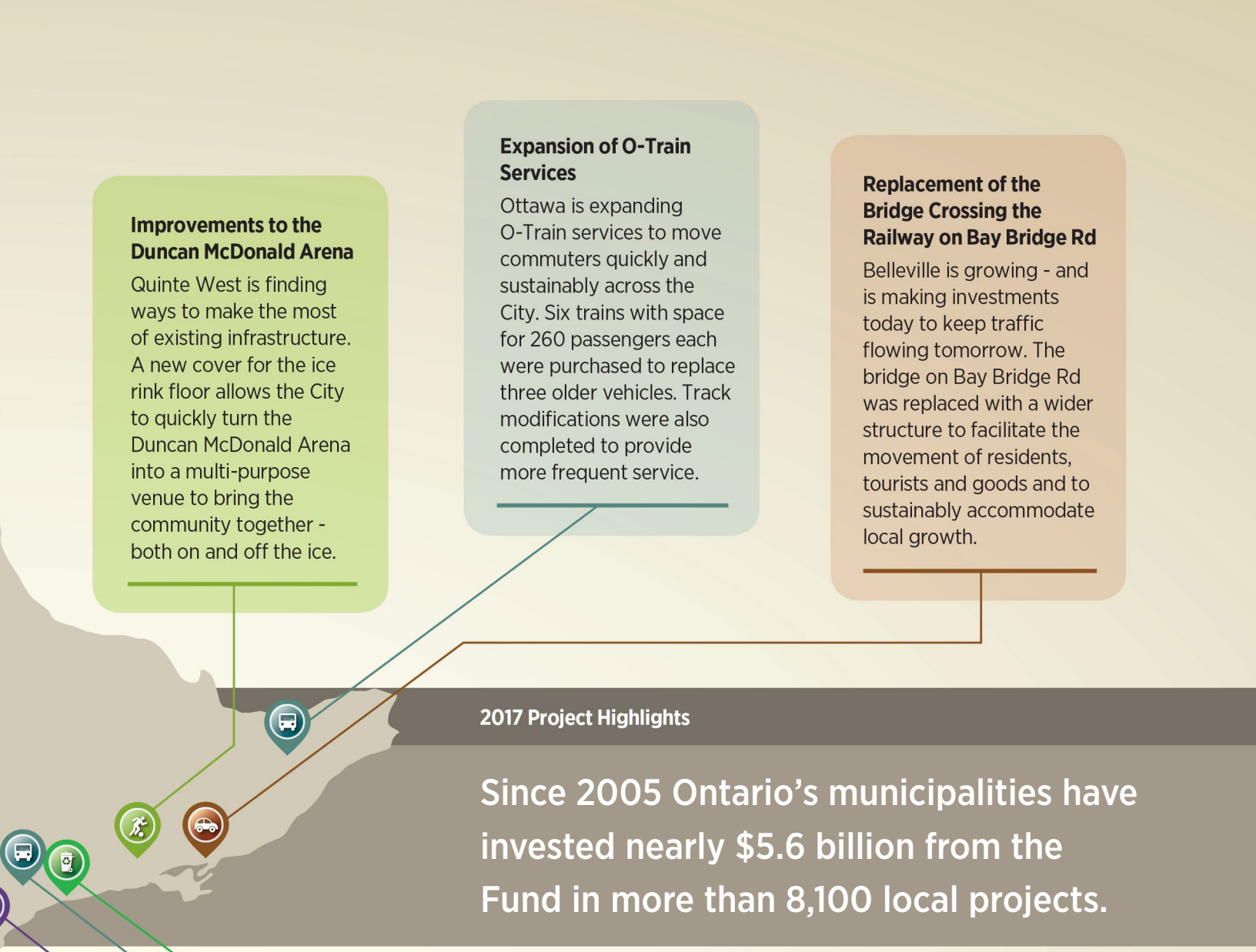
Stratford is replacing aging infrastructure to deliver reliable and safe water to local residents. Over 400 m of watermain beneath Oxford St were replaced to provide steady service to nearly 1,000 residents.

Remediation of Centennial Park

Sarnia is creating clean and safe spaces along the City's scenic waterfront. Over five hectares of Centennial Park - located on former industrial lands - were remediated to remove contaminants seeping through the soil. Additional revitalization initiatives are underway.

Installation of Energy-Efficient LED Streetlights

Norfolk County is cutting energy consumption - and operating expenditures - by converting streetlights from traditional lighting fixtures to energy-efficient LED fixtures. Over 4,000 streetlights were installed with energy savings exceeding 50% per year.



2017 Project Highlights

Since 2005 Ontario's municipalities have invested nearly $5.6 billion from the Fund in more than 8,100 local projects.

Improvements to the Duncan McDonald Arena

Quinte West is finding ways to make the most of existing infrastructure. A new cover for the ice rink floor allows the City to quickly turn the Duncan McDonald Arena into a multi-purpose venue to bring the community together - both on and off the ice.

Expansion of O-Train Services

Ottawa is expanding O-Train services to move commuters quickly and sustainably across the City. Six trains with space for 260 passengers each were purchased to replace three older vehicles. Track modifications were also completed to provide more frequent service.

Replacement of the Bridge Crossing the Railway on Bay Bridge Rd

Belleville is growing - and is making investments today to keep traffic flowing tomorrow. The bridge on Bay Bridge Rd was replaced with a wider structure to facilitate the movement of residents, tourists and goods and to sustainably accommodate local growth.

Upgrades to the Oakville South West Wastewater Treatment Plant

Halton Region is protecting the local environment - and the residents that rely on it - by expanding wastewater treatment capacity. The Region's upgrades reduce the risk of bypass events and help keep nearby watersheds clean.

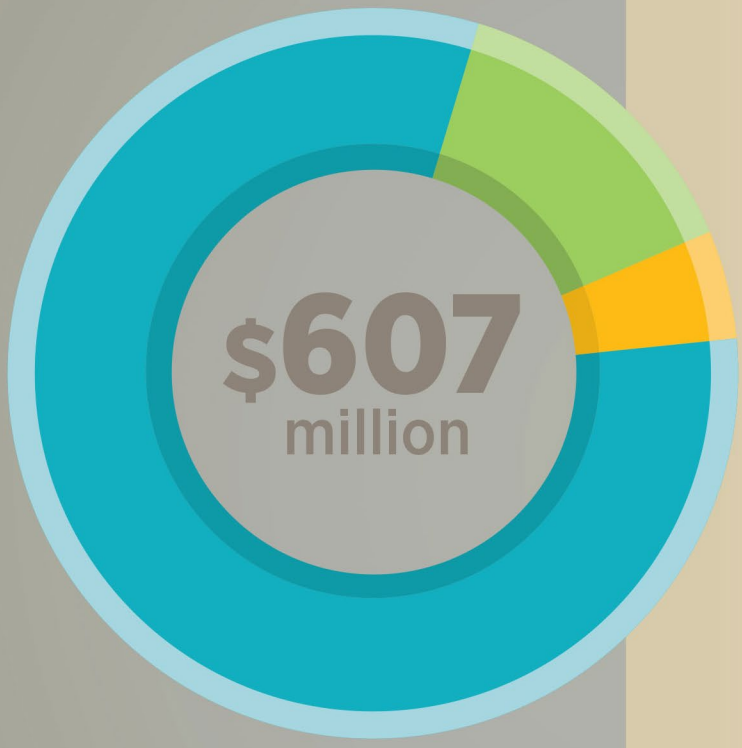
Development and Implementation of a Mobile Fare Payment App

York Region is making it easier to take public transit. The Region's mobile fare payment system is Canada's first and has already helped more than 17,000 users enjoy a convenient and sustainable commute.

Construction of the Durham York Energy Centre

Durham Region is partnering with York Region to create energy from waste. The Durham York Energy Centre can process up to 140,000 tonnes of residential garbage each year to generate enough energy to power approximately 10,000 houses.

Investment
in 2017



Productivity and Economic Growth

Local Roads and Bridges	$373.0 million
Public Transit	$118.8 million
Regional and Local Airports	$1.2 million
Short-line Rail	$0.2 million

Clean Environment

Recreation	$19.3 million
Capacity Building	$5.1 million
Disaster Mitigation	$1.9 million
Culture	$1.4 million
Sports	$0.7 million
Tourism	$0.6 million

Strong Cities and Communities

Wastewater	$29.2 million
Community Energy Systems	$21.1 million
Solid Waste	$20.4 million
Drinking Water	$13.2 million
Brownfield Redevelopment	$0.5 million

Investments of the Federal Gas Tax Fund

Safe, up-to-date infrastructure is an essential part of Canada's economic prosperity, long-term sustainability and quality of life. Municipal governments own and maintain much of the infrastructure that Ontarians rely on every day. This includes our vast network of local roads and bridges, public transit systems, drinking water and wastewater infrastructure, streetlights, parks and recreation facilities and much more.

It's no secret that Ontario's infrastructure is under pressure. Much of it was built more than 60 years ago. Some communities are working to build new infrastructure to meet the demands of a growing population. Others must address the challenges that come with an aging population and shrinking tax base. All communities must adapt to more extreme weather, which can put a strain on aging sewer systems and other infrastructure.

Municipal governments cannot rely on property taxes alone to meet local infrastructure needs. The federal Gas Tax Fund provides permanent, stable funding for local infrastructure, allowing municipal governments to meet local needs today and plan for growth and change over time.

The next few pages explain how the federal Gas Tax Fund was used in 2017 and how federal investment in our local infrastructure is helping to achieve increased productivity and economic growth, a cleaner environment and stronger cities and communities.

Rehabilitation of the Blackfriar Bridge in the City of London.

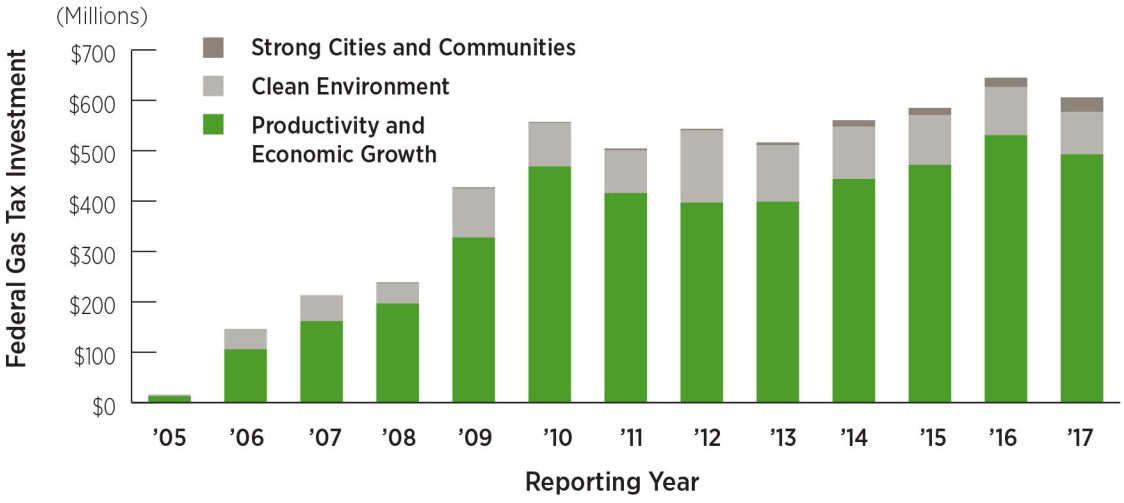
Investments

Ontario's municipalities invested $607 million from the federal Gas Tax Fund in 2017. This investment supported 1,165 local infrastructure and capacity-building projects worth $3.1 billion. Detailed project information is available in Part II of this report. Benefits generated by these projects are summarized in Appendix A.

Municipalities have invested nearly $5.6 billion from the Fund since its establishment in 2005. Federal Gas Tax funds supported 8,118 projects worth almost $16 billion in that time.

Federal Gas Tax investment is helping to grow local economies. Of the $607 million invested in 2017, 81% was invested in projects that support productivity and economic growth – a trend stretching back to the creation of the Fund in 2005 (Figure 1). Most of this investment – $373 million – was used to rehabilitate, widen, or extend local roads and bridges, reflecting the fact that road networks make up the majority of Ontario's municipal infrastructure. The renewal, upgrade and expansion of these networks continue to be a major need for most municipalities.

Figure 1: Federal Gas Tax Investment (2005-2017)

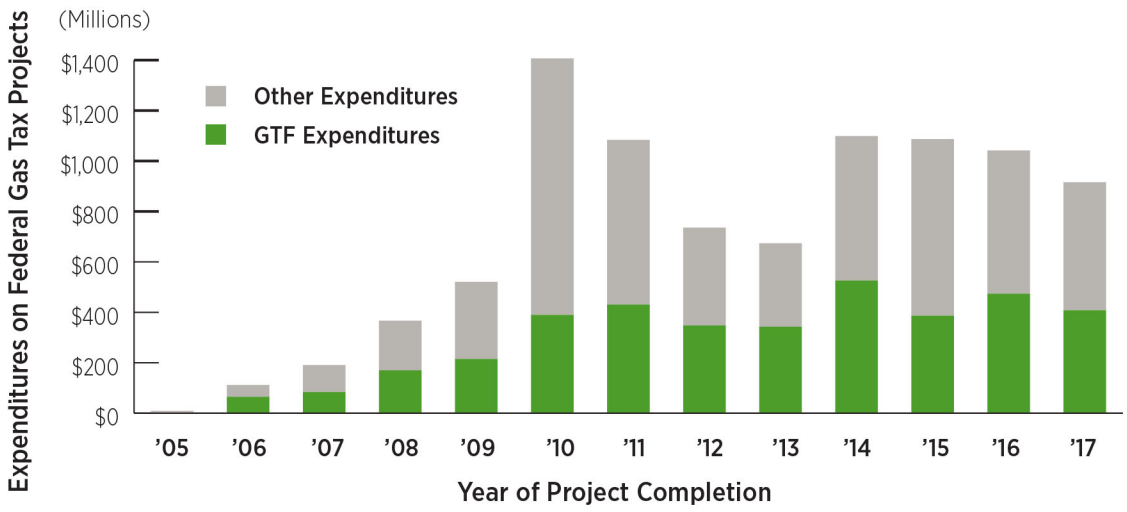


An additional 14% of the total investment was in infrastructure that directly promotes a cleaner environment, including pipes, sewers, energy-efficient retrofits, waste management, and more. Investment in capacity-building initiatives and culture, disaster mitigation, recreation, sports and tourism infrastructure make up the remaining 5% and is helping to build stronger cities and communities across Ontario.

As part of the annual reporting process, municipalities provide the total cost of each project supported by the federal Gas Tax Fund. This information allows AMO to calculate the funding leveraged for each project.

For every $100 of federal Gas Tax funds invested in projects completed prior to December 31, 2017, municipalities have invested an additional $141 from other funding sources. This amount varies slightly across projects, between categories, and over time (Figure 2). In 2017, municipalities completed 669 projects with the support of the Fund; on average, $124 was leveraged for every $100 of federal Gas Tax investment.

Figure 2: Federal Gas Tax Fund Leveraging (2015-2017)



Some of this leveraging can be credited to the Fund's incrementality requirement. The federal Gas Tax Fund is intended to complement, without replacing or displacing, existing funding for municipal infrastructure. Municipalities cannot use federal Gas Tax funds to reduce municipal taxes or offset municipal infrastructure investments.

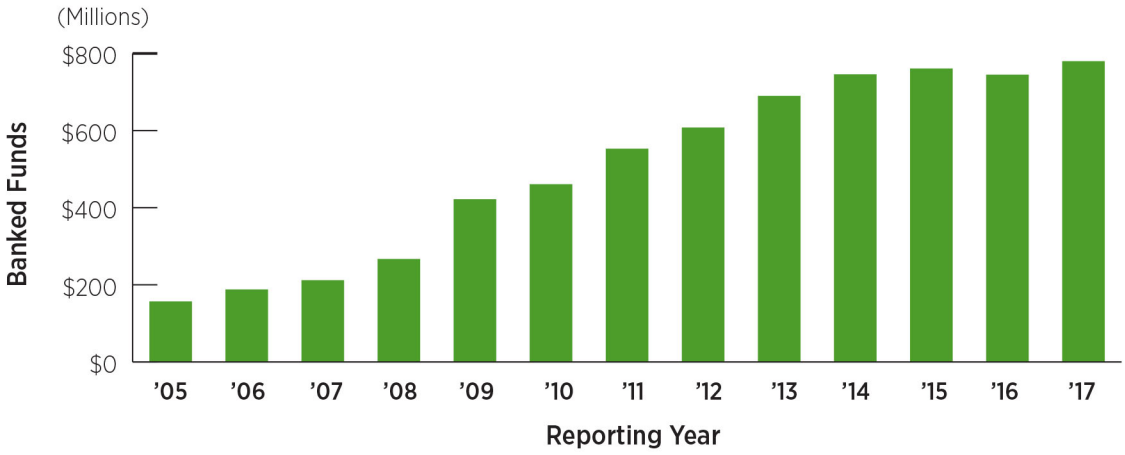
Ontario's communities have met this requirement by leveraging the Fund – and have consistently invested more in local infrastructure than they did prior to the creation of the Fund. Municipal capital investment averaged $5 billion per year in the five-year period leading up the establishment of the Fund and over $9 billion per year in the five-year period preceding this report.

Reserves

Municipalities are permitted to save unused federal Gas Tax Funds for up to five years. This practice means that the Fund has a larger impact on a municipality's ability to meet local infrastructure needs than funding delivered on a project-by-project basis. Banking funds gives municipalities the ability to plan for future infrastructure projects and smooths the impact of year-to-year fluctuations in other infrastructure funding. By the end of 2017, Ontario's municipalities had $780.8 million in federal Gas Tax reserves.

AMO's agreement with each municipality requires unused funds to be stored in interest-bearing accounts or investments. Banked funds are therefore earning interest, and interest revenues have increased with the amount of federal Gas Tax funds in reserves. Ontario's communities reported interest revenues of $13.4 million in 2017 – and have earned $125.9 million since 2005. Interest revenues are treated as federal Gas Tax funds and are reinvested in federal Gas Tax projects.

Figure 3: Federal Gas Tax Funds Held in Reserves (2015-2017)



Rehabilitation of Baybridge Road CPR Overhead Bridge in the City of Belleville.

Replacement of Red Cross Para Transit Bus in the Town of Collingwood.

Benefits of the Federal Gas Tax Fund

Measuring Benefits

By reporting on project results, municipal governments demonstrate how federal investment in local infrastructure is helping to meet the national objectives of increased productivity and economic growth, cleaner environment and stronger cities and communities.

AMO, in consultation with municipalities and with the approval of the Fund's Oversight Committee, developed a series of output and outcome indicators to measure the benefits of each infrastructure investment. Municipalities began reporting benefits generated by federal Gas Tax investments under these new indicators in the 2016 reporting year.

The 2018 Outcomes Report

AMO released an **Outcomes Report** detailing the results achieved by investments of the Fund made between April 2014 and December 2016. A copy of the report is available on our website at **www.amo.on.ca.**

Municipal governments completed over 2,000 projects worth a combined $2.7 billion with the support of the federal Gas Tax Fund during this time. Over $1.3 billion was financed by the Fund.

The Report details the ways in which infrastructure projects supported by the federal Gas Tax Fund delivered economic, environmental and community benefits across Ontario. Over 9,000 lane-km of local roads were rehabilitated or reconstructed – enough to drive from Kenora to Cornwall and back twice. LED streetlight installations and building upgrades saved enough energy to power over 2,400 houses for a year. Investments in recreation facilities encouraged an additional 1,200 residents to get active in fitness programs.

Significant progress was also made in asset management. Almost all municipalities now have an asset management plan covering at least core infrastructure, as described in the next section of this report. Communities primarily invest federal Gas Tax funds to maintain infrastructure in a state of good repair in alignment with these asset management plans.

Benefits Generated in 2017

Municipalities continued to rebuild roadways, install energy-saving retrofits, and improve recreation facilities in 2017. Benefits generated by projects completed in 2017 are summarized in Appendix A.

The Township of Sables-Spanish Rivers' Emiry Road Bridge Replacement

LOCAL ROADS

Emiry Road services local residents and agricultural businesses, including dairy farms, pick-your-own strawberry farms, and a pumpkin farm. The Emiry Road Bridge had been given a reduced load rating due to the deteriorating condition of the wooden structure. The wooden bridge was replaced with a new pre-engineered steel bridge. The new bridge provides better access for residents and agricultural businesses, which are integral to the local economy.

Project Results:

- 180 square metres of replaced bridge
- Average vehicle traffic speed increased by 10 kph during peak hours (from 60 to 70 kph)

Community Archives of Belleville and Hastings County

CULTURE

The Community Archives of Belleville and Hastings County preserves the community's history through the records of local governments, individuals, families, businesses, and organizations. The 5,000 square-feet accessible space is housed in the Belleville Public Library and has climate-controlled storage areas packed with high-density mobile shelving that offer lots of room to store future donations to the collection.

Hastings County residents can learn more about local history by attending outreach events led by the Archivist. The Community Archives also attracts tourists to the area with about 5% of visitors coming from out-of-town to learn more about their ancestors.

Project Results:

- Increase in number of cultural events held each year (from one event to seven events)
- 66% increase in number of residents participating in cultural activities (from 403 to 669)

Sector Progress in Asset Management

Challenges to Infrastructure Investment

Local infrastructure delivers the water that we drink, connects our families and communities, and brings us together for recreation and play. Much of this infrastructure is over half a century old and in need of upgrade or replacement – but funding is limited, our population is aging, and extreme weather events are increasingly common.

Municipal governments face myriad challenges in delivering services. And while some challenges affect all Ontarians, others are local. Communities with declining populations are expected to maintain a stable pool of infrastructure with a shrinking tax base; rapidly growing municipalities are expected to build new infrastructure to meet surging demand.

These pressures shape each community's approach to local infrastructure investment. Rapidly growing municipalities often turn to development charges and debt to expand services – but are left in the lurch when growth slows or fails to meet expectations. Declining municipalities tend to avoid debt, but rely on transfer payments from other levels of government to maintain infrastructure.

These trends are described in research completed in 2017. Learn more by reviewing the latest **report** on municipal infrastructure investment and financial sustainability. A copy of the report is available on our website at **www.amo.on.ca**.

Asset Management and Financial Sustainability

Communities can draw from a common toolkit to overcome their unique challenges. Strategic use of debt, for example, can ensure that we each pay for a fair share of the infrastructure that we use – now and in the future. Wise use of reserves can smooth year-to-year variations in the availability of funds. A coordinated approach to asset management can ensure that municipalities deliver appropriate levels of service to residents at a sustainable cost.

Asset management is, in fact, essential for financial sustainability. All municipalities manage their assets, of course, and have done so for years; asset management, as a practice, provides a means of managing assets in a structured way so that asset performance, costs, opportunities and risks are balanced with the provision of sustainable levels of service.

Asset Management and the Fund

The federal Gas Tax Fund provides critical support to advance municipal asset management practices. Local governments used $30 million from the Fund between 2014 and 2017 to develop asset management plans, collect data describing the condition of assets, and drive other capacity-building initiatives.

Use of the Fund is also subject to terms and conditions set out in the Agreement – which include requirements for the implementation of asset management systems. Communities were required to develop and implement asset management plans; they are now expected to use these plans to guide infrastructure planning and investment decisions. Municipalities must also demonstrate how federal Gas Tax funds are being invested in priority projects.

This guidance and support helped municipalities create and expand asset management plans. A little over half of Ontario's communities had an asset management plan in place by the end of 2013, and these plans typically covered only roads, bridges, pipes and sewers. By the end of 2017, all but one municipality had an asset management plan, and these plans often also covered facilities and other assets. **Research** commissioned by AMO confirms that some communities have more than doubled the scope of their asset management plans since 2013. Learn more by reviewing the research available on our website at **www.amo.on.ca**.

Recent Progress in the Development of Asset Management Systems

Communities are now focusing on the development of asset management systems. In response to AMO's 2017 questionnaire on asset management, prepared in consultation with AMO's asset management working group, municipalities indicated that they are training staff on best practices in asset management, creating governance structure for cross-departmental collaboration, and sharing resources with neighbouring municipalities.

AMO will continue to monitor the municipal sector's progress in the development of asset management systems as required under the Agreement. Research projects described above, along with questionnaires completed by municipalities in 2013 and 2016, are being used as a baseline to assess progress. AMO additionally collected all municipal asset management plans in 2017 and is currently reviewing these plans to identify gaps and determine training needs. AMO will use the insights gained to help municipal staff adopt international best practices and develop asset management systems aligned with their strategic plans.

Sharing Our Story

AMO works directly with the Government of Canada and municipal governments to ensure that Canadians can access information about how the federal Gas Tax Fund is invested in their communities.

AMO facilitates communications related to the federal Gas Tax Fund in several ways, including maintaining an up-to-date database of investment in Ontario, sharing information through social media, working directly with municipalities to share details about individual projects, and much more. The results of our efforts to share our story with Ontario residents, members of parliament and the media are detailed below.

Communications in 2017

News Releases and Media Events

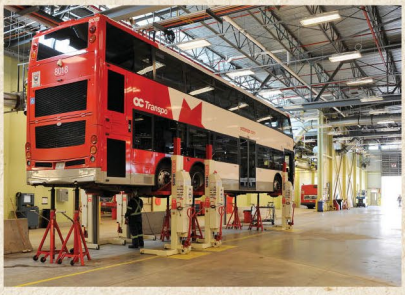
AMO works directly with municipal governments to spread the word about local investment of the federal Gas Tax Fund by issuing news releases and/or organizing media events to announce a local project milestone. In 2017, Infrastructure Canada, AMO and municipal governments worked together to issue 13 news releases and facilitate two media events. This work resulted in local media coverage that recognizes the importance of federal Gas Tax investment in community infrastructure.

Resurfacing of Whalen Line in the Municipality of South Huron

Making Headlines

Federal Gas Tax Fund helping the City of Ottawa provide more Accessible transit.

– Ottawa, Ontario | March 31, 2017



With support from the federal Gas Tax Fund, the City of Ottawa was able to replace Para Transpo's aging fleet of minibuses with 82 new vehicles. This important lifeline provides door-to-door transportation services for residents who are unable to use conventional buses.

Investing in public transit is key to connecting communities and providing the middle class with increased opportunities. Every day, Canadians count on accessible and efficient transit systems to get to work, visit loved ones and access community services. With support from the federal Gas Tax Fund, the City of Ottawa was able to replace Para Transpo's aging fleet of minibuses with 82 new vehicles. This important lifeline provides door-to-door transportation services for residents who are unable to use conventional buses.

Federal Gas Tax supports local road and capital projects in Simcoe County.

– County of Simcoe, | July 10, 2017

The County of Simcoe is pleased to announce that it will receive $8.4 million from the Government of Canada through the federal Gas Tax Fund (GTF) to support vital community projects in 2017.

Approximately $5.5 million of the GTF contributions will be applied to enhance nine road rehabilitation projects throughout the County, while $2.9 million will support two significant roads and transportation capital projects including the Wye River North Bridge Rehabilitation project and the reconstruction of County Road 17 from Severn Falls north to the Big Chute.

City of London receives $22.3 million investment from Federal Gas Tax fund.

– Global News | August 26, 2017

GTF funding supports hundreds of local infrastructure projects across Ontario each year. In July, the Government of Canada delivered the first of two annual $391 million GTF installments to Ontario.

The city will use some of their allocation to fund three important local infrastructure projects.

This includes $4.5 million for the rehabilitation of Veterans Memorial Parkway, $5 million for water and sewer replacement projects on Dundas Street, to be followed by road and sidewalk work, and $2.5 million for the installation of new water, road and pedestrian infrastructure on Byron Baseline. According to the city's media release, the Dundas Street and Byron Baseline projects will also have major enhancements in pedestrian infrastructure and bike lanes.

Caledon invests Federal Gas Tax funds in local infrastructure.

– Caledon News | October 29, 2017

The Town of Caledon is investing millions of dollars from federal gas tax funding into local infrastructure projects. In 2016 alone, over $2.3 million was spent to repair bridges, fix sidewalks and restore roads.

"It's good to know that when you fill up your gas tank, a portion of that money is helping to fund critical infrastructure, like roads and bridges, in our Town" said Mayor Allan Thompson. "I want to thank and recognize the efforts of our AMO municipal partners for a successful advocacy campaign which resulted in this funding."

First phase of Colborne Street construction to be completed by end of year.

– The Wellington Advisor
September 12, 2017

The reconstruction of Colborne Street from Geddes Street North to Queen Street is underway now and will bring significant improvements to historic downtown Elora, officials say.

With support from the federal Gas Tax Fund, work on Colborne Street will include: - replacement of the water main, sanitary sewers and storm sewers, new concrete curbs and gutters and asphalt paving of the street;

- on-street parking, traffic calming measures, new concrete sidewalks and decorative heritage style street lighting improvements; and

- parking and sidewalk layout that will be arranged to accommodate a large existing ash tree which is undergoing treatment for the emerald ash borer

Construction will be completed by the end of 2017 with the final layer of asphalt to be completed in 2018, township officials say.

The total cost of the project is $1,348,184 with $141,500 coming from the federal Gas Tax Fund.

Federal Gas Tax Fund and the Ontario Community Infrastructure Fund help improve water and sewer systems in Gananoque

– Town News | May 26, 2017

Up-to-date water and wastewater infrastructure is essential for safe drinking water and clean local waterways. With support from the federal Gas Tax Fund and the Ontario Community Infrastructure Fund, the Town of Gananoque has upgraded water, wastewater and storm water systems on Victoria Avenue.

Work on Victoria Avenue included replacement of a 100-year old water main and a 70-year old storm sewer system. The existing sanitary sewer and manholes were also replaced and the road was fully reconstructed.

Social Media

Like many organizations, AMO is focusing more and more on producing social media content to share information about the federal Gas Tax Fund and engage with people online through a dedicated Twitter account, @GasTaxatWork. AMO coordinates its efforts with Infrastructure Canada and individual municipal governments to maximize reach online and spread the word.

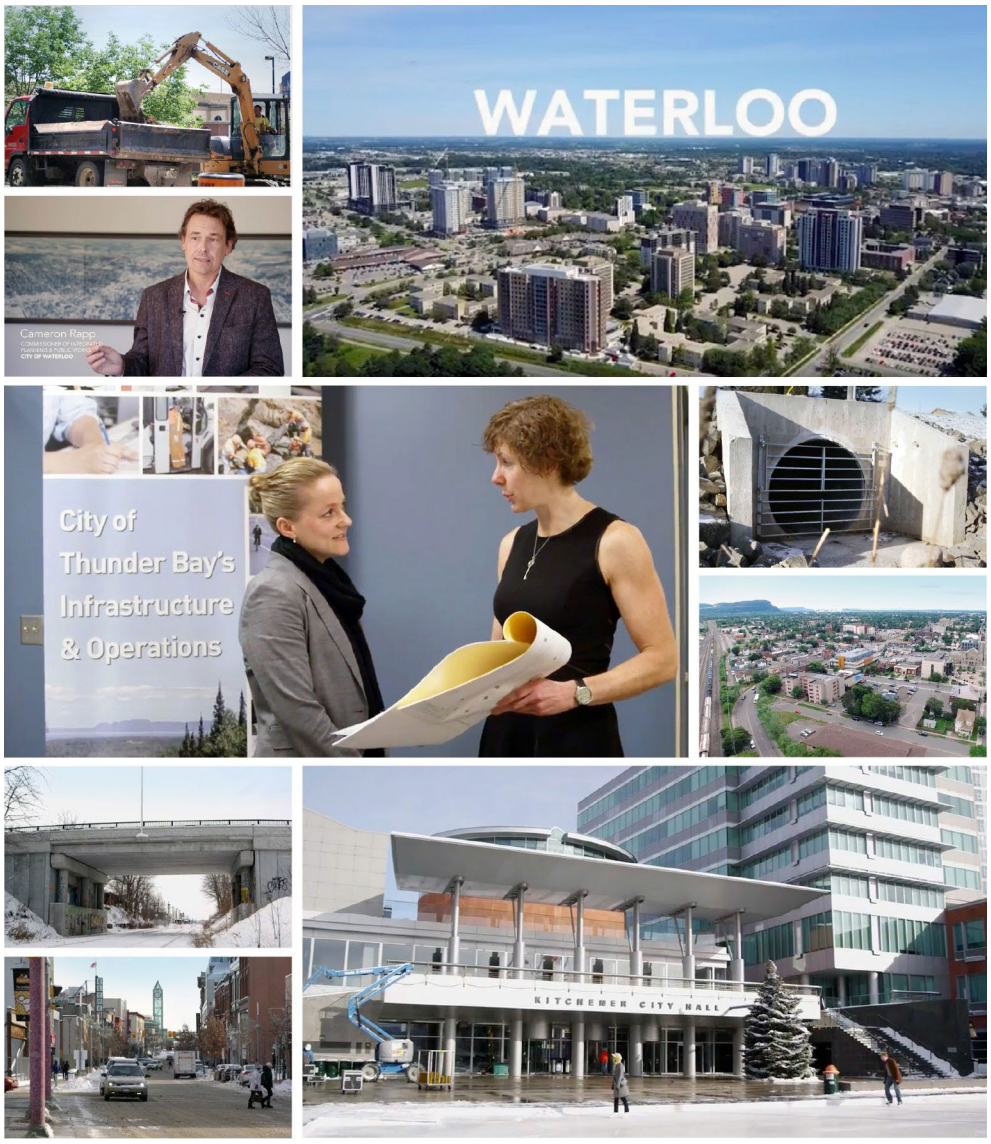
In 2017, @GasTaxinOntario earned:

933 **followers** | **241** **re-tweets, likes and replies** | **88** **link clicks**

Videos

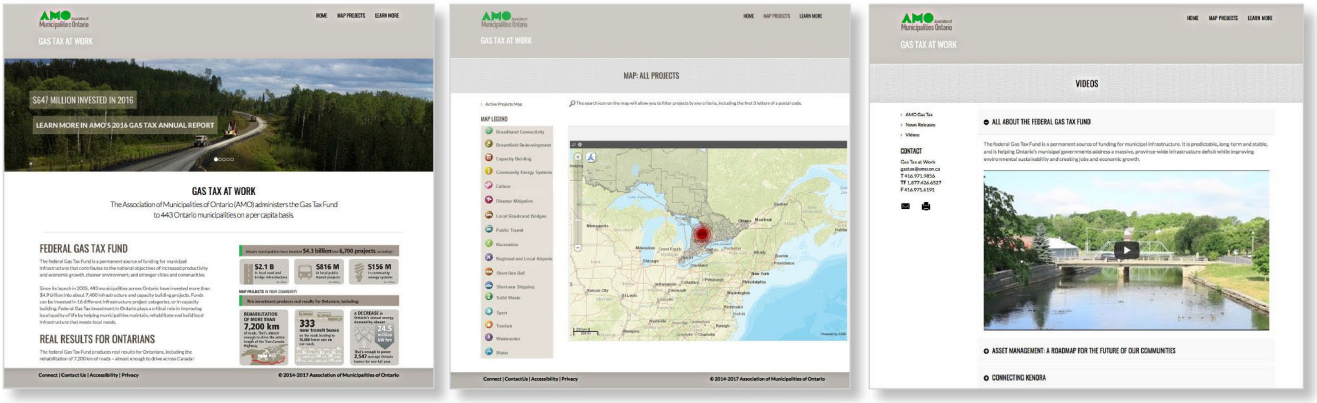
Audiences are consuming content through video more than ever before and AMO has been producing videos to share federal Gas Tax Fund stories since 2013. In 2017 **AMO produced four unique videos** to highlight infrastructure in six Ontario communities:

- The City of Waterloo's Asset Management System
- New Recycling Centre in the City of St. Thomas
- Kincardine's Leachate Treatment Facility
- Tracking our Progress: Reporting on Federal Gas Tax Fund Outcomes (featuring the City of Thunder Bay, the City of Kitchener, and North Frontenac Township)



Gas Tax at Work

AMO continues to maintain **www.gastaxatwork.ca** – an online database of federal Gas Tax project information. The unique mapping function gives users information about exactly where and how the Fund is invested in Ontario communities. The website also includes general information about the Fund as well as links to videos and news releases. A new website and mapping tool is expected to be launched in 2019.



Education

Part of AMO's role administering the federal Gas Tax Fund is to ensure that municipal governments have the information that they need to effectively report on local investment, including reporting on project outcomes. This serves as the foundation for AMO's work in sharing the local benefits of the Fund in communications across Ontario.

AMO shares program updates and other information directly through email, through the WatchFile (AMO's weekly e-newsletter), at municipal education forums, by producing videos and on-demand webinars and through social media. Program information and detailed reporting instructions are available 24-7 at **www.amo.on.ca**.

In 2017, AMO and Infrastructure Canada delivered a special education session at the AMO Conference in Ottawa. AMO also delivered presentations related to the Fund at conferences for the Canadian Network of Asset Managers (CNAM), the Municipal Finance Officers' Association (MFOA), and many local events across Ontario. AMO staff also participated in several knowledge-sharing sessions with Asset Management Ontario and the Federation of Canadian Municipalities.

Gas Tax Awards

AMO Gas Tax Awards are given out each year to municipal governments that demonstrate excellence in the use of the federal Gas Tax Fund. The Awards highlight infrastructure projects that make a difference in our communities by addressing local needs, creating economic growth or achieving environmental outcomes. All nominees were evaluated by an Awards Committee based on how the project:

- **Advances national objectives** – by boosting productivity and economic growth, promoting a cleaner environment, or strengthening communities;
- **Supports long-term planning** – by building capacity for planning and asset management, addressing long-term needs, or generating long-lasting benefits;
- **Addresses local needs** – by creating wide-ranging community benefits that meet the diverse needs of multiple residents and businesses; and
- **Leverages the Fund** – by combining federal Gas Tax funds with other sources of funding to achieve greater positive outcomes.

2018 Winner: The Town of LaSalle's Water Meter Replacement Project.

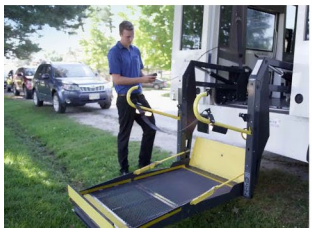
2018 Winner: Clearview Township's Public Transit Project.

The Township of Clearview's Public Transit Project

Clearview Township invested the federal Gas Tax Fund in launching a new municipal transit service. By launching a transit service now, the small community of 14,500 residents is meeting today's needs while planning for growth that will happen in the future.

Transportation in rural communities can be a challenge for those without regular access to a car. With help from the federal Gas Tax Fund, Clearview has been able to implement an affordable, reliable transit system that gives residents options for getting around town. The bus route was planned so that it serves all major points of interest in the Town of Stayner, including Town Hall, grocery stores, parks, residential areas, retirement homes, schools, medical centres and more. Bus stops are located so that all residents can access them within a 3-5-minute walk.

From left to right Chris Vanderkruys, Mayor of Clearview Township, Lynn Dollin, Immediate Past AMO President, Gary McNamara, Former AMO President.



"The Government of Canada is committed to working with municipalities to ensure that they are ready for tomorrow's challenges. The federal Gas Tax Fund allows municipalities like the Township of Clearview to invest in public transit infrastructure projects that help build strong, sustainable communities now and for decades to come."

- The Honourable François-Philippe Champagne, Minister of Infrastructure and Communities

"The federal Gas Tax Fund helped Clearview launch its first transit system. Our bus route serves a community of about 4,500 but we already have 600 riders per month. Investing in transit now will allow us to enhance the service over time as our community grows."

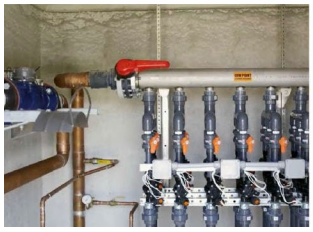
- Christopher Vanderkruys, Mayor of the Township of Clearview

The Town of LaSalle's Water Meter Replacement Project

The Town of LaSalle invested $2.2 million from the federal Gas Tax Fund into replacing 85% of its water meters that were not providing accurate readings. The new meters allow staff to identify abnormal water use patterns at any time, leading to early leak detection, less water usage and ultimately, lower water bills.

The Town has also brought utility billing in-house to better serve residents. Water customers now have a one-stop shop for any service or billing requests and can also access their accounts online. This new system is more convenient for residents and allows for better customer service.

From left to right Lynn Dollin, Immediate Past AMO President, Ken Antaya, Mayor of the Town of LaSalle, Gary McNamara, Former AMO President.



"The Government of Canada is committed to working with Ontario municipalities to ensure they receive the support they need to build strong and vibrant communities. The federal Gas Tax Fund gives municipalities like LaSalle the flexibility to invest in infrastructure projects that address local needs and create a more sustainable future for its residents."

- The Honourable François-Philippe Champagne, Minister of Infrastructure and Communities

"Investing the federal Gas Tax Fund in 10,300 new water meters has led to a better experience for local water customers, and a reduction in water loss due to more accurate billing. We have also decreased our own costs by bringing the meter reading, billing and collection in-house."

- Ken Antaya, Mayor of the Town of LaSalle

Risk Management and Compliance

AMO's Risk Management Framework

The Agreement establishes terms and conditions on municipalities' use of the Fund. AMO uses a risk-based approach that minimizes municipal administrative costs and recognizes municipalities as a mature order of government to monitor compliance with these requirements. The approach is defined by AMO's risk management framework.

The framework combines policies, plans, processes and education. These components collectively state AMO's goals and objectives pertaining to risk management, describe responsibilities and procedures for managing risk, and guide the development of training materials for municipal staff managing federal Gas Tax funds. The framework is reviewed annually. Components evolve as the framework matures.

Assessing Risk

Municipalities complete a **questionnaire** each year when reporting their use of federal Gas Tax funds. The questionnaire asks if specific financial policies and standard operating procedures relevant to administration of the Fund have been implemented. Responses are used to assess compliance risks and target AMO's efforts to manage risks.

Monitoring Compliance

A minimum of ten per cent of municipalities receiving federal Gas Tax funds through AMO are selected each year for a compliance audit. Municipalities are randomly selected by AMO's auditor, Grant Thornton LLP, in accordance with established selection criteria. Audits are completed by Grant Thornton LLP or Collins Barrow LLP.

Compliance audits confirm that terms and conditions on municipalities' use of federal Gas Tax funds are met. Auditors additionally attest to the accuracy of responses to the questionnaire described above. Summaries of the compliance audits completed for the 44 municipalities selected in 2017 are available in Part II of this report.

AMO's Compliance Audit

The Administrative Agreement also establishes terms and conditions for AMO's administration of the Fund. A compliance audit is conducted each year to confirm that AMO has fulfilled these requirements.

The compliance audit for the year ending December 31, 2017 was completed by Grant Thornton LLP. The audit confirms that AMO has complied with terms and conditions set out in the Administrative Agreement. A copy of the audit is included in Part II of this report.

The Town of Tecumseh's Sanitary Sewer Extension

WASTEWATER

The Town of Tecumseh extended a sanitary sewer along Pulleyblank Street, Crowder Court and Moro Drive. This is a multi-year, multi-phase project to transfer local industrial properties from failing septic sewage systems to new sewers. This phase of the project brought new services to 23 properties – all part of a local industrial park. Before this project began, the businesses could not expand over their existing septic tanks, meaning they were unable to grow local operations. This investment in sanitary sewers opens up the possibility for future development, including private expansion on each property.

Project Results:

- 2,240 metres of repaired, rehabilitated or replaced stormwater sewers
- 940 metres of new sanitary sewers

The Township of North Frontenac's Clarendon Miller Community Upgrades

CAPACITY BUILDING

The Clarendon Miller Community Hall is a gathering place for residents in the rural community of North Frontenac. The Hall is part of the Clar-Mill Community Centre, where residents can access a walking trail, playground, rest area and the Township's war memorial where a Remembrance Day ceremony is held each year.

This project involved paving about 2,700 square metres at the Community Centre property to stop water from running into the park and playground area and provide a smooth surface that is more accessible for people that use wheelchairs. The improvements have enhanced the overall accessibility of the Community Hall. Residents that were previously unable to attend community events due to accessibility barriers can now access the Clarendon Miller Community Hall with ease.

Project Results:

- 1,800 residents will benefit from the investment in recreational infrastructure
- Increase in annual number of visitors to the community (from 1,000 to 2,000)

Appendix A:
Project Results Reported in 2017

Investment in Completed Projects

Municipalities completed 622 infrastructure projects in 2017. The table below illustrates the distribution of these projects – and the funds that supported them – across project categories.[3]

Category	Completed Projects	Cumulative Federal Gas Tax Investment	Cumulative Project Costs
Brownfield Redevelopment	2	$3,388,121	$9,661,042
Community Energy Systems	42	$11,456,320	$14,361,598
Culture	4	$197,823	$1,369,006
Drinking Water	31	$16,007,797	$55,069,537
Local Roads and Bridges	439	$258,957,997	$541,948,222
Public Transit	18	$55,304,231	$89,653,418
Recreation	31	$6,305,417	$29,379,893
Regional and Local Airports	3	$294,275	$311,537
Solid Waste	12	$177,942,166	$230,367,349
Sports	1	$500,000	$650,000
Wastewater	39	$29,466,192	$111,508,059
Total	**622**	**$559,820,341**	**$1,084,279,661**

Municipality of North Perth's Steve Kerr Memorial Complex.

Streicher Line Paving Project in the Township of Wellesley.

LED Streetlight Conversion in the City of St. Catherines.

[3] Cumulative federal Gas Tax investment is shown to the end of December 31, 2017 – but financing is ongoing for 31 of the 622 projects that completed construction in 2017.

Project Results

Municipalities report results achieved by infrastructure projects supported by the federal Gas Tax Fund when construction is completed. Results achieved by the 622 infrastructure projects that completed construction in 2017 are described in the tables below.

BROWNFIELD REDEVELOPMENT	Projects	Total
Area remediated, decontaminated or redeveloped (ha)	1	6
Volume of contaminated soil removed (m^3)	1	250
Volume of contaminated water removed (ML)	1	19

COMMUNITY ENERGY SYSTEMS	Projects	Total
Number of buildings retrofitted	25	32
Number of buildings built with energy-efficient materials or systems	2	3
Number of LED street lights installed	12	10,722
Increase in annual energy generation (kWh)	1	509
Reduction in annual energy consumption (GWh)	29	7
Reduction in annual fossil fuel consumption (ML)	8	106,826
Reduction in annual greenhouse gas emissions (tonnes of CO_2e)	2	108

CULTURE	Projects	Total
Number of new, renovated or upgraded arts facilities, libraries and museums	3	5
Number of renovated heritage sites or buildings	1	1
Increase in annual number of visitors to the community	1	31
Increase in number of cultural events held annually	3	12
Increase in number of residents participating in cultural activities	4	1,319
Number of businesses positively affected	1	10

DRINKING WATER	Projects	Total
Length of new watermains (km)	8	6
Length of rehabilitated or replaced watermains (km)	23	22
Reduction in average daily water leakage (ML)	1	1
Reduction in days in which boil water advisory was issued in a year	1	2
Increase in number of households with water meters / transmitters	2	10,320
Reduction in annual number of watermain breaks	11	24
Increase in number of properties connected to fire hydrants and/or with fire protection	6	102
Number of residents with access to new, rehabilitated or replaced water distribution pipes	21	6,334
Volume of drinking water treated to a higher standard (ML)	1	108

LOCAL ROADS AND BRIDGES	Projects	Total
Local Roads		
Length of new paved roads and gravel roads converted to paved roads (lane-km)	47	183
Length of new unpaved roads (lane-km)	5	18
Length of rehabilitated unpaved roads (lane-km)	46	371
Length of rehabilitated or replaced paved roads (lane-km)	269	2,346
Length of roads with improved drainage (lane-km)	116	543
Increase in length of paved roads rated as good and above (lane-km)	264	1,937
Increase in length of unpaved roads rated as good and above (lane-km)	39	284
Average change in average vehicle traffic speed during peak hours (%)	85	31
Increase in capacity of sand or salt storage sites (tonnes)	2	6,044
Number of intersections with advanced traffic management systems	11	24
Number of residents with access to new, rehabilitated or replaced roads	144	1,404,566
Number of residents with improved access to highways or neighbouring municipalities	81	737,330
Bridges and Culverts		
Number of new bridges and culverts	6	9
Number of rehabilitated or replaced bridges and culverts	59	195
Surface area of new bridges and culverts (m^2)	6	4,011
Surface area of rehabilitated or replaced bridges and culverts (m^2)	50	13,987
Increase in surface area of bridges and culverts with condition of the primary component rated as good and above (m^2)	53	14,565
Number of residents with access to new, rehabilitated or replaced bridges and culverts	35	697,183
Active Transportation		
Length of new bike lanes (m)	1	86,415
Length of new sidewalks (m)	8	3,258
Length of new walking trails (m)	1	126
Number of rehabilitated or replaced pedestrian bridges	1	4
Length of rehabilitated or replaced sidewalks (m)	11	24,665
Length of rehabilitated or replaced walking trails (m)	1	60
Length of rehabilitated or replaced multi-use trails (m)	1	957
Surface area of rehabilitated or replaced pedestrian bridges (m^2)	1	120
Number of residents with access to new, rehabilitated or replaced bike lanes, sidewalks, hiking and walking trails, and/or pedestrian bridges	22	981,986

PUBLIC TRANSIT	Projects	Total
Number of new public transit vehicles	7	51
Number of rehabilitated, refurbished or replaced public transit vehicles	7	148
Increase in number of accessible vehicles	4	33
Increase in number of accessible transit facilities	1	1
Average increase in annual number of regular service passenger trips on conventional transit per capita	2	1
Average increase in annual revenue vehicle kilometres per capita	3	11
Decrease in average age of fleet (%)	5	27
Number of residents with improved access to transit facilities	1	4,029
Number of transit facilities with accessibility or service upgrades/enhancements	4	17
Number of transit vehicles with accessibility or service upgrades/enhancements	5	61

RECREATION	Projects	Total
Number of new, renovated or rehabilitated comfort stations, picnic shelters and playground structures	11	29
Number of new, renovated, rehabilitated or upgraded arenas, community centres, fitness facilities, pools, sports fields and sport-specific courts	18	32
Increase in annual number of visitors to the community	3	525
Increase in annual number of registered users	5	5,201
Capacity of new, renovated, rehabilitated or upgraded fitness facilities, arenas and community centres	6	10,762
Number of businesses positively affected	14	340
Number of residents who will benefit from the investment	25	413,412

REGIONAL AND LOCAL AIRPORTS	Projects	Total
Number of businesses positively affected	3	220

SOLID WASTE	Projects	Total
Number of new blue bins	2	2,808
Number of new garbage or recycling trucks	1	1
Number of new landfill facilities	1	1
Number of new waste incineration facilities	1	1
Number of rehabilitated or expanded landfill facilities	2	2
Increase in number of households participating in recycling or organics collection	4	11,139
Increase in total waste collected, disposed in landfills, incinerated and diverted from landfills annually (tonnes)	4	108,366
Increase in volume of methane gas captured annually (m^3)	1	1,315,948

SPORTS	Projects	Total
Number of businesses positively affected	1	4

WASTEWATER	Projects	Total
Length of new sanitary sewers (m)	3	1,798
Length of new stormwater sewers (m)	12	7,639
Length of rehabilitated or replaced sanitary sewers (m)	17	11,613
Length of rehabilitated or replaced stormwater sewers (m)	18	10,785
Change in reserve sewage treatment plant capacity (ML)	1	511
Change in serviced area protected by green infrastructure (ha)	1	2
Change in number of residents serviced by stormwater/sanitary infrastructure	20	3,053
Reduction in energy used by treatment system per ML of wastewater treated (kWh)	1	4
Reduction in annual number of sanitary sewer backups	8	35

Appendix B:

Financial Statements

2017 Financial Statements - AMO Year End Balance

December 31, 2017

	2017	2014 – 2017
Opening Balance	**$889,012**	
Revenues		
Received from Canada	$631,326,358	$2,433,435,282
Interest Earned	$226,995	$1,116,006
Net	**$631,553,353**	**$2,434,551,288**
Expenditures		
Transferred to Municipalities	$(628,224,368)	$(2,437,512,952)
Administration Costs	$(3,101,991)	$(12,112,535)
Net	**$(631,326,359)**	**$(2,449,625,487)**
Closing Balance	**$1,116,006**	

2017 Financial Statements - Municipal Aggregate Annual Expenditure Report

December 31, 2017

	2017	2014-2017
Opening Balance	**$745,765,133**	
Revenues		
Allocations Received from AMO	$628,224,368	$2,437,014,790
Proceeds from the Disposal of Assets	$32,500	$136,488
Interest Earned	$13,386,229	$54,109,248
Net	**$641,643,097**	**$2,491,260,526**
Transfers		
In	$39,580,937	$150,817,826
Out	$(39,580,937)	$(150,817,826)
Net	-	-
Expenditures on Eligible Projects		
Broadband Connectivity	-	$(25,864)
Brownfield Redevelopment	$(489,716)	$(5,329,506)
Capacity-Building	$(5,132,852)	$(29,998,169)
Community Energy Systems	$(21,078,363)	$(78,148,506)
Culture	$(1,418,072)	$(3,698,609)
Disaster Mitigation	$(1,855,040)	$(3,094,379)
Drinking Water	$(13,208,081)	$(63,348,468)
Local Roads and Bridges	$(373,038,453)	$(1,463,546,252)
Public Transit	$(118,818,378)	$(475,018,997)
Recreation	$(19,289,672)	$(35,388,240)
Regional and Local Airports	$(1,150,141)	$(3,131,334)
Short-line Rail	$(201,225)	$(201,225)
Short-sea Shipping	-	-
Solid Waste	$(20,445,926)	$(91,242,310)
Sports	$(653,083)	$(1,704,783)
Tourism	$(619,463)	$(966,295)
Wastewater	$(29,215,237)	$(145,839,009)
Net	**$(606,613,701)**	**$(2,400,681,946)**
Closing Balance	**$780,794,529**	

Through the federal Gas Tax Fund, national investment in local infrastructure is helping to grow Canada's economy, improve the environment, and build stronger communities.

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6 trees	23,112 L of water	350 kg of waste	910 kg CO_2	10 GJ	3 kg NOX
	66 days of water consumption	7 waste containers	6,087 km driven	47,581 60W light bulbs for one hour	emissions of one truck during 8 days

Photography: Thank you to all of the municipalities that contributed photos of their local infrastructure projects. Others taken by Rick Chard, www.rickchard.com
Photos of the City of London's Blackfriar Bridge taken by MJ Idzerda.
Photos of the City of Kitchener's Kiwanis Park Pool taken by Emily Lambe Photography.

Part I and II of this report can be downloaded at AMO's website. Please consider the environment before printing copies.

COUNTY OF WELLINGTON

PLANNING AND DEVELOPMENT DEPARTMENT
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ADMINISTRATION CENTRE
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Town of Minto
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RR#1
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October 3, 2018

In October 2016, Wellington County Council initiated the process to develop a Wellington County Natural Heritage System. Since then, County and Grand River Conservation Authority staff have worked in collaboration with stakeholders to develop a natural heritage system using a made in Wellington approach.

On September 27, 2018, Wellington County Council received a staff report on the natural heritage system titled Wellington County Natural Heritage System - Final Report (PD2018-21), which contained the following recommendations:

> That the Wellington County Natural Heritage System Final Report be received for information; and
>
> That the report be distributed to member municipalities in Wellington County and the Wellington Federation of Agriculture; and
>
> That the Wellington County Natural Heritage System mapping be used as an information support tool.

Please find the Wellington County Natural Heritage System Final Report enclosed. For additional information, please visit the project website at the following link:

https://www.wellington.ca/en/resident-services/pl-naturalheritagesystem.aspx ← Letter and document from link to Oct. 18/18 Council.

If you have any questions please contact Danielle De Fields at danielled@wellington.ca.

Sincerely,

Danielle De Fields

Danielle De Fields, MCIP, RPP
Manager of Policy Planning
Wellington County

Mapping of a Natural Heritage System in the County of Wellington

Final Report

September 2018

Prepared for:
The County of Wellington

Prepared by:
Grand River Conservation Authority
400 Clyde Road
Cambridge, ON, N1R5W6

To be cited as:
Grand River Conservation Authority (GRCA). 2018. Mapping of a Natural Heritage System in the County of Wellington. Final Report, September 2018.

Acknowledgements

We would like to express appreciation to the Wellington County Council for recommending the development of a Wellington County Natural Heritage System (Wellington County NHS). The County of Wellington and the Grand River Conservation Authority (GRCA) would like to express gratitude to the members of the Steering Committee for their contributions in the development of the Wellington County NHS. We would also like to thank the many technical experts, stakeholders and members of the Wellington County Community for providing thoughtful, detailed and useful feedback at workshops and during the public commenting period. We are grateful to key Wellington County staff; Aldo Salis and Jameson Pickard, as well as former staff Mark Paoli, for facilitating this project. We are also grateful to GRCA staff Crystal Allan, Fred Natolochny, Katherine Robbins, Kevin Tupman and Tony Zammit for their management and development of the project.

Steering Committee Members

Crystal	Allan	Grand River Conservation Authority
Katherine	Robbins	Grand River Conservation Authority
Tony	Zammit	Grand River Conservation Authority
Fred	Natolochny	Grand River Conservation Authority
Mark	Paoli	Wellington County
Jameson	Pickard	Wellington County
Mathew	Shetler	Maitland Conservation
Kendra	Hopper	Maitland Conservation
Erik	Downing	Saugeen Valley Conservation Authority
Josh	Campbell	Credit Valley Conservation Authority
Aviva	Patel	Credit Valley Conservation Authority
Kim	Barrett	Conservation Halton
Lesley	Matich	Conservation Halton
Lesley	McDonell	Hamilton Conservation Authority

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1.0 Background and Context

1.1 A Systems Approach to Conservation

Approaches to the conservation of nature in Ontario have evolved significantly over the past few decades in response to advances in conservation biology and landscape ecology. Prior to the 1960's, conservation lands such as parks and reserves were identified primarily for the purposes of managing natural resource uses (e.g., forests for logging, reservoirs for flood control) and recreational activities (Environment Canada, 2005).

The conservation of lands were successful in achieving the protection of many important natural areas, however there became an increasing awareness through the 1980's that the health of species and communities within these protected areas were being impacted by surrounding human land uses (Harris, 1984). Population declines were occurring in some protected areas due to their spatial isolation.

Connectivity between natural features on the landscape was being lost. Increasingly land-use changes resulted in the conversion of large, unbroken swaths of natural land into smaller, often isolated natural areas. The separation or fragmentation of the natural landscape into smaller parcels is referred to as landscape fragmentation and it can disrupt seasonal movements of wildlife, decrease wildlife access to resources and mates, and increase the presence of nuisance wildlife in rural and urban lands, among other negative effects.

Biogeographers and conservation biologists called for a re-evaluation of the existing "Natural Areas" approach to conservation (Noss & Harris, 1986). It is now recognized that the ecological integrity of our natural heritage can best be maintained with a "Systems" approach to conservation, where natural areas are connected to one another via corridors and linkages, forming an interconnected web of natural habitat.

Today, natural areas are being managed by a variety of groups, both government and non-government, with a much broader set of objectives, including the conservation of ecological, hydrological and geological interconnected values (Gray et al. 2009; Margules & Pressey, 2000). Connected Natural Heritage Systems (NHSs) provide many ecosystem services such as pollination, clean water, and soil erosion control which support healthy communities. NHSs also provide many ecological functions (e.g. endangered species habitat, movement corridors for wildlife, biodiversity maintenance) which contribute to ecological sustainability and resiliency of the local, regional and global landscape.

What is a Natural Heritage System?

The Provincial Policy Statement (2014), under the Planning Act, defines a Natural Heritage System (NHS) as:

"..a system made up of natural heritage features and areas, 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 natural heritage features and areas, federal and provincial parks and conservation reserves, other natural heritage features, lands that have been restored or have the potential to be restored to a natural state, areas that support hydrologic functions, and working landscapes that enable ecological functions to continue."

1.2 The Relationship of the Wellington County NHS to the Growth Plan NHS

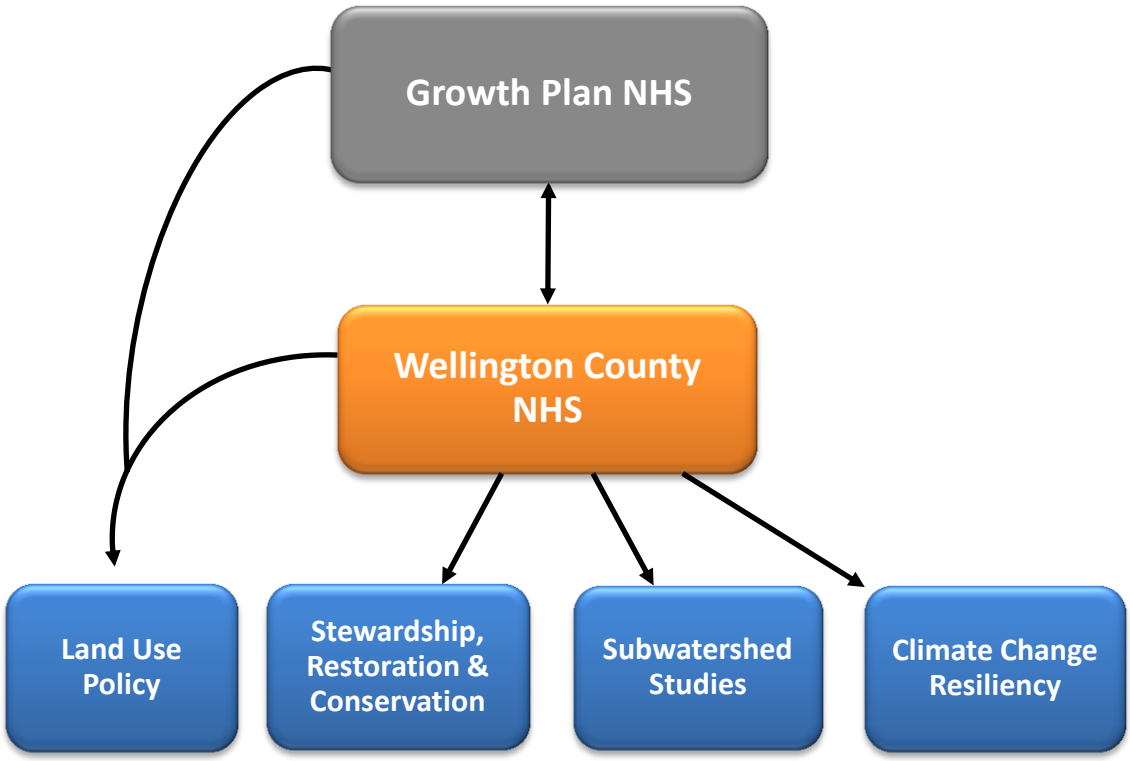
On February 9, 2018 the province released a regional-scale NHS in accordance with updated policies in the 2017 Growth Plan for the Greater Golden Horseshoe (the Growth Plan NHS). The Growth Plan for the Greater Golden Horseshoe requires that member municipalities, including Wellington County, incorporate the Growth Plan NHS mapping through an official plan review.

From a landscape perspective, NHSs should be identified at various scales because the ecological importance of certain features may not be easily discernable at a single spatial scale. For example, a habitat may be considered significant wildlife habitat (SWH) after field assessments that can only be done at a local scale. Conversely, the hydrological or terrestrial connectivity within valleylands or between woodlands can only be discerned at broader spatial scales.

The province identified the Growth Plan NHS at a mapping scale of roughly 1:50,000. The Wellington County NHS presented in this report identifies a connected NHS at a mapping scale of roughly 1:10:000.

The Wellington County NHS may help the County conform to provincial planning requirements by providing a scientific basis for refinements to the Growth Plan NHS before it is incorporated into the County's official plan (figure 1). It can also be a resource for existing stewardship programs and strategies to help prioritize conservation actions (figure 1). Furthermore, the Wellington County NHS can be a foundational tool that will support watershed and subwatershed planning, as well as climate change strategies (figure 1).

Figure 1 The hierarchical relationships between Growth Plan NHS, the Wellington County NHS, County land use policy, and stewardship initiatives within the County. A Wellington County NHS has a number of potential uses (in blue).



2.0 Overview of Wellington County Natural Heritage

The following describes the current physical and ecological characteristics of the landscape in Wellington County, all of which contribute to the development and ecological function of features in the Wellington County NHS.

2.1 Physical Characteristics

2.1.1 Climate

The Wellington County climate is characterized by a humid continental climate with large seasonal differences of warm and humid summers to cold or very cold winters. Climate averaged data was obtained from Environment Canada's weather station at Belwood Shand Dam for a 30 year period between 1981-2010.

Summer days typically reach highs in the mid to low-20s °C but may also include several days where temperatures exceed 30 °C. During the winter, daytime highs are normally a few degrees below 0 °C, but can also be much warmer or colder. Overall the average annual daily temperature is 6.7 °C (table 1).

The average annual precipitation in the area is 945.7 mm (table 1). The County typically receives more precipitation in the spring and summer months than in the fall and winter. Snowfall accounts for approximately 16% of the annual precipitation.

Table 1. Climate Average Data for the years 1981-2010. Environment Canada Shand Dam Weather Station

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Daily Mean Temperature (°C)	-7.4	-6.3	-1.9	5.7	12.2	17.5	20.0	19.0	14.9	8.3	2.1	-3.9	6.7
Precipitation (mm)	67.9	55.9	59.6	74.1	86.9	83.9	89.2	96.6	93.1	77.2	93.0	68.6	945.7

2.1.2 Bedrock and Surficial Geology

Underlying Wellington County are strata (layers) of bedrock, characterized by the geological time scale of their formation (i.e. Period, Era, and Eon) and by the type of rock. The County is situated on bedrock formed during the Silurian Period (OGS, 2011). The Silurian bedrock of Wellington County has four major strata (figure 2). The Amabel

formation (the lowest strata) and the Guelph formation (the second lowest strata) consist of sandstone, shale, dolostone, siltstone rock types (Hoffman at el., 1963). The Salina formation (the third lowest strata) and the Bass Islands formation (the top strata) consist of limestone, dolostone, shale, sandstone, gypsum and salt. In the westernmost sides of Minto and Mapleton, Selurian bedrock is overlain with younger bedrock from the Devonian Period, consisting of sandstone, dolostone and limestone (Hoffman at el., 1963).

Repeated glaciation events in Southern Ontario deposited varying thicknesses and types of sediment on top of the underlying geology (Hoffman et al., 1963). In Wellington County, sediment was mostly deposited directly by glacier ice (i.e. glacial deposits, or till) or by streams flowing away from those glaciers (i.e. glaciofluvial deposits, or outwash; Chapman & Putnam, 2007). The mode in which sediments were deposited determined the type of materials present in surficial deposits, their thickness, and whether the materials were organized (stratified) or mixed (Stephenson et al., 1988).

The most prevalent material present in Wellington County is till, a poorly sorted and poorly stratified surficial deposit (figure 3; OGS, 2010). Glaciofluvial deposits account for the majority of other types of material present in the County, mainly in Minto, Erin, Centre Wellington, Guelph/Eramosa and Puslinch. In Erin, glaciofluvial deposits are composed of mainly sand and gravel, in Puslinch, gravel was deposited, and in Centre Wellington and Guelph/Eramosa, sand, gravel, and combinations of sand and gravel were deposited (figure 3; OGS, 2010). In Minto, glaciofluvial deposits of sand, sand and gravel, or sand, silt and gravel predominate in the northern half of the municipality (figure 3; OGS, 2010).

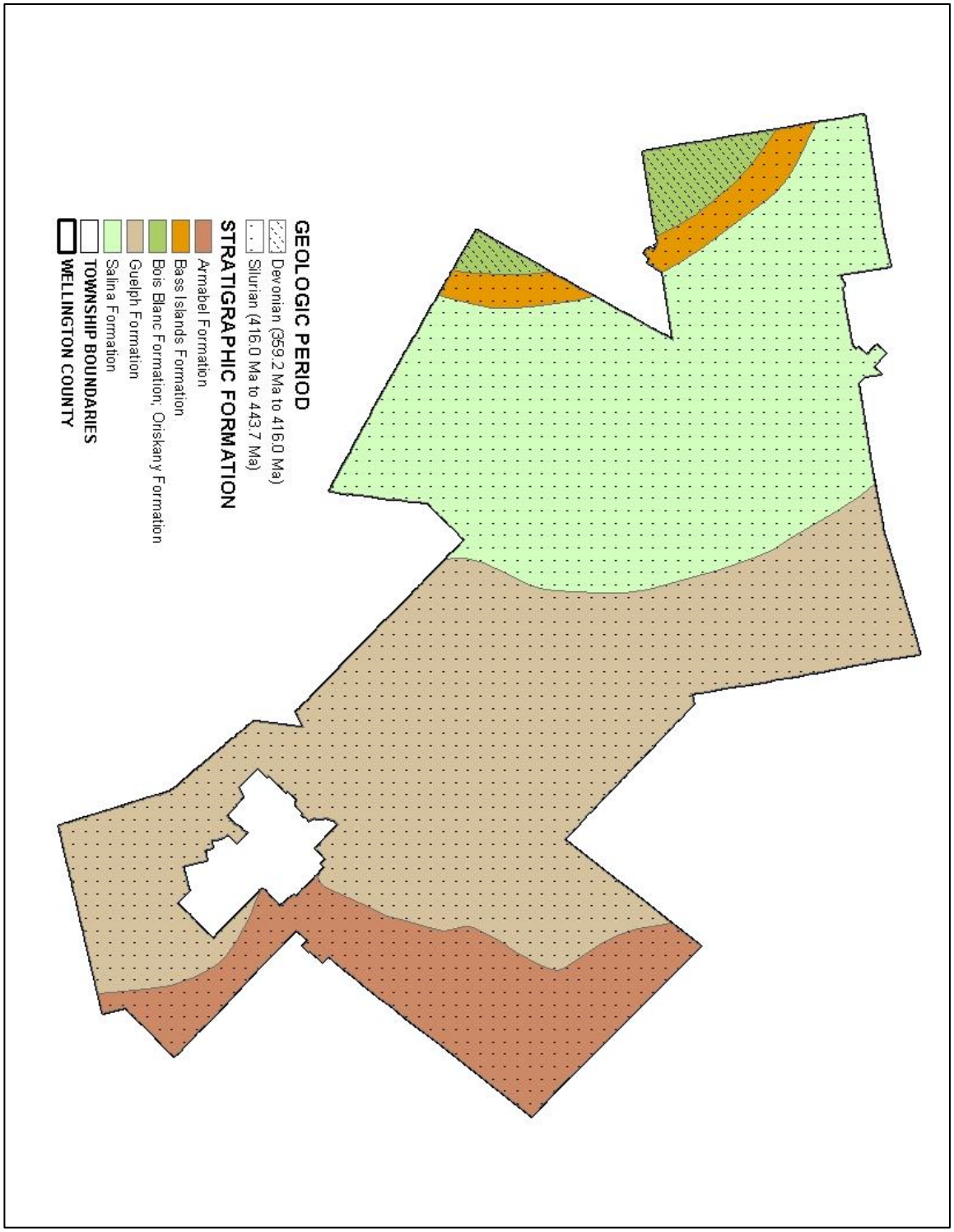


Figure 2. Bedrock Geology in Wellington County

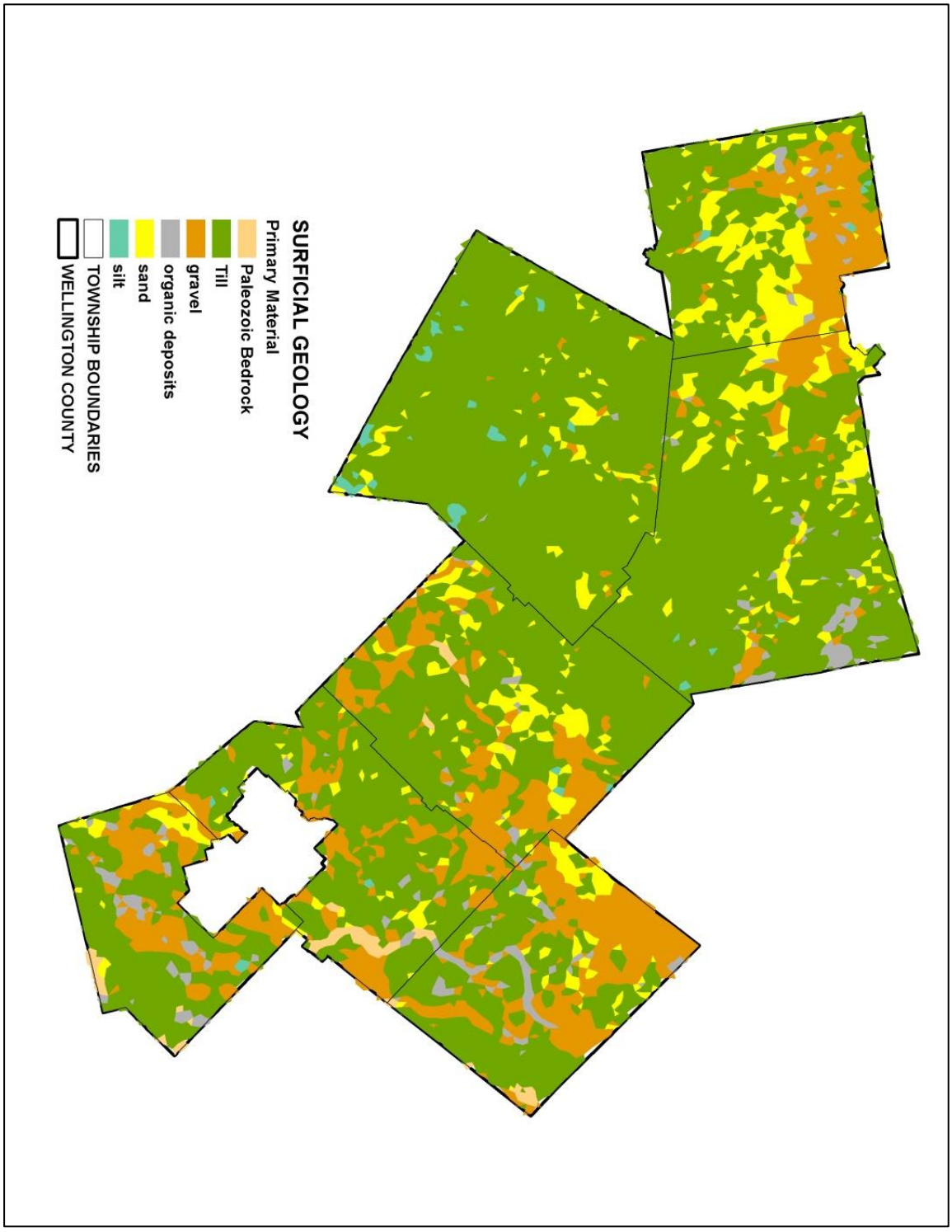


Figure 3. Surficial Geology in Wellington County

2.1.3 Physiography and Soils

Physiography and soils affect hydrological connectivity directly and other ecosystem functions indirectly by influencing the growth and species composition of vegetation communities.

Wellington County contains eight physiographic regions (figure 4), each one distinct based on topographic features, surficial geology, and soils (Chapman & Putnam, 2007). The dominant soil types in the county (figure 5) are loamy soils which are ideal for agriculture as they tend to contain more nutrients than other soil types and have ideal water permeability.

The Townships of Centre Wellington and Guelph Eramosa are mostly situated within the Guelph Drumlin Field, which is characterized by a high density of drumlins (low and broad oval hills), glacial spillways, and loam or fine sandy loam soils (figures 4 and 5; Chapman & Putnam, 2007).

The Townships of Mapleton and Wellington North comprise the relatively flat terrain of the Dundalk Till Plain and Stratford Till Plain regions (figure 4). Soil types in both of these regions are dominated by loam in the southern parts of the region and silty loam in the northern parts, with clay loam soils predominating in the Luther Marsh area of Wellington North Township (figure 5). Agricultural land use is greatest in Mapleton and Wellington North than all other lower-tier municipalities in Wellington County, probably in part due to the combination of flat topography and loam soils.

The Paris-Galt Moraine (i.e. the Horseshoe Moraine) is a large till moraine making up much of the physiography in Puslinch Township (figure 4). The Paris-Galt Moraine is a significant groundwater recharge area consisting of well drained sandy loam soils and glacial rock deposits.

Finally, the sandy kame moraines in the northern part of Minto and the silty loam kame moraines in eastern Centre Wellington and northern portions of Erin Township are also well drained and areas important for groundwater recharge (figures 4 and 5).

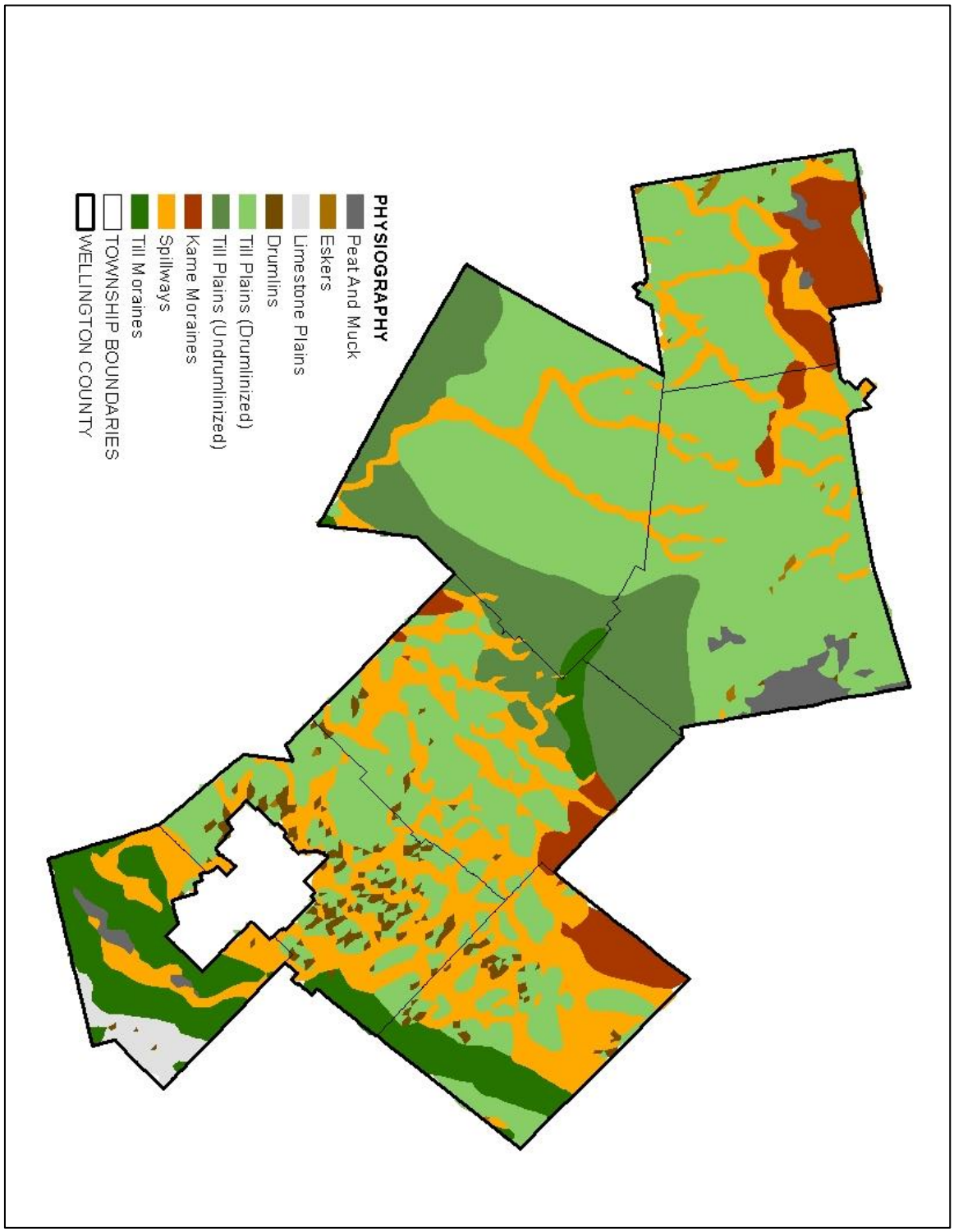


Figure 4. Physiography in Wellington County

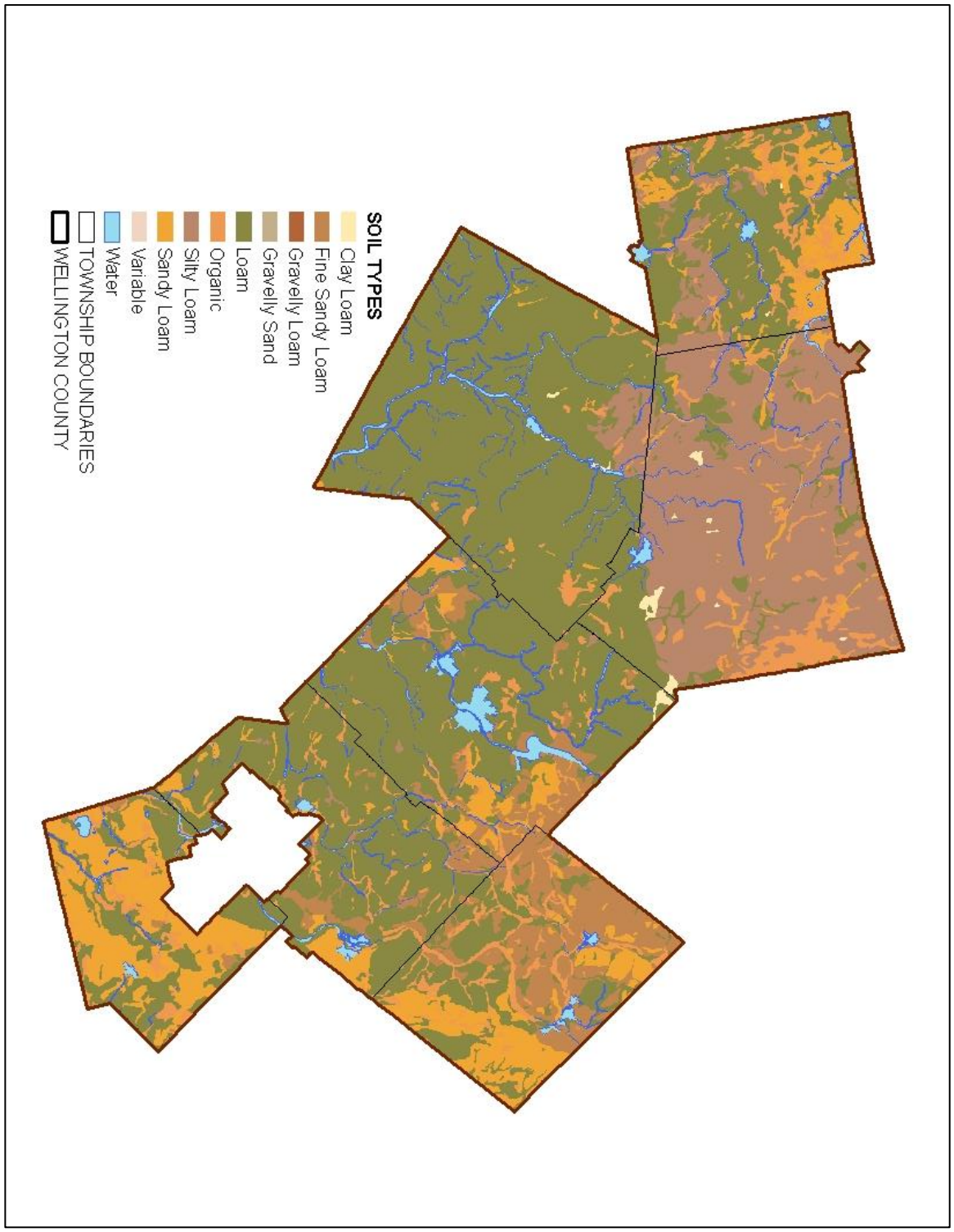


Figure 5. Soil Types in Wellington County

2.1.4 Groundwater Hydrology

Modelled estimates of groundwater recharge have been produced by conservation authorities as part of the Drinking Water Source Protection Program in accordance with Ontario's Clean Water Act (figure 6). While modelled estimates of groundwater recharge have been compiled across the County, not all data is similar for comparison purposes in figure 6 (e.g. areas mapped white).

In Wellington, areas of high recharge are concentrated on the Paris-Galt Moraines in Puslinch and the Moraines of the Hillsburgh Sandhills in Erin, ranging mostly between 295-579 mm/yr. Recharge to the groundwater system is lowest in the Dundalk Till Plain and Stratford Till Plain regions, generally recharging at 65 mm/yr or less.

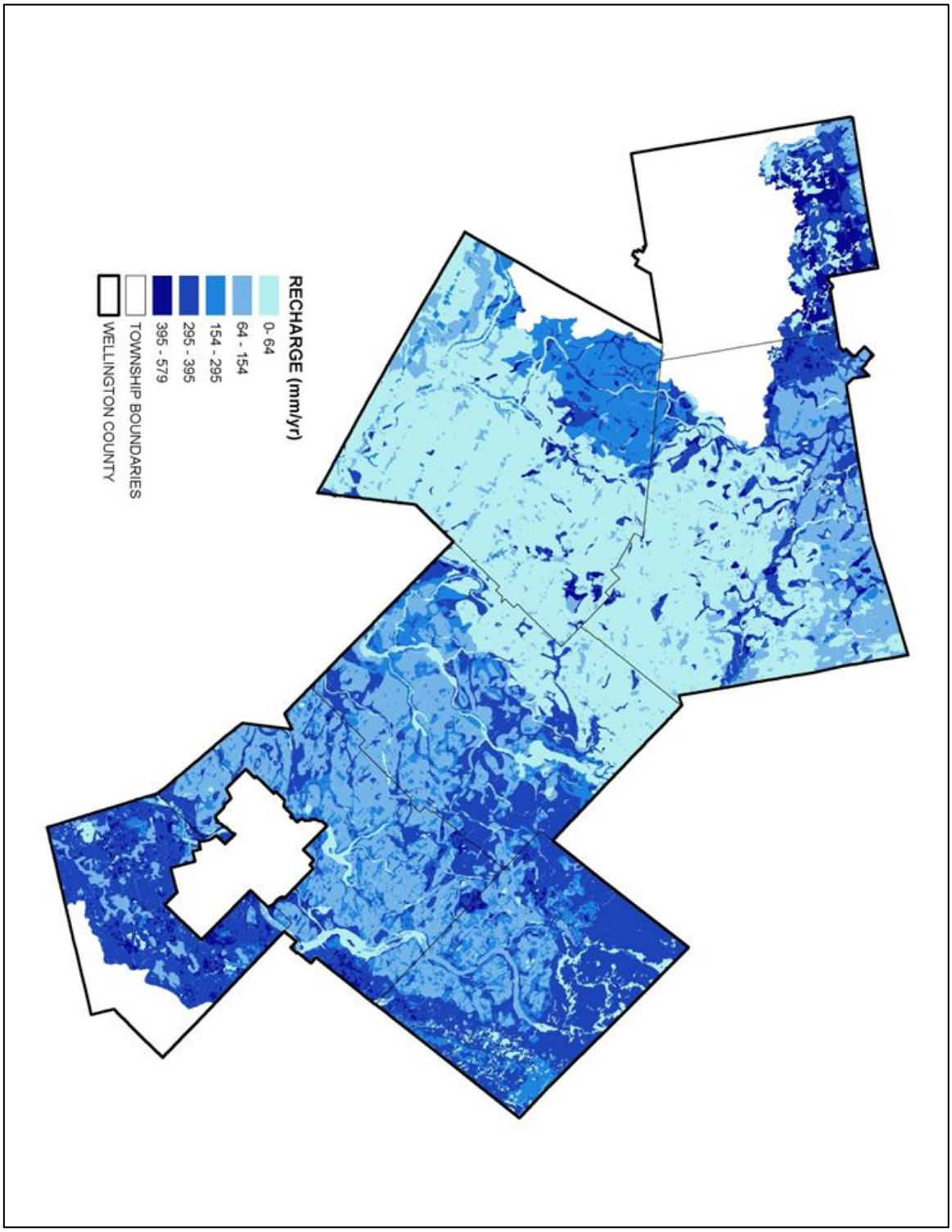


Figure 6. Modelled Groundwater Recharge Areas in Wellington County

2.2 Aquatic and Wetland Ecology

2.2.1 Watercourses

Fifty-six percent of the watercourses in the county have been classified by the Ontario Ministry of Natural Resources and Forestry (OMNRF) based on assessments of the temperature regime and the composition of the fish community within specific reaches. The remaining 44% have an unassigned classification or are not classified. Of the currently assessed watercourses, a majority are classified as warmwater fish habitat (figure 7, table 2).

Table 2. Lengths of Classified Watercourses in Wellington County

Lengths of Mapped Watercourses				
Total Length of Watercourses (km)			Classified Watercourses (km)	Not Classified Watercourses (km)
3,512			2,573	939
Lengths of Classified Watercourses				
Total (km)	**Cold (km)**	**Cool (km)**	**Warm (km)**	**Unknown (km)**
2,573	667	540	766	600

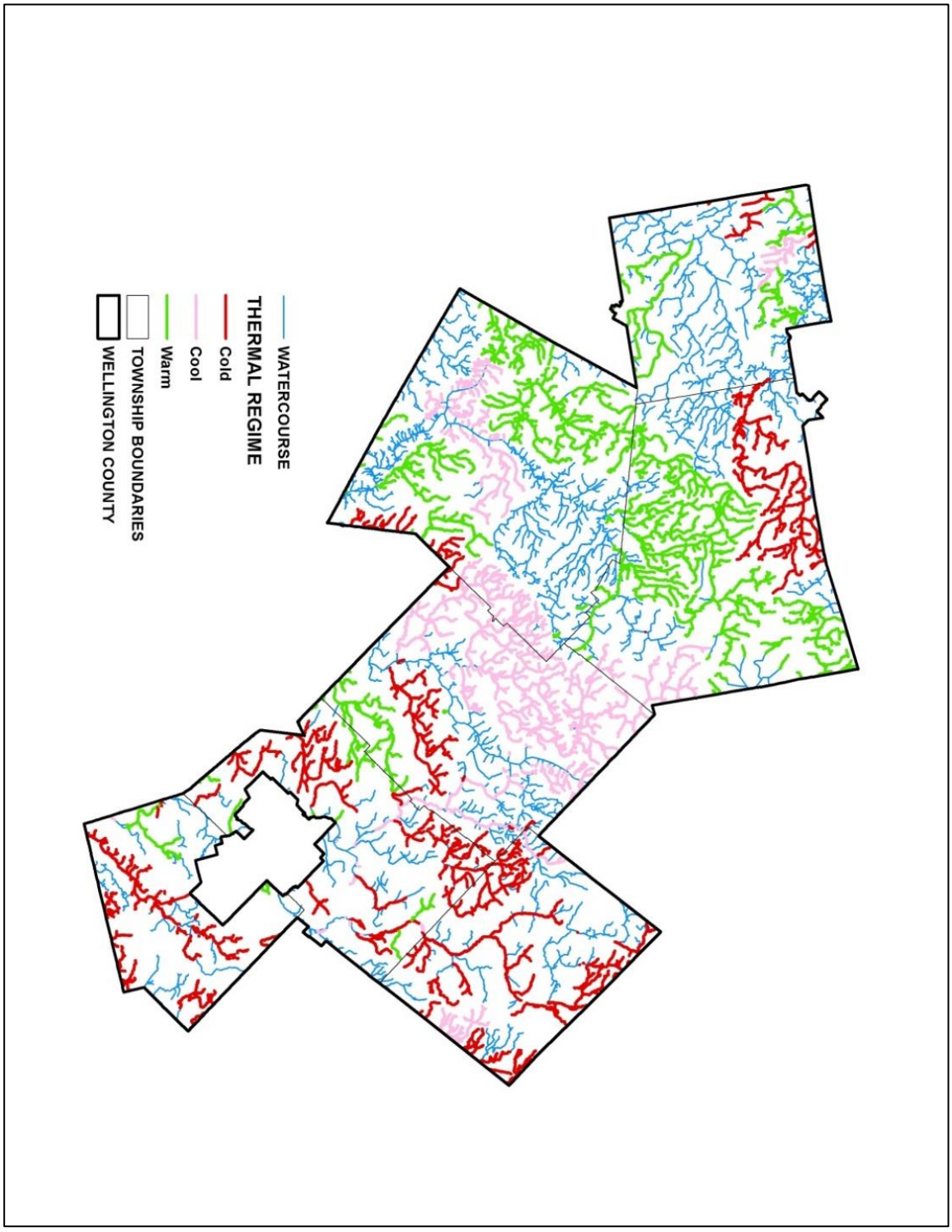


Figure 7. Thermal Regimes of Watercourses in Wellington County

2.2.2 Wetlands

Wetlands are lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the ground surface. In either case the presence of abundant water has caused the formation of hydric soils and has favored the dominance of either hydrophytic plants or water tolerant plants. Periodically soaked or wet lands being used for agricultural purposes, which no longer exhibit wetland characteristics, are not considered to be wetlands.

Many wetlands have been evaluated and mapped by the Ontario Ministry of Natural Resources and Forestry using Ontario's Wetland Evaluation System (OMNR, 2014). Wetland evaluations consider biological, hydrological, socio-economic factors as well as special features of a wetland or wetland complex. Wetlands that meet certain criteria through the Ontario Wetland Evaluation System (OWES) are designated as Provincially Significant and afforded protection under Ontario's Planning Act. This analysis considered both evaluated (PSWs and non-PSWs) and unevaluated wetlands.

Wetlands can also be mapped by local planning authorities such as conservation authorities and municipalities. These agencies may have local wetland protection policies that consider certain wetlands identified through OWES as non-provincially significant to be locally significant wetlands on the landscape. All wetlands are afforded protection in accordance with conservation authority policies.

Wetlands cover 30,267 hectares, or about 12% of the county. Wetland cover in the county is above the federal subwatershed and watershed targets (6% and 10% percent, respectively per Environment Canada, 2013). A vast majority of the mapped wetlands in the county have been evaluated in accordance with provincial standards, and most of these wetlands (91% of the total evaluated wetland area) are considered to be provincially significant (table 3). Of the 90 wetlands that have been evaluated, 46 are considered to be provincially significant whereas 44 are considered locally significant (table 3).

Table 3. Total Wetland Cover and Evaluated Wetland Cover in Wellington County

Wellington County Area	260,982 ha			
Total Wetland Cover	30,267 ha			
	No. Wetland Complexes	**Area (ha)**	**% of County**	**% of Total Wetland in County**
Total Evaluated Wetlands	90	27,424	10.5	90.6
Provincially Significant Wetland (PSW)	46	24,943	9.6	82.4
Non-Provincially (Locally) Significant Wetland	44	2,481	0.9	8.2
Percentage PSW (of total evaluated wetland area)	91%			

The geographic extent of evaluated and unevaluated wetlands within the county is illustrated in figure 8. Although a high percentage of the wetlands within the county have been evaluated, these field assessments have not occurred evenly across the landscape. For instance, whereas most wetlands in Minto, Guelph/Eramosa, and Puslinch Townships have been evaluated, several wetlands in Mapleton and Wellington North Townships have not been evaluated. Although many wetlands throughout this and other townships have not been evaluated in accordance with provincial standards or are considered to be locally significant only, all wetlands in the county are considered valuable to a natural heritage system and support a number of functions including:

- providing habitat for a variety of plants and animals, including species at risk and other species of conservation concern,
- controlling flooding and erosion,
- attenuating nutrients, and
- providing educational, recreational, and research opportunities.

Many of the wetlands found within Wellington County are part of much larger wetland complexes which in many cases extend beyond the municipal boundary. Some of the largest (>1000 total hectares) and diverse wetlands complexes partially or wholly represented in the county include the following:

Speed-Lutteral-Swan Creek Wetland, a 5,683 ha complex of deciduous and coniferous swamp (95% of the complex) and marsh (5%) communities located within glacial meltwater channels associated with the Guelph Drumlin Field. The wetland complex covers portions of Eramosa, Erin, Nichol, and West Garafraxa Townships in Wellington County. Considerable portions of the wetland (60% of complex area) is underlain by organic soils, where carbon storage is expected to be proportionately high, and is sustained by and/or contributes groundwater to local watercourses known to contain Brook Trout.

Luther Marsh Wetland Complex, a 4,029 ha complex of deciduous and coniferous swamp, marsh, fen and bog communities. Luther Marsh is a large and diverse headwater wetland that drains toward the upper Grand River. Wylde Lake Bog is one of the more significant biological features and one of the largest peatlands within the district. Luther Lake is known to harbor large concentrations of waterfowl during fall migration and is a known breeding area for species at risk, including Least Bittern, Black Tern, and Bald Eagle. The wetland continues to support a breeding colony of Great Blue Heron and several Osprey nests. During the fall, large numbers of Great Egret and Sandhill Crane roost in the marsh areas.

Eramosa-Blue Springs Wetland, a 3,089 ha complex of deciduous and coniferous swamp (95%) and a marsh (5%) communities. Much of the wetland complex occurs along the riparian zones or meltwater channels and as such have a permanent or intermittent surface water connection with other nearby wetlands and/or watercourses that feed Blue Springs Creek and the Eramosa River. Much of the wetland (95%) is underlain by organic soils, where carbon storage is expected to be proportionately high, and is sustained by and contributes groundwater to local watercourses known to contain Brook Trout.

Mill Creek Wetland, a 1,804 ha complex of deciduous and coniferous swamp (95%) and a marsh (5%) communities closely associated with Aberfoyle Creek and Mill Creek in Puslinch Township. Upper portions of the wetland complex located on the Galt-Paris Moraine are sustained by high rates of groundwater discharge, which also sustains a diverse cold water fish community dominated by Brook Trout and Brown Trout.

A complete list of evaluated wetlands can be found in Appendix II: Evaluated Wetlands in Wellington County.

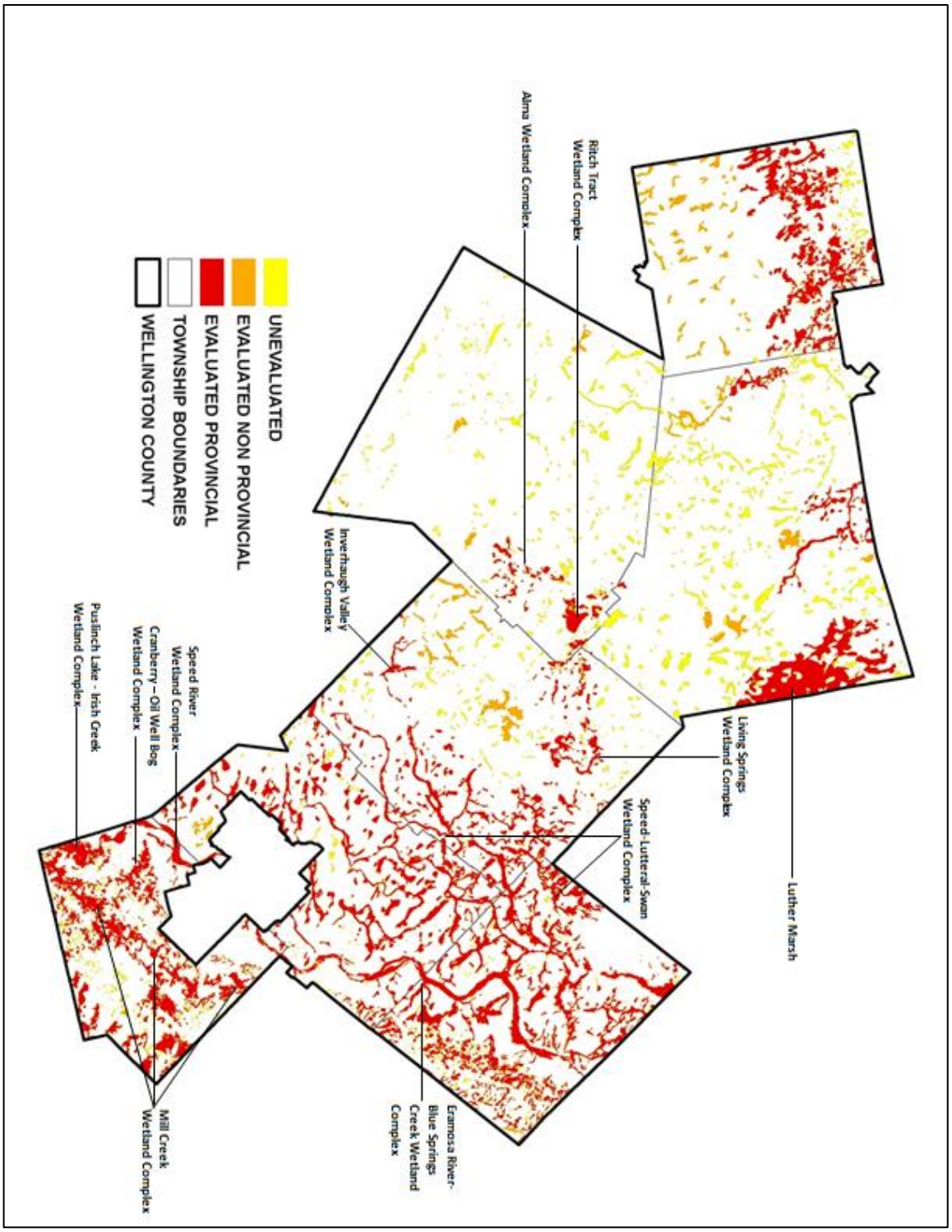


Figure 8. Evaluated and Unevaluated Wetlands in Wellington County

2.3 Terrestrial Ecology

2.3.1 Valleylands

Valleylands are natural areas that occur in a valley or other landform depression that has water flowing through or standing for some period of the year (OMMAH, 2014). Valleylands form across the landscape, from their origins in headwater areas to their outlets in aquatic features such as wetlands and lakes. Although the physical boundaries of valleylands can be determined, some valleylands are more well-defined than others. For example, vallelyands with flows occurring overland through streams and rivers are more well-defined than valleylands where flows originate from springs, seepage areas or surface run-off (OMNR, 2010). Well-defined valleylands can be delineated by the stable top-of-bank, and less well-defined valleylands can be delineated using a combination of proxy boundaries such as riparian zones, flood hazard limits, the meander belt of the watercourse or the highest general level of seasonal inundation (OMNR, 2010). For much of the county valleylands have not yet been identified by planning authorities – the exception being valleyland mapping, and an associated methodology, developed by Credit Valley Conservation as part of the Credit River Watershed NHS.

2.3.2 Woodlands

Woodlands are areas with trees greater than 2 m in height and 60% canopy coverage, with a minimum mapping unit of 0.25 ha where mapped from orthophotography and 0.5 ha where mapped from Infrared Satellite imagery, as identified and mapped by the province. Woodlands generally include forests, woodlots, plantations, and swamps. Woodlands are also defined in accordance with the Ecological Land Classification System for Southern Ontario (Lee et al., 1998). Accordingly, a forest is a terrestrial vegetation community with at least 60% tree cover whereas a woodland is a treed community with 35 to 60% cover of coniferous or deciduous trees. Interior forests are defined as those portions of the woodland in excess of 100 m from the edge of the feature.

Woodlands cover 45,556 ha or 17.4% of Wellington County (figure 9). Woodland cover is unevenly distributed across Wellington County, ranging from approximately 10% in the Township of Mapleton to 33% in the Township of Puslinch (figure 10).

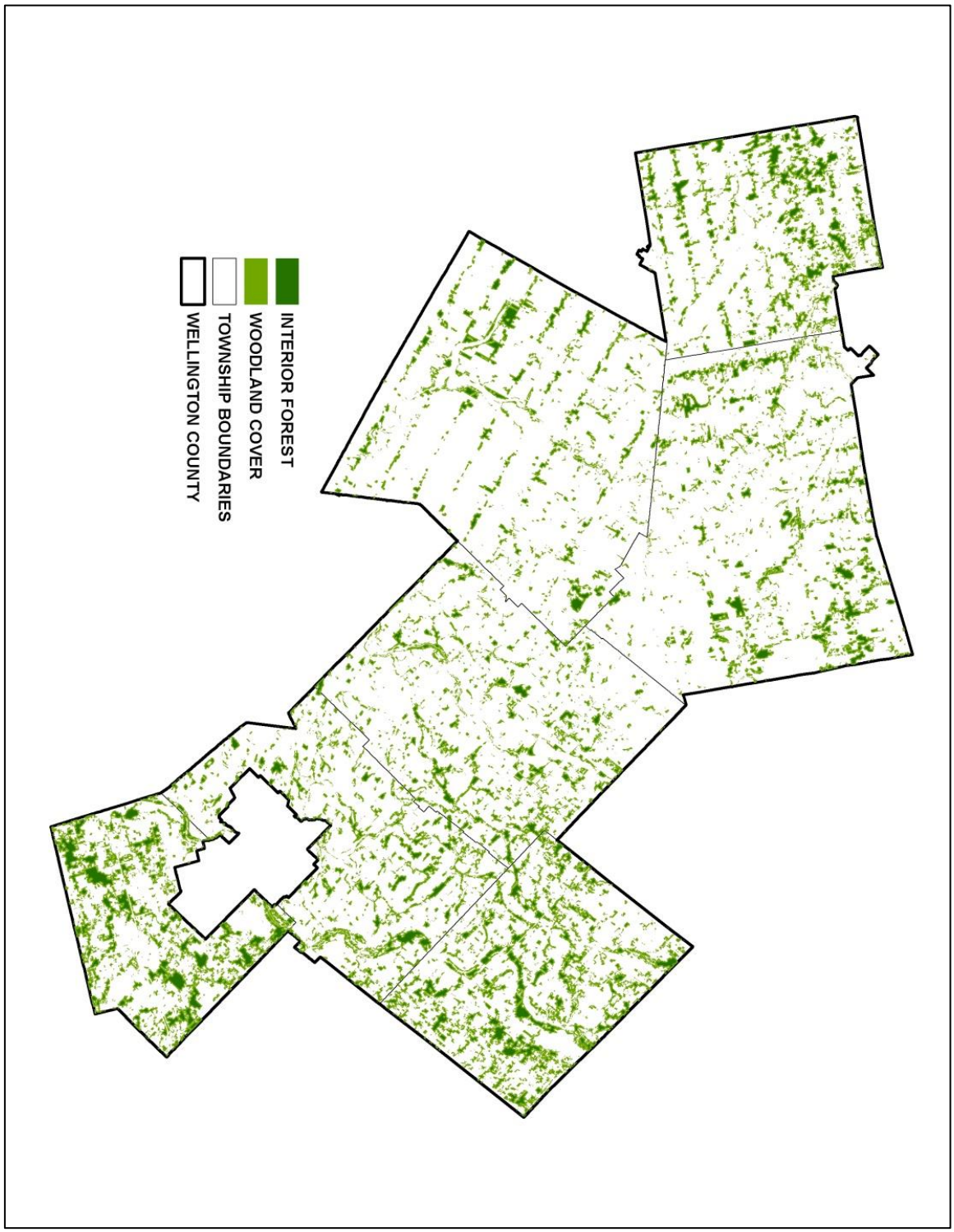
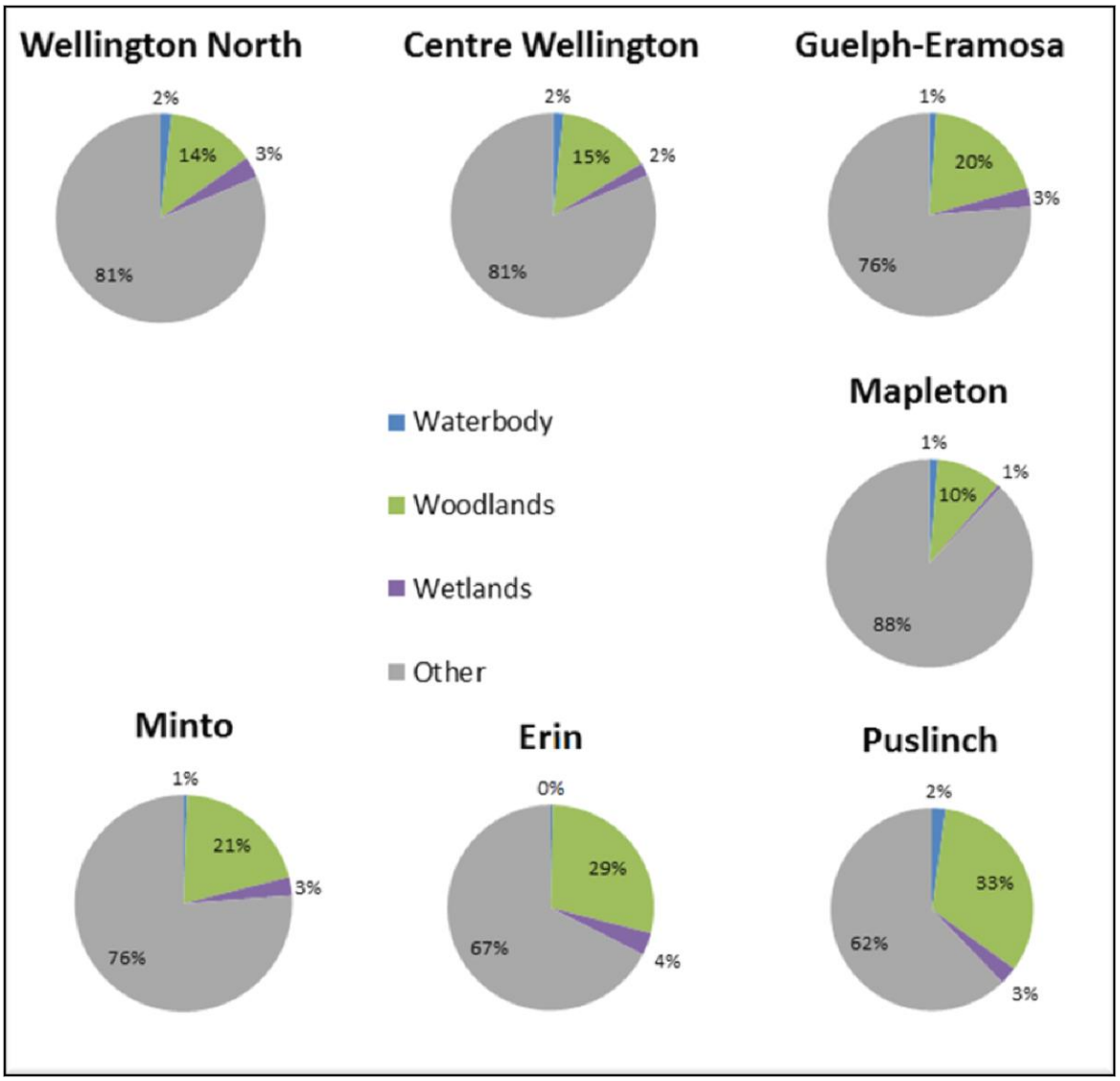


Figure 9. Woodland Cover and Interior Forest in Wellington County

Figure 10. Percent of Land Cover in Wellington County's Member Municipalities



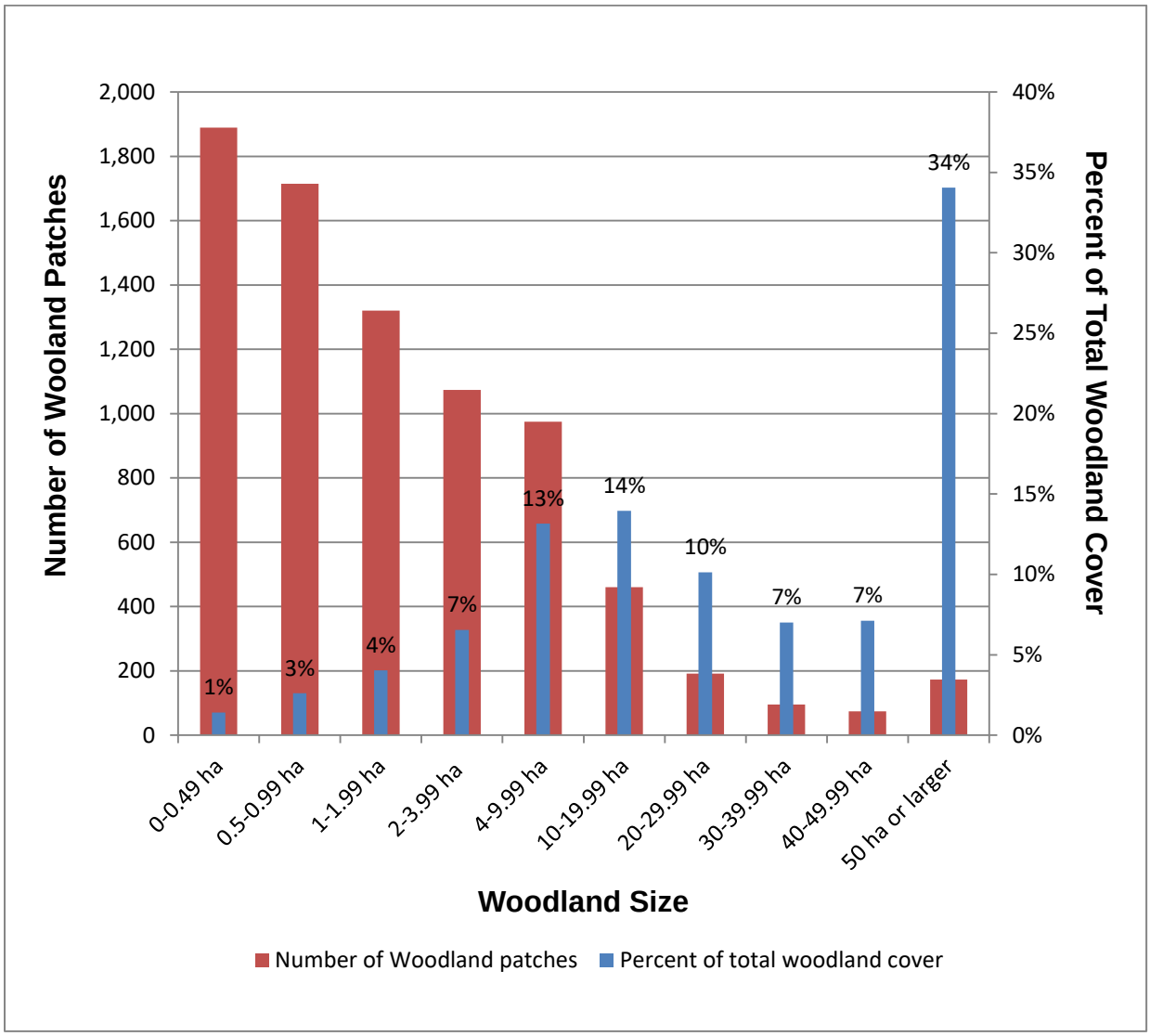
Approximately 6,460 ha, or 14% of the county's forested area, is considered interior forest (table 4).

Table 4. Total Woodland Cover and Interior Woodland Cover in Wellington County

Total Woodland Cover	45,556 ha (17.4% of Wellington County)
Interior Forest Cover (100 meters from edge)	6,460 ha (14% of total woodland cover and 2.4% of Wellington County)

Woodlands in the county are generally fragmented (figure 9) and woodland patch sizes vary considerably (figure 11). Forty-one percent of woodland patches in the county are over 40 ha in size, 31% between 10 and 40 ha in size, and 28% are less than 10 ha (figure 11).

Figure 11. Number and Percent Cover of Woodland Patches by Size in Wellington County



Woodlands tend to be larger and appear to be more connected in portions of Guelph/Eramosa, Puslinch, and Minto Townships whereas woodlands are smaller and more isolated within portions of Wellington North and Mapleton Townships. Some of the forested areas are located on areas characterized by a high groundwater table and moist soils, and are also mapped as wetlands. Many woodlands in the county are contiguous with or overlap with large wetland complexes such as Luther Marsh. Many

woodlands are confined to river and creek valleys and provide buffer and linkage functions. Some of the larger valleys, most notably the Speed River, Eramosa River, and Mill Creek valleys, are buffered by wooded swamps.

2.3.3 Areas of Natural and Scientific Interest

Areas of Natural and Scientific Interest (ANSIs) are defined by the province as “an area 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” (MNR, 1983; Hilts et al., 1986; OMMAH, 2014). Life Science ANSIs target lands and water with representative terrestrial and aquatic natural heritage features whereas Earth Science ANSIs target lands and waters with representative geologic features. The best representative sites outside of national parks, provincial parks, or conservation reserves are considered to be provincially significant ANSIs. Other sites that are considered to be the next best examples of a representative ecological or geological unit, landform, or community are identified as regionally significant or locally significant (OMNR, 2010). These natural areas tend to comprise or are contiguous with locally significant woodlands and PSWs.

Fifty-three (53) ANSIs designated by the OMNRF are wholly or partially represented within Wellington County, including 31 Earth Science ANSIs and 22 Life Science ANSIs (figure 12). Twenty ANSIs are considered significant at a provincial scale whereas the remaining ANSIs are considered regionally significant.

In terms of area represented in the county, the top 5 Life Science ANSIs include Luther Marsh and the Eramosa River Valley, which are considered provincially significant and Galt Creek and Forests, Brisbane Woods, and Oil Well Bog-Little Tract, which are considered regionally significant.

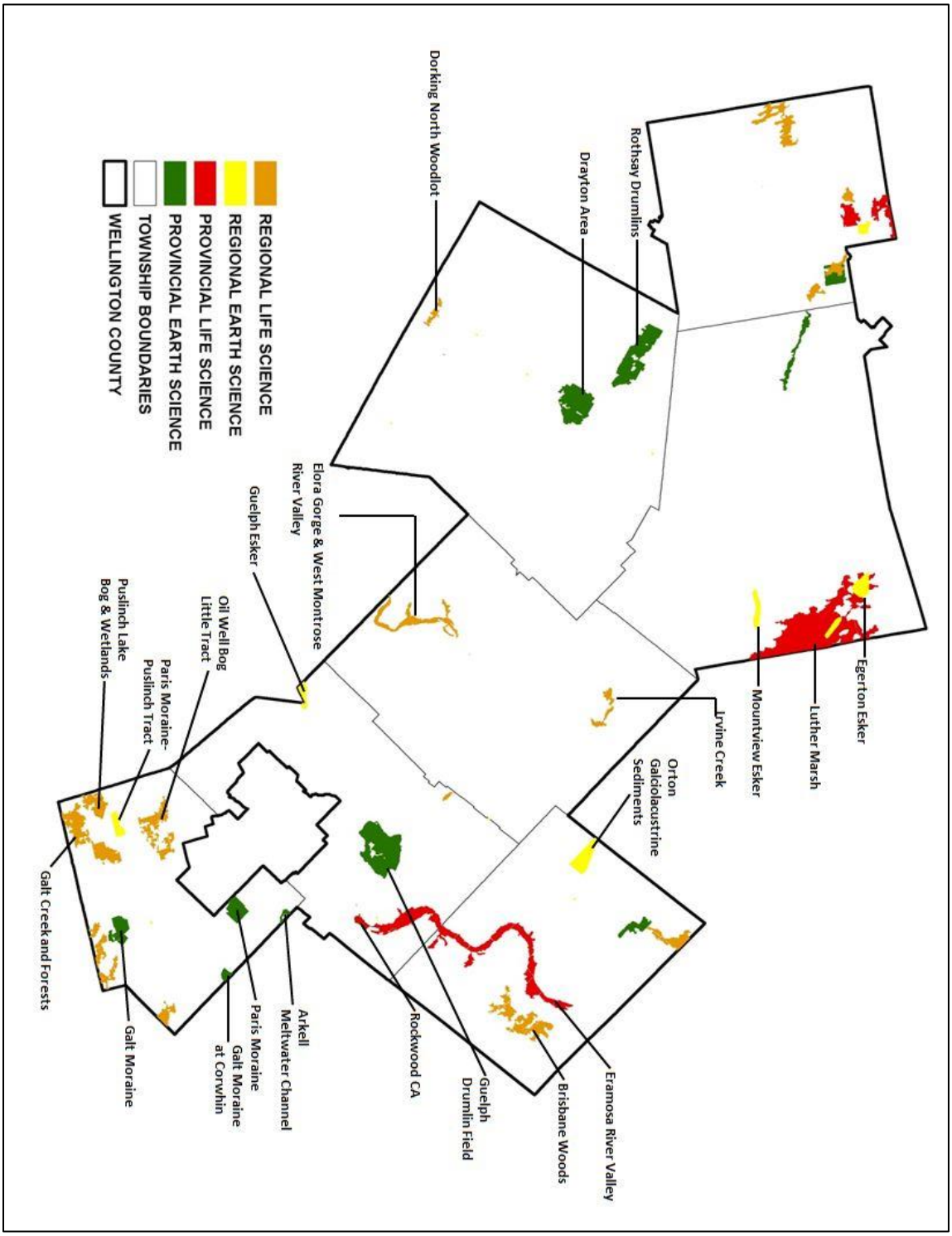


Figure 12. Areas of Natural and Scientific Interest (ANSIs) in Wellington County

2.3.4 Rare Species and Species at Risk

A total of 73 provincially significant species tracked by the Natural Heritage Information Center have been recorded in the county (see Appendix III: Provincially Significant Species Documented Within Wellington County), including 26 plants, 24 birds, 7 reptiles, 6 insects, 4 fishes, 4 mammals, 1 amphibian, and 1 mussel. The list of significant species includes 43 species at risk that have been assessed at the provincial and/or federal levels. Provincially-listed species at risk and their habitat are afforded protection in accordance with the provincial Endangered Species Act, which is administered by the Ontario Ministry of Natural Resources and Forestry. Federally-listed species at risk and their habitat are afforded protection in accordance with the Species at Risk Act, which is administered jointly by Environment and Climate Change Canada and Fisheries and Oceans Canada. Only threatened and endangered species are currently afforded legal protection. Species of special concern and their habitat generally receive protection in accordance with the Provincial Policy Statement (PPS) issued under the Planning Act.

2.3.5 Significant Wildlife Habitat

Significant Wildlife Habitat (SWH) has been identified by the province as a natural heritage area for the purposes of implementing Section 2.1 of the PPS (OMMAH, 2014). The Natural Heritage Reference Manual (OMNR, 2010) and the Significant Wildlife Habitat Technical Guide (OMNR, 2000) were prepared by the Ontario Ministry of Natural Resources and Forestry to assist planning authorities and others involved in land use planning in the protection of NHSs in the province. According to the Significant Wildlife Habitat Technical Guide (SWHTG), wildlife is described as “all wild mammals, birds, reptiles, amphibians, fishes, invertebrates, plants, fungi, algae, bacteria and other wild organisms” (Ontario Wildlife Working Group, 1991).

What is Significant Wildlife Habitat?

The Provincial Policy Statement (2014), under the Planning Act, identifies wildlife habitat as:

"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."

Wildlife habitat is considered significant where it 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. Criteria for determining significance may be recommended by the province but municipal approaches that achieve or exceed the same objective may also be used."

More recently, the OMNRF issued additional technical criteria to facilitate the identification of SWH in the province (OMNRF, 2015). Schedule 6E lists the recommended criteria for identifying SWH within Ecoregion 6E, which includes Wellington County. The 4 general categories of SWH are summarized in table 5 and are outlined and defined in greater detail in the SWHTG and Ecoregion Schedule 6E. The schedules include a description of wildlife habitat, wildlife species, and the criteria that must be met to identify SWH. Candidate SWH is described using the Ecological Land Classification (ELC) for Southern Ontario (Lee et al., 1998).

The identification of core natural heritage features such as significant wetlands, ANSIs, and other locally significant woodlands has facilitated the identification of SWH in the county. In addition, areas that are known to contain provincially significant species would also be considered SWH. A full and detailed assessment of SWH is beyond the scope of this report.

Table 5. Significant Wildlife Habitat Categories and their Definitions. Specific Criteria for Sub-categories are Outlined in the Significant Wildlife Habitat Technical Guide and Ecoregion Schedule 6E (OMNRF, 2000; 2015).

Category	Definition
Seasonal Concentration Areas Waterfowl Stopover and Staging Areas Shorebird Migratory Stopover Areas Raptor Wintering Areas Bat Hibernacula Bat Maternity Colonies Turtle Wintering Areas Reptile Hibernacula Colonial Nesting Bird Habitats Deer Winter Congregation Areas	These areas contain large numbers or concentrations of 1 or more wildlife species annually and usually at certain times of the year, sometimes within relatively small areas. Examples include deer wintering areas, breeding bird colonies, and hibernation sites for reptiles, amphibians, and bats.
Rare Vegetation Communities Cliff and Talus Slopes Alvars Old Growth Forests Savannah Tallgrass Prairie or Specialized Habitat for Wildlife Waterfowl Nesting Areas Bald Eagle and Osprey Nesting, Foraging and Perching Habitat Woodland Raptor Nesting Habitat Turtle Nesting Areas Seeps and Springs Amphibian Breeding Habitat Area-sensitive Bird Breeding Habitat	Rare vegetation communities often contain rare species, particularly plants and small invertebrates, which depend on such habitats for their survival and cannot readily move to or find alternative habitats. Rare vegetation species and communities are identified by the Natural Heritage Information Centre using a ranking procedure developed by The Nature Conservancy. Some wildlife species require large areas of suitable wintering and breeding habitat for their long-term survival. Wildlife populations also tend to decline when habitat becomes fragmented and reduced in size. The more wildlife species a habitat contains, the more significant the habitat becomes to the planning area. The largest and least fragmented habitats within a planning area will support the most significant populations of wildlife.

Category	Definition
Habitat for Species of Conservation Concern (Not including Endangered or Threatened Species) Marsh Breeding Bird Habitat Open Country Bird Breeding Habitat Shrub/Early Successional Bird Breeding Habitat Terrestrial Crayfish	This habitat includes wildlife species that are listed as Special Concern, are ranked as being rare, that are declining, or are featured species. Such habitats do not include habitats of Endangered or Threatened species as identified by the Endangered Species Act 2007.
Animal Movement Corridors Amphibian Movement Corridors Deer Movement Corridors	These areas tend to be elongated areas used by wildlife to move from one habitat to another. They are important to ensure genetic diversity within populations, to allow seasonal migration of animals (e.g. deer moving from summer to winter range), and to allow animals to move throughout their home range from feeding areas to cover areas. Animal movement corridors function at different scales often related to the size and home range of the animal. For example, short, narrow areas of natural habitat may function as a corridor between amphibian breeding areas and their summer range, while wider, longer corridors are needed to allow deer to travel from their winter habitat to their summer habitat. Identifying the most important corridors that provide connectivity across the landscape is challenging because of a lack of specific information on animal movements. There is also some uncertainty about the optimum width and mortality risks of corridors. Furthermore, a corridor may be beneficial for some species but detrimental to others. For example, narrow linear corridors may allow increased access for raccoons, cats, and other predators. Also, narrow corridors dominated by edge habitat may encourage invasion by weedy generalist plants and opportunistic species of birds and mammals. Corridors often consist of naturally vegetated areas that run through more open or developed landscapes. However, sparsely vegetated areas can also function as corridors. For example, many species move freely through agricultural land to reach natural areas.

3.0 The Framework for Developing a Wellington County NHS

In October of 2017, the Grand River Conservation Authority (GRCA) was retained by Wellington County to map a Natural Heritage System (NHS) for the county. The project was to include a broad natural heritage characterization, and recommendations for a scientifically defensible methodology for identifying a NHS within Wellington County.

3.1 Project Governance

The GRCA managed and executed all aspects of NHS development and Wellington County managed and executed communications and consultations with the public.

A Project Steering Committee (SC) was formed to oversee the project. The SC was comprised of county staff and representatives from the six conservation authorities whose jurisdiction overlap county borders. Their role in this project was to provide expertise to help inform decision making and to facilitate access to relevant data and resources from their respective jurisdictions.

3.2 Project Scope

3.2.1 Guiding Principles

The following principles, as outlined in the Terms of Reference for this project, have guided the development of the Wellington County NHS:

- ✓ The process for identifying regionally significant natural features and areas in Wellington County should not be constrained by provincial guidance and policies (i.e. the PPS 2014 and Growth Plan NHS).
- ✓ A science-based approach (including either empirical evidence, conservation principles or expert opinion) should be used to guide the criteria measures and methodology, with consideration of economic, cultural and social values.
- ✓ The NHS is to focus on identifying local scale core areas and linkages within a landscape context.
- ✓ Data inputs will come from existing datasets (whether baseline or derived), will be of a reasonably recent vintage, and will be as consistent and complete as possible across the study area.
- ✓ The final methodology, criteria measures, analytical limitations, results and implications will be well-documented and clearly explained in the final report.
- ✓ Connection of the project NHS mapping to existing NHS mapping (of like-scale) in adjacent areas is to be made as much as reasonably possible.
- ✓ Defendable and repeatable methodology is to be used (i.e., the same map would result from someone else using the same criteria and methods).

3.2.2 Project Goals

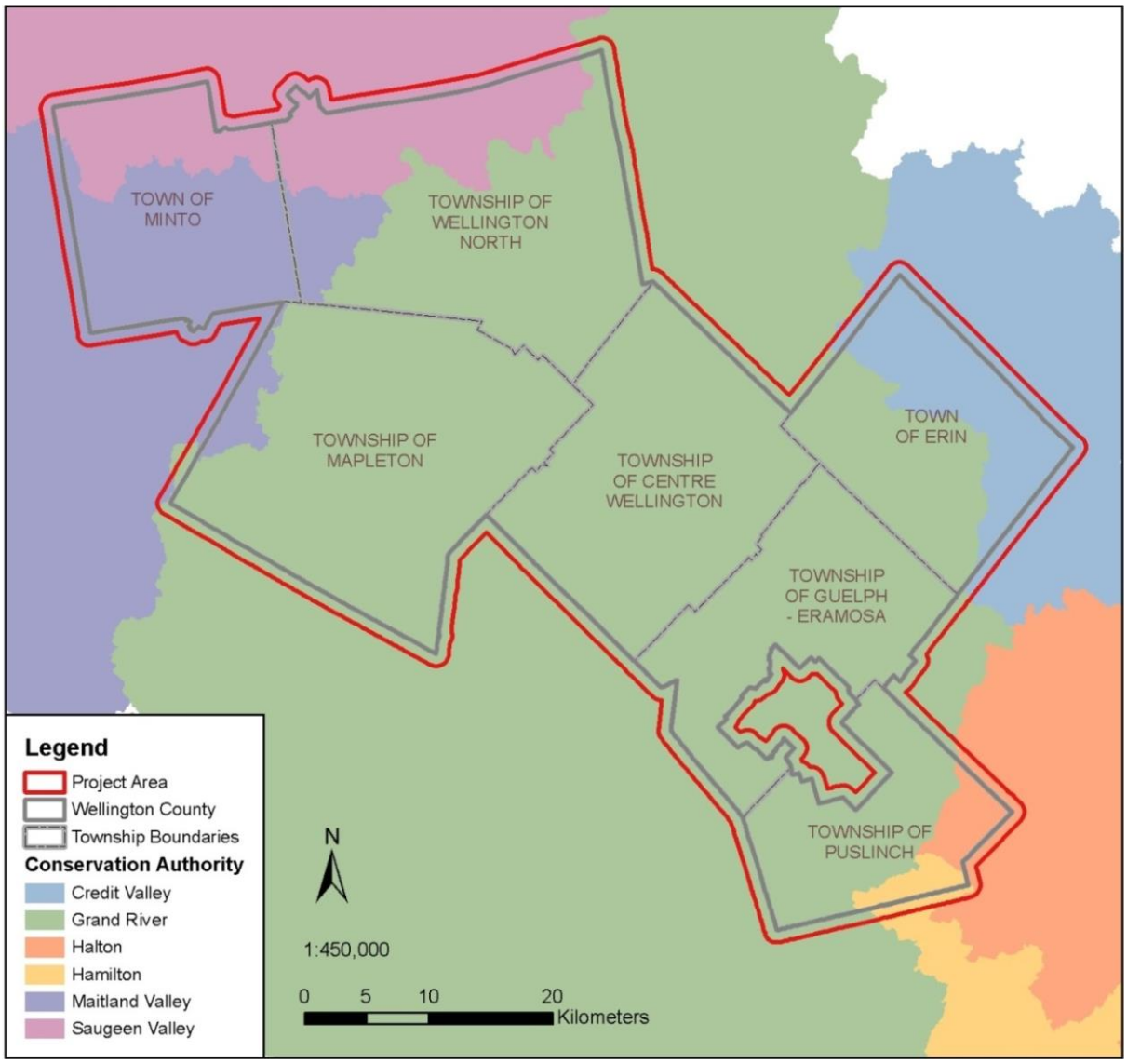
The project goals are to develop, through the engagement and agreement of stakeholders, a Wellington County NHS that will:

- ✓ Maintain and/or improve local and regional biodiversity
- ✓ Recognize local-scale linkage between and among natural heritage features and areas
- ✓ Provide a strategic direction for land and water restoration, stewardship activities, conservation land acquisition and securement, priorities for inventory programs, and amendments to the County Official Plan
- ✓ Inform resource-management decision-making
- ✓ Support sustainable economic opportunities
- ✓ Support sustainable recreational use

3.2.3 Study Area

The project area is defined as the County of Wellington, plus a 1 kilometer buffer to acknowledge connectivity beyond the municipal boundary (figure 13). This represents an area of 2,976 km^2 (297,568 ha).

Figure 13. Wellington County Natural Heritage System Project Area



3.3 Project Phases

Development of the Wellington County NHS occurred over six general phases:

Phase 1 – A Terms of Reference, detailing the project plan and scope, was formed between Wellington County and the GRCA. A Steering Committee (SC) was established and an initial meeting was held on November 20, 2017 with SC members to kick off the project.

Phase 2 – A review was conducted of scientific and grey literature related to NHSs, their supporting methodologies and models, as well as relevant landscape ecology

concepts and research. Existing spatial data resources were identified, obtained and reviewed.

Phase 3 – A full-day technical workshop was held on December 12, 2017 to review potential options for NHS methodologies and criteria. Workshop attendees included members of the SC as well as expertise in planning, Geographic Information Systems (GIS) analysis and landscape ecology from neighboring municipal offices and conservation authorities. Over several group discussions, methodology and criteria options were evaluated with consideration of the project's timeline and of Wellington's unique landscape. All methodology and criteria options were weighed in terms of their data requirements, whether they were appropriate for the degree of landscape fragmentation in the county, and how well they aligned with the goals and guiding principles of this project.

Phase 4 – The technical workshop informed the development of a methodology and criteria for identifying a Wellington County NHS. The spatial data layers acquired in phase 2 were prepared and processed in a GIS to create mapping that represents the Wellington County NHS. Mapping outputs were validated throughout the mapping process with quality assurance and quality control measures.

Phase 5 – Draft mapping was presented to the SC and workshop participants on March 20, 2018 for review and feedback. An open house was held on April 3, 2018 to present draft mapping to the general public (see section 6.0). Beginning April 3rd, comments from the public were welcomed and those received by May 7, 2018 were considered for incorporation in final mapping revisions.

Phase 6 – a final report (this document) was produced to summarize the development of the Wellington County NHS. It includes a description of the project, a general natural heritage characterization of the project area, a general description of the methodology and criteria used to identify the Wellington County NHS, an overview of the natural features captured by the Wellington County NHS mapping, a comparison of the Wellington County NHS to the Growth Plan NHS, recommendations for future work and several reference appendices. A technical report entitled "Mapping of a Natural Heritage System in the County of Wellington. Technical Report" was also produced to accompany the final report. The technical report outlines the step-by-step workflow followed to produce the NHS mapping. The information provided in the technical report is intended to provide sufficient enough detail to replicate or update the NHS mapping.

4.0 The Recommended Natural Heritage System for Wellington County

4.1 General Description of the Wellington County NHS

The Natural Heritage System (NHS) recommended for Wellington County was designed within the context of the County's landscape; a mosaic of diverse land uses and natural cover types, with rural land uses being dominant. It captures natural features, areas and linkages with an approach that considers both broad-scale and local-scale ecological functions. The aquatic components of the NHS form the main linkages in the NHS, and enhancement linkages have been identified in areas where voluntary stewardship activities can improve local linkages. The Wellington County NHS contains primarily natural land cover but also contains some non-natural cover in areas that provide ecological and/or hydrological function (e.g., valleylands).

4.2 Overview of the Wellington County NHS Components

The Wellington County NHS is comprised of two main component types (table 6):

1) ***Natural Heritage Components*** consist of natural features and areas such as woodlands, wetlands, valleylands, aquatic habitat, significant wildlife habitat, habitat of endangered and threatened species, and Life Science ANSIs. These are natural features and areas with important ecological and hydrological functions that are already on the landscape. They are the building blocks of the Wellington County NHS.

2) ***Stewardship Components*** consist of Enhancement Linkages and Enhancement Woodlands. These components have the potential to connect and enhance the overall ecological and hydrological functions of the Wellington County NHS.

Table 6. The Components of the Wellington County NHS with Definitions

Component Type	Definition
Natural Heritage Components	
Wetlands	Wetlands are lands that are seasonally or permanently covered by shallow water, as well as lands where the water table is close to or at the ground surface. Wetlands have hydric soils that support predominantly hydrophytic plants or water tolerant plants.
Woodlands	Woodlands are areas where trees provide 60 percent canopy coverage. Woodlands include forests, woodlots, plantations, and swamps.
Valleylands	Valleylands are depressional landforms whose formation was or is currently influenced by the flow regime of watercourses. Valleylands are dynamic features, changing both gradually through slow erosion and deposition processes, and also abruptly through rapid erosion processes such as floods.
Aquatic Habitat	Aquatic habitat refers to all watercourses and waterbodies, including those which are natural as well as those which have been altered or constructed.
Significant Wildlife Habitat	The PPS (2014) identifies wildlife habitat as: "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."

Component Type	Definition
Natural Heritage Components	
	Wildlife habitat is considered significant where it is: "ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or NHS. Criteria for determining significance may be recommended by the province but municipal approaches that achieve or exceed the same objective may also be used."
Habitat of Endangered and Threatened Species	The PPS (2014) identifies habitat of endangered and threatened species as: "a) with respect to…endangered or threatened species for which a regulation is made under …the Endangered Species Act, 2007, the area prescribed by that regulation as the habitat of the species; or b) with respect to any other endangered or threatened species, an area on which the species depends, directly or indirectly, to carry on its life processes, including life processes such as reproduction, rearing, hibernation, migration or feeding, as approved by the Ontario Ministry of Natural Resources; and…that are used by members of the species as dens, nests, hibernacula or other residences."
Life Science ANSIs	Life Science ANSIs are areas of significant representative segments of Ontario's biodiversity and natural landscapes including specific types of forests, valleys, prairies and wetlands, their native plants and animals and their supportive environments. They contain

Component Type	Definition
Natural Heritage Components	
	relatively undisturbed vegetation and landforms and their associated species and communities.
Stewardship Components	**Definition**
Enhancement Linkages	Enhancement Linkages are potential connections between Natural Heritage Components. Enhancement Linkages should be thought of as approximate and flexible.
Enhancement Woodlands	Enhancement Woodlands are smaller woodlands in the Townships of Wellington County that have less than 29% overall woodland cover (Minto, Wellington North, Centre Wellington, Mapleton, and Guelph/Eramosa). Enhancement Woodlands are woodlands that, if enhanced, would improve the broad-scale ecological and hydrological functions of the NHS.

4.3 General Description of Mapping Methodology

The Wellington County NHS was mapped in two stages:

Stage 1: Mapping Natural Heritage Components

The best available existing spatial data of natural features and areas from Conservation Authorities and the province were used to map the Natural Heritage Components of the Wellington County NHS. Features mapped by these sources were included within the NHS if they fulfilled the ecological criteria listed in table 8. Ecological criteria classes and thresholds were used to select those natural heritage features and areas that are important for preserving ecological functions in the system (see section 4.4). These were based on a review of the current scientific and grey literature, of existing guidance documents, of effective and practical application of criteria in other Southern Ontario jurisdictions, and on the professional judgement of technical experts at the workshop. Natural Heritage Components were mapped using a Geographic Information System (GIS) called ArcGIS (See the companion to this final report “Mapping of a Natural

Heritage System in the County of Wellington. Technical Report" for a detailed workflow of technical steps in ArcGIS).

Stage 2: Mapping Stewardship Components

Stewardship Components were mapped using the Natural Heritage Components as building blocks.

Enhancement linkages were mapped as dotted lines between unconnected Natural Heritage Components to represent potential linkages (figure 14). Enhancement Linkages were identified with connectivity analysis using a toolbox for ArcGIS called Linkage Mapper (Version 1.1. Seattle, WA: The Nature Conservancy). This objective and automated process uses a combination of least-cost path analysis (LCP) and Euclidian distance calculations to identify the most ideal path, or "path of least resistance", between unconnected patches of Natural Heritage Components (figure 14). In the context of NHS design, the "cost" in a least-cost path analysis refers to factors that reduce the viability of linkages, such as land use types that limit the distribution and migration of flora and fauna. In the example shown in figure 14, feature A is isolated, so it will be connected via the "path of least resistance" to either feature B or feature C. The "path of least resistance" identified by Linkage Mapper occurs between feature A and feature B, rather than feature C, because this connection follows a natural watercourse and does not require a road crossing. We used data related to land cover characteristics to determine the relative "cost" of various land cover types. These relative "cost" values, a data input in Linkage Mapper, are shown in table 7.

Enhancement Woodlands were selected based on ecological criteria classes and thresholds. Enhancement Woodlands are smaller woodlands in parts of the county that, if grown in size through voluntary restoration actions, would increase the overall woodland cover in townships where there is currently less than 29% woodland cover.

Figure 14. An Example of how Enhancement Linkages were Mapped along the "Path of Least Resistance" using the Software Linkage Mapper

Feature A is isolated from the other natural features on the landscape. The "path of least resistance" occurs between feature A and feature B rather than feature C because this linkage follows a watercourse and does not require a road crossing.

Table 7. The Relative "Cost" Values Assigned to Land Cover Types to Map Enhancement Linkages

Land cover	Relative "cost" Value
Streams with adjacent natural cover	5
Natural cover not adjacent to a stream	10
Streams without adjacent natural cover	50
Pervious built-up areas, tilled farmland, undifferentiated lands, and slower-moving medium-impact roads	100
Impervious built-up areas, extraction sites, faster-moving medium-impact roads	1000
High-impact roads (All Freeways and any roads with speed limits ≥90km/hr and ≥4 lanes)	No data (no connections can made in this land cover type)

4.4 Criteria and Thresholds used to Identify Wellington County NHS Components

Broad concepts in the field of landscape ecology were established in the 1990's (Forman, 1995; Riley & Mohr, 1994) and continue to be refined by emerging hypotheses and research. Generally, these concepts recognize the heterogeneity of landscapes, and identify the various factors related to spatial-scale and spatial-pattern that influence the structure and function of ecosystems (Noss & Cooperrider, 1994; Riley & Mohr, 1994). They form the basis for Wellington County's selection criteria: size, representation, rarity, habitat quality, matrix influence, and hydrological importance (table 8).

These six criteria and their thresholds (table 8) are grounded in empirical evidence, guidelines produced by government or non-government science agencies, and the expertise of Conservation Authority and Municipal staff provided at a technical workshop held on November 20, 2017. In the following subsections we provide a brief elaboration of the scientific rationale behind each of these criteria.

Table 8. The Components of the Wellington County NHS with Criteria Thresholds

Natural Heritage Components		
Component	**Criteria class**	**Criteria Threshold**
Woodlands	Size	✓ Woodlands in Urban Centers: ≥ 1 ha and ≥30 m wide
		✓ Woodlands in Rural Areas: ≥4ha and ≥30m wide
	Matrix influence	✓ Woodlands of any size that is contained by or is within 30m of a natural heritage component meeting a criteria threshold
	Rarity	✓ Woodlands containing a vegetation community and/or species with a provincial ranking of S1, S2 or S3 (as ranked by the NHIC) or a global ranking of G1, G2 or G3 (as ranked by the NatureServe Network) (text criterion)
		✓ Woodlands containing 10 or more trees/ha greater than 100 years old (text criterion)
		✓ Woodlands containing 10 or more trees/ha that are ≥50 cm in diameter (text criterion)
Wetlands	Hydrological importance	✓ Evaluated non-Provincially Significant Wetlands and all Provincially Significant Wetlands
		✓ Unevaluated wetlands mapped by the MNRF or Conservation Authorities
Valleylands	Hydrological importance	✓ Valleylands associated with watercourses, waterbodies and wetlands
	Representation	✓ Valleylands representing distinctive landforms such as oxbows, bottomlands, terraces, deltas, etc. (text criterion)
Aquatic Habitat	Habitat Quality	✓ All watercourses
		✓ Waterbodies connected to a watercourse
		✓ All headwaters (text criterion)
	Matrix influence	✓ Waterbodies within 30 m of a natural heritage component meeting a criteria threshold

Natural Heritage Components		
Component	**Criteria class**	**Criteria Threshold**
Significant Wildlife Habitat (SWH)	Habitat Quality	✓ All identified SWH (text criterion)
Habitat of Endangered and Threated Species	Rarity	✓ All identified habitat of Endangered and Threatened Species (text criterion)
Areas of Natural and Scientific Interest (ANSI)	Representation	✓ Life Science ANSIs
Stewardship Components		
Components	**Criteria class**	**Criteria Threshold**
Enhancement Woodlands	Size	In lower-tier municipalities with <30% woodland cover: ✓ Woodlands in Rural Areas: 1-4 ha in size and ≥30m wide
Enhancement Linkages	Size	✓ Flexible connections between Natural Heritage Components. The exact location and the appropriate width of the linkage should be determined at the site-level and should accommodate the dispersal needs of the species at the site.

4.4.1 Size

Generally, larger habitat patches have more intact ecological functions than smaller habitat patches for a variety of reasons. Larger habitat patches tend to have greater structural diversity and are more likely to supports the habitat requirements of a greater number of species, particularly “area-sensitive” species which breed only in larger habitat patches (Environment Canada, 2013; Herkert et al., 2003).

With respect to woodlands specifically, there is strong evidence indicating that species diversity, abundance and breeding success in woodland patches can be at least partially attributed to patch size (Lee et al., 2002; Villard et al., 1999; Austen et al., 2001; Nol et al., 2005; Burke & Nol, 2000; Bayne & Hobson, 2002). Larger woodland patches are more likely to contain different successional stages, which translates to more structural diversity, providing different habitat types for a greater variety of

species. Some forest species can only be found in large patches because they are sensitive to “edge effects”, meaning they can only survive in the interior of a forest patch, far away from the patch’s edge (Forman, 1995; Burke & Nol, 2000). Larger patches also support more stable species populations as they have more space and more resources which enable larger population capacities (Connor et al., 2000; Andrén, 1994; Freemark & Merriam, 1986; MacArthur & Wilson, 1967). Larger patches are also more resilient to stressors tied to climate change. For example, large forests can better sustain the effects of blowdown and erosion caused by extreme weather, and their ecological equilibriums are more stable making them less susceptible to disease, insect infestations and exotic species invasions (Pearce, 1992).

Patch size has long been emphasized as a vitally influential, but current research has shown that landscape-level characteristics also have an important effect on the ecosystem functions at the scale of woodland patches (Driscoll et al., 2013; Ewers & Didham, 2006). In particular, research and guidance documents have stressed that patch size be considered in conjunction with the overall amount of woodland cover in an area (Fahrig, 2013; Federation of Ontario Naturalists, 2004; Environment Canada, 2013). As woodland patches become more fragmented and overall woodland cover decreases, preserving smaller woodlands becomes increasingly important (Andrén, 1994). Although the most cited value of small woodland patches is their social value to urban communities, they also provide ecosystem functions such as airborne pollution uptake, stepping stone habitat in lieu of connected movement corridors for migratory species (Forman, 1995; Leidner & Haddad, 2011; Lloyd & Marsden, 2011), and redirecting pressure for recreational opportunities away from the now fewer and more sensitive remaining large woodland patches.

The province and Ontario Nature have provided guidelines putting minimum woodland patch sizes in the context of overall woodland cover. They both suggest size thresholds for a variety of woodland cover scenarios (table 9). In a landscape with 30% woodland cover Ontario Nature suggests a more conservative size threshold of 15 ha, and the province suggests a size threshold of 20 ha. In a landscape with 10% woodland cover Ontario Nature suggests a size threshold of 2 ha, and the province suggests a size threshold of 4 ha.

Table 9. Minimum Woodland Patch Size Thresholds Recommended by the Province and Ontario Nature

Percent Woodland Cover	Minimum woodland patch size (OMNR 2010)	Percent Woodland Cover	Minimum woodland patch size (ON 2004)
<5 %	2 ha	<5 %	All woodlands
5-15%	4 ha	5-10%	2 ha
15-30%	20 ha	11-15%	4 ha
30-60%	50 ha	16-20%	10 ha
-	-	21-30%	15 ha
-	-	31-50%	25 ha

As discussed in subsection 2.3.2, woodland cover is unevenly distributed across Wellington County, ranging from approximately 10% in the Township of Mapleton to 33% in the Township of Puslinch (figure 10). Given this, a conservative approach for Wellington County would be to apply the 2 ha or 4 ha threshold to the entire county. At this threshold, the vast majority of interior woodland habitat in Wellington would be included by default. The county's overall woodland cover and interior woodland could also be increased by targeting small woodland patches for voluntary stewardship action in the Townships of Wellington North, Centre Wellington, Mapleton, Minto, and Guelph/Eramosa.

4.4.2 Matrix influence

Matrix influence refers to the effect of surrounding lands (known as the 'matrix') on the ecosystem services and ecological function of a patch. Some human land uses adjacent to a patch can have direct negative impacts (e.g., mortality) or indirect negative impacts (e.g., increased predation) on the populations of species (Ries et al., 2004; Ewers & Didham, 2006). Conversely, the ecological function of a habitat patch can be increased if it is adjacent to another natural habitat patch (e.g., riparian vegetation along a watercourse improves fish habitat), or, to a lesser degree, fallow fields and low-intensity agricultural lands (Perfecto & Vandermeer, 2002; Cook et al., 2002).

The fragmentation of woodland cover in a landscape results in patches of woodlands that are disconnected and sometimes isolated from other woodland patches by large gaps. A matrix of primarily urban land uses between woodland patches can impede the

distribution and migration of flora and fauna. Disruptions in the dispersal of species can threaten the health of populations (Ewers & Didham, 2006; Noss & Harris, 1986). Where patches of other natural cover exist in the matrix, functional connections are likely to persist if those patches are in relative close proximity; however there is limited science indicating specific distances at which certain functions are maintained. A study in Southern Ontario found that the movements of forest birds in fragmented landscapes are generally constrained by forest margins, but that most birds were more likely to cross a gap of up to 25 m if an existing detour under forest cover was considerably longer (Belisle & Desrochers, 2002). In a review of the functions provided by woodlands, Gartner-Lee (2002) reports that woodlands influence thermoregulation, sediment filtration, nutrient flow and habitat quality of riparian and aquatic habitat from distances of 4 – 300 m away. Given the limited guidance available, we recommend the inclusion of woodlands (of any size) in the landscape matrix within 30 m of any other NHS component.

Similarly, the matrix surrounding off-line waterbodies has a strong influence over their functional connectivity to the NHS. Off-line waterbodies (those which are not well connected to a watercourse) are generally formed naturally though geomorphic processes or artificially for aggregate extraction, stormwater management, irrigation or aesthetic purposes. Their lack of hydrological connectivity increases the potential to accumulate sediment, contaminants and nutrients to toxic levels (Tixier et al., 2011; Nurnberg et al., 2003). However, off-line ponds in urban areas can and do provide habitat for terrestrial and aquatic wildlife, (Helfield & Diamond, 1997; Scher & Thiery, 2005; Adams et al., 1985) presumably more so when in close proximity to other natural habitat patches.

4.4.3 Rarity

Rarity refers to uncommon characteristics. As with all concepts in landscape ecology, rarity must be considered in the context of spatial and temporal scale. For example, a species occurring over a broad geographic range is rare if its overall population densities are low relative to historical densities. Conversely, a locally common species may still be considered rare if its global range is very small, or if an individual is observed outside of its global range. Rarity applies not only to species, but also to vegetation communities and ecosystems, and all can be considered rare at one or multiple spatial scales.

Globally rare species and vegetation communities are identified and tracked by the NatureServe Network using a standardized conservation status ranking system (Master et al., 2012). In this system, globally rare species are ranked as G1 (critically imperilled species or communities), G2 (imperilled species or communities) or G3 (vulnerable species or communities; Rainer et al. 2017). NatureServe has also established methodology for assessments at the national and subnational level. In Ontario, the Natural Heritage Information Centre (NHIC) identifies and tracks species using the

subnational (Srank) system. Rare species are ranked as S1 (extremely rare species or communities – usually less than 5 occurrences), S2 (very rare species or communities – usually between 5-20 occurrences), or S3 (rare to uncommon species or communities – usually between 20-100 occurrences). It is necessary to protect the habitat of rare species in order to protect the species themselves from further rarity. NatureServe rankings, and the assessments that support them, are one of many resources used by the federal and provincial government in their designation of species at risk under the federal Species at Risk Act or the provincial Endangered Species Act. However, not all rare species end up listed, and only the habitats of species listed as endangered or threatened are protected by these pieces of legislation.

Although there is a reasonable amount of woodland cover in parts of southern Ontario, old-growth forests are rare. Mature and old-growth forests are sometimes considered "legacy features" because they take a significant amount of time to establish, and will only do so with minimal human and natural disturbance. Evidence suggests that forest composition (i.e. measures such as tree density, structural diversity, tree species diversity and tree age diversity) has a positive influence on the overall diversity and abundance of both flora and fauna (Austen & Bradstreet, 1996; Jacquemyn et al., 2003; Weber et al., 2008).

4.4.4 Habitat Quality

Habitat quality refers to the degree to which the habitat requirements (i.e. resources, mates, space etc.) of a species are met. High quality habitats are critical to the long-term sustainability of local and/or regional species populations (OMNR, 2000), and thus also critical for maintaining Wellington's biodiversity. Habitat quality is a species-specific concept as all species have different ideal habitat conditions (Hall et al., 1997), yet, the habitats of different species can and do overlap within the same natural feature.

Habitat quality is generally evaluated based on existing knowledge of the ideal physical, chemical and biologic conditions for each life history stage of a species' life cycle. The Significant Wildlife Habitat Technical Guide (OMNR, 2000), and its accompanying Criteria Schedule for Ecoregion 6E (OMNRF, 2015) is the most comprehensive system in Wellington County for identifying high quality habitats of birds, reptiles, amphibians, mammals, vascular plants, and butterflies. Although some significant wildlife habitats (SWH) have been identified by Conservation Authorities in Wellington County, exhaustive watershed-wide searches have not been performed. Nevertheless, natural features containing SWH, whether or not their existence is known, should be considered high quality habitat.

Identifying the locations of high quality fish habitat is a more complex task. The GRCA and Credit Valley Conservation (CVC) have both estimated the fish communities present in their respective watersheds in fisheries management plans (OMNR & GRCA, 2005; OMNR & CVC, 2002). Fish community estimates were produced using a

combination of predictive modeling of potential fish habitat based on geomorphology, and site-level fish and habitat analysis. Although the habitat needs and life cycles of the fish in these communities are known, the specific locations of high quality fish habitat is subject to rapid change due to highly dynamic hydrologic processes (Junk et al., 1989). Therefore, river systems and their on-line waterbodies should be thought of as mosaics of ever-changing habitat patches (Allan, 2004; Fausch et al., 2002; Ward et al., 2002). Evidence suggests that variability and variety in aquatic habitats supports greater biodiversity (Townsend, 1989; Hildrew & Giller, 1994; Robinson et al., 2002).

4.4.5 Representation

Representation refers to the full range of variation in species, communities and ecosystems within a landscape, whether common or rare (Smith & Theberge, 1986). Ecologists have a very limited understanding of the relative significance of species, communities and ecosystems. Therefore, the most effective way to preserve biodiversity is to ensure that the full range of ecological variation is represented in natural heritage systems (Margules & Pressey, 2000).

Representation is a concept that is relevant and significant at all spatial scales (Kukkala & Moilanen, 2013). The full range of species, communities and ecosystems in Wellington County is narrower than the full range in the province, and the provincial range is narrower the National and Global range of ecological variation, but all are significant at their respective scales.

Many of Ontario's designated parks and protected natural areas are identified on the basis of representation (Gray et al., 2009). Areas of Natural and Scientific Interest (ANSIs) are publicly or privately owned areas that are recognized for their representative earth science or life science diversity. There are over 1,000 ANSIs in Ontario (Gray et al., 2009). The ANSI designation was implemented in the 1980's to complement Provincial Parks system, as resource limitations do not allow for the acquisition of all representative areas into the Parks system. Life Science ANSIs target lands and water with terrestrial and aquatic natural heritage features that are provincially, regionally or locally representative.

Representation is an important concept with respect to Valleylands. The action of flowing water causes frequent disturbance and change to the landforms within Valleylands (Swanson et al., 1988; Tockner & Stanford, 2002). These landform changes over space and time provide a high diversity of riparian habitat types that support biodiversity, as well as ecological functions such as stream flow regulation (Décamps & Naiman, 1990; Tockner & Stanford, 2002).

4.4.6 Hydrological Importance

Hydrological importance refers to a feature's physical, biological and chemical connection to the aquatic system and/or its influence on the hydrological cycle.

Hydrological importance is a measure that pertains to waterbodies, wetlands, watercourses, headwaters, groundwater recharge areas and groundwater discharge areas.

Features with a connection to the aquatic system maintain the hydrological balance of a landscape. They help sustain water quantity by attenuating surface water runoff and controlling groundwater recharge and discharge. These features can be disproportionately more valuable in urbanizing areas where landscape changes interfere with the hydrological balance by replacing pervious land cover types (e.g. agricultural land) with impervious surfaces (Schueler et al., 2009; Bolund & Hunhammer, 1999; Diamond et al., 2002). Features with a connection to the aquatic system also maintain the quality of water. Contaminants, sediment and excess nutrients are degraded or stored, improving water quality downstream (USEPA, 2015; Meyer et al., 2003; Cappiella & Fraley-McNeal, 2007).

All wetlands are an integral part of the hydrologic cycle, including small and/or isolated wetlands such as headwater wetlands (Mitsch & Gosselink, 2007; OMNR, 2010). As of 2002, Wellington County has lost 49.3% of its historical wetland cover (DUC, 2010). Currently, wetlands represent 12% of Wellington's total area. Watersheds with less than 10% wetland cover are susceptible to declines in wetland functions, particularly hydrological functions such as flood abatement and water quality functions such as sediment trapping (Johnston et al., 1990). These key functions, as well as biodiversity, have also been shown to decline in watersheds that have lost approximately 60% of historical wetland area (Zedler, 2003). Based on these studies, Environment Canada (2013) has suggested a 'no net loss' approach, combined with maintenance of at least 40% of historical wetland cover.

Valleylands are the backbone of the aquatic system as they contain the drainage network of a watershed from their headwaters down to their ultimate drainage into lakes. Vegetated riparian zones in valleylands reduce the intensity and volume of surface water runoff, which helps to reduce shoreline erosion, while also buffering the aquatic system from contaminants originating in agricultural and urban lands (Strayer et al., 2003; Allan, 2004; Opperman et al., 2010). The floodplains in valleylands moderate inflows and outflows during a flood by providing storage areas where floodwaters can be temporarily retained until water levels decrease in streams (Tockner & Stanford, 2002).

5.0 Outcome of the Wellington County NHS

5.1 Wellington County NHS Summary

As discussed in detail in chapter 4, The Wellington County NHS is comprised of two main component types: 1) Natural heritage components, which consist of natural features and areas, and 2) Stewardship components, which consist of enhancement linkages and enhancement woodlands (table 6). Maps of the Wellington County NHS are shown in Appendix I: Maps. Some of the components of the Wellington County NHS are provided as text only (table 8) because mapped information is either sensitive, incomplete or unavailable.

The Wellington County NHS (excluding enhancement linkages) is 59,343 ha, or 23%, of Wellington's total area. A breakdown by feature is provided in table 10.

Table 10. Quantities of Natural Features in the County that are Captured in the Wellington County NHS as Natural Heritage Components

Feature	Area in County (ha or km)	Area expressed as a percent of Wellington's total area (%)	Amount of area captured in Wellington County NHS (ha or km)	Amount of feature captured in Wellington County NHS expressed as a percent
Wetlands	*30,267 ha	11.5%	30,267 ha	100%
Woodlands	*45,556 ha	17.4%	44,864 ha	98.5%
Valleylands	*29,859 ha	11.4%	29,859 ha	100%
Waterbodies	*5,056 ha	1.9%	4,736 ha	93.7%
Watercourses	*3,512 km	N/A	3,512 km	100%
Life Science ANSIs	*8,482 ha	3.2%	8,482 ha	100%

*These feature types are not mutually exclusive. For example, Life Science ANSIs and valleylands are comprised of a combination of features, and some woodland types (e.g., swamps) are both woodland and wetland. Summing these area values will not provide an accurate total area of features.

A total of 1,171 enhancement woodlands were identified in Mapleton, Wellington North, Minto, Centre Wellington and Guelph/Eramosa (table 11). Not surprising due to their size difference, Wellington North identifies the most enhancement woodlands and Minto the least. A total of 13,931 enhancement linkages were identified across the county, with a total length of 2,646 km. The longest enhancement linkage was identified in Centre Wellington at 5.6 km.

Table 11. Quantities of Natural Features in the County that are Captured in the Wellington County NHS as Stewardship Components

Stewardship Component	Lower Tier Municipality							Entire County
	Mapleton	Wellington North	Minto	Centre Wellington	Guelph-Eramosa	Erin	Puslinch	
Enhancement Woodlands								
Number (#)	242	358	157	241	173	0	0	1,171
Area (ha)	554.29	744.10	304.61	516.09	364.41	0	0	2,483.5
Enhancement Linkages								
Number (#)	5,703	1,333	950	1,616	1,070	1,460	1,799	13,931
Total Length (km)	985.42	334.96	249.60	390.40	247.08	200.96	237.64	2,646
Minimum Length (m)	14.99	14.99	14.99	14.99	14.99	14.99	14.99	14.99
Maximum Length (m)	3,118	2,333	3,975	5,632	3,411	1,538	3,813	5,632

5.2 Comparison of the Wellington County NHS to the Growth Plan NHS

The provincial and county NHSs were developed at different scales and with different by complimentary objectives. The province identified the Growth Plan NHS at a mapping scale of roughly 1:50,000. The Wellington County NHS presented in this report identifies a connected NHS at a mapping scale of roughly 1:10,000.

The province's Growth Plan for the Greater Golden Horseshoe maps 78,519 ha, or 30%, of Wellington's total area as part of the Growth Plan NHS. When overlaid with the Wellington County NHS, there are 40,442 ha captured similarly by both the Growth Plan NHS and the Wellington County NHS (see Appendix I: Maps – *Comparison of the Wellington County NHS to the Growth Plan NHS*).

The Growth Plan NHS includes more area than the Wellington County NHS because the methodology applied resulted in the inclusion of more non-natural land cover (i.e.

lands classified by the Southern Ontario Land Resource Information System (SOLRIS) Version 2.1 and Version 3 as Built-up areas, Extraction, Tilled, Transportation, or Undifferentiated). The Growth Plan NHS is 46% non-natural cover whereas the Wellington County NHS is 8% non-natural cover. Furthermore, The Growth Plan NHS includes less of the county's wetlands (76%), woodlands (68%), valleylands (64%), waterbodies (31%) and watercourses (44%) compared to the Wellington County NHS (table 12).

Table 12. Quantities of Natural Features in the County Captured by the Wellington County NHS and the Growth Plan NHS

Feature	Amount in County (ha or km)	Amount captured in Wellington County NHS (ha or km)	Amount captured in Wellington County NHS expressed as a percent	Amount captured in Growth Plan NHS (ha or km)	Amount captured in Growth Plan NHS expressed as a percent
Wetlands	30,267 ha	30,267 ha	100%	22,852 ha	76%
Woodlands	45,556 ha	44,864 ha	99%	31,160 ha	68%
Valleylands	29,859 ha	29,859 ha	100%	19,169 ha	64%
Waterbodies	5,056 ha	4,736 ha	94%	1,547 ha	31%
Watercourses	3,512 km	3,512 km	100%	1,549 km	44%
Life Science ANSIs	8,482 ha	8,482 ha	100%	8,372 ha	99%

6.0 Public Consultation

6.1 Public Open House and Stakeholder Engagement

As a component of the Wellington County NHS mapping project, the County of Wellington undertook several public consultation activities to communicate project information and gather input including the following:

- A Public Drop-In Open House on April 3, 2018 held in the Aboyne Hall at Wellington Place (figure 15)
- A dedicated page on the county's website with key project information and Frequently Asked Questions & Answers
- An interactive online mapping tool for the public to view the proposed NHS
- Social media posts on Facebook and Twitter

The proposed Wellington County NHS was posted on the county's website for a 35-day review period from April 3 to May 7, 2018.

Copies of stakeholder engagement material can be found in Appendix IV: Stakeholder Engagement.

Open House Attendees

6.2 Presentation to the Wellington Federation of Agriculture

A significant portion of Wellington County's landscape is characterized by agricultural lands therefore it is important that any NHS developed for Wellington County respects the role agriculture offers to the conservation and stewardship of the environment.

On April 3, 2018 the County of Wellington and the Grand River Conservation Authority (GRCA) presented the proposed Wellington County NHS to the Wellington Federation of Agriculture(WFA) Board of Directors. The presentation provided an overview of the project, an overview of the proposed Wellington County NHS methodology and mapping, answered questions about the mapping and sought feedback.

Through an email on April 5, 2018 the County of Wellington provided links to key project information, FAQs and the Public Comment Form that could be forwarded to WFA members.

A copy of the presentation given to the WFA can be found in Appendix V: Presentation to Wellington Federation of Agriculture.

6.3 Stakeholder Input on the Wellington County NHS

Notice of the Public Open House was advertised in the Wellington Advertiser for 2 weeks prior to the event. Additional notice was emailed to stakeholder contacts that were considered to have a potential interest in the Wellington County NHS project. A total of 21 members of the public signed into the Public Open House held April 3, 2018. No written comments were submitted at the Public Open House.

Some members of the WFA Board of Directors raised concerns with the project during the presentation given by County of Wellington and GRCA staff. There were also concerns about the potential impact on farm properties of the province's Growth Plan NHS. Members of the agricultural community were encouraged to review the draft mapping and provide feedback.

Public consultation on the proposed Wellington County NHS was provided for 35 days, from April 3 to May 7, 2018. As a result of the public consultation, the County of Wellington received a total of 3 written comment submissions: 2 submissions were received online and 1 comment submission was received through email.

A copy of all written submissions can be found in Appendix VI: Comments Received on the Wellington County Natural Heritage System

6.4 Outcome of Stakeholder Input to the Wellington County NHS

The intent of the public consultation was to present information on the proposed Wellington County NHS mapping and provide an opportunity for stakeholders to offer feedback. Overall public comments were generally supportive of the county's initiative to

identify a NHS that balances the conservation and stewardship of natural areas with the importance of agriculture on the landscape.

As a result of consultation and feedback received, the County removed Environmentally Sensitive Areas (ESAs) as a mapped component of the Wellington County NHS.

As a result of consultation and feedback received, the inclusion of floodplains was reviewed and determined to be an appropriate surrogate for significant valleylands until such time valleylands in Wellington County can be identified or an alternate surrogate considered.

Comments from the public received after May 7th, 2018 will be kept on file with the County of Wellington for consideration in future initiatives. The county remains open to input on planning matters of interest to the public. At the time of submission of this final report no additional comments have been received.

7.0 Concluding Remarks

7.1 Statement of Limitations

We use ecological principles and science-based criteria (see section 4.4) to include all important ecological features into the Wellington County NHS. This project was not scoped to derive custom spatial data layers through interpretation of aerial photographs or satellite imagery, nor was natural heritage information collected though field reconnaissance activities such as Ecological Land Classification (ELC) and wildlife surveys. We used best available existing mapped natural heritage data from Conservation Authorities and from the province to perform the analysis and map the components of the NHS. We relied on the vetting done by the source of the data and have not modified the delineations of any features. NHS Components that could not be mapped due to insufficient data were included in the Wellington County NHS as text. This mapping is intended for use at a mapping scale of 1:10,000. For use at finer scales, we recommend site-level refinement.

7.2 Recommendations for Future Work

7.2.1 Identification of Enhancement Areas

Federal guidelines suggest that an adequately healthy NHS should contain at least 30 percent forest cover and 10 percent wetland cover at the watershed scale, which will only support approximately half of its potential species-richness. If targeted for voluntary stewardship action, enhancement woodlands can help to increase Wellington County's overall natural cover, thereby increasing the resiliency of the system. However to reach

these federal targets, it is recommended that enhancement areas are also identified. Enhancement areas should be:

a) areas that would connect functionally to the Wellington County NHS if restored
b) areas that are currently pervious (i.e. lands that are currently unpaved and allow water to reach the soil).

7.2.2 Assessment of Connectivity to Neighbouring Municipal Natural Heritage Systems

Within the Wellington County NHS, natural heritage components such as aquatic habitat and valleylands provide the majority of existing hydrological and terrestrial connectivity in the system, and enhancement linkages identify opportunities to improve overall connectivity. Ecological processes such as species dispersion and stream flow fluctuations do not halt at geographic boundaries, so an assessment of hydrological and terrestrial connectivity at Wellington County's jurisdictional boundary should be done to ensure system connectivity with neighbouring municipalities.

8.0 Acronyms

ANSI	Areas of Natural and Scientific Interest
CVC	Credit Valley Conservation
ELC	Ecological Land Classification System
ESA	Environmentally Sensitive Areas
GRCA	Grand River Conservation Authority
GIS	Geographic Information System
NHIC	Natural Heritage Information Centre
NHS	Natural Heritage System
OGS	Ontario Geological Survey
OMMAH	Ontario Ministry of Municipal Affairs and Housing
OMNRF	Ontario Ministry of Natural Resources and Forestry
PPS	Provincial Policy Statement
PSW	Provincially Significant Wetland
SC	Steering Committee
SWH	Significant Wildlife Habitat
SWHTG	Significant Wildlife Habitat Technical Guide
WFA	Wellington Federation of Agriculture

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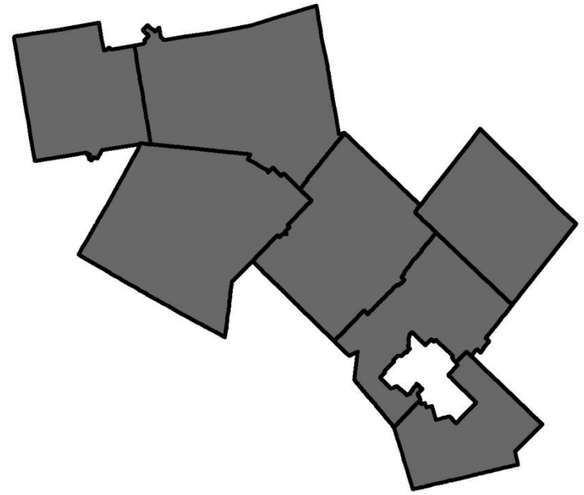
Appendix I: Maps

Wellington County
Natural Heritage System

Legend

- Existing Natural Heritage Components
- Enhancement Woodlands
- Enhancement Linkages

Wellington County



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NAD 1983 UTM Zone 17N

Wellington County
Natural Heritage System

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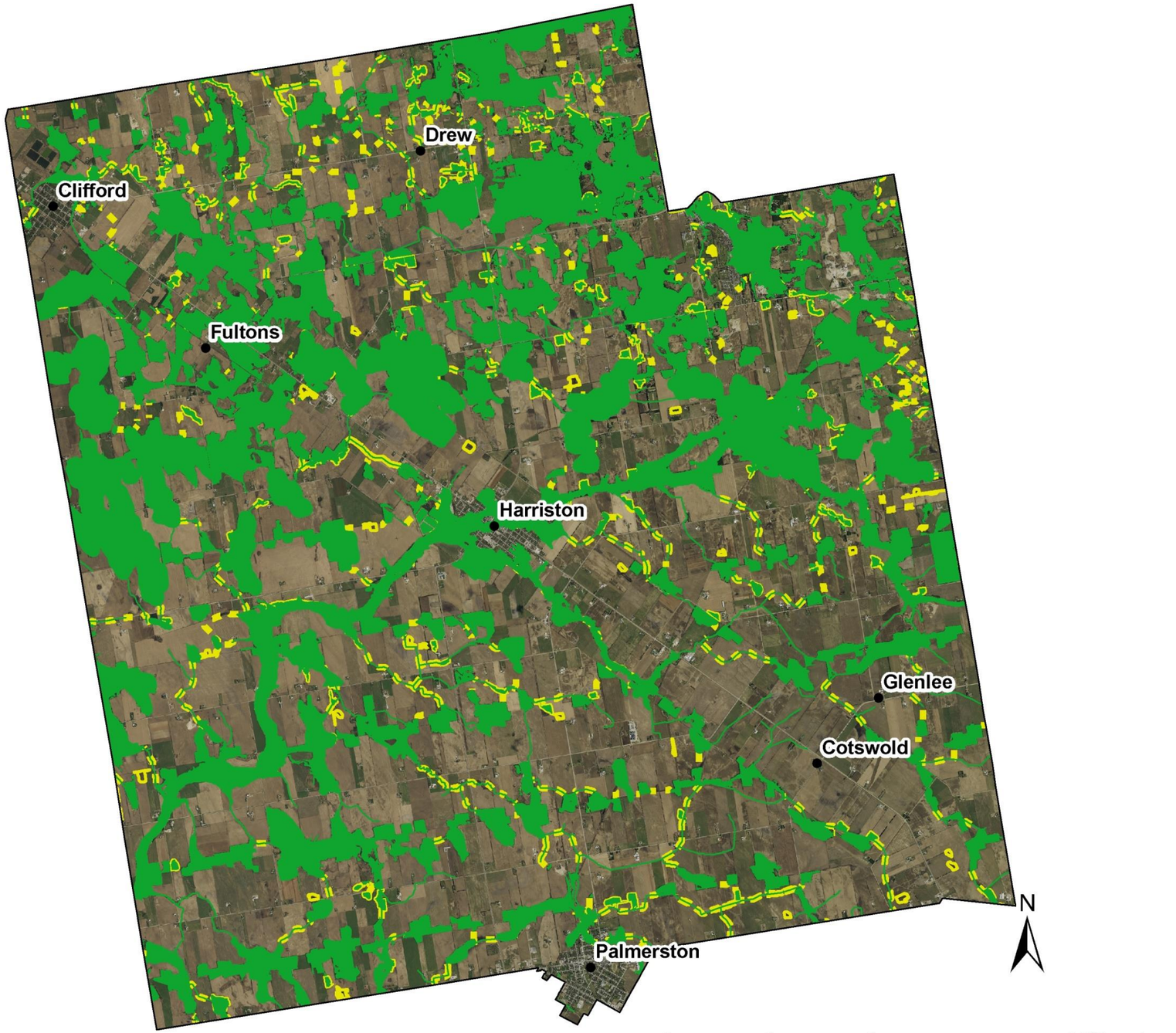
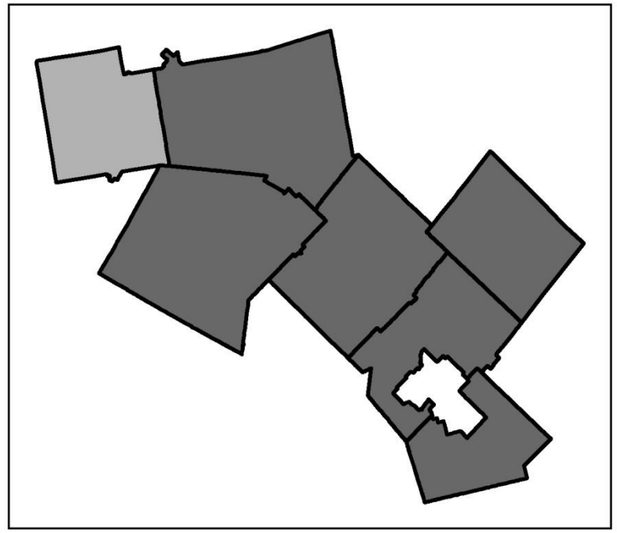


Legend

- Existing Natural Heritage Components
- Enhancement Woodlands
- Enhancement Linkages

Wellington County



NAD 1983 UTM Zone 17N

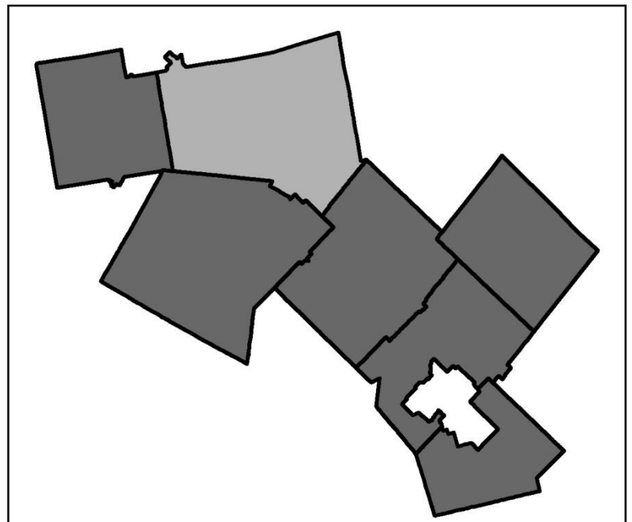
Wellington County
Natural Heritage System

Township of Wellington North

Legend

- Existing Natural Heritage Components
- Enhancement Woodlands
- Enhancement Linkages

Wellington County



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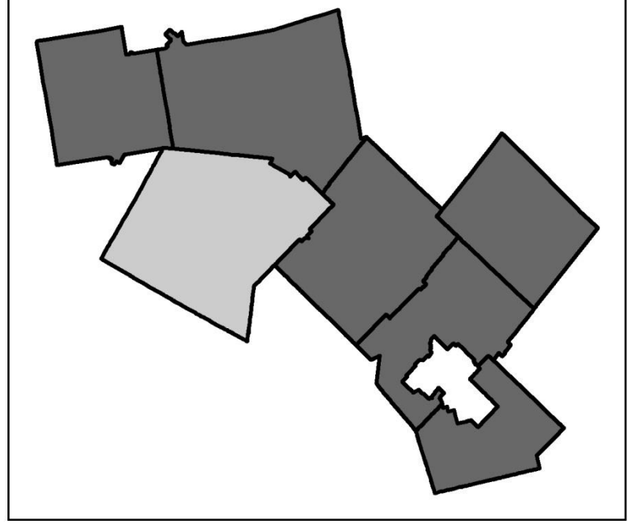
Wellington County
Natural Heritage System

Township of Mapleton

Legend

- Existing Natural Heritage Components
- Enhancement Woodlands
- Enhancement Linkages

Wellington County



NAD 1983 UTM Zone 17N

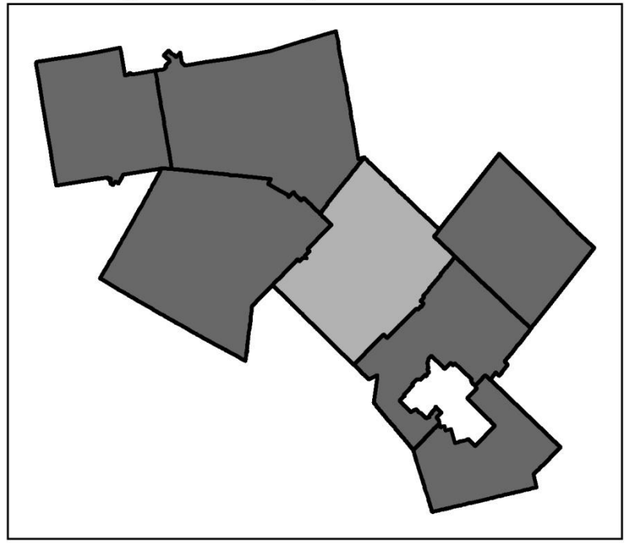
Wellington County
Natural Heritage System

Township of Centre Wellington

Legend

- Existing Natural Heritage Components
- Enhancement Woodlands
- Enhancement Linkages

Wellington County



NAD 1983 UTM Zone 17N

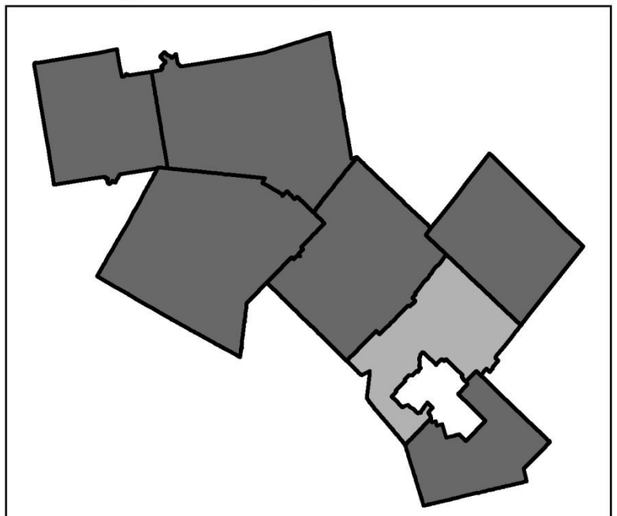
Wellington County
Natural Heritage System

Township of Guelph Eramosa

Legend

- Existing Natural Heritage Components
- Enhancement Woodlands
- Enhancement Linkages

Wellington County



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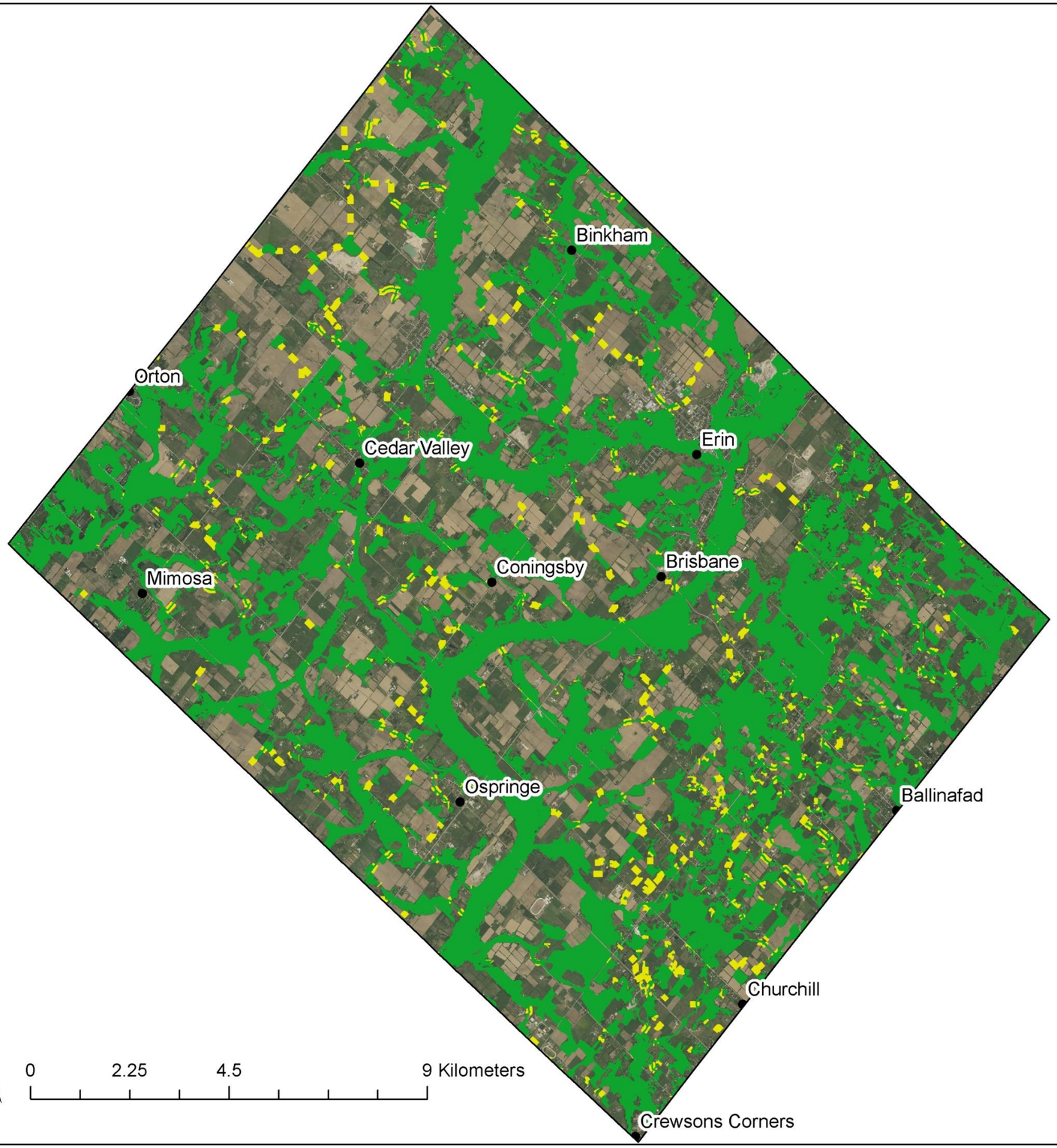
Wellington County
Natural Heritage System

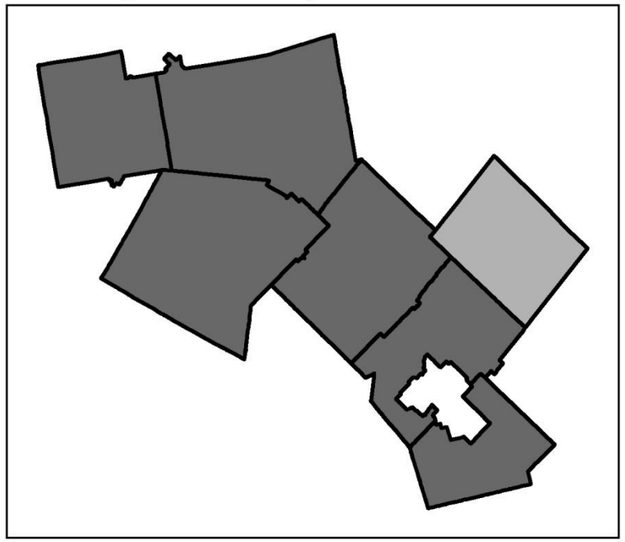
Town of Erin



Legend

- Existing Natural Heritage Components
- Enhancement Woodlands
- Enhancement Linkages

Wellington County



NAD 1983 UTM Zone 17N

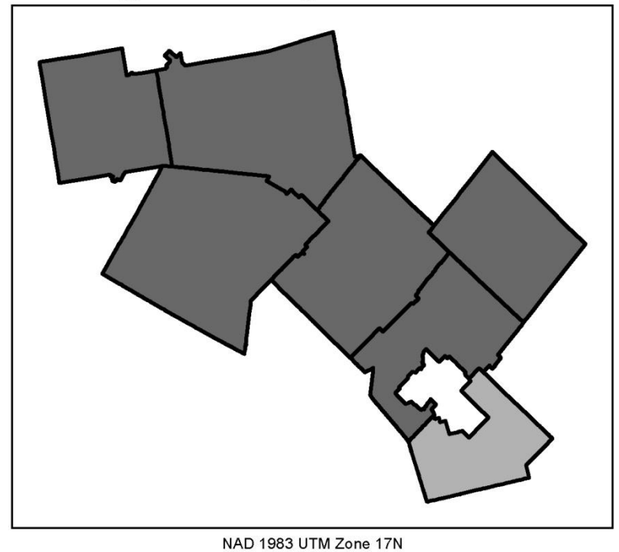
Wellington County
Natural Heritage System

Township of Puslinch

Legend

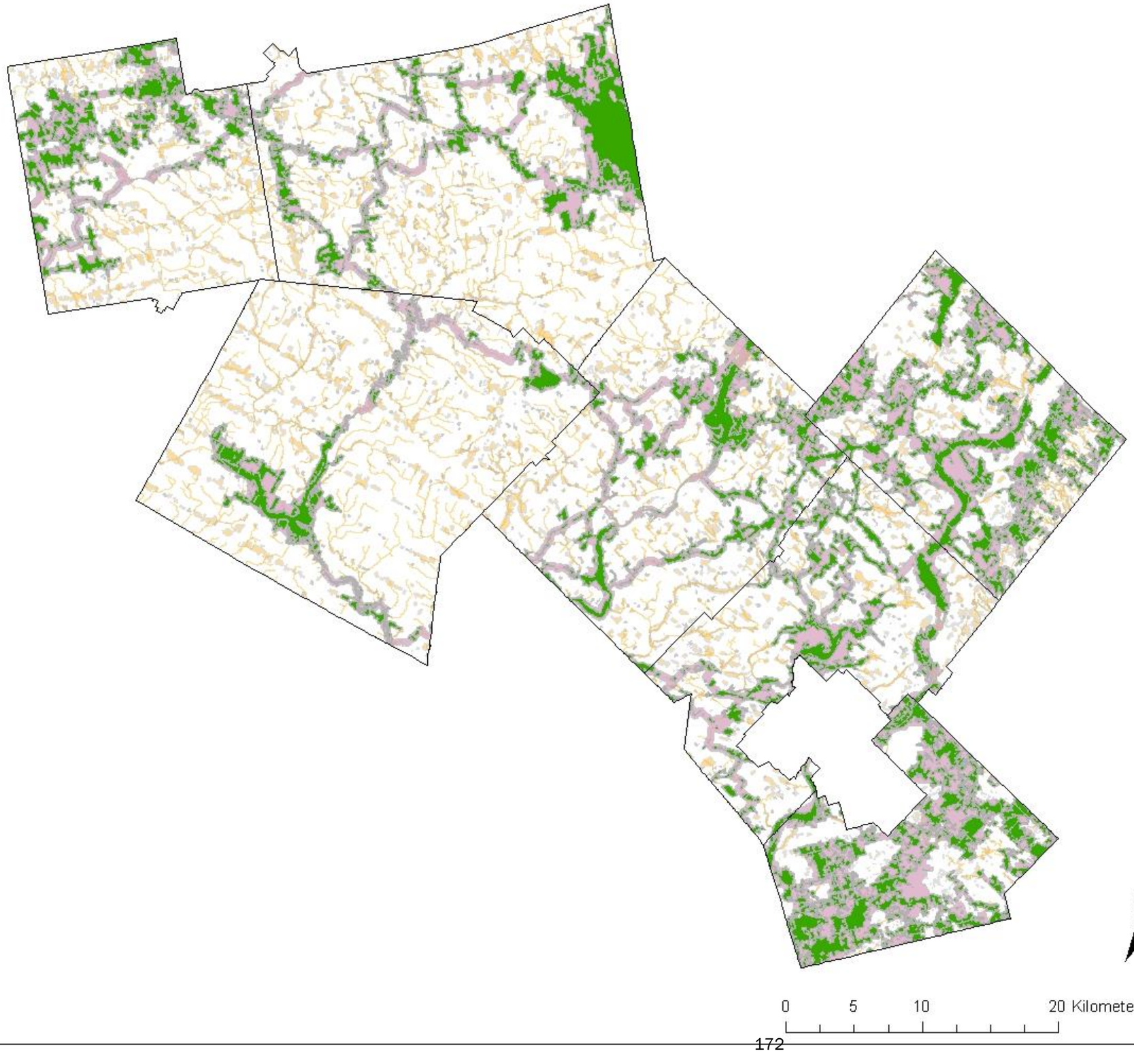
- Existing Natural Heritage Components
- Enhancement Woodlands
- Enhancement Linkages

Wellington County



NAD 1983 UTM Zone 17N

Growth Plan Natural Heritage System and Wellington County Natural Heritage System



Legend

- Wellington County Townships
- Both Growth Plan NHS and County NHS
- Growth Plan Natural Heritage System
- Wellington County Natural Heritage System

NAD 1983 UTM Zone 17N

Appendix II: Evaluated Wetlands in Wellington County

Wetland Complex Name	Total Complex Area (Ha)	Overall Wetland Score
Acton Silver Creek Wetland Complex	170.79	720
Alma Wetland Complex	230.41	708
Alton Hillsburgh Wetland Complex	290.11	700
Arkell Bog Wetland Complex	44.42	630
Arkell Corwhin Wetland Complex	188.80	723
Badenoch Moffat Wetland Complex	479.74	792
Beverly Swamp Wetland Complex	2759.76	776
Brotherston Wetland Complex	136.46	436
Caledon Mountain Wetland Complex	266.93	845
Central Carroll Creek Wetland Complex	47.57	464
Clare Creek Wetland Complex	490.23	706
Clifford-Harriston Complex	54.75	Null
Clifford Harriston Wetland Complex	2805.59	789
Clythe Creek Wetland Complex	124.58	604
Conn Swamp	153.99	Null
Cotswold East Wetland Complex	25.61	391
Cotswold Wetland Complex	21.35	367
Cranberry Oil Well Bog Wetland Complex	372.57	854
Creek Bank Valley Wetland	238.07	551

Wetland Complex Name	Total Complex Area (Ha)	Overall Wetland Score
Damascus Southeast Wetland Complex	211.54	483
Derrynane Swamp	151.17	440
East Morriston Swamp	12.48	337
Ellis Creek Wetland Complex	524.84	772
Elmira Wetland	55.88	433
Eramosa River - Blue Springs Creek Wetland Complex	3444.71	776*
Erin Town Line Woods Swamp	19.71	268
Fairchild Creek Headwaters Wetland Complex	294.84	772
Farewell Swamp	199.00	746
Fletcher Creek Swamp	563.13	781
Glenchristie Wetland Complex	53.65	643
Glenlee Wetland Complex	26.82	409
Goldstone South Swamp	44.97	334
Guelph Junction Wetland Complex	485.43	782
Guelph Northeast Wetland Complex	285.23	620
Guelph Southwest Wetland Complex	90.76	467
Hanlon Creek Swamp	233.18	632
Harriston South Wetland Complex	74.21	441
Harriston West Wetland Complex	17.57	285
Harriston Wetland Complex	12.79	359

Wetland Complex Name	Total Complex Area (Ha)	Overall Wetland Score
Hopewell Creek Riparian Wetland	147.83	484
Howick Minto Wetland Complex	217.27	556
Inverhaugh Valley Wetland Complex	137.90	712
Irvine Creek Wetland Complex	286.13	523
Keldon Swamp	920.68	Null
Living Springs Wetland Complex	363.32	693*
Lower Cox Creek Wetland Complex	333.95	619
Lower Mountsberg Creek Wetland Complex	365.79	667
Luther Marsh	4033.07	874
Marden South Wetland Complex	757.81	669
Melgund Wetland Complex	24.30	341
Mill Creek Puslinch Wetland Complex	1804.10	788
Minto 1 Wetland	13.39	336
Minto 10 Wetland	9.97	254
Minto 11 Wetland	8.66	289
Minto 12 Wetland	12.72	258
Minto 13 Wetland	27.95	333
Minto 14 Wetland	2.04	326
Minto 2 Wetland	66.50	361
Minto 3 Wetland	54.41	421
Minto 4 Wetland	15.08	282

Wetland Complex Name	Total Complex Area (Ha)	Overall Wetland Score
Minto 5 Wetland	18.54	287
Minto 6 Wetland	17.35	385
Minto 7 Wetland	8.28	232
Minto 8 Wetland	14.25	360
Minto 9 Wetland	10.29	241
Minto Wallace 1 Wetland Complex	65.99	425
Minto Wallace 2 Wetland Complex	61.90	404
Moffat Creek Swamp	238.69	707
Morriston Marsh	4.63	253
Mountsberg Reservoir Marsh	230.81	701
North Cumnock Wetland Complex	254.20	619
North Woolwich Swamp	249.58	603
Palmerston Northwest Wetland Complex	36.04	312
Portuguese Swamp	60.68	654
Puslinch Lake Irish Creek Wetland Complex	485.11	763
Ritch Tract Swamp	328.50	563
Salem South Wetland Complex	151.14	565
South Saugeen River Wetland Complex	113.82	Null
Speed-Lutteral-Swan Creek Wetland Complex	5853.16	798*
Speed River Wetland Complex	661.58	808
Stirton South Swamp	43.27	276

Wetland Complex Name	Total Complex Area (Ha)	Overall Wetland Score
Torrence Creek Swamp	141.55	692
Trecastle Swamp	72.65	350
Valens Wetland Complex	290.46	774
Wagram Wetland Complex	216.89	585
Waterloo Guelph Townline Wetland	81.08	591
Wellington Huron Wetland	25.75	391
West Credit River Wetland Complex	907.76	785

*Where more than one overall score is listed for the complex, the most recent overall score is shown (data source - Ontario Ministry of Natural Resources and Forestry. Dataset Name: Wetland. Ontario: Queen's Printer of Ontario, 2017.)

Appendix III: Provincially Significant Species Documented Within Wellington County

Common Name	Scientific Name	Provincial Rank[1]	Provincial Status[2]	Federal Status[3]	Source	Last Known Observation	Habitat present
Plants							
American Chestnut	*Castanea dentata*	S1S2	ENDANGERED	ENDANGERED	NHIC 2015	1983	Yes
American Gromwell	*Lithospermum latifolium*	S3	No Status	No Status	NHIC 2015	1941	Yes
Beaked Spiked Rush	*Eleocharis rostellata*	S3	No Status	No Status	NHIC 2015	1909	Yes
Burning Bush	*Eonymus atropureus*	S3	No Status	No Status	NHIC 2015	1902	Yes
Butternut	*Juglans cinerea*	S2?	ENDANGERED	ENDANGERED	NHIC 2015	2009	Yes
Canadian Black-snakeroot	*Sanicula canadensis var. grandis*	S2	No Status	No Status	NHIC 2015	1904	?
Carey's Sedge	*Carex careyana*	S2	No Status	No Status	NHIC 2015	1997	Yes
Carolina Vetch	*Vicia caroliniana*	S2	No Status	No Status	NHIC 2015	1948	Yes
Downy False Foxglove	*Aureolaria virginica*	S1	No Status	No Status	NHIC 2015	1990	Yes
False Hop Sedge	*Carex lupuliformis*	S1	ENDANGERED	ENDANGERED	NHIC 2015	1902	?
Harbinger-of-Spring	*Eriginea bulbosa*	S3	No Status	No Status	NHIC 2015	1942	Yes
Hill's Pond Weed	*Potamogeton hillii*	S2	SPECIAL CONCERN	SPECIAL CONCERN	NHIC 2015	?	?
Large Roundleaf Orchid	*Platanthera macrophylla*	S2	No Status	No Status	NHIC 2015	?	?
Moss Flox	*Phlox subulata*	S1?	No Status	No Status	NHIC 2015	1974	?
Northern Hawthorn	*Craetagus dissona*	S3	No Status	No Status	NHIC 2015	1942	Yes
Pignut Hickory	*Carya glabra*	S3	No Status	No Status	NHIC 2015	1980	Yes
Ram's Head Lady's Slipper	*Cypripedium arietinum*	S3	No Status	No Status	NHIC 2015	1986	?
Rugulose Grapefern	*Botrychium rugulosum*	S2	No Status	No Status	NHIC 2015	1979	?
Scarlet Beebalm	*Monarda didyma*	S3	No Status	No Status	NHIC 2015	1892	?
Sharp-fruited Rush	*Juncus acuminatus*	S3	No Status	No Status	NHIC 2015	1902	Yes
Shrubby St. John's Wart	*Hypericum prolificum*	S2	No Status	No Status	NHIC 2015	?	Yes
Slender Stubble Moss	*Gyroweisia tenuis*	S1	No Status	No Status	NHIC 2015	?	?
Slim-flowered Muhly	*Muhlenbergia tenuiflora*	S2	No Status	No Status	NHIC 2015	1989	?
Smith's Bulrush	*Schoenoplectus smithii*	S3	No Status	No Status	NHIC 2015	1902	Yes
Soft-Hairy False Gromwell	*Onosmodium molle ssp. hispidissimum*	S2	No Status	No Status	NHIC 2015	?	?

Woodland Flax	*Linum virginianum*	S2	No Status	No Status	NHIC 2015	?	Yes
Birds							
Acadian Flycatcher	*Empidonax virescens*	S2S3B	ENDANGERED	ENDANGERED	eBird 2018	1988	?
Bank Swallow	*Riparia riparia*	S4B	THREATENED	THREATENED	eBird 2018	2017	Yes
Bald Eagle	*Haliaeetus leucocephalus*	S4B S2N	SPECIAL CONCERN	Not At Risk	eBird 2018	2017	Yes
Barn Swallow	*Hirundo rustica*	S4B	THREATENED	THREATENED	eBird 2018	2017	Yes
Black Tern	*Chlidonia niger*	S3B	SPECIAL CONCERN	Not At Risk	eBird 2018	2007	Yes
Bobolink	*Dolichonyx oryzivorus*	S4B	THREATENED	THREATENED	eBird 2018	2017	Yes
Canada Warbler	*Wilsonia canadensis*	S4B	SPECIAL CONCERN	THREATENED	eBird 2018	2017	Yes
Cerulean Warbler	*Dendroica cerulea*	S3B	THREATENED	ENDANGERED	eBird 2018	2005	?
Chimney Swift	*Chaetura pelagica*	S4B	THREATENED	THREATENED	eBird 2018	2017	Yes
Common Nighthawk	*Chordeiles minor*	S4B	SPECIAL CONCERN	THREATENED	eBird 2018	2017	Yes
Eastern Meadowlark	*Sturnella magna*	S4B	THREATENED	THREATENED	eBird 2018	2017	Yes
Eastern Whip-poor-will	*Caprimulgus vociferus*	S4B	THREATENED	THREATENED	eBird 2018	2017	Yes
Golden Eagle	*Aquila chrysaetos*	S2B	ENDANGERED	NOT AT RISK	eBird 2018	2017	No
Golden-winged Warbler	*Vermivora chrysoptera*	S4B	SPECIAL CONCERN	THREATENED	eBird 2018	2000	Yes
Horned Grebe	*Podiceps auritus*	S1B	SPECIAL CONCERN	SPECIAL CONCERN	eBird 2018	2018	Yes
Henslow's Sparrow	*Ammodramus henslowii*	SHB	ENDANGERED	ENDANGERED	NHIC 2015	1988	?
Least Bittern	*Ixobrychus exilis*	S4B	THREATENED	THREATENED	eBird 2018	2017	Yes
Loggerhead Shrike	*Lanius ludovicianus*	S2B	ENDANGERED	ENDANGERED	NHIC 2015	1982	?
Olive-sided Flycatcher	*Contopus cooperi*	S4B	SPECIAL CONCERN	THREATENED	eBird 2018	2016	Yes
Peregrine Falcon	*Falco peregrinus*	S3B	SPECIAL CONCERN	SPECIAL CONCERN	eBird 2018	2017	Yes
Prairie Warbler	*Dendroica discolor*	S3B	Not At Risk	Not At Risk	eBird 2016	2016	Yes
Red-headed Woodpecker	*Melanerpes erythrocephalus*	S4B	SPECIAL CONCERN	THREATENED	eBird 2018	2016	Yes
Short-eared Owl	*Asio flammeus*	S4B S2N	SPECIAL CONCERN	SPECIAL CONCERN	eBird 2018	2017	Yes
Yellow-breasted Chat	*Icteria virens*	S2B	SPECIAL CONCERN	SPECIAL CONCERN	eBird 2018	June 14, 2017	Yes
Mammals							
Eastern Small-footed Myotis	*Myotis lebii*	S2	ENDANGERED				Yes

Little Brown Myotis	*Myotis lucifugus*	S4	ENDANGERED	ENDANGERED			Yes
Northern Myotis	*Myotis septentrionalis*	S3	ENDANGERED	ENDANGERED			Yes
Tricolored Bat	*Pipistrellus subflavus*	S3?	No Status	No Status			Yes
Herpetofauna							
Blanding's Turtle	*Emydoidea blandingii*	S3	THREATENED	THREATENED	NHIC 2015	1988	Yes
Butler's Gartersnake	*Thamnophis butleri*	S2	ENDANGERED	ENDANGERED	NHIC	2009	Yes
Eastern Massassauga	*Sistrurus catenatus*	S3	THREATENED	THREATENED	NHIC 2015	1962	Yes
Eastern Ribbonsnake	*Thamnophis sauritus*	S3	SPECIAL CONCERN	SPECIAL CONCERN	NHIC 2015	1990	Yes
Jefferson Salamander	*Ambystoma jeffersonianum*	S2	ENDANGERED	THREATENED	NHIC 2015	1985	?
Jefferson X Blue-spotted Salamander	*Ambystoma hybrid pop. 1*	S2	No Status	No Status	NHIC 2015	1990	Yes
Milksnake	*Lampropeltis triangulum*	S3	SPECIAL CONCERN	SPECIAL CONCERN	NHIC 2015	1990	Yes
Northern Map Turtle	*Graptemys geographica*	S3	SPECIAL CONCERN	SPECIAL CONCERN	NHIC 2015	1924	?
Snapping Turtle	*Chelydra serpentine*	S3	SPECIAL CONCERN	SPECIAL CONCERN	GRCA 2017	2017	Yes
Fishes							
Black Redhorse	*Moxostoma duquesnei*	S2	THREATENED	THREATENED	NHIC 2015	1982	Yes
Greater Redhorse	*Moxostoma valenciennesi*	S3	No Status	No Status	NHIC 2015	1997	Yes
Redside Dace	*Clinostomus elongatus*	S2	ENDANGERED	ENDANGERED	NHIC 2015	2001	Yes
Silver Shiner	*Notropis photogenis*	S2S3	THREATENED	SPECIAL CONCERN	NHIC 2015	1981	Yes
Mussels							
Rainbow Mussel	*Villosa iris*	S2S3	ENDANGERED	THREATENED	NHIC 2015		
Insects							
A Mayfly	*Ameletus walleyi*	SH	No Status	No Status	NHIC 2015	1969	?
Giant Lacewing	*Polystoechotes punctatus*	SH	No Status	No Status	NHIC 2015	?	?
Clam-tipped Emerald	*Somatochlora tenebrosa*	S2S3	No Status	No Status	NHIC 2015		
Mottled Darner	*Aeshna clepsydra*	S3	No Status	No Status	NHIC 2015	1995	?
Rusy-patched Bumblebee	*Bombus affinis*	S1	ENDANGERED	ENDANGERED	NHIC 2018	1980	
Tawny Emperor	*Asterocampa clyton*	S2S3	No Status	No Status	NHIC 2015	1997	?

Appendix IV: Stakeholder Engagement

Open House Notice

COUNTY OF WELLINGTON

NOTICE OF OPEN HOUSE

Wellington County Natural Heritage System

Tuesday April 3, 2018
4:00 pm - 8:00 pm

at the Aboyne Hall
Wellington County Museum and Archives
0536 Wellington Road 18, Fergus

Wellington County retained the Grand River Conservation Authority (GRCA) to develop a Natural Heritage System across the County. The project was designed to identify a natural heritage system with a 'made in Wellington' approach that reflects the diversity of natural heritage resources on the County landscape and respects the balance between natural systems and the importance of farming and other land uses.

You are invited to this drop-in format Open House to view the draft mapping, ask project team members questions about the project, and learn about stewardship opportunities for landowners.

This Open House marks the beginning of public consultation so if you are unable to attend, please feel free to phone or email the address below to provide your input or ask questions.

For more information, please feel free to contact the County Planning Department at:

519.837.2600 x2040 | countynhs@wellington.ca

or visit our website at:

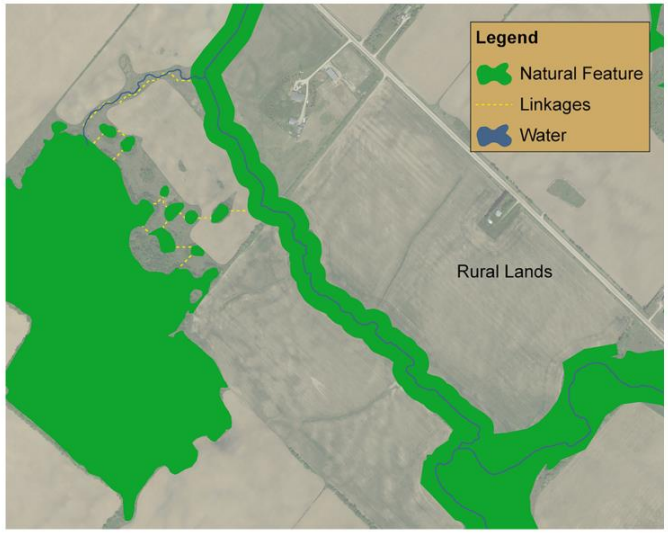
https://www.wellington.ca/en/resident-services/pl-majorprojects.aspx

ALTERNATE FORMATS OF THIS NOTICE ARE AVAILABLE UPON REQUEST

Wellington County Natural Heritage System

What is a Natural Heritage System?

A natural heritage system is a network of interconnected natural features and areas such as wetlands, woodlands, valleylands, lakes and rivers.



Natural Heritage Systems are identified to help conserve biological diversity, maintain ecological functions (e.g. movement corridors for wildlife, endangered species habitat) and sustain ecosystem services that we all depend on (e.g. pollination, clean water, flood damage reduction).

Biological Diversity

The Henslow's Sparrow and the Spotted Turtle are two species at risk found in Wellington County

Ecological Functions

An aerial photograph showing the importance of corridors within a rural landscape

Ecosystem Services

Bees and other pollinators are crucial for the pollination of fruit, vegetable, oil, seed, and nut crops

Open House Story Boards

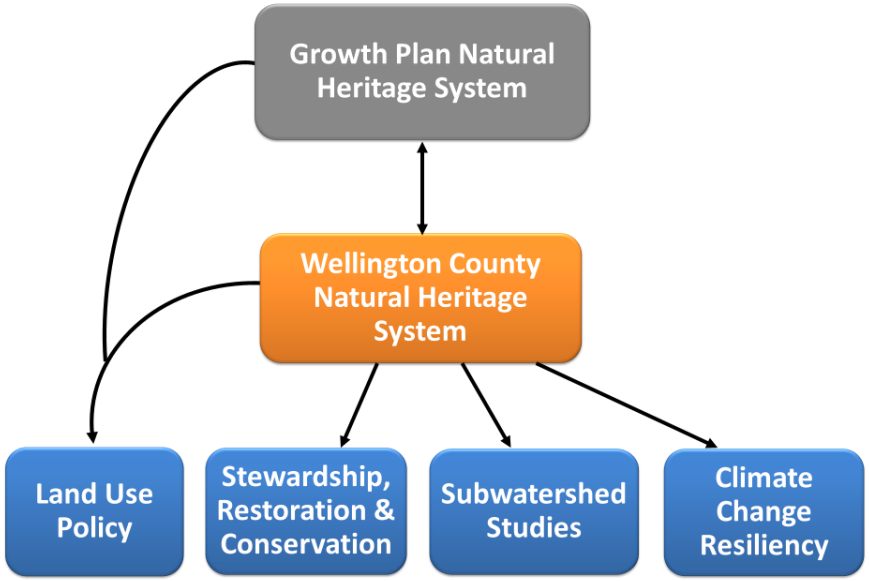
Wellington County Natural Heritage System

The relationship to the Growth Plan Natural Heritage System

The County recognizes that the regional scale Natural Heritage System in the Growth Plan for the Greater Golden Horseshoe (Growth Plan NHS) was recently issued and that decisions on planning matters must conform with the policies related to that system.

At the same time, the County feels that it needs a more detailed and locally developed Natural Heritage System as a scientific basis for:

- ✓ Refinements to the Growth Plan NHS when we amend the County Official Plan to conform with the Growth Plan and consider possible future policy amendments
- ✓ Stewardship programs and strategies
- ✓ Watershed and subwatershed planning
- ✓ Developing climate change strategies



Wellington County Natural Heritage System

What is the goal of this project?

The goals of this project are to identify, through the engagement of stakeholders, a Natural Heritage System that will:

- ✓ Maintain and/or improve local and regional biodiversity
- ✓ Recognize local-scale linkage between and among natural heritage features and areas
- ✓ Provide a scientific basis for land and water stewardship activities, conservation land acquisition, priorities for Inventory Programs, and possible future amendments to the County Official Plan
- ✓ Inform resource-management decision-making
- ✓ Support sustainable economic opportunities
- ✓ Support sustainable recreational use

Wellington County Natural Heritage System

What is included in Wellington's Natural Heritage System Mapping?

Existing Natural Heritage Components	
Components	**Criteria**
Wetlands	✓ Any evaluated non-Provincially Significant wetlands and Provincially Significant wetlands
	✓ Any unevaluated wetlands mapped by the MNRF or Conservation Authorities
Woodlands	✓ Woodlands in Urban Centers: ≥ 1 ha and ≥ 30 m wide
	✓ Woodlands in Rural Areas: ≥ 4ha and ≥ 30m wide
	✓ Woodlands of any size that is contained by or is within 30m of an existing natural heritage component meeting a criteria threshold
	✓ Woodlands containing a vegetation community with a provincial ranking of S1, S2 or S3 (as ranked by the NHIC) or a global ranking of G1, G2 or G3 (as ranked by the NatureServe Network) (text criterion)
	✓ Woodlands containing 10 or more trees/ha greater than 100 years old (text criterion)
	✓ Woodlands containing 10 or more trees/ha that are ≥ 50 cm in diameter (text criterion)
Valleylands	✓ Valleylands associated with watercourses, waterbodies and wetlands
	✓ Valleylands representing distinctive landforms such as oxbows, bottomlands, terraces, deltas, etc. (text criterion)
Aquatic Habitat	✓ All watercourses
	✓ Waterbodies connected to a watercourse
	✓ All headwaters (text criterion)
	✓ Waterbodies within 30 m of an existing natural heritage component meeting a criteria threshold
Significant Wildlife Habitat (SWH)	✓ All identified SWH (text criterion)
Habitat of Endangered and Threated Species	✓ All identified habitat of Endangered and Threatened Species (text criterion)
Areas of Natural and Scientific Importance(ANSI)	✓ All Life Science ANSIs
Environmentally Sensitive Areas (ESA)	✓ All ESAs

Stewardship Components	
Components	**Criteria**
Enhancement Woodlands	In lower-tier municipalities with ≤30% woodland cover: ✓ Woodlands in Rural Areas: 1-4 ha in size and ≥ 30m wide
Enhancement Linkages	✓ Flexible connections between Existing Natural Heritage Components

Wellington County Natural Heritage System

Methods used to map Wellington County's draft Natural Heritage System

Step 1: Identification of Existing Natural Heritage Components

- The best available data from Conservation Authorities and the Province were used to map natural features.
- Existing Natural Heritage Components of the draft Natural Heritage System were selected using science-based criteria.
- Ecologically important components that could not be mapped due to insufficient data were included in the draft Natural Heritage System as text.

Step 2: Identification of Stewardship Components

- Enhancement Linkages were mapped using an objective, automated software tool (Linkage Mapper*) in a Geographic Information Systems (GIS).
- Enhancement Woodlands were selected using science-based criteria. If enhanced through voluntary stewardship action these woodlands could increase the overall woodland cover in Wellington County.

We want to hear from YOU!
Please leave your comments and suggestions on a comment form!

* McRae, B.H., and D.M. Kavanagh. 2014. Linkage Mapper connectivity analysis software. The Nature Conservancy, Seattle, WA. [Available at: http://www.circuitscape.org/linkagemapper].

Wellington County Natural Heritage System

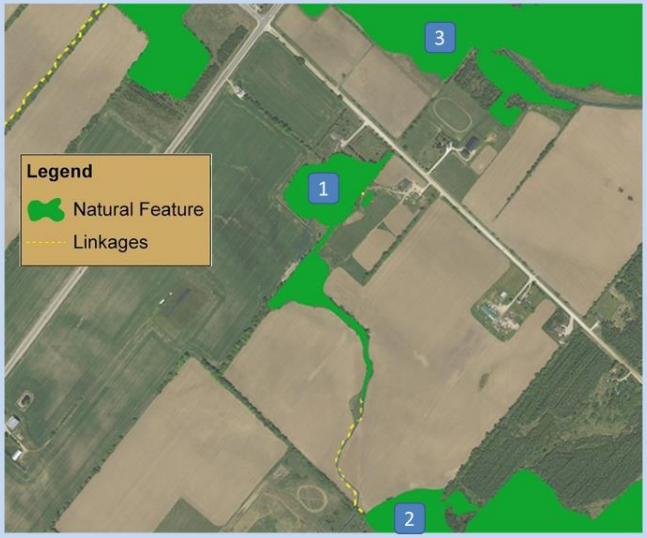
What are Enhancement Linkages?

Enhancement Linkages aim to improve or create connections between Existing Natural Enhancement Components in the Natural Heritage System.

Enhancement linkages were mapped by identifying the "path of least resistance" between Existing Natural Heritage Components.

Enhancement Linkages should be thought of as ***approximate*** and ***flexible*** locations.

An example of the "Path of Least Resistance"



Feature 1 is isolated from the other natural features on the landscape. The "path of least resistance" occurs between feature 1 and feature 2 , rather than feature 3 , because this linkage follows a watercourse and does not require a road crossing.

Wellington County Natural Heritage System

What programs and funding are available to landowners?

Wellington County and its Stewardship Partners have a long history of working with residents to protect and improve natural heritage in the County through voluntary stewardship programs such as:

- The Green Legacy Programme
- Trees for Mapleton
- Trees for Minto
- Wellington Rural Water Quality Program
- CVC Landowner Action Fund
- Halton Watershed Stewardship program
- Reforestation and Tree Planting Programs offered by your local Conservation Authority
- …and more!

Wellington County Natural Heritage System Q and A

County Natural Heritage System Questions and Answers

This project is striving to identify a natural heritage system that best reflects the County of Wellington's natural heritage with a 'made in Wellington' approach that respects the balance between natural systems and the importance of agriculture and other land uses on the County landscape.

What will the Grand River Conservation Authority (GRCA) produce for the County at the end of this project?

The GRCA will provide:

- Digital mapping of the County Natural Heritage System;
- An analysis of the Natural Heritage System for the Growth Plan for the Greater Golden Horseshoe (Growth Plan NHS);
- A final report that includes a general description of how the mapping was done as well as appendices with technical information; and
- The GRCA will present the final report to the County Planning Committee.

The County will post copies of the above products on its web site.

What support is available for landowners who want to do stewardship?

Stewardship projects are voluntary.

Landowners who are planning or considering stewardship projects on their lands can begin using the County Natural Heritage System to see where there may be opportunities. For advice to identify the best locations, landowners can contact their Conservation Authority stewardship or landowner outreach service.
Green Legacy staff can also connect you with planting advice and services that may be available in your area.

There are a number of funding programs available to assist landowners undertaking stewardship projects on their property. This includes the Wellington Rural Water Quality Program and the Green Legacy Program, in addition to a number of provincial initiatives. Each program has its own goals, grant rates and eligibility criteria. Your local Conservation Authority stewardship staff can help to connect you with potential funding opportunities for your project.

What is the difference between this County Natural Heritage System and the Greenlands System that is in the County Official Plan?

The County Official Plan Greenlands System relates to policies in the Provincial Policy Statement about protecting natural heritage features from development and protecting people and property from lands that are subject to flooding, erosion or unstable slopes. The Greenlands and Core Greenlands designations show the boundaries of the features that were included. As a result, many of the features in the Official Plan Greenlands System are also in the County Natural Heritage System. The main difference is that the County Natural Heritage System identifies linkages between the features and potential areas for enhancement.

Will the County Natural Heritage System add to the Conservation Authority Regulated Area?

Conservation Authority Regulations are focused on natural hazards such as floodplains, watercourses, slopes, wetlands, etc. Changes to Conservation Authority regulated area mapping will focus on these features and the lands adjacent to them. The Conservation Authority regulation for natural hazards does not include linkages so linkages will not be added to the Regulated Area mapping.

Since the Province has issued a Natural Heritage System for the Growth Plan that includes Wellington, why is the County developing a Natural Heritage System?

The County recognizes that planning decisions made under the Planning Act must conform with the policies for the Growth Plan Natural Heritage System (Growth Plan NHS). The County will be required to add the Growth Plan NHS as an overlay to the County Official Plan. This change will be part of a larger Official Plan Amendment to conform with the Growth Plan that we need to complete by 2022 (conformity OPA). When we draft the conformity OPA, we will have an opportunity to refine the Growth Plan Natural Heritage System to make it more precise. In order to have a scientific basis for the Growth Plan NHS refinement process, possible future policy amendments, and mapping to support stewardship efforts, the County needs a more detailed and locally developed natural heritage system.

How do I provide feedback and when is the deadline for input?

The mapping presented at this time is Draft. You can provide comments in a number of ways:

- Fill in the comment form on our web site at: **www.wellington.ca/naturalheritagesystem**
- Send an email to us at **countynhc@wellington.ca**
- Write to:

  Aldo Salis, Director of Planning
  County of Wellington, 74 Woolwich Street, Guelph, ON N1H 3T9

We would appreciate getting your comments by May 7th. Comments received after May 7th will be kept on file for consideration in future initiatives and the County is always open to input on planning matters of interest to the public. You are also welcome to provide feedback on the comment form on the next page.

ALTERNATE FORMATS AVAILABLE UPON REQUEST.

Comment Form

The mapping presented at this time is Draft. You can provide comments in a number of ways:

- Fill in the comment form on our web site at: **www.wellington.ca/naturalheritagesystem**
- Send an email to us at **countynhc@wellington.ca**
- Write to: **Aldo Salis, Director of Planning**
  County of Wellington, 74 Woolwich Street, Guelph, ON N1H 3T9

1. **Do you think we selected the right features to include in the system?**

2. **Do we show the features correctly on the draft mapping? If not, what changes would you recommend?**

3. **Do you agree with showing the enhancement linkages with arrow symbols?If not, how would you recommend showing the linkages?**

4. **What other feedback would you like the County to consider?**

First Name: _____ Last Name: _____
Telephone: _____ Email: _____
Address: _____

I hereby request the County of Wellington Planning Department to keep me informed of all further public meetings in relation to this matter. Disclosure of this information is governed by the Municipal Freedom of Information and Protection of Privacy Act, R.S.S 1990. Questions about this collection and disclosure should be directed to Mark Paoli, Senior Planner, County of Wellington.

ALTERNATE FORMATS AVAILABLE UPON REQUEST.

Appendix V: Presentation to Wellington Federation of Agriculture

Draft Mapping of a Natural Heritage System in the County of Wellington

Presentation to the Wellington Federation of Agriculture

April 3rd, 2018

Grand River Conservation Authority

Natural Heritage Systems & Agriculture

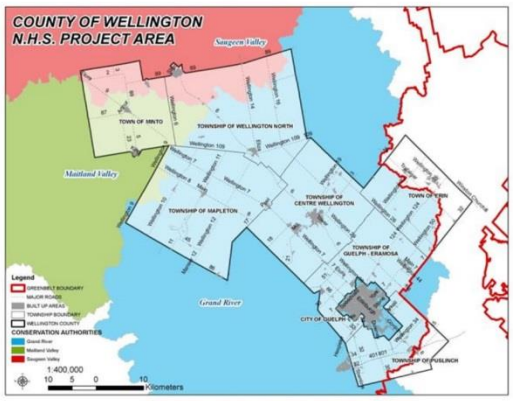
- Agricultural lands are not only economically beneficial to Wellington County but can also produce ecosystem services
- Agricultural lands can support ecological function of nearby natural cover
- Agricultural lands can support hydrological connectivity
- The benefits of agricultural lands to human health and the environment are a source of pride for many farmers and the County

What happens next for this project

- Today kicks off a one month commenting period
- In May, the County and GRCA will review and consider the input received
- In June, the GRCA will present a report to the County Planning Committee

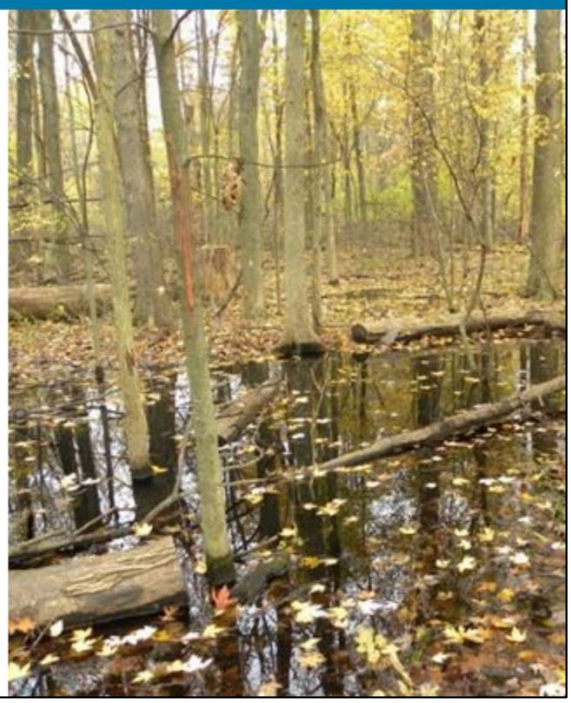
Initiating a Wellington NHS

In the fall of 2016, County Council passed a recommendation requesting GRCA provide a proposal to develop a natural heritage system for the County.



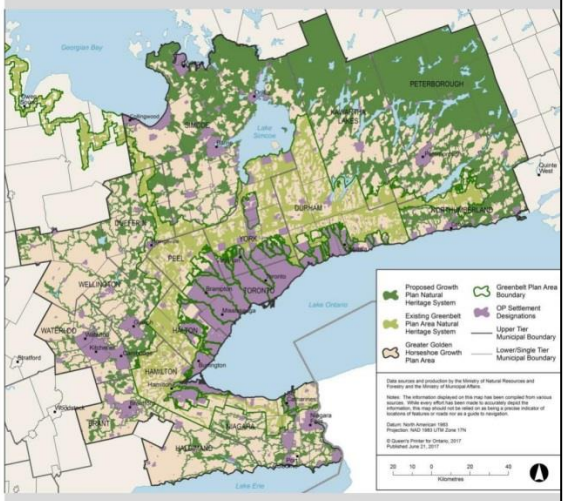
Grand River NHS Framework

GRCA's Strategic Plan identifies the development of a Natural Heritage Systems Framework for the Grand River watershed as a priority.

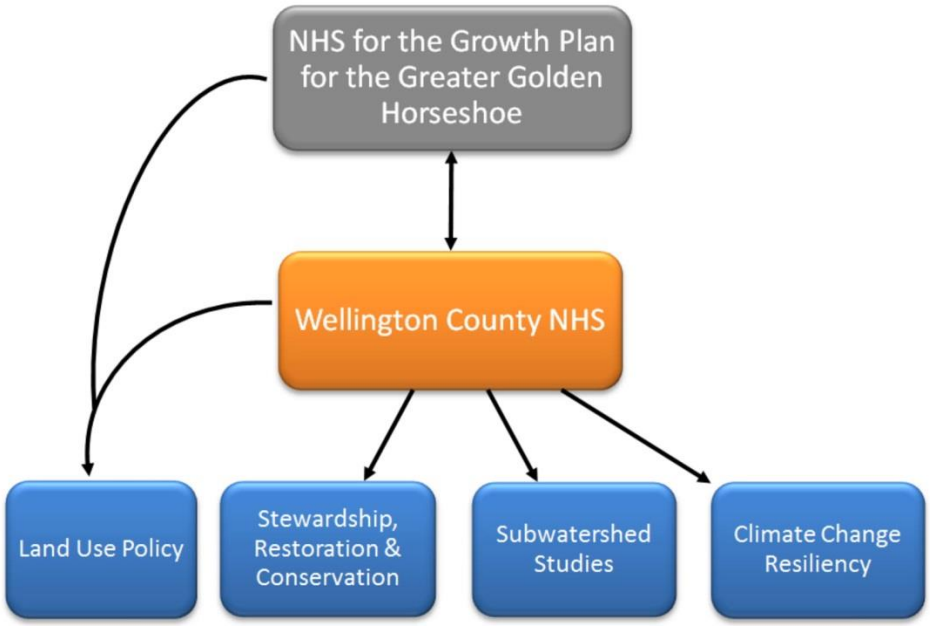


Proposed NHS for the GPGGH

In the Summer of 2017, the Province released the proposed regional NHS for the Growth Plan for the Greater Golden Horseshoe region.



A multi-purpose NHS



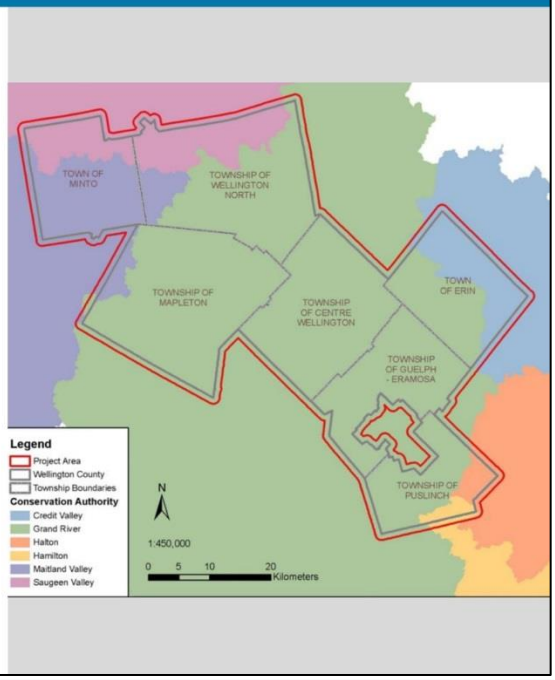
Overall Goal

This project is striving to identify a natural heritage system that best reflects the County of Wellington's natural heritage with a 'made in Wellington' approach that respects the balance between natural systems and the importance of agriculture and other land uses on the County landscape.

Project Area & Committee

County of Wellington including Greenbelt areas + 1km buffer.

Coordination of project by GRCA with County staff & other CA reps to provide strategic direction.



The system was built in two steps

Step 1: Identification of Existing Natural Heritage Components

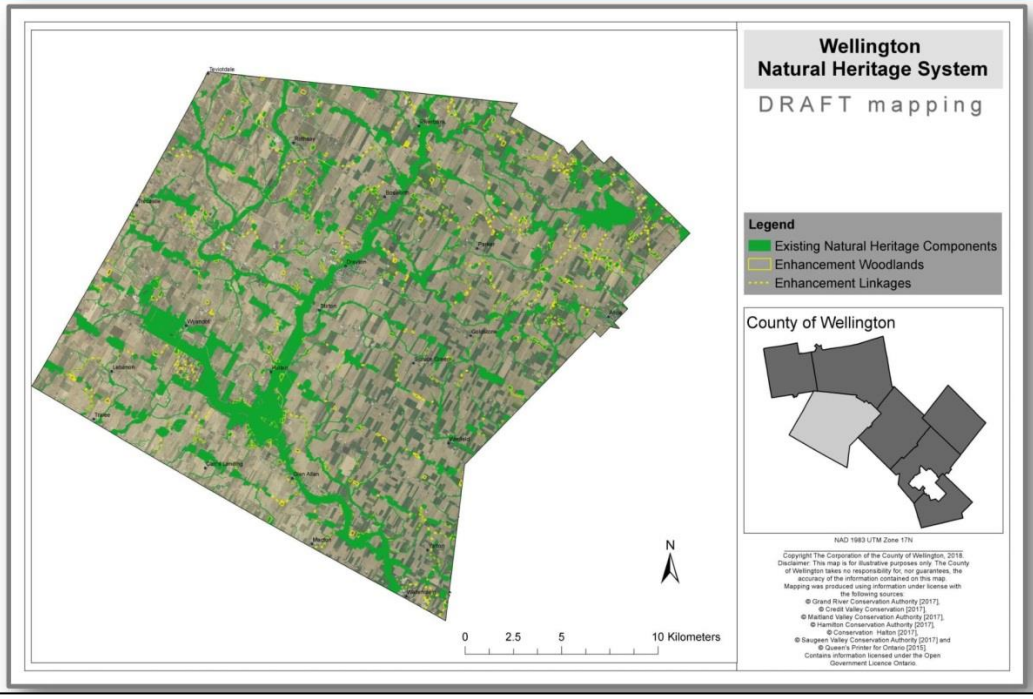
- Existing Natural Heritage Components for the draft Natural Heritage System were selected using science-based criteria.
- The best available data from Conservation Authorities and the Province were used to map natural features.
- Ecologically important components that could not be mapped due to insufficient data were included in the draft Natural Heritage System as text.

The system was built in two steps

Step 2: Identification of Stewardship Components

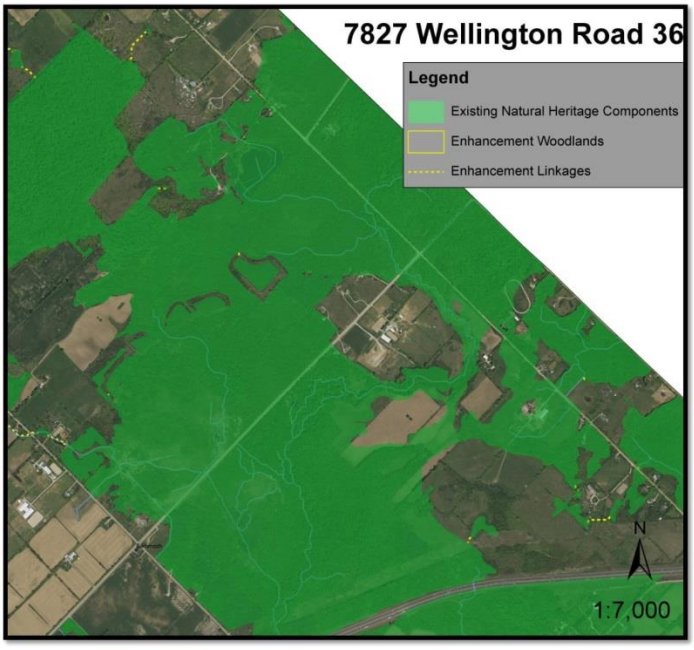
- **Enhancement Linkages** were mapped using an objective, automated software tool (Linkage Mapper*) in a Geographic Information System (GIS).
- **Enhancement Woodlands** were selected using science-based criteria. If enhanced through voluntary stewardship action these woodlands could increase the overall woodland cover in Wellington County.

Natural Heritage System

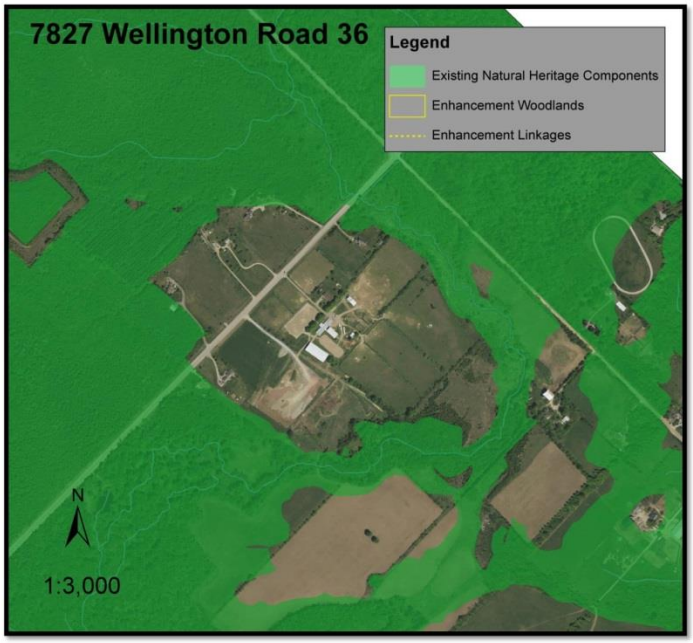


Natural Heritage System

Agricultural Property (Puslinch)



Agricultural Property (Puslinch)



Agricultural Property (Puslinch)

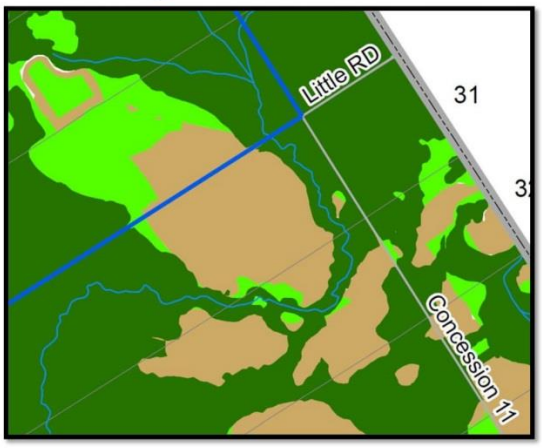
Valleylands Floodplain Component

Wetlands Component

Agricultural Property (Puslinch)

Wellington NHS

Wellington Greenlands



A Tool for Stewardship

Wellington County and its Stewardship Partners have a long history of working with residents to protect and improve natural heritage in the County through voluntary stewardship programs such as:

- ✓ The Green Legacy Programme
- ✓ Trees for Mapleton
- ✓ Trees for Minto
- ✓ Wellington Rural Water Quality Program
- ✓ CVC Landowner Action Fund
- ✓ Halton Watershed Stewardship Program
- ✓ Reforestation and Tree Planting Programs offered by your local Conservation Authority

…and more!

Photo: Grand River Conservation Authority/Shari Lovell

Paris and Galt Moraine Policy Area Policies

- Agriculture is a major activity on the moraines and is an accepted and supported use of land. The County will encourage best practices for agriculture by developing and supporting stewardship programs.
- Large scale development proposals will be required to demonstrate that ground and surface water functions will be maintained, and where possible, enhanced.
- Small scale developments that do not rely on significant site alterations will not normally be required to demonstrate protection of the moraines. Where planning approvals for small scale developments are needed, best practices for site alteration will be required to reduce or eliminate cut and fill activities that would fill in land surface depressions.

Appendix VI: Comments Received on the Wellington County Natural Heritage System

Summary of Public Comments on the County of Wellington Natural Heritage System		
Submission	Comment	Response
#1	A) Mapping is at such a large scale it is hard to make sense of the mapping. There are areas where there should be dark green and there are not. There are enhanced linkage areas shown in yellow, which is unnecessary as the stream corridor is completely vegetated on both sides. B) There are areas marked Natural Heritage Components in green on the County Map that are absolutely devoid of any natural features whatever, other than a ditch, drain or stream. C) The Software used by the GRCA, the same used by the province, I understand, apparently does not include decommissioned railway right of way as a medium for enhanced linkage purposes. If so, this is something that you will need to attend to manually. In my view, these abandoned rail corridors can potentially be as effective as a stream corridor. In the case of the Elora Cataract Trail way, owned by the GRCA, and CVC, it links two watersheds, the Grand and Credit, three major parks spaces, Forks of the Credit Provincial Park, Belwood Conservation Area, and the Elora Gorge Conservation Area, a variety of landscapes, rural and urban communities. Further, there are many initiatives along the way to create further linkages to local park space. Among others elsewhere in the County, we have in the Township of Centre Wellington alone, the CNR. ROW from Fergus to Alma, the CNR ROW from Elora to Guelph, the CNR ROW, now owned by the County and converted to the Trestle Bridge Trail and associated linkages to Grand River, the museum and nursing home complexes, and soon to be hospital lands. Even those ROW that been conveyed to adjacent landowners remain as effective, vegetated linkages.	• The scale of the online mapping is adjustable allowing the user to zoom out for a broader landscape perspective or to zoom in and view neighbourhood/community connectivity. • The scope of the study used existing data sets that could be applied across Wellington County. The accuracy and representation of the NHS is a result of the best data available. Updated datasets will inform future updates to the NHS mapping. • Decommissioned railway corridors were not selected as a dataset, nor available, as a component of the Wellington County Natural System. • Enhancement linkages were identified through the use of an automated program – the application of manual adjustments was beyond the scope of the study. The intent of displaying enhancement linkages is to demonstrate potential connections or corridors between existing natural heritage components however the linkage may be flexible in its route to connect features.
#2	It is important to preserve and protect our waterways as vital community assets and now appreciating the aesthetics of our County. Connecting on foot as well.	• Comment noted.
#3	I like the overall concept of what the county is trying to do. I like the idea of showing the dashed where a connection could be made but most of them were not practical as they cut across a farm at an angle. It would be good if the County could look at other models like the ALUS Canada and identify and target areas where more environmental restoration needed to be done. The county has a good model of promoting environmental initiatives like green legacy but maybe a component could be added on to rural water quality program to help encourage better stewardship practices and provide the corridors for animals to co exist with us in the farming community. I see increases in windbreaks but also see other fence lines coming down. With increased flooding, climate change and a lack of awareness of how our practices on farm can affect the climate, wildlife , soil erosion , etc much work will be needed to be done to get us in the farming community on side. There is no ag extension really any more and younger farmers get information in different ways. We need to be re engaged. (somehow). At the recent farm show in Drayton I was encouraged by the number of younger farmers that were interested in doing more, There is a good article in the most recent Ontario Grain Farmer on page 6 on Alternative Land use. I believe some monetary compensation will be needed, some case studies that show a benefit to society and to the farmer, some taxation changes on properties that are currently bush but not under a land conservation program to keep them bush and in wetlands, some restrictions maybe on when we can take out another fence row, etc.	• Linkages shown in the Natural Heritage System represent a connection between core areas exists, not necessarily the connection between the Core areas. It is our thought that linkages in most cases will form in areas outside of cultivated fields. • The County and GRCA researched other models for the Natural Heritage system and reviewed available options with the working group at the technical workshop. It was determined that a hybrid approach was appropriate for the County using the Feature Composite method and the Core Areas and Linkages method. • The Wellington County Natural Heritage System will be utilized as a resource to guide restoration and enhancement projects that are undertaken. These may include projects through the Green Legacy program, Rural Water Quality Program or initiatives by local Conservation Authorities. • The Wellington Federation of Agriculture (WFA) was consulted throughout this project.

	I commend the county on the work done so far but please engage, dialogue with the farm community and get us on side. I think in general all of us need to think longer term and I believe this project is attempting to do that.	

Section: **Administration**	Policy Number: **1.11**
Policy: **Community Electronic Sign Use Policy**	Effective Date: **10/16/2018**
Date Last Revised:	Current Revision Date:

POLICY STATEMENT:

The Town of Minto provides the Community Electronic Sign for communication of specific information to the community of Minto within the framework of the Town's mission, values and public service. All messages should clearly support and advance this statement.

COMMUNITY ELECTRONIC SIGN LOCATION:

Lions Heritage Park – Main St. Palmerston

PURPOSE:

To establish guidelines/rules regarding requests for information placed on the Community Electronic Sign. Prospective users are encouraged to use a variety of communication media for announcements rather than relying solely on the Community Electronic Sign.

The priorities for information on the Community Electronic Sign are as follows:

1. Town Emergency Notifications
   - In the event of an emergency the Town has the right to suspend all messages and use the Community Electronic Sign for emergency purposes only.
2. Founding Sponsors
   - Public service announcements, information regarding meetings, and events coordinated by any of the founding sponsors: The Town of Minto, Palmerston Lions Club and Palmerston Legion.
3. Founding Donors
   - Public service announcements, information regarding meetings, and events coordinated by any of the founding donors: Blessings to You and Palmerston Snow Kings.
4. Operations Donors
   - Public service announcements, information regarding meetings, and events coordinated by any of the operations donors: Wellington County Library and TG Minto.
5. Palmerston (Minto) Community Organizations
   - Messaging about their organization's AGM meetings and community wide special events.
6. Palmerston (Minto) Sports Organizations
   - Messaging about yearly registrations, AGM meetings, major tournaments, and championships and fundraising events.
7. Palmerston (Minto) Businesses
   - Messaging about employment opportunities, grand openings and special events sponsored by the business for the benefit of the greater community.

Section: **Administration**	Policy Number: **1.11**
Policy: **Community Electronic Sign Use Policy**	Effective Date: **10/16/2018**
Date Last Revised:	Current Revision Date:

FEES FOR COMMUNITY ELECTRONIC SIGN MESSAGES:

- Not-For Profit Groups: $25.00 + HST/per message/per week
- For-Profit Businesses: $30.00 + HST/per message/per week
- Founding Sponsors receive 1 free message per week for five (5) years beginning November 1, 2018 – October 31, 2023
- Founding Donors receive 1 free message per week for (3) years beginning November 1, 2018 – October 31, 2021
- Operations Donors: Same as Not-For-Profit Groups and For-Profit Businesses

APPLICATION SUBMISSION PROCEDURE:

1. Please read the policy before requesting information be placed on the electronic sign. If you accept the conditions of this policy then submit the application.

2. Send in a Community Electronic Sign Request Form (Schedule A) by email to belinda@town.minto.on.ca (at least 14 days prior to your event being posted on the Community Electronic Sign. Note: no submissions will be accepted by phone or fax.

3. Application shall contain the following information:

- Organization Name
- Contact Person Name
- Contact Telephone #
- Email Address
- Date(s) of Event
- Type of Event
- Time of Event
- Location of Event
- Request dates for message to appear
- Content of Message
    - Graphics or logos must be supplied at time of submission and must be in a JPEG format. Non-suitable graphic formats will not be accepted.
    - The information requested to be placed on the Community Electronic Sign must be kept to the barest minimum for maximum readability and delivery of the message to the motoring and pedestrian public.
    - Messages appear best with four lines per screen. Information is required to be placed on one screen.
    - It is suggested that time and thought be given to preparing a message that effectively delivers the required information in as few characters as possible.

Please note:

- The Town of Minto has sole discretion to accept or reject the organization making the request and/or content of the message, as well as the ability to alter the text accordingly to fit the Community Electronic Sign design.
- In the event there are too many requests for a given time period the requests will be posted on a first come first serve basis.

- The Town offers no guarantee with respect to the appearance of any message on the Community Electronic Sign. Appearance of the messages is subject to constraints of priorities, as well as electronic and mechanical limitations.
- A draft design of the message will be provided to the Contact Person and this must be signed off by the Contact Person prior to it being placed on the Community Electronic Sign seven (7) days prior to the message going on the sign.
- Postings will take place once per week, where practical.
- Should the sign be down for a period of time (due to weather, technology issues, or emergency purposes, etc.) the Town of Minto will reimburse pro-rated time.
- The Town of Minto reserves the right to make changes to this policy and the fee schedule. Such amendments shall take effect immediately upon ratification.

INFORMATION ON SIGNS:

- Users are cautioned that the Town offers no guarantee with respect to the appearance of any message on the sign.
- Each message will appear for not more than seven (7) consecutive days. If available a message may be allowed an additional seven (7) days.
- Only one message per event should be submitted.
- The following messages shall not be permitted to be advertised:
    - False, misleading, or deceptive messages;
    - Promotion of alcoholic beverages, tobacco or cannabis;
    - Promotion of political, factional or religious viewpoints;
    - Messages expressing discriminating viewpoints pursuant to the Ontario Human Rights Code;
    - Personal requests such as birthdays, engagements, weddings, anniversaries etc.;
    - Events and functions open only to members of an organization;
    - Profane language or content, personal attacks, sexual content;
    - Information that may compromise the safety and security of the public; and
    - Any other content that is considered inappropriate in the opinion of the Municipality

Section: **Administration**	Policy Number: **1.11**
Policy: **Community Electronic Sign Use Policy**	Effective Date: **10/16/2018**
Date Last Revised:	Current Revision Date:

COMMUNITY ELECTRONIC SIGN REQUEST FORM

Please read the policy before requesting information is placed on the community electronic sign. If you accept the conditions of this policy then send an email to belinda@town.minto.on.ca (at least 14 days prior to your event being posted on the Community Electronic Sign – no submissions will be accepted by phone or fax). With the following:

Organization Name:_____

Contact Person's Name:_____

Contact Telephone #:_____ **Email Address:**_____

Date(s) of Event:_____ **Type of Event:**_____

Time of Event:_____ **Location of Event:**_____

Message Content (Not to exceed 4 lines, 10-11 characters per line)

_____
_____
_____
_____

Requested Dates for Information to Appear:_____

Please Note: Graphics or Logos must be supplied at time of submission and must be in a JPEG format. Non-suitable graphic formats will not be accepted.

The Town of Minto has sole discretion to accept or reject the organization making the request and/or content of the message, as well as the ability to alter the text accordingly to fit the Community Electronic Sign design.

In the event there are too many requests for a given time period the requests will be posted on a first come first serve basis.

The Town offers no guarantee with respect to the appearance of any message on the Community Electronic Sign. Appearance of the messages is subject to constraints of priorities, as well as electronic and mechanical limitations.

A draft design of the message will be provided to the Contact Person and this must be signed off by the Contact Person prior to it being placed on the Community Electronic Sign seven (7) days prior to the message going on the sign.

I have read and agree to the terms and conditions of the Community Electronic Sign Policy and Procedures.
Signature:_____
Date:_____

TOWN OF MINTO

DATE: October 1, 2018
REPORT TO: Mayor and Council
FROM: Cam Forbes, By-law Enforcement Officer
SUBJECT: Municipal Parking Lot in Clifford

STRATEGIC PLAN:

Maintain and enhance infrastructure to protect public health and safety, prevent property damage, maintain a high quality of life, and effectively manage financial resources to ensure Minto is an attractive and viable community for family living and business investment.

BACKGROUND:

There are some apartment buildings in Clifford that do not provide enough parking spaces for the tenants of the building. Currently these tenants are parking their extra vehicles on the street. As of November 1st, they will no longer be able to park on the street between the hours of 2am and 6am until the end of March. A resident approached this Department with 3 vehicles and only 1 parking space at their building and advised that there are other tenants with the same problem. The request is that the Town make available spaces in the lot at the corner of Allan and Elora Street in Clifford for overnight parking shown below.

COMMENTS:

The parking lot at 3 Elora St. S., on the corner of Allan and Elora St. in Clifford, offers free parking during the Elora St. construction and is available for business and other use during the day. As per our parking by-law 5000-05, parking in a municipal parking lot is not

allowed between the hours of 2am and 6am from November 1st until March 31st. If overnight parking is allowed, the by-law must be amended to allow for overnight parking.

If the Town offered 5 paid parking spaces on this lot, it should help to alleviate this parking problem and if there is a demand for more spaces they could be added at a later date. Similar parking arrangements are available in Palmerston. Having this parking available helps encourage affordable rental housing particularly in downtown buildings where on-site parking is limited. Public Works was not planning to provide winter maintenance on this lot but has been consulted and is prepared to service it provided residents using the spaces clear between their vehicles.

FINANCIAL CONSIDERATIONS:

The cost of putting up paid parking signs will be minimal as we have signs that were in the Foodland parking lot in Palmerston and could be used in Clifford. All rented spaces will help to offset the cost of maintaining this parking lot.

RECOMMENDATION:

That Council receives the By-law Enforcement Officers' October 16, 2018 report regarding the Municipal parking lot at 3 Elora St. South Clifford and considers amending Schedule D of By-law 5000-05 in open session to permit up to 5 spaces to be used for overnight parking at the same rate and terms as applies in Palmerston.

_____

Cam Forbes
By-Law Enforcement Officer

Town of Minto

DATE: October 11, 2018
TO: Mayor Bridge and Members of Council
FROM: Michelle Brown, Building Assistant
RE: Revised B87/18; B88/18 Cherry C/O Dan Sinclair
Part Lots 50 &51, w/s Queen St., Lot 52, e/s Lowe St, Palmerston, Town of Minto

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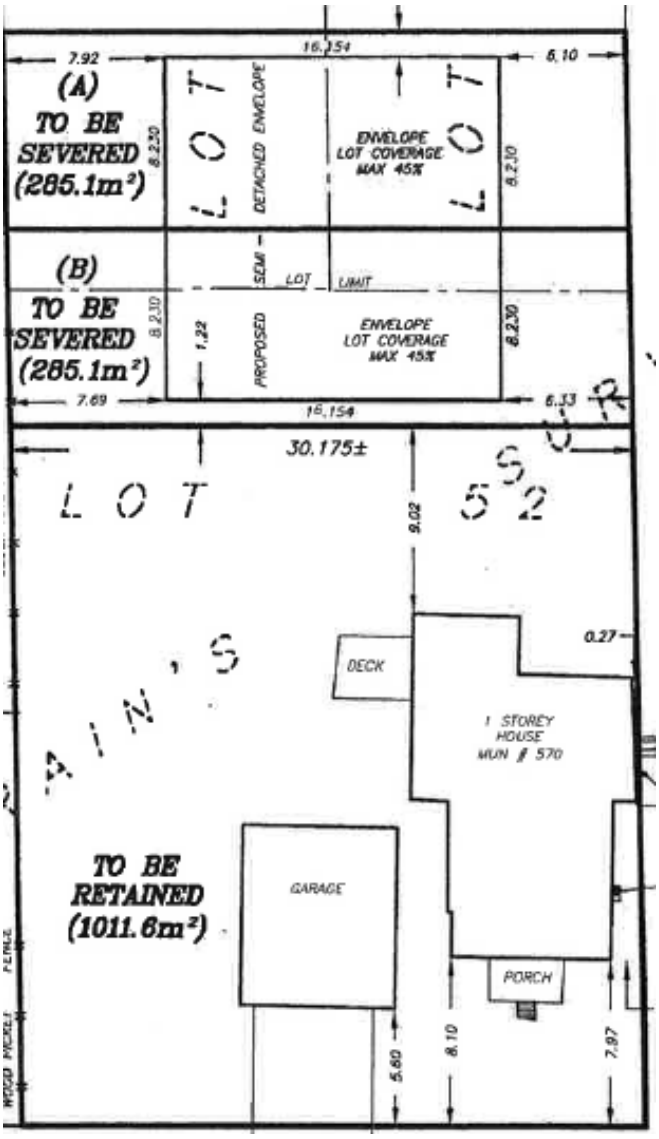
STRATEGIC PLAN

Ensure growth and development in Clifford, Palmerston and Harriston makes cost effective and efficient use of municipal services, and development in rural and urban areas is well planned, reflects community interests, is attractive in design and layout, and is consistent with applicable County and Provincial Policies.



BACKGROUND

At the September 18 Council meeting a resolution was passed supporting two consent applications on the subject property. At that meeting County staff had suggested deferral although recommended the Town submit comments to ensure conditions were before Land Division. Two revised consent applications were submitted for this property at the corner of Queen and Lowe Street in Palmerston.

Revised applications B87-18 and B88-17 would sever two 285.1 square metre residential lots to allow for a semi-detached dwelling. This will create a 1,011.6 square metre retained residential lot with an existing dwelling and garage.

The intent of the retained parcel is to remain the same for the immediate future. This property will likely be developed at a later date subject to all applicable By-law and Building Code requirements.

The subject property is zoned Residential (R2). Permitted uses include single detached, and townhouse dwellings. The revised severance proposal no longer requires a zoning by-law

amendment as the proposed severed and retained lots meet the minimum lot area and frontage requirements.

The County comments indicate support of the revised severance application as the applications are consistent with Provincial Policy and generally conform to the Official Plan.

COMMENT

Town of Minto staff and Town Engineer reviewed the revised application and provide the following comments;

Clerks
Standard financial conditions are recommended.

Public Works
Standard conditions in relation to servicing and frontage fees are recommended. An entrance permit must be obtained prior to construction.

Building
Standard building permit fees and development charges will be required prior to the issuance of a building permit. The requirement of an engineered grading and drainage plan is also recommended for all parcels to the satisfaction of the Town's engineer prior to issuance of a building permit.

All of the above issues can be address through the Town's standard conditions for consent applications. The recommendation below is similar to that passed September 18 except that the condition regarding rezoning and grading and drainage is removed as they will no longer be required for these applications.

RECOMMENDATION

THAT the Council recommends County of Wellington Land Division Committee approve Revised Severance Applications B87/18, and B88/18, Cherry C/O Dan Sinclair Severance Part Lots 50 &51, w/s Queen St., Lot 52, e/s Lowe St. Palmerston, Town of Minto and that the following conditions be considered:

1. THAT the applicant satisfies all requirements of the Town of Minto, financial and otherwise which the Town may deem to be necessary for the proper and orderly development of the subject lands.
2. That the applicant be advised the Town of Minto will require payment of any applicable development charges at the time of issuance of a building permit respecting the lot(s) subject of the application at the rate established by Council applicable at time of issuance of the building permit.
3. That the applicant provide proof of payment from the Town of Minto that outstanding frontage charges for water, sanitary sewer, and or storm sewer where applicable and required by the Town for the severed lot(s) at the rate established

by policy in place at the time of payment of the frontage charge (for reference only and subject to change, the rate applicable at the time of this decision is $221.00 per metre lot frontage), and that the applicant is also advised this does not include paying the cost of lateral connections to any service which shall be payable to the Town at time of connection.

4. That the applicant obtains written confirmation from the Town of Minto Public Works Department that satisfactory access arrangements to the subject lands have been made including payment of applicable fees.
5. THAT the applicant satisfies the requirements of the Town of Minto in reference to Parkland Dedication as provided for in the Planning Act including where applicable paying cash-in-lieu of parkland in the amount of $500 per lot or other specified in the applicable policy of the Town at the time of consent

ATTACHMENTS

County of Wellington Senior Planner, Michelle Innocente

Michelle Brown
Building Assistant

Planning and Development Department | **County of Wellington**
County Administration Centre | 74 Woolwich Street | Guelph ON N1H 3T9
T 519.837.2600 | F 519.823.1694

Application	B87/18 & B88/18
Location	Part Lots 50 &51, w/s Queen St., Lot 52, e/s Lowe St. TOWN OF MINTO (Palmerston)
Applicant/Owner	William Cherry

PLANNING OPINION: Applications B87/18 and B88/18 would sever two 285.1 square metre urban residential lots for a semi detached dwelling in the Residential Area. A 1,011.6 square metre urban residential lot would be retained with existing dwelling and garage.

These applications are consistent with Provincial Policy and would generally conform to the Official Plan. We have no concerns provided the following matters are addressed as conditions of approval:

a) That driveway access can be provided to the severed and retained lands to the satisfaction of the of the local municipality; and,
b) That servicing can be accommodated on the site to the satisfaction of the local municipality.

PLACES TO GROW: No Issues.

PROVINCIAL POLICY STATEMENT (PPS): No Issues.

WELLINGTON COUNTY OFFICIAL PLAN: The subject property is designated RESIDENTIAL and is located within the Urban Centre of Palmerston. Section 10.6.2, states that new lots may be created in Urban Centres provided that the lands are appropriately zoned. Lots may be created for a variety of community uses subject to the policies of this plan. Lot creation will normally proceed by plan of subdivision and will be based on the provision of full urban services, wherever such services are available. We are satisfied that a plan of subdivision is not necessary for the creation of the proposed lots.

The matters under section 10.1.3 were also considered including l) that the proposed lots and uses are compatible with and designed to minimize adverse impacts on surrounding use.

WELL HEAD PROTECTION AREA: The subject property is located within a WHPA C with Vulnerability Score of 4.

LOCAL ZONING BY-LAW: The subject property is zoned Residential (R2). Permitted uses include single detached dwellings, and townhouse dwellings. The proposed severed and retained lots appear to meet the minimum lot area and frontage requirements. Lot coverage should be confirmed during building permit review.

SITE VISIT INFORMATION: The subject property was visited and photographed on September 14, 2018. Notice Cards were posted and the survey sketch appears to meet the application requirements.

Michelle Innocente
Senior Planner
October 4, 2018

Town of Minto

DATE: October 11, 2018
TO: Mayor Bridge and Members of Council
FROM: Michelle Brown, Building Assistant
RE: B102-18 Lyles & Clark C/O Dan Sinclair, Part Lot 17, Concession 10, 730 King St, Palmerston, Town of Minto

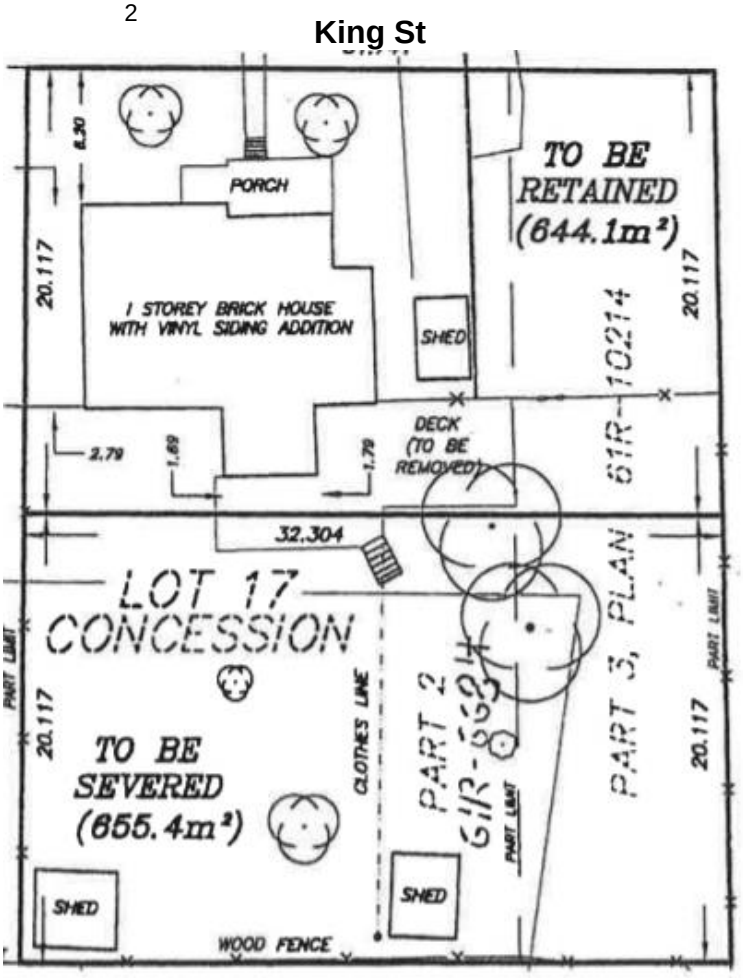
STRATEGIC PLAN

Ensure growth and development in Clifford, Palmerston and Harriston makes cost effective and efficient use of municipal services, and development in rural and urban areas is well planned, reflects community interests, is attractive in design and layout, and is consistent with applicable County and Provincial Policies.

BACKGROUND

The proposed consent application to the County of Wellington Land Division is for a corner lot as shown on the sketch below.

The intent of application B102-18 is to sever 655.4 square metre residential lot with a retained 644.1 square metre residential lot with an existing dwelling and shed. The existing deck is to be removed.



The retained parcel will contain the one storey home while the severed parcel is to be developed for residential purposes. Two sheds on the severed lot will be required to be removed.

The subject property is zoned Residential (R2). Permitted uses include single detached, and townhouse dwellings. The proposed severed and retained lots meet the minimum lot area and frontage requirements, but relief will be required for the rear yard setback.

There is currently so water or sanitary service available on Young Street to service the proposed severed lot. Town staff has met with the applicant regarding extending services at his cost to the severed lot. A servicing agreement will need to be signed at a later date once a final design, grading and drainage plan is provided prior to the issuance of a building permit.

The proposed residential development of the severed lot will be subject to all applicable By-law and Building Code to address any deficiencies at that time.

The County comments indicate that application is consistent with Provincial Policy and would generally conform to the Official Plan.

COMMENTS

Town and Triton Engineering reviewed the application and provide the following comments;

Clerks - Standard financial conditions are recommended.

Public Works - The home on the retained parcel has access to a water and sewer service. The water and sewer lines on King Street can be extended to service the proposed severed parcel. A qualified professional will need to provide an engineered design to ensure the services are installed according to Town standards. A servicing agreement will be required

as a condition of severance prior to the issuance of a building permit. Satisfactory driveway access arrangements must be provided for the severed parcel.

Building - Standard building permit fees and development charges will be required prior to the issuance of a building permit. The requirement of an engineered grading and drainage plan is also recommended for all parcels to the satisfaction of the Town's engineer prior to issuance of a building permit.

All of the above issues can be address through the Town's standard conditions for consents.

RECOMMENDATION

THAT the Council recommends County of Wellington Land Division Committee approve Severance Application B102-18, Lyles & Clark C/O Dan Sinclair Part Lot 17, Concession 10, 730 King St. Palmerston, Town of Minto and that the following conditions be considered:

1. THAT the applicant satisfies all requirements of the Town of Minto, financial and otherwise which the Town may deem to be necessary for the proper and orderly development of the subject lands.
2. That the applicant be advised the Town of Minto will require payment of any applicable development charges at the time of issuance of a building permit respecting the lot(s) subject of the application at the rate established by Council applicable at time of issuance of the building permit.
3. That the applicant provide proof of payment from the Town of Minto that outstanding frontage charges for water, sanitary sewer, and or storm sewer where applicable and required by the Town for the severed lot(s) at the rate established by policy in place at the time of payment of the frontage charge (for reference only and subject to change, the rate applicable at the time of this decision is $221.00 per metre lot frontage), and that the applicant is also advised this does not include paying the cost of lateral connections to any service which shall be payable to the Town at time of connection.
4. That the applicant obtains written confirmation from the Town of Minto Public Works Department that satisfactory access arrangements to the subject lands have been made including payment of applicable fees.
5. THAT the applicant satisfies the requirements of the Town of Minto in reference to Parkland Dedication as provided for in the Planning Act including where applicable paying cash-in-lieu of parkland in the amount of $500 per lot or other specified in the applicable policy of the Town at the time of consent
6. THAT the applicant provide confirmation from the Town of Minto that servicing arrangements are made as required to provide for, among other matters, extensions of sanitary sewers, water, storm sewers, and surface water management and servicing agreement has to been signed and securities posted to the satisfaction of the Town prior to the issuance of a building permit.

Planning and Development Department | County of Wellington
County Administration Centre | 74 Woolwich Street | Guelph ON N1H 3T9
T 519.837.2600 | F 519.823.1694

Application	B102/18
Location	Part Lot 17, Concession 10 TOWN OF MINTO
Applicant/Owner	Candace Lyles, Robert Clark, Anna Clark

PLANNING OPINION: This application would sever a 655.4 m² (7,054 ft²) lot for residential use in the Urban Centre of Palmerston. A 644.1 m² (6,933ft) parcel with an existing single detached dwelling would be retained.

This application is consistent with Provincial Policy and generally conforms to the Official Plan, staff would have no concerns with the application provided:

a) That servicing can be provided to the site to the satisfaction of the Local Municipality;
b) That safe driveway access can be provided to the site to the satisfaction of the local municipality;
c) That the bisected deck and two remaining sheds on the property are removed to the satisfaction of the local municipality; and
d) That zoning compliance can be achieved for the retained lands to the satisfaction of the local municipality.

PLACES TO GROW: No issues.

PROVINCIAL POLICY STATEMENT (PPS): The subject property is located within the urban area of Palmerston. Section 1.1.3.1 states that settlement areas shall be the focus of growth and development, and their vitality and regeneration shall be promoted.

WELLINGTON COUNTY OFFICIAL PLAN: The subject property is designated RESIDNETIAL and located in the urban centre of Palmerston according to schedule A5-3 of the Official Plan. Section 10.6.2 states that new lots may be created in Urban Centres provided that the land will be appropriately zoned.

The subject property is currently zoned Medium Density Residential (R2) and would meet the minimum lot area and frontage requirements. The proposed lot is generally consistent in size, shape and frontage of lots in the area and has sufficient area to accommodate a single detached or semi-detached use as permitted by the zoning.

The matters under section 10.1.3 were also considered.

WELL HEAD PROTECTION AREA: The subject property is not located within a WHPA.

LOCAL ZONING BY-LAW: The subject property is zoned Medium Density Residential (R2). It appears that both the severed and retained lands can meet the minimum lot area and frontage requirements of the zoning by-law for a single detached dwelling. The following zoning relief is necessary as a result of the consent:

- Relief for a reduced rear yard setback to the house on the retained parcel; where as a setback of 7.6 m is required;

In addition to the zoning relief above the existing sheds on the severed parcel and the deck which is bisected by the new property lot line need to be removed.

SITE VISIT INFORMATION: The subject property has not yet been visited.

Jameson Pickard

Jameson Pickard, Planner
October 3rd, 2018

Building Department Monthly Review

September 2018

September 2018 Permit Activity

- **Construction remained strong in September, but was lower than in 2017.**
- **16 Permits issued resulting in $2.8 Million constructed value vs. 27 Permits in 2017 worth $3.8 Million**

	2018		2017	
PERMIT TYPE	PERMITS ISSUED	DOLLAR VALUE	PERMITS ISSUED	DOLLAR VALUE
Single Family Dwelling	1	$0.00	1	$320,000.00
Multiple Family Dwelling	2	$1,990,000.00	0	$0.00
Accessory Appartments	0	$0.00	0	$0.00
Residential Additions/Renovations	1	$1,000.00	3	$73,000.00
Residential Accessory Structures	4	$63,000.00	3	$133,000.00
Residential Pool Enclosures/Decks	2	$19,000.00	6	$39,000.00
Commercial Permits	0	$0.00	2	$7,000.00
Industrial	3	$750,000.00	2	$2,400,000.00
Institutional	0	$0.00	1	$600,000.00
Agricultural	0	$0.00	6	$249,000.00
Sewage Systems	1	$8,000.00	3	$35,000.00
Demolitions	2	$15,000.00	0	$0.00
Monthly Total	16	$ 2,846,000.00	27	$ 3,856,000.00
Total Year to Date	174	$ 28,333,000.00	186	$ 25,490,000.00

Year To Date 2018 Permit Activity

- **Year to Date - 174 Permits resulting in $28.3 Million constructed value vs. 185 Permits in 2017 worth $25.3 Million**

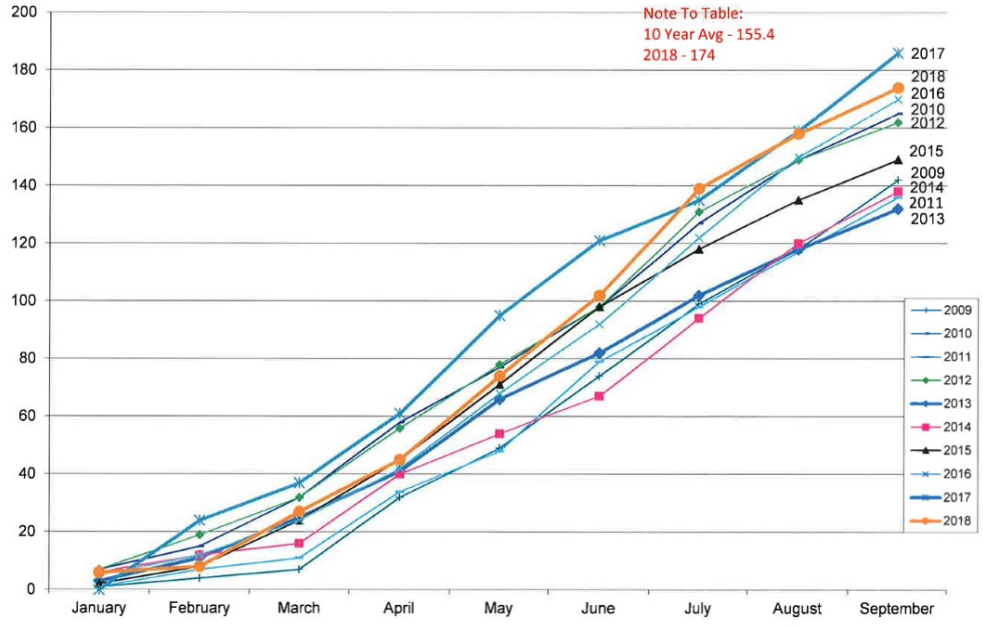
	2018		2017	
PERMIT TYPE	PERMITS ISSUED	DOLLAR VALUE	PERMITS ISSUED	DOLLAR VALUE
Single Family Dwelling	29	$ 10,325,000.00	23	$ 6,895,000.00
Multiple Family Dwelling	4	$ 2,911,000.00	10	$ 5,785,000.00
Accessory Apartments	1	$ 40,000.00	0	$ -
Residential Additions/Renovations	25	$ 1,411,000.00	28	$ 1,323,000.00
Residential Accessory Structures	22	$ 465,000.00	19	$ 534,000.00
Residential Pool Enclosures/Decks	19	$ 140,000.00	33	$ 142,000.00
Commercial Permits	6	$ 328,000.00	5	$ 197,000.00
Industrial	8	$ 1,385,000.00	15	$ 5,000,000.00
Institutional	3	$ 240,000.00	5	$ 982,000.00
Agricultural	40	$ 10,911,000.00	29	$ 4,434,000.00
Sewage Systems	12	$ 126,000.00	14	$ 146,000.00
Demolitions	5	$ 51,000.00	5	$ 52,000.00
Total	174	$ 28,333,000.00	186	$ 25,490,000.00

September's Highlights

- **Highlights include:**
  - 10 new Residential Units issued, (1 – 5 Plex (Palmerston), 1 – 4 Plex (Harriston), and 1 SFD (Palmerston), 2 new Industrial Buildings (Rural) and an Industrial Addition (Palmerston Industrial Park)
  - 42 new Residential units to date

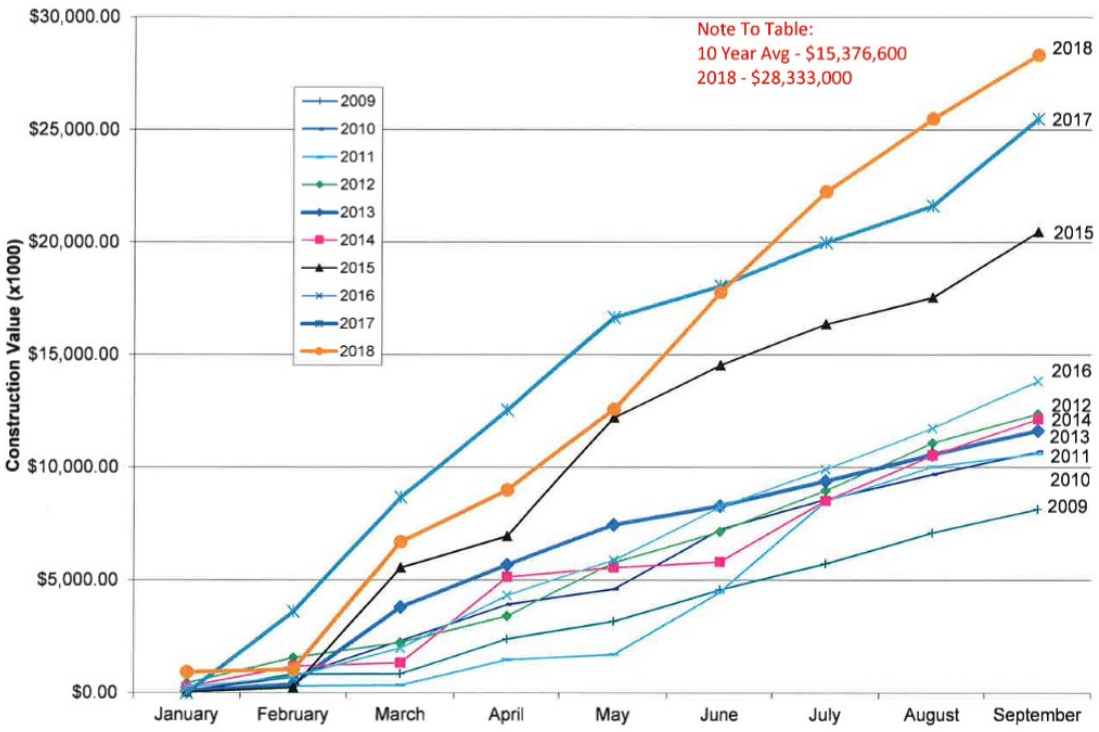
10 Year Permit Numbers

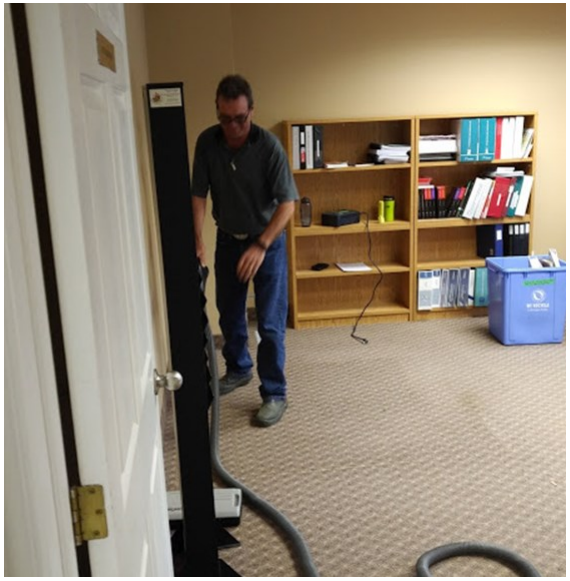
- 10 Year Average – 155.4
- Year To Date – 174 Permits



10 Year Construction Value

- 10 Year Average - $15,376,000
- Year To Date - $28,333,000





Spoiler Alert…

Questions/Comments

TOWN OF MINTO

DATE: October 11, 2018
REPORT TO: Mayor and Council
FROM: Bill White C.A.O. Clerk
SUBJECT: Proposed Service and Connection Policy

STRATEGIC PLAN:

Ensure growth and development in Clifford, Palmerston and Harriston makes cost effective and efficient use of municipal services, and development in rural and urban areas is well planned, reflects community interests, is attractive in design and layout, and is consistent with applicable County and Provincial Policies.

BACKGROUND:

The attached policy has been prepared in consultation with Public Works and Building Department Staff as well as Triton Engineering to govern how developers and landowners access Town water, sewer, stormwater and roadway services. The proposed policy contains the following sections:

Part 1: Purpose:

- guidance as to cost and procedures to access water, sewer, stormwater, roads including entrances to Town roads and lateral connection to municipal watermains, sanitary sewers and other services

Part 2: Goal

- allocate servicing costs fairly to ensure no ratepayer subsidy, encourage cost effective development where developers pay fair share and procedures to connect are appropriate

Part 3: Applicability

- procedures for obtaining access to municipal services for lots created by severance or plan of subdivision, and site plan control
- includes methods of collecting frontage charges as a condition of severance as well as for existing lots where commercial industrial, institutional and large residential projects are approved through site plan control
- allows for Council to establish a fair frontage for connection to newly serviced lands on Elora Street within the North Clifford Secondary Plan

Part 4: Quality Control

- ensures municipal, provincial, federal standards and guidelines are met for all types of service connections, including the DWQMS process for water systems
- requires any person or developer wishing to connect to any service use a qualified design professional to prepare plans and design connections

- shall comply with the Town's engineering standards
https://town.minto.on.ca/content/government/policies-and-procedures/municipal-servicing-design-standards-final-april-2016.pdf .

Part 5: Methodology
- outlines the process to connect to a service of any kind; completed form submitted to Public Works becomes an agreement between the applicant and Public Works Department (signed by Water Foreman, Wastewater Foreman, or Manager of Roads & Drainage)
- proposes frontage fee of $340 per meter for Clifford Elora Street versus all other areas where frontage fee is $221 per meter approved by Council through fees and charges bylaw
- requires $2,000 deposit at time of connection which is retain through building permit process and includes care of construction site, mud tracking and final grading
- no work on Town property or services unless contractor is qualified or under consulting engineering guidance
- allows for servicing agreements to be signed on high capacity roads for connections and replacement of ultra-rib pipe in Clifford if multiple connections are needed
- completed form is entered into CityWide tracking system and circulated to various Departments for review (Finance, Building etc.)

Part 6: Cost Sharing
- allows cost sharing between developers and Town such as special service area agreements

COMMENTS
The policy establishes a clearer practice for all persons involved in the development industry to access Town services in a fair, equitable and appropriate fashion so that all applicable rules and regulations at all levels of government are met. The policy streamlines the application process so that parties clearly understand their obligations as upon submission.

The policy also ensures communication between Town Departments through planning applications, building permits and service connection requests.

FINANCIAL CONSIDERATIONS:
The policy will help ensure Town investment in water and sewer systems servicing is recovered through various development processes. In the case of Clifford Elora Street for larger lots where major development occurs a reasonable frontage fee is proposed that would recover some of the cost of the servicing work for the water and sewer systems as major projects proceed.

RECOMMENDATION:
That Council receives the C.A.O. Clerk's October 11, 2018 report Proposed Service and Connection Policy and approves the policy attached.

Bill White C.A.O. Clerk

Section: **Public Works**	Policy Number: **4.17**
Policy: **Service Extension**	Effective Date: **03/09/2005**
Date Last Revised:	Current Revision Date: **10/16/2018**

Service Extension and Connection Policy

PART 1: PURPOSE:

This policy provides guidance to Town staff, public and developers regarding cost and procedures for connecting to or accessing public water, sewer, roads, and stormwater in the following areas:

1. Allocating the cost of water, sewer, stormwater and roads (which may include curb & gutter and sidewalks) for infill lots or to new developments whether industrial, commercial or residential.
2. Establishing entrances to municipal roads, and lateral connection requirements for municipal water, sanitary sewer and storm sewer services for infill lots and new developments

PART 2: GOAL:

To allocate the cost of servicing developments in an equitable manner so that ratepayers do not subsidize specific projects, encouraging responsible cost effective development for the good of the community, providing for developers paying a fair share of the cost of accessing municipal services, and implementing appropriate procedures to ensure connections to municipal services occurs according to Town standards and practices.

PART 3: APPLICABILITY:

This policy applies to new development in Minto's urban areas on existing properties, lots created by severance through Wellington County Land Division and properties where municipal services are to be extended to a property to allow for development. This policy will set out the practices and procedures for connecting these lots.

3.1 Lots Created by Severance

Where a new lot is created by severance, access to municipal services is first determined when applications circulated by the County are reviewed by Town staff and Council.

1. When reviewing severance applications circulated by the County, Public Works staff will assess whether the proposed lot fronts on water, sanitary sewer, storm sewer and roadway of sufficient capacity/condition to accommodate the proposed development. This includes assessing site lanes and alignment for new driveways. Public Works will also identify if there are any lateral services from the Town's main into the proposed lot.

a) If service capacity is adequate and safe driveway access available, the Town will request the County include a standard condition that prior to final approval of the lot, the required frontage payment set in the fees and charges bylaw will be made (water, sewer, storm sewer), and that a driveway entrance permit will be obtained.
b) If there are no lateral services to the lot, Public Works will state that connection to such services will be at the applicant's cost according to the requirements of the Town. The frontage fee must be paid and driveway deposit posted before Town staff clear this condition with the County.

2. If water, sewer, storm sewer or roadway must be extended or upgraded to accommodate the approved, a requirement for a servicing agreement with the Town will be placed before County gives final approval. The servicing agreement must be signed by the landowner, and any securities posted, before Town staff clear this condition with the County.

3. After lots are created by severance, the methodology set out in this policy shall apply to making physical connection to municipal services located within a street.

3.2 Lots created by draft plan of subdivision

Lots in draft plans are created on private property to be accessed by future public roads, watermain, sanitary sewer mains, storm sewer, sidewalks, curbs and other Town infrastructure to be installed at the developer's cost. The County will circulate draft plans to the Town for review by municipal staff, the Town's consulting engineer and formal comment by Council. Draft plans received for comment are to be circulated by Town staff to all Departments so that recreation, parks, facilities, financial, economic development and servicing conditions can be set.

The subdivision agreement is a developer's commitment to construct all services to future lots to a standard that would allow the Town to assume maintenance responsibility in the future. The subdivision agreement also covers land dedication for parks, cash payments, easements and most other conditions to protect Town interests. In most cases frontage fees will not be payable under a subdivision agreement because the developer incurs the full cost of servicing their project. Off-site work to upgrade existing municipal services to accommodate a proposed subdivision will also be identified in the subdivision agreement for a new draft plan. This will include a cost sharing arrangement, if applicable, identifying any Town contribution to off-site services. Council shall request the County include a standard condition requiring execution of a subdivision agreement as a condition of every circulated draft plan of subdivision.

The subdivision agreement sets terms for the Town to release conditions on the draft plan status to the County and the process required for the Town to assume maintenance of new

services constructed in the subdivision. This will require a defined number of lots be developed in the subdivision, a registered professional consulting engineer certify servicing work meets Town standards, and at least a two year maintenance period during which the subdivision developer must maintain services including snow removal.

3.3 Site Plan Control

Commercial, industrial, institutional, larger residential and similar projects built on existing vacant lots fronting on municipal roads with full municipal services available are subject to the Town's site plan control area by-law. The site plan submitted to the Town shall show in detail the services located in the municipal road allowance and the size and location of connections. Depending on how municipal services were installed and how the lot was created the Town may require a frontage fee be paid as a condition of developing a site through this process.

In the case of Clifford Elora Street northwest of James Street the Town invested in sanitary sewer, stormwater, road and water upgrades to pre-service about 1500 metres of frontage where several large vacant lots may be developed. The North Clifford Secondary Plan identifies a frontage charge of $650 per meter would pay back about one-half of an initial $1.5 million investment in water and sewer work along this section of the roadway. The secondary plan permits the Town to identify a fair frontage fee for new development on this section of Elora Street. The frontage fee would be collected as a condition of site plan approval, severance or subdivision, providing access to services for development fronting on Elora Street.

PART 4: QUALITY CONTROL:

The Town provides municipal services within roadways and road allowances in accordance with strict requirements set out in Provincial Legislation. Roadways must be cared for according to minimum maintenance standards set by the Province. The Town will generally apply applicable Ontario Provincial Design Standards for access to municipal roads.

The sanitary sewer collection system operates according to Provincial and potentially pending Federal standards to ensure safe and effective processing of wastewater. The Town's by-law contains certain requirements to ensure discharge into the municipal system is lawful and safe.

Minto's drinking water distribution services are operated according to the Drinking Water Quality Standard set by the Province by applicable legislation. The Town's bylaw also contains specific requirements to ensure water quality is maintained at all times, and proper documentation, monitoring and oversight of water systems and supply are maintained.

Storm water systems to process surface water from development are also provincially regulated, and can only be accessed in accordance with accepted engineering standards, which may include storm water retention facilities required to minimize impacts of development on adjacent lands and prevent localized flooding.

As a result any person or developer wishing to connect to any service within a municipal road allowance or Town easement or right of way shall abide by strict requirements of the Town. This includes a requirement that qualified design professionals such as consulting engineers be used preparing site plans and designing connections to municipal services. The Town's engineering standards are available on the Town's website at https://town.minto.on.ca/content/government/policies-and-procedures/municipal-servicing-design-standards-final-april-2016.pdf . This specifies typical development requirements to ensure the high standard of municipal services is maintained by the Town.

PART 5: METHODOLOGY:

This process applies to required connections to municipal services where work is to be completed within a municipal road allowance or Town right of way or easement. The following procedure applies:

1. A request for provision of water, sewer, stormwater services and/ or road extensions or connections must be made by property owners or authorized agents or developers by filling out the applicable form attached to this policy. The completed form is to be emailed to the Public Works Assistant for processing unless email is not possible in which case the form shall be delivered to the Town office or mailed.

2. The forms filed with the Public Works Department will be reviewed and the applicant advised of the Town's requirements to access municipal services including the following:
   a) municipal services requested (water, sanitary sewer, stormwater or roadway)
   b) applicable frontage fee to be paid based on approved Town fee schedule
   c) the required deposit amount based on approved Town fee schedule
   d) the contractor responsible for completing the work according to applicable standards
   e) any additional costs associated with securing connection to municipal services

   The Town will prepare a response within two weeks of receiving the form.

3. There are two frontage fees under Section 2b) applicable in Minto. In the Village of Clifford a frontage fee of $340 per metre of lot frontage applies to connections to municipal services on Elora Street north from James Street northerly to the Town limits. All other infill lots shall pay a frontage fee of $221 per metre of lot frontage depending on how the lot was created and whether frontage fees were previously paid. Frontage fees will be set by Council through the fees and charges bylaw.

4. The deposit amount under 2e) shall be $2,000 per lot requiring access to municipal services even if only an entrance permit is required. Where the form filed under this policy corresponds with a building permit application the deposit under this section shall be retained through the building permit process to ensure the construction site is kept appropriately, mud is not tracked on to Town streets and final grading is completed according to the approved plan. The deposit will be returned when all work specified by this policy or by an applicable building permit has been issued.

5. The Town shall permit only qualified contractors to conduct work required to connect to municipal services under 2d) above. If a contractor is approved by the Town to complete the work that contractor must obtaining all locates and arrange a pre-construction meeting with the Town's Water Foreman, Roads Foreman, Wastewater Foreman and Chief Building Official depending on the connection(s) required. The contractor shall not conduct any work without qualified Town staff being on-site during the construction period as required. The Town may also require Triton Engineering staff be present during the work, or may accept the applicant's consulting engineer if warranted.

6. The Town will use its best efforts to outline additional or unusual costs to the developer when processing requests to secure connections to municipal services under 2e) above. In some cases lateral water and sewer connections may be "pre-serviced" to the lot line of the property to be developed. The developer will be responsible for the additional cost of the physical connection between the main and the lot line if laterals have not been "pre-serviced', or the laterals are not of a sufficient size. Other additional costs may be poor soil conditions, road restoration, private utility relocation (hydro poles, fiber optic cable, gas lines etc.).

7. On high capacity roads where traffic volumes are high, such as a County Road or Connecting Link Highway, the Town may require a connection agreement be signed between the parties which will include a cost estimate for the required connection work, a deposit in addition to 2c) above and Council approval of the connection agreement.

8. Where multiple service connections to the sanitary sewer system are required in certain parts of Clifford where "ultra-rib" piping is installed, under Town policy the developer may be responsible for replacing the main as well as installing the required connections.

Upon receipt of the completed form requests the Public Works Assistant shall enter the material in the CityWide system and circulate the service request to seek input from the applicant Finance and Administrative Department, Building Department, Treasurer, County of Wellington Planning Department and any other relevant regulatory authorities.

Town staff is encouraged to seek advice from engineers, lawyers, public utility providers and other utilities or outside consultants if necessary.

Projects which are located within urban boundaries should be designed according to accepted service standards for quality of road surfaces, level of water flow for fire protection purposes and other approved standards.

PART 6: COST SHARING

In some cases the Town may participate in servicing projects on municipal roads with the developer to facilitate more affordable servicing of development lands or improve existing service capacities.

Costs for the provision of water, sewer and stormwater services for projects requested by developers or other property owners, may be financed through the provision of Sections 326 (Special Service Area) or 391 (Fees and Charges) of the Municipal Act, 2001. The area affected by the extension of services will be reviewed.

If affected properties have existing services, the cost of water and sewer services will be paid through general user fees while roads and stormwater costs will be paid through general tax revenue. If the properties do not have these services, the services will be taken to the lot line, with costs allocated to the benefiting landowners on the basis of frontage, catchment areas or some other rational criteria. Under section 326, the costs will be designated as “special services”, and a “special local municipality levy” will be raised on the affected properties.

APPLICATION FOR MUNICIPAL SERVICE CONNECTION PERMIT
(municipal water, sanitary sewer, storm sewer, roadway entrance)
AND

AGREEMENT BETWEEN THE CORPORATION OF THE TOWN MINTO
(hereinafter called the "Municipality")
And

_____
Name of Owner

_____
Address requiring service Roll Number

_____
Email Phone Number

BUILDING: New _____ TYPE OF USER: Domestic _____
Existing _____ Industrial _____
_____ Commercial _____
_____ Other _____

REQUIRED SERVICES (identify connection size)

Roadway Entrance _____ Water Service _____
Sanitary Service _____ Storm Service _____

Name of Qualified Contractor and/or Consultant Responsible for Connection/Design

_____

_____

Contractor Email Contractor Phone Number

FOR THE PROVISION OF MUNICIPAL SERVICE:

1. I, the undersigned (hereinafter called the "Owner"), do hereby request the Municipality to permit the contractor or consultant identified herein to make, or to make on behalf of the Owner, necessary connection(s) to make available municipal service at the premises above listed and I undertake and agree to be bound by the rules and regulations and general conditions as stated herein and the applicable by-laws, standards and fees as may be established from time to time by the Municipality.

2. This agreement shall not be binding upon the Municipality until accepted by it through its proper officers, and shall not be modified or affected by any promise, agreement or representation, by any agent or employee of the Municipality, unless incorporated in writing into this agreement before such acceptance.

3. The Owner vacating the above listed premises without notifying the Municipality is liable for all subsequent accounts until a new Owner is registered at the vacated

location. It is the Owner's responsibility and in his best interest to advise the Municipality in writing when he vacates the premises where he was registered for connection to a municipal service.

4. The Owner agrees that upon filing this application with the Municipality at its discretion, to deposit with the Town a minimum of $2,000 such funds to be held by the Municipality without interest as a guarantee the Owner fulfils terms of this Agreement.

5. The Owner will provide all work on the premises to connect it at the point of connection to the Municipality's services works, to obtain all permits as may be required and to maintain the same in efficient condition with proper devices.

6. The rates charged for a municipal service are subject to change at any time on receipt of notice from the Municipality and are generally set out in Schedule "A".

7. This Agreement shall continue in force from year to year until terminated by a notice in writing, given by either party hereto at least one month before the end of the term or any year term thereafter.

8. The Owner agreement is not to make any changes in or additions to servicing work connecting the premises to the Municipality's services after the same has been installed by the Owner and inspected by the Municipality except with the written consent of the Municipality.

9. It is agreed that the signatures of the parties hereto shall be binding upon their successors or assigns, and that the vacating of the premises herein named shall not release the Owner from this agreement, except at the option, and by written consent of the Municipality.

SIGNED BY:

_____ _____

Owner Date

Application accompanied by a fee of $ _____ Dollars

Accompanied with a plan (in PDF or duplicate paper) of the lot showing the point at the street line at which the connections to municipal services is to be made.

ACCEPTED FOR THE MUNICIPALITY

_____ _____

Public Works Official Date

Schedule "A"
Calculation of Estimated Cost
(June 2018 estimate)

Name: _____

Street Address of Property _____

Frontage of Lot on Street _____ Depth of Lot _____

Notes to connection request _____

CALCULATION OF ESTIMATED COST (**outside Clifford Elora Street**)

Flat Rate Charge (for each separately assessed property)	$ _____
Plus _____ Service Connections @$1,500 each	$ _____
Plus _____metres Storm Frontage @$61 per metre =	$ _____
Plus _____metres Sanitary Frontage @$80 per metre =	$ _____
Plus _____metres Water Frontage @$80 per metre =	$ _____
TOTAL ESTIMATED COST:	$

or

CALCULATION OF ESTIMATED COST (**Clifford Elora Street**)

Flat Rate Charge (for each separately assessed property)	$ _____
Plus _____ Service Connections @$2,500 each	$ _____
Plus _____metres Storm Frontage @$96 per metre =	$ _____
Plus _____metres Sanitary Frontage @$122 per metre =	$ _____
Plus _____metres Water Frontage @$122 per metre =	$ _____
TOTAL ESTIMATED COST:	$

If you have lot frontage greater than 20 metres and would like additional service connection(s), these may be available at a cost to you of $1,500 each outside of Clifford Elora Street and $2,500 per connection on Clifford Elora Street. During the design or construction phase of this project, you will be given the opportunity to formally request any such extra service connection (Additional connections may also apply to street townhouses and semi's regardless of the lot frontage).

PAYMENT:

Pay ⅓ in advance by (provide applicable date here)	$
Pay ⅓ when contract awarded	$
Pay ⅓ when construction completed	$
	$

BY SIGNING BELOW THE PROPERTY OWNER AGREES WITH THE ABOVE METHOD OF PAYMENT PAYABLE TO THE TOWN OF MINTO. PLEASE SIGN AND RETURN ONE COPY OF THIS FORM TO THE TOWN OFFICE BY (APPLICABLE DATE HERE) WITH APPLICABLE PAYMENT

Print: _____

Signed: _____

TOWN OF MINTO

DATE: October 9, 2018
REPORT TO: Mayor and Council
FROM: Gordon Duff, Treasurer
SUBJECT: 2017 Development Charges Reserve Funds

STRATEGIC PLAN:

5.3 Ensure financial plans to include a blend of capital financing methods including long-term debt, user fees, grants, internal reserves and taxation, and maintain reserves to the point where Minto reduces reliance on borrowing or tax increases to finance major capital expenditures.

BACKGROUND:

Development charges are imposed by the Town to recover certain growth-related capital costs from residential and non-residential developments that create the need for these capital projects.

The nature and amount of these charges are determined by a Development Charges Study following the regulations set out in the Development Charges Act, 1997. The current development charges schedule was developed as part of the Development Charges Study was approved June 2, 2015 which expires March 1, 2020. The Act requires the Treasurer annually provide a financial statement; the format of this report has changed and expanded.

COMMENTS:

Section 43(2) of the Development Charges Act (DCA) requires the Treasurer present a financial statement to Council including the following:

- Statements of the opening and closing balances of the reserve funds and of transactions relating to the funds;
- Statements identifying,
  i. All assets whose capital costs were funded under a development charge by-law during the year,
  ii. For each asset mentioned in (i) above, the manner in which any capital cost not funded under the by-law was or will be funded;
- A statement as to compliance with subsection 59.1 (1) of the DCA; and
- Any other information that is prescribed.

Section 59.1 (1) of the DCA specifically prohibits municipalities from imposing additional payments on developers or requiring construction of a service unless specifically authorized under the DCA or another Act. This provision does not affect a municipality's right to include conditions for installation or payment for local services but is intended to close the door on

other “voluntary” payments that may have been sought by municipalities outside the legislative framework. The importance the province places on this section is reinforced by (a) requiring that the Treasurer’s report include a statement confirming that the municipality complies with Section 59.1 (1) and (b) granting extensive investigative powers to the minister of Municipal Affairs and Housing to investigate municipal compliance.

The Town of Minto does not require any “voluntary” payments from developers and the Treasurer’s statement below will confirms compliance with Section 59.1 (1).

In the past, municipalities were required to file the Treasurer’s report with the Minister within 60 days of the presentation of the report to Council. In accordance with Section 43 of the DCA this requirement has been removed and replaced by a requirement that Council shall ensure that the statement is available to the public and that the Treasurer shall give a copy of the statement to the minister of Municipal Affairs and Housing upon request.

In order to comply with these reporting requirements:

a) The Treasurer confirms that, for 2017 development charges reporting, the Town of Minto complies with section 59.1 (1) of the Development Charges Act, 1997; and,
b) Recommendations in this report include Council’s acceptance of the Treasurer’s statement and direction to post the report and attachments on the Town’s website.

FINANCIAL CONSIDERATIONS:

The changes in the Development Charges noted in the attached schedules have been presented in the annual Financial Statements and on Schedule 61 of the annual Financial Information Return.

RECOMMENDATION:

The Council of the Town of Minto receives the Treasurer’s Report dated October 9, 2018 and accepts the Treasurer’s declaration that the Town is in compliance with Section 59.1 (1) if the Development Charges Act, 1997, and that the report and related attachments be posted on the Town’s website.

_____

Gordon Duff, Treasurer

Municipality of Town of Minto

Annual Treasurer's Statement of Reserve Funds for By-Law 2015-53

	Services to which the Development Charge Relates (examples)									
	Non-Discounted Services						Discounted Services			
Description	Roads	Water	Wastewater	Outdoor Recreation	Protection	Administration	Waste Diversion	Parks and Recreation	Library	Total
Opening Balance, January 1, 2017	120777	86398	153802	69458	36453	14526				481414
Plus:										
Development Charge Collections	65519	72967	125462		18118	2157				284223
Accrued Interest	1392	996	1772	800	420	167				5547
Repayment of Monies Borrowed from Fund and Associated Interest										0
Sub-Total	66911	73963	127234	800	18538	2324				289770
Less:										
Amount Transferred to Capital (or Other) Funds				28000						28000
Amounts Refunded										0
Amounts Loaned to Other D.C. Service Category for Interim Financing										0
Credits										0
Sub-Total	0	0	0	28000	0	0				28000
										0
Closing Balance, December 31, 2017	187688	160361	281036	42258	54991	16850				743184

The Municipality is compliant with s.s. 59.1 (1) of the *Development Charges Act* , whereby charges are not directly or indirectly imposed on development nor has a requirement to construct a service related to development been imposed, except as permitted by the *Development Charges Act* or another Act.

TOWN OF MINTO

DATE: October 9, 2018
REPORT TO: Mayor and Council
FROM: Gordon Duff, Treasurer
SUBJECT: 2017 Parkland Reserve Fund

STRATEGIC PLAN:

5.3 Ensure financial plans to include a blend of capital financing methods including long-term debt, user fees, grants, internal reserves and taxation, and maintain reserves to the point where Minto reduces reliance on borrowing or tax increases to finance major capital expenditures.

BACKGROUND:

In accordance with the Planning Act, as amended through Bill 73, The Smart Growth for Our Communities Act, 2015, Section 37 and Section 42 requires the Treasurer to provide a financial statement including opening and closing balances to Council relating to cash-in-lieu of parkland monies. This statement must be made available to the public.

COMMENTS:

The transactions which occurred in the Town of Minto's Cash-in-Lieu of Parkland Reserve Fund are shown in the attached statement.

FINANCIAL CONSIDERATIONS:

There are no financial implications associated with Council receiving this report as its sole purpose is to meet legislative reporting requirements.

RECOMMENDATION:

The Council receives the Treasurer's Report dated October 9, 2018 and associated financial statement regarding Parkland Reserve Fund as required by Provincial Legislation for information only.

_____
Gordon Duff, Treasurer

TOWN OF MINTO
STATEMENT OF THE TREASURER
CASH-IN-LIEU OF PARKLAND RESERVE FUND
FOR THE YEAR ENDED DECEMBER 31, 2017

Balance, December 31, 2016		**$11,093**
Contributions during the year	$18,000	
Interest Earned	128	18,128
		29,221
Funds spent during 2017		
None		0
Balance, December 31, 2017		**$29,221**

TOWN OF MINTO

DATE: October 12, 2018
REPORT TO: Mayor and Council
FROM: Gordon Duff, Treasurer
SUBJECT: Approval of Accounts September 2018

STRATEGIC PLAN:

Manage Town finances in a transparent and fiscally responsible manner using a wide variety of accepted methods such as maintaining healthy reserves, investing conservatively, sensible user fees, property tax control, and responsible borrowing.

BACKGROUND

The following is a summary of accounts by Department paid for October 12, 2018

Administration	$ 329,880.47
People & Property	
Health & Safety	
Health Services	
Building	$ 11,457.25
Economic Development	$ 33,500.06
Incubator	$ 512.72
Tourism	
Fire	$ 12,405.81
Drains	$ 142,958.00
Roads	$ 973,302.94
Cemetery	
Waste Water	$ 19,737.60
Streetlights	$ 12,587.93
Water	$ 11,161.94
Town Landscaping Care	$ 16.94
Recreation	$ 8,374.45
Clifford	$ 8,348.90
Harriston	$ 21,413.18
Palmerston	$ 101,512.88
Norgan	$ 3,988.76
	$ 1,691,159.83

COMMENTS:

The above information is provided to provide an update on monthly spending by Department as public information. Council also receives three budget update reports per year outlining the status of budget to actual for the capital plan and operating budgets.

Council receives by email a detailed summary of accounts including personal information about identifiable individuals that is protected under the Municipal Freedom of Information Act. The auditor supports Council approving the accounts in this fashion.

FINANCIAL CONSIDERATIONS:

Council's approval of the accounts increases transparency by disclosing monthly spending by Department.

RECOMMENDATION:

That Council receives the Treasurer's report dated October 12, 2018 regarding Approval of Accounts, and approves the Town of Minto accounts by Department for September 2018.

Gordon Duff, Treasurer

The Corporation of the Town of Minto
By-law 2018-81

For the purpose of amending By-law 5000-05, a By-law to regulate the parking or stopping of vehicles on highways, public parking lots and in some instances, private property within the Town of Minto

WHEREAS under Section 9 of the Municipal Act, S.O., 2001, c. 25, the Corporation of the Town of Minto has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under this or any other Act;

AND WHEREAS the Council of the Corporation of the Town of Minto deems it necessary and expedient to amend Parking By-Law Number 5000-05;

AND WHEREAS Council proposes to amend By-law 5000-05 to include Municipal Parking lot in Clifford;

NOW THEREFORE the Council of the Corporation of the Town of Minto enacts as follows:

1. That Schedule "D" of By-law 5000-05 is hereby amended to include Municipal Parking Lot at 3 Elora Street South in Clifford;

2. That Schedule "D" shall appear generally as shown in Schedule "A" to this By-law.

6. This By-law shall come into full force and effect upon final passing thereof.

Read a first, second, third time and passed in open Council this 16th day of October 2018.

_____
Mayor George A. Bridge

_____
CAO/Clerk Bill White

Schedule "A" to By-law 2018-81
Generally showing Schedule "D" to By-law 5000-05

Municipal Parking Lots

Palmerston

Parking Lot 1: North Side Main Street municipal parking lot, more particularly described as Part of Lot 10 and Lot 11, north side Main Street.

Parking Lot 2: Jane Street municipal parking lot described as Part of Lot 8, North Side of Main Street.

Parking Lot 3: South Side of Main Street municipal parking lot, described as Part of Lot 1, West Side William Street, Part of Lot 3 and Part of Lot 4, South Side Main Street, rear land.

Harriston

Parking Lot 1: Mill Street – Prestons Survey – Lot 4, Part of Lot 3, North Side of Mill Plan Lapotiers Part Tannery, Part Maitland River Bd.

Parking Lot 2: 78 Mill Street (privately owned lot with long term municipal lease thereon) Part of Lot 19, South Side Mill Street, Part of Lot 19 and Part of Lot 20, North Side Webb Street, Description RP 61R-2798 PART 2.

Clifford

Parking Lot 1: Allan Street and Elora St. South municipal parking lot described as 3 Elora Street South, Plan Clifford Lot 143 Part Lot 144.

The Corporation of the Town of Minto
By-law No. 2018-82

To confirm actions of the Council of the Corporation of the Town of Minto Respecting a meeting held October 16, 2018

WHEREAS the Council of the Town of Minto met on October 16, 2018 and such proceedings were conducted in accordance with the Town's approved Procedural By-law.

NOW THEREFORE the Council of the Corporation of the Town of Minto hereby enacts as follows:

1. That the actions of the Council at its Committee of the Whole/Council meeting held on October 16, 2018 in respect to each report, motion, resolution or other action passed and taken by the Council at its meeting, is hereby adopted, ratified and confirmed, as if each resolution or other action was adopted, ratified and confirmed by its separate By-law.

2. That the Mayor and the proper officers of the Corporation are hereby authorized and directed to do all things necessary to give effect to the said action, or obtain approvals, where required, and, except where otherwise provided, the Mayor and the C.A.O. Clerk are hereby directed to execute all documents necessary in that behalf and to affix the Corporate Seal of the Town to all such documents.

3. This By-law shall come into force and takes effect on the date of its final passing.

Read a first, second, third time and passed in open Council this 16th day of October 2018.

Mayor George A. Bridge

C.A.O. Clerk Bill White