



NEW NIAGARA OFFICIAL PLAN

Natural Environment Work Program: Consultation Summary Report - 1st Point of Engagement

Niagara Region
September 19, 2019



SUSTAINABLE REGION



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Executive Summary

Introduction

The Region is developing a new Niagara Official Plan (NOP) – through a process known as a “municipal comprehensive review”. The NOP will be a long-range policy planning document to shape Niagara’s physical, economic, and social development.

Natural Environment planning which includes natural heritage, water resources, and watershed planning is an important part of the process. As part of the new NOP, natural environment mapping and policies will be developed to reflect the current vision, goals and objectives for Niagara Region. The Natural Environment Work Program commenced in 2018 and is expected to be completed in 2020.

An important component of the work program is to engage with public agency stakeholders, interested groups/stakeholders, Indigenous groups and the public about natural environment matters in the region to better inform the development of options for the natural environment system(s) and policies. The purpose of this 1st Point of Engagement was to inform the public and stakeholders on the discussion papers and background study that was completed and to seek input towards the development of options for evaluation in the next phase.

The purpose of this document is to summarize the results of the 1st Point of Engagement and identify key themes and related implications for the next steps in the work program.

Overview of Consultation Process

The 1st Point of Engagement has been documented in this Consultation Summary Report, which summarizes the first of three points of engagement that will take place over the course of the work program. Forms of engagement included presentations, workshops and open house format. Stakeholder and community engagement included the following:

- Local Councils Presentations
- Stakeholder Workshops
- Public Information Centres
- Indigenous Group Meetings
- Agricultural Policy and Action Committee Presentation
- Technical Advisory Group Workshop
- Planning Advisory Committee Presentation
- Regional Planning and Economic Development Committee Presentation
- Niagara Peninsula Conservation Authority (NPCA) Board and Staff Meetings

Key Themes

Through the consultation process nine key themes emerged. The following provides a summary of the key themes, in no particular order, and the implications for consideration by the Region and consultant team when developing the natural environment policies and options for mapping the natural environment system.

Key Theme #1 - Consistent Policies and Clear Roles and Responsibilities

Developing policies that are consistent with Provincial/Federal legislation, Provincial policies, are clear and defensible, provide the appropriate level of flexibility, and include definitions for key terms will be critical to ensure objectives for the natural environment are met and policies are implemented as intended.

Key Theme #2 – Take a Systems Approach to Natural Environment Planning

Watershed planning should form the basis for land use planning. The natural environment component of the new Niagara Official Plan (NOP) should take a holistic approach with consideration of the inter-relationships between multiple issues (and their cumulative impacts).

Key Theme #3 - Recognize the Uniqueness of Niagara's Geography, Natural Environment and Agriculture

Niagara Region is rich in natural beauty and has a thriving agricultural community that both relies on and can support the natural environment. The approach to natural environment planning needs to recognize other important industries and find a balance that achieves the goals and objectives for the natural environment system.

Key Theme #4 - Accurately Map the Natural Environment

The mapping of the natural environment system should ensure a level of accuracy that supports land use planning and includes the best available data; this includes working with agency partners and the community to ensure data is accurate and recent. Available natural environment mapping data should also be accessible in a user-friendly on-line mapping tool.

Key Theme #5 – Monitor Federal Legislation and Provincial Policy Direction

The Region must continue to monitor and work closely with the Province and Federal governments to help influence future decisions and legislation/planning documents, and must build some flexibility into natural environment planning (i.e., policies) to allow for required changes that may be mandated.

Key Theme #6 - Protect the Natural Environment

Future natural environment NOP-related work needs to reflect multiple focuses — protecting existing important natural environment features, and restoring/enhancing others. Tools and guidelines will need to be developed to ensure policies are interpreted and implemented as intended.

Key Theme #7 – Explore Challenging Issues in Natural Environment Planning

There are several topics in natural environment planning that elicit strong opinions for a variety of reasons or that are of interest to many, including buffers, setbacks, vegetation protection zones, biological offsetting, invasive species, and watercourse characterization in agricultural areas. These issues will need to be thoroughly explored, explained and assessed following a science-based objectives approach.

Key Theme #8 - Forward Thinking Natural Environment Policies and Official Plan

The new NOP should recognize trends and issues in environment planning and provide clear policies to achieve the vision, goals, and objectives for the Region's natural environment.

Key Theme #9 - Build Trust Through Continued Engagement, Collaboration and Education

Community and stakeholder engagement must continue to ensure policy direction and natural environment system mapping considers the full range of perspectives. Through the natural environment work program and beyond, the Region has an opportunity to educate the public and stakeholders, receive input through meaningful engagement, and develop natural environment policies that support the protection of the Region's natural environment for the future. The new NOP should create opportunities for more collaboration and engagement of the public and stakeholders through natural environment planning

Next Steps

The input received through the 1st Point of Engagement was considered when finalizing the mapping discussion paper, watershed planning discussion paper and natural environment background study. The discussion papers, background study and this Consultation Summary Report will be presented to Regional Planning and Economic Development Committee for information.

Following the presentation of the background study, the consultant team will undertake the next phase of the work program to develop and evaluate options for the natural systems. The preliminary findings of this work inform the second technical paper: Identification and Evaluation of Options for Regional Natural Environment System(s). Following the development of this second technical paper, the Region will commence with the 2nd Point of Engagement.

Project Study Team

North-South Environmental Inc.

Sal Spitale
Mirek Sharp
Kristen Harrison

Meridian Planning Consultants Inc.

Nick McDonald

Ecosystem Recovery Inc.

Mariëtte Pushkar
Chris Moon

GLPi Consulting

Glenn Pothier

Table of Contents

Executive Summary	i
1.0 Introduction.....	1
1.1 Consultation Summary.....	1
2.0 Local Council Presentations	3
2.1 Considerations for the Natural Environment Work Program	3
3.0 Stakeholder Workshops	4
3.1 Considerations for the Natural Environment Work Program	11
4.0 Public Information Centres	12
4.1 Considerations for the Natural Environment Work Program	14
5.0 Indigenous Group Meetings.....	14
5.1 Considerations for the Natural Environment Work Program	15
6.0 Agricultural Policy and Action Committee Presentation	16
6.1 Considerations for the Natural Environment Work Program	17
7.0 Technical Advisory Group Workshop	17
7.1 Considerations for the Natural Environment Work Program	20
8.0 Planning Advisory Committee Presentation	21
8.1 Considerations for the Natural Environment Work Program	22
9.0 Niagara Peninsula Conservation Authority (NPCA) Board and Staff Meetings ..	23
9.1 Considerations for Natural Environment Work Program	23
10.0 Regional Planning and Economic Development Committee Presentation	24
10.1 Considerations for Natural Environment Work Program	24
11.0 Key Themes and Implications for the Natural Environment Work Program	25
12.0 Next Steps.....	28

List of Figures

Figure 1. Schematic of Consultation Undertaken during the 1st Point of Engagement ...	2
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List of Tables

Table 1. Dates of engagement activities undertaken during the 1 st Point of Engagement.	2
Table 2. Stakeholder Workshops event details.	4
Table 3. Land Developers, Environmental Consultants and Municipal Planning Staff Workshop – general comments received during ‘4-S’ exercise.	5
Table 4. Agricultural Community – general comments received during ‘4-S’ exercise.	6
Table 5. Environmental Groups – general comments received during ‘4-S’ exercise.	6
Table 6. Planning Advisory Committee Presentation – general comments received during ‘4-S’ exercise.	22

List of Appendices

Appendix A: Local Council Presentations.	30
Appendix B: Stakeholder Workshops	31
Appendix C: Public Information Centre	32
Appendix D: Indigenous Group Meetings	33
Appendix E: Agricultural Policy and Action Committee Presentation	34
Appendix F: Planning Advisory Committee Presentation	35
Appendix G: Regional Planning and Economic Development Committee Presentation	36

1.0 Introduction

The Region is developing a new Niagara Official Plan (NOP) – through a process known as a “municipal comprehensive review”. The NOP will be a long-range policy planning document to shape Niagara’s physical, economic, and social development.

Natural Environment planning which includes natural heritage, water resources, and watershed planning is an important part of the process. As part of the new NOP, natural environment mapping and policies will be developed to reflect the current vision, goals and objectives for Niagara Region. A key element of the work to develop the new NOP will be policies and mapping that incorporate Provincial requirements on natural environment planning. Niagara Region has retained a consultant team, led by North-South Environmental Inc, with Meridian Planning Consulting Inc., Ecosystem Recovering Inc., and GLPi, to support the Region in undertaking the Natural Environment Work Program.

The Natural Environment Work Program commenced in 2018 and is expected to be completed in 2020. The Natural Environment Work Program includes the following phases:

- Mapping and Watershed Planning Discussion Papers and Comprehensive Background Study
- 1st Point of Engagement: Inform on Background Study
- Identification and Evaluation of Options for Regional Natural Environment System(s)
- 2nd Point of Engagement: Consultation on Options for the Natural Systems
- The Regional Natural Environment System and Considerations for Implementation
- Develop Draft Official Plan Policies and Finalize Mapping
- 3rd Point of Engagement: Draft OP Policies and Schedules

An important component of the work program is to engage with public agency stakeholders, interested groups/stakeholders, Indigenous groups and the public about natural environment matters in the region to better inform the development of options for the natural environment system(s) and policies. The purpose of this 1st Point of Engagement was to inform the public and stakeholders on the discussion papers and background study that was completed and to seek input towards the development of options for evaluation in the next phase.

In addition to informing stakeholders and the public on the initial review completed as part of the background studies, the 1st Point of Engagement intended to seek input towards the development of the options for the natural environment mapping and policies, to be undertaken in the next phase. The following table (Table 1) provides an overview of the groups and dates during which the engagement event took place.

Table 1. Dates of engagement activities undertaken during the 1st Point of Engagement.

Date	Activity
February 20, 2019	Presentation to Planning and Economic Development Committee (PDS 10-2019)
February 22, 2019	Presentation to the Agricultural Policy and Action Committee (APAC)
February 22, 2019	Technical Advisory Group (TAG) Meeting
April 23, 2019	Presentation to Fort Erie Council
May 1, 2019	Meeting with Six Nations Elected Council Staff
May 1, 2019	Meeting with Haudenosaunee Confederacy Chiefs Council
May 3, 2019	Workshop – Development Community, Consultants, and Local Planning Staff
May 6, 2019	Presentation to Grimsby Council
May 7, 2019	Meeting with Fort Erie Friendship Centre Staff
May 7, 2019	Presentation to Thorold Council
May 13, 2019	Presentation to Niagara-on-the-Lake Council
May 14, 2019	Presentation to Niagara Falls Council
May 16, 2019	Workshop – Agricultural Community
May 16, 2019	Workshop – Environmental Stakeholder Groups
May 22, 2019	Workshop – Planning Advisory Committee (PAC)
May 27, 2019	Presentation to Port Colborne Council
May 28, 2019	Presentation to Wainfleet Council
May 29, 2019	Meeting with Niagara Region Metis Council
May 30, 2019	Public Information Centre – West Lincoln
June 3, 2019	Presentation to Pelham Council
June 5, 2019	Meeting with Niagara Region Native Centre Staff
June 6, 2019	Meeting with NPCA Senior Staff
June 6, 2019	Public Information Centre - Welland
June 10, 2019	Information Package to St. Catharines Council
June 10, 2019	Presentation to West Lincoln Council
June 11, 2019	Meeting with Mississauga of the Credit Staff
June 11, 2019	Presentation to Welland Council
June 13, 2019	Meeting with NPCA Technical Staff
June 17, 2019	Presentation to Lincoln Council
July 23, 2019	Meeting with NPCA Technical Staff
September 18, 2019	Presentation to NPCA Board [Scheduled]

The purpose of this document is to summarize the results of the 1st Point of Engagement and identify key themes emerging from this consultation, and related implications for developing the natural environment system mapping and policies as part of the Natural Environment Work Program.

1.1 Consultation Summary

This consultation summary report provides an overview of the 1st Point of Engagement that has been recently completed. It is the first of 3 consultation summary reports that will be prepared over the course of the project. As illustrated in Figure 1, the public and stakeholder engagement program for the natural environment work program includes a variety of methodologies to communicate, educate, engage participants, receive input, and inform the next phases of the project.

The general comments and feedback received from each group are provided in the following sections:

- **Section 2** – Local Councils Presentations
- **Section 3** – Stakeholder Workshops
- **Section 4** – Public Information Centres
- **Section 5** – Indigenous Group Meetings
- **Section 6** – Agricultural Policy and Action Committee Presentation
- **Section 7** – Technical Advisory Group Workshop
- **Section 8** – Planning Advisory Committee Presentation
- **Section 9** - Niagara Peninsula Conservation Authority (NPCA) Board and Staff Meetings
- **Section 10** – Regional Planning and Economic Development Committee Presentation

Appendices are provided that include notices of meetings, agendas, presentation materials, comment forms and images of the notes from stakeholder workshops.

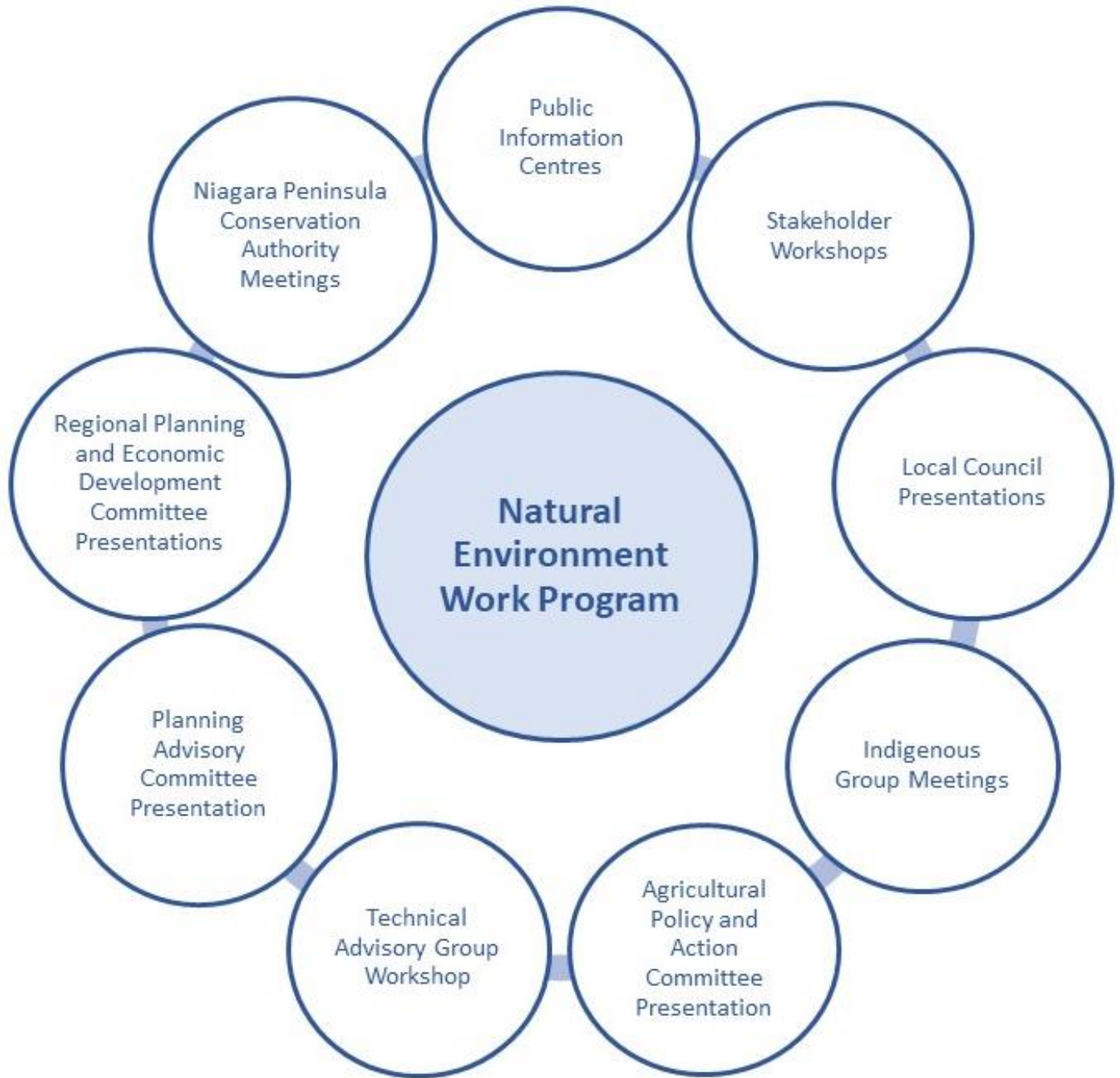


Figure 1. Schematic of Consultation Undertaken during the 1st Point of Engagement

2.0 Local Council Presentations

Niagara Region Planning Staff made a presentation on the Natural Environment Work Program (**Appendix A**) to each of the local councils. The presentation was given following a more general update on the process of preparing the new Niagara Official Plan. Although several attempts were made to schedule a presentation to the City of St. Catharines Council, a presentation could not be made due to agenda conflicts. Instead an information package similar to the presentation given to the other local councils was provided to the City of St. Catharines.

Following the local council presentations, a range of follow-up questions were asked by Local Councillors and comments provided. The key themes that were discussed following the presentation to the Local Councils included:

- Role of Niagara Peninsula Conservation Authority (NPCA) in watershed planning
- Providing and maintaining connectivity between features within the system
- Protection for woodlands through policy and the Regional Tree By-law
- Consideration for the agricultural system and agricultural infrastructure
- Impacts of climate change and role of natural environment in mitigating impacts from climate change
- Invasive species (e.g., Emerald Ash Borer and its effect on ash trees)
- Need for accurate mapping
- Implications and implementation of the Natural Heritage System for the Growth Plan

2.1 Considerations for the Natural Environment Work Program

Based on the feedback received from the Local Council presentation, the following key points should be considered when identifying and evaluating options and developing the natural environment mapping and policies:

Key points for consideration:

- Provide a clear description of the role of the Region and NPCA in watershed planning in the Region
- Ensure clear policies for protection of key features as well as appropriate and effective by-laws to enforce protection (e.g., Regional Tree By-law)
- Ensure natural environment system is designed to be resilient to and mitigate impacts from threats
- Provide best mapping available to represent natural environment system
- Ensure agricultural systems and infrastructure is recognized when developing the natural environment policies and mapping

- Provide clear direction on how the policies of the Growth Plan Natural Heritage System will be implemented by the Region

3.0 Stakeholder Workshops

Three stakeholder workshops were held during the 1st Point of Engagement, with the date and time, location and number of participants who signed-in recorded in **Table 1**. Invitations were distributed four weeks in advance of each of the workshops (**Appendix B**).

Table 2. Stakeholder Workshops event details.

Group	Date and Time	Location	Approximate Number of Attendees
Land Developers, Environmental Consultants and Municipal Planning Staff	Friday May 3, 2019, 12:30 pm – 3:00 pm*	Holiday Inn Express & Staybridge Suites, 524 York Road, Niagara-on-the-Lake	90
Agricultural Community	Thursday, May 16, 2019, 1:30 pm – 4:00 pm	Rockway Community Centre, 2021 Pelham Road, Lincoln	33
Environmental Stakeholder Groups	Thursday, May 16, 2019, 6:00 pm - 8:30 pm	Rockway Community Centre 2021 Pelham Road, Lincoln	33

* The natural environment work program workshop was part of a full-day session that was hosted by Niagara Region Staff related to environmental planning in the Region.

The agenda for each workshop is provided in **Appendix B**. Each stakeholder workshop consisted of a presentation of the Natural Environment Work Program, the overall Official Plan framework, and overview of specific topics related to the background review to inform the natural environment mapping and policies (**Appendix B**). The format of the workshops, facilitated by Glenn Pothier of GLPi, was designed to provide attendees the opportunity to participate in discussions and provide feedback on the presentation materials as well as areas of interest.

Following the presentation, the participants were encouraged to ask clarifying questions. This was followed by an exercise whereby participants were asked to record their thoughts and comments on the presentation, based on the following '4-S' exercise:

- Stressing
- Strategically Important
- Surprising

- Sticking

A summary of the input received across the 3 stakeholder workshops through the '4-S' exercise is provided in Tables 2, 3 and 4.

Table 3. Land Developers, Environmental Consultants and Municipal Planning Staff Workshop – general comments received during '4-S' exercise.

<p>Stressing</p> <ul style="list-style-type: none"> • Lack of alignment in policies between public agencies • Different set of policies and criteria for features inside/outside urban areas • Growth Plan Natural Heritage System and related policies • Lack of flexibility in natural environment policies • Use of zoning in natural environment system mapping • Impact of policies related to enhancement and linkage areas on development opportunities • How the use of offsetting would be applied recognizing the need for options for development while protecting of natural environment. 	<p>Strategically Important</p> <ul style="list-style-type: none"> • Mapping - need high-level of accuracy; online-mapping for transparency • Ability to compensate for features to provide more options for development • Flexibility in policies without need for Official Plan Amendment • Climate change adaptability – need to recognize changes in future climate scenarios • Restoration/enhancement of degraded systems in addition to protection • Invasive species management • Buffers – flexibility in width and permitted uses based on site specific assessment • Consistent definitions and policies between public agencies • Consultation is important to inform development of mapping and policies • Identification of a more robust and accurate natural environment system
<p>Surprising</p> <ul style="list-style-type: none"> • Major changes to Growth Plan and no transition of policies and natural heritage system mapping • No discussion on budgeting for natural heritage restoration/enhancement • Natural environment planning and policies are considering impact of Emerald Ash Borer on woodlands • Wide linkages from the Growth Plan Natural Heritage System • Transition of Niagara Peninsula Conservation Authority from lead role in watershed planning 	<p>Sticking</p> <ul style="list-style-type: none"> • How Growth Plan policies will be implemented in the new Official Plan – they are restrictive • That the natural environment system includes both the natural heritage and water resource systems • Addressing invasive species and impacts on significant woodlands • Interrelationships and complexity of the natural environment system • Designations preferred vs. overlay – stronger protection

Table 4. Agricultural Community – general comments received during ‘4-S’ exercise.

Stressing <ul style="list-style-type: none"> • Impacts of Invasive species (e.g., Phragmites in agricultural ditches) • Need for accurate mapping – ground truthing needed • Municipal drains - maintenance of drains is lacking • Concern about impact of natural environment policies on agricultural practices, particularly agricultural drains/irrigation channels and relationship with fish habitat • Definitions of watercourse as it relates to agricultural system / farming practices • Impact of buffer on construction of farm buildings 	Strategically Important <ul style="list-style-type: none"> • Management of buffers with pesticides should be permitted in agricultural areas • Map and treat ‘agriculture-related’ watercourses differently than ‘natural’ watercourses • Maintenance of agricultural drains • Make clear distinction between agricultural-related watercourses and fish habitat
Surprising <ul style="list-style-type: none"> • Discussion or policy on Phragmites (or other invasive species) not included in official plan • Mapping shows agricultural drains in mapping of watercourses 	Sticking <ul style="list-style-type: none"> • Mapping of watercourses – particularly in agricultural system • Primacy of agricultural system over natural environment system • How to map fish habitat in agricultural-related drainage features

Table 5. Environmental Groups – general comments received during ‘4-S’ exercise.

Stressing <ul style="list-style-type: none"> • Green infrastructure needs to be recognized as value/asset • Woodland clearing not adequately enforced/penalized • Offsetting is being considered – problematic and should not be considered 	Strategically Important <ul style="list-style-type: none"> • Targets and metrics needed to monitor how objectives are met • Develop science-based policy objectives • Buffers to protect features/system • Monitoring needed to enforce by-laws • Accurate and updated mapping needed (e.g., wetlands). • Protection of aquifers as part of water resource system • More robust natural environment system including linkages and enhancement • Policies need to provide stronger protection for system
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	<ul style="list-style-type: none"> • Natural value / ecosystem valuation to regard features/system as an asset • Integrate climate change considerations with natural environment systems
<p>Surprising</p> <ul style="list-style-type: none"> • That offsetting is even being considered as an option in natural environment planning • No mention of green infrastructure • That current mapping does not include corridor along shoreline of Great Lakes • That not all features where information is known would be mapped (e.g., Significant Wildlife Habitat, habitat of threatened and endangered species) 	<p>Sticking</p> <ul style="list-style-type: none"> • Offsetting is being considered - problematic • Invasive species and climate change are linked • Emphasis on connectivity for robust system • Connect benefits of natural environment system to human health – ecosystem services • Water resource system – links natural environment system and needs to be comprehensive, including aquifers

Following the 4-S exercise round table discussions were undertaken by participants. These were guided by asking the participants to answer a series of prepared questions, geared towards each workshop. The questions were related to a similar set of key topic areas in order to further elicit responses to specific issues related to the Natural Environment Work Program; these questions are provided in **Appendix B**. A summary of both written and verbal comments provided within the key topic areas during this exercise are provided below. The full list of comments are provided in **Appendix B** along with photos of each of the comment sheets produced during the workshops. The summary of the comments provided below is a blended response from all three of the stakeholder workshops.

Buffers

- Buffers/vegetation protection zones should be vegetated with native species to reduce erosion and are not intended to be managed
- Buffers should be informed by site specific conditions rather than be based on a minimum pre-determined width
- Flexibility in buffer width should be considered in urban areas depending on proposed adjacent land use
- Man-made features that become naturalized should not require a buffer to adjacent development/land use.
- Buffer zones should provide more space for flooding events
- Plant native species in buffers

Actions to Achieve a Resilient/Healthy Natural Environment System

- Reintroduce extirpated species

- Wetland restoration in floodplains
- Manage invasive species, especially phragmites, the removal of which is a significant cost to land owners
- Environment first approach to planning, then plan development around environment
- Consider more restrictive environmental protection policies than required by the province.
- Identify natural heritage supporting areas: green infrastructure, increase carbon sequestration, provide opportunities for Low Impact Development (LID) technology, constructed wetlands, enhance urban canopy and biodiversity
- Put a monetary value on ecosystem services
- Identify a well-connected system to improve resiliency
- Provide incentives to protect and enhance the natural environment system
- Increased protection for wetlands
- Buffers should be designed to mitigate impacts from climate change
- Acquire more land for conservation
- Better engagement of public in nature conservation and protection; provide better 'encouragement' policies for stewardship, and make people aware of existing environmental policies
- Transparent process to identify and protect features and system
- Better forest management of private woodlands

Resources to Support Natural Environment Planning

- Guidance documents
- Flow charts for planning process and clarity on agency responsibilities for review/consultation
- Stewardship support/guidance for enhancement/restoration within features
- Monitoring plan guidelines
- Invasive species management plan; include rapid response protocol
- More financial resources for municipalities
- Guidance on identifying features (e.g., criteria for significant woodlands)
- Open mapping data – interactive mapping; high accuracy mapping including data acquired during site specific studies
- Scoping criteria for Environmental Impact Study early in the process
- Examples of how to interpret and assess negative impact and what can be mitigated

Role of Community in Achieving a Sustainable and Healthy Natural Environment System

- Embrace LID technology
- Work with municipalities for green development standards; achieve net-zero development

- Preservation of the natural environment is considered a benefit to residents and new developments and can be marketed as such
- Design adequate storm water management systems
- Stewardship of natural spaces
- Sustainable landscaping, green infrastructure e.g., bioswales and better building design
- Increase diversity of plantings in landscaped areas and restrict invasive species from landscape plantings
- Implement environment farm plans; include best practices such as, Integrated Pest Management on farms to reduce use of pesticides, use cover crops instead of fertilizer, no till farming, avoid grazing in waterways (e.g., use livestock fencing adjacent to waterways), use closed system recycling in greenhouses, and create wetlands to deal with wastewater
- Public engagement in reporting on environment issues, such as locations of invasive species – citizen science
- Contribute to expertise in natural environment protection and planning (e.g., reinstate environmental advisory committee with Region)
- Continue to provide well-advertised opportunities for public review and meaningful input into the natural environment mapping and policies.

Mapping the Natural Environment System(s)

- Natural environment mapping in agricultural areas should clearly differentiate 'natural' watercourses and fish habitat from agricultural ditches and augmented irrigation channels
- Man-made features, such as SWM ponds, should be mapped as part of water resource system
- Comprehensive water resource system should be mapped as linking natural environment system
- Better and more accurate mapping of all features – can be achieved through ground truthing. Consider the time of year when ground-truthing features.
- Region should maintain a general repository of up-to-date mapping data for public use including ground truthed and more accurate datasets from site-specific studies
- Maintain a user-friendly on-line mapping tool
- Consider use of drone imagery to update mapping more regularly.
- Policy should provide flexibility to reflect imperfect mapping to allow refinements to Region's mapping

Biggest Threats to the Natural Environment System

- Climate change and invasive species and their cumulative and interactive effects
- Loss of woodlands from death of ash dominated canopy as a result of Emerald Ash Borer

- Improper use of offsetting would lead to loss of significant features/areas and should not be permitted, especially for complex features that cannot be replicated.
- Lack of community engagement
- Slow response to threats/impacts
- Broken/lost trust – need for environment committees
- Lack of action – not enough restoration and invasive species management
- Lack of enforcement when illegal degradation/destruction of natural areas takes place
- Weak environmental policies
- Pollution and illegal dumping of garbage, fill, debris (e.g., construction debris)
- Lack of watershed planning
- Underrepresentation of natural features (i.e., lack of natural cover)

3.1 Considerations for the Natural Environment Work Program

Based on the input received during the three stakeholder workshops, the following key points should be considered when identifying and evaluating options and developing the natural environment mapping and policies.

Key Points for Consideration:

- Buffer widths to be science-based, informed by site specific studies, and designed to mitigate impacts from adjacent development
- Policies regarding buffers should provide flexibility to determine appropriate width and compatible uses
- Natural areas should be enhanced through active management, including invasive species management
- Design natural environment system to increase resiliency of system from threats such as climate change
- Engage public in natural environment planning and provide opportunities for stewardship
- Ensure natural environment policies are clear and protect significant features
- Place economic value on ecosystem services and invest in natural environment green infrastructure
- Guidance documents should be prepared by the Region to assist with interpreting policies, developing appropriate mitigation plans and supporting management of natural features
- Regional Invasive Species Management Plan should be developed to implement a coordinated approach to address invasive species
- The Region should develop a user-friendly online mapping tool that illustrates the components of the natural environment system
- The Region can encourage community participation in achieving a sustainable and health natural environment system by:
 - Promoting Low Impact Development technology
 - Developing green development standards
 - Encouraging stewardship of natural features/areas
 - Providing standards/guidelines for landscaping to support native species biodiversity
 - Supporting farmers to implement environment farm plans and best practices
 - Reinstating an environmental advisory committee
- Improve accuracy of natural environment mapping
 - More ground truthing of features
 - Using datasets from site-specific studies as they become available

- Natural environment system mapping should differentiate between 'natural' features and agriculture related features and the differences should be reflected in policy
- Natural environment policies should provide flexibility in mapping refinements to recognize imperfect mapping
- The natural environment system should be designed to be resilient to threats, such as climate change and land use change
- Natural environment policies should recognize threats to the natural environment system, including climate change, invasive species and natural area loss
- Offsetting is considered problematic and has led to a loss of trust in public agencies; further discussion on this topic is warranted
- Policies and by-laws need to be clear and strong enough to ensure the objectives for the natural environment are met

4.0 Public Information Centres

Two public information centres (PICs) were held specifically on the Natural Environment Work Program as part of the 1st Point of Engagement:

- Public Information Centre #1 - Thursday May 30, 2019, 5:30 - 7:30 pm, West Lincoln Arena and Community Centre, 177 West Street, Smithville
- Public Information Centre #2 - Thursday June 6, 2019, 5:30 - 7:30 pm, Welland Civic Square – Community Room, 60 East Main Street, Welland

Notice of the PICs were posted on the new Niagara Official Plan's website and advertised through the Region's social media and in print in several local newspapers in the Region. A copy of the PIC notice is included in **Appendix C**.

The PICs were held in an open house format - poster boards were displayed for public review (**Appendix C**). Staff from Niagara Region and members of the consultant team were available to answer questions and provide additional information. There were 15 members of the public recorded on the sign-in sheet at the PIC on May 30th, and 16 on June 6th.

Attendees from the public were encouraged to provide their contact information on a sign-in sheet to permit correspondence regarding future opportunities for public engagement. In addition, comment forms were provided at the PIC (**Appendix C**) as well as online, for members of the public to provide additional comments and feedback on the information provided on the poster boards.

A summary of the comments that were received through comment forms is provided as follows:

- Natural areas/features and water resources should be preserved and enhanced with development directed towards brownfields and 'run down' commercial areas
- As much of the natural environment should be preserved as possible taking into consideration agricultural needs and population growth
- Need for long-term planning to protect the environment (land and water) for future generations, rather than short-term gain of development
- Policies and procedures must be clear to protect the natural environment while directing future growth
- Top issues/threats identified as affecting natural environment include:
 - Loss of forest cover and wetlands
 - Lack of quarry rehabilitation to natural areas
 - Need for invasive species management
 - Pollution, especially pesticides and other toxins
 - Climate change; better water management to deal with flooding
 - Lack of protection of water resources including rural water sources and aquifers
 - Urban sprawl
 - Lack of strength in policies to protect the natural environment (now and in the NOP)
 - Incompatible development with natural environment
 - Lack of protection of critical habitat for rare/uncommon wildlife (e.g., Blue Spotted Salamander)
 - Lack of ecological expertise at Region and environmental advisory group to support Region
 - Increase public awareness of importance of natural environment and how it affects and relates to both agricultural and urban life
- Do not permit agricultural buildings in buffers to water features
- Biodiversity offsetting is problematic and should not be considered as part of environmental planning
- Environmental Advisory Committee (EAC) should be established, ensuring adequate representation (e.g., nature clubs: Bert Miller, Niagara Falls, Peninsula Field Naturalists)
- Identify important bird habitat (e.g., significant nesting colonies) and protect
- More discussion on the pros and cons of biodiversity offsetting is required

4.1 Considerations for the Natural Environment Work Program

Based on the input received at the public information centres, the following key points should be considered when identifying and evaluating options and developing the natural environment mapping and policies.

Key Points for Consideration:

- Ensure protection and enhancement of natural environment system by supporting development in brownfields and repurposing industrial areas
- Recognize agricultural areas while preserving natural environment
- Natural environment policies should be clear and adequate to ensure protection of the natural environment for future generations
- The following threats should be considered in natural environment planning:
 - Loss of natural features, specifically wetlands and woodlands
 - Invasive species
 - Climate change
 - Pollution (e.g., overuse of pesticides and fertilizers)
- The Region should consider reinstating an environmental advisory committee with adequate representation from community
- Biodiversity offsetting should be thoroughly discussed if being considered as part of environmental planning

5.0 Indigenous Group Meetings

Six meetings with Indigenous groups were held as part of the 1st Point of Engagement:

- May 1, 2019 - Six Nations Elected Council (SNEC) – Lands and Resources Department Staff
- May 1, 2019 - Haudenosaunee Confederacy Chiefs Council (HCCC)
- May 7, 2019 - Fort Erie Friendship Centre
- May 29, 2019 - Niagara Region Métis Council (Métis Nation of Ontario)
- June 5, 2019 - Niagara Regional Native Centre (NRNC)
- June 11, 2019 - Mississaugas of the Credit – Department of Consultation and Accommodation Staff

Niagara Region staff provided an overview of Planning and Development Services at the Region and the work underway for the Official Plan, including the Natural Environment Work Program. Two packages of information were provided – ‘New Niagara Official Plan’ and ‘Natural Environment Work Program’ (**Appendix D**). Niagara Region staff asked about each of the group’s interests, and how they would like to be involved in the new NOP. A range of topics were discussed. The following provides a summary of the discussion related to the Natural Environment Work Program only.

- Indigenous groups want to be part of the solution and work with the Region (e.g., involvement in scoping of Environmental Assessments and 'major' environmental impact studies)
- Climate change a major concern
- Wetlands and endangered species are highly valued in Indigenous communities
- Environment protection is a critical issue with the Indigenous community
- Recognition that development needs to take place, environmental protection and sustainability are critical
- Protection of natural areas for continued availability of traditional medicines
- Watershed planning is important to address cumulative impacts
- Watercourses are an important 'connection' between other natural features whether they are 'natural' or not.
- Emerald Ash Borer is impacting woodlands and the Region should play an active role in addressing the effect on ash trees and woodlands
- Reforestation (woodlands and urban canopy) opportunities should be identified, encouraged and implemented through environmental planning

5.1 Considerations for the Natural Environment Work Program

Based on the input received during the meetings with indigenous groups, the following key points should be considered when identifying and evaluating options and developing the natural environment mapping and policies.

Key Points for Consideration:

- Indigenous groups should be informed about major applications that would affect the natural environment system (i.e., water and land)
- Indigenous community representation should be provided if an environmental advisory committee is reinstated
- Protection and health of the natural environment is critical for endangered species, continued availability of traditional medicines, and to ensure continued benefits for future generations
- Indigenous groups can be part of the solution to address impacts from climate change
- Invasive species impacts on the natural environment should be managed by Region
- Environmental planning should include reforestation by encouraging tree planting and requiring replacement of trees/woodlands as part of planning process

6.0 Agricultural Policy and Action Committee Presentation

The Agricultural Policy & Action Committee (APAC) is an advisory body established by the Niagara Region to recognize the critical primacy of agriculture in the Niagara Region in terms of both public policy and demonstrable actions. The Committee has been established to advise Regional Council on issues that impact the agricultural industry and support Regional Council, reporting through the Planning and Economic Development Committee, by initiating, developing, implementing and participating in actions and strategies needed to advance the agricultural industry and preserve the agricultural land base throughout the Niagara Region.

At the February 22, 2019 APAC meeting, a presentation (**Appendix E**) was made by staff from the Region to introduce the APAC to the Natural Environment Work Program for the new NOP. The following provides a summary of comments provided following the presentation:

- The water resource system should identify and protect highly vulnerable aquifers
- Climate change policies should support a reduction in greenhouse gas emissions
- The natural environment policies and identification of watercourses and fish habitat in agricultural areas need to be carefully considered as not to encumber normal farming practices
- The water resource system should differentiate between drainage and irrigation channels for agricultural purposes and other watercourse features
- Urbanization and stormwater management designs need to carefully consider the impact on agricultural land as part of watershed planning in addition to considerations for the natural environment features
- Need to recognize agricultural areas while preserving natural environment as part of finding a balance in natural environment planning
- Invasive species, particularly Phragmites, negatively impacts agricultural infrastructure and needs better coordinated management

6.1 Considerations for the Natural Environment Work Program

Based on the input received at the February 22 APAC meeting, the following key points should be considered when identifying and evaluating options and developing the natural environment mapping and policies.

Key Points for Consideration:

- The water resource system and natural heritage system should differentiate between agricultural-related water features and 'natural' features
- The natural environment policies should protect significant features and areas while ensuring normal farming practices are not encumbered
- Watershed planning needs to consider the impact of potential development on the agricultural system in addition to the natural environment system
- A coordinated approach to invasive species needs to be developed for agricultural infrastructure in addition to other areas

7.0 Technical Advisory Group Workshop

A Technical Advisory Group (TAG) has been formed to support the Natural Environment Work Program. The TAG is an advisory group of land use planners from the Region, area municipalities, NPCA, Ministry of Natural Resources and Forestry and the Ministry of Municipal Affairs and Housing. The mandate of the TAG is for members to provide input and to bring forward the perspectives of the organization they represent. The TAG provides value to the Natural Environment Work Program as an advisory group, providing scientific and evidence-based input and recommendations on a broad range of environmental issues.

During the 1st Point of Engagement a TAG meeting was held on Friday, February 22, 2019, 1:00 – 3:00 pm, at the Region's headquarters.

The following provides a summary of general comments provided by the TAG at the meeting.

- Update and improve on policies to be clear and interpreted as intended and consider implications and requirements for local implementation
- Policies should encourage stewardship to support the protection, restoration, and enhancement of natural environment features
- Guidelines and associated natural environment by-laws (Regional Tree By-law) should be updated to be consistent with the new Niagara Official Plan
- Ensure consistency with Provincial policies and criteria to identify natural environment features

- Natural environment planning needs to better address threats, e.g., climate change and invasive species
- Find a balance between flexible policy that incorporates site-specific information but also broad natural heritage protections at a system-level
- Carefully consider of how to integrate the Growth Plan NHS policies and mapping
- Ensure matters related to both the agricultural system and natural environment system are carefully considered (e.g., agricultural drains, irrigation channels)

Through the TAG workshop, key theme areas were discussed and summarized as follows:

Watershed Planning

- Watershed planning at the tertiary level is appropriate to inform the new NOP.
- Tertiary watershed boundaries may need to be combined when undertaking watershed studies at the local municipal level
- Due to cross-jurisdictional overlap of watersheds coordination between municipalities will be required
- Better integrate watershed planning into land-use planning, and develop a policy framework that supports this
- The watershed planning framework and roles/responsibilities of the Region and area municipalities should be clearly described in the Official Plan to ensure a common understanding during implementation
- An implementation framework should also consider priority areas (i.e., growth pressures) for planning, and scale (subwatershed vs. watershed plan) should be considered accordingly
- Education and communication of the watershed planning framework, responsibilities and expectations will be required.
- Watershed planning methodology needs to be well defined and consistent across watersheds regardless of jurisdiction
- Watershed planning in Niagara will require resources – including staff and financial resources

Mapping the Natural Environment System(s)

- Datasets used to map the natural environment system need to ensure the most up-to-date and accurate information is used, including updating existing datasets with more recent site specific and ground truthed features
- Need a process for datasets used by the Region for screening and user-friendly online mapping tools to be updated on a regular basis with more accurate information (e.g., refined feature mapping from approved site-specific studies, such as Environmental Impact Studies)
- Consider updating older datasets with known inaccuracies with a combination of ground truthing and aerial photography interpretation (e.g., woodland and wetland datasets)
- The importance of the accuracy of the dataset is related to the geographic need for higher accuracy (e.g., watercourse mapping in agricultural areas, woodland mapping in urban areas)
- Directing resources towards updated datasets should be informed by: growth pressure, areas of known gaps, woodlands, areas of high aggregate potential, and municipal staff resources
- Include policies that allow refinement to mapping, recognizing imperfect mapping, and provide tools to deal with this reality

Buffers and Adjacent Lands

- Policies need to be clear about what triggers an Environmental Impact Study

- Clear policies need to be provided to inform requirements for buffers and guidelines to ensure consistent interpretation and application of buffer requirements
- The width of buffers should be identified on a site-specific basis and informed by science
- Buffer policies need to be clear about the exemption of certain uses within buffers, particularly planting of crops
- The definition of buffers should be clear including purpose and function of a buffer

Identifying a Resilient Natural Environment System

- Recognize biodiversity as being key to a resilient natural environment and include policies to this effect
- Policies need to be designed to ensure natural environment objectives are met
- Recognize changes in features as a result of natural (e.g., wind throw) and anthropogenic disturbance (e.g., climate change and introduction of non-native invasive species) and develop policies to ensure the long-term protection of the natural environment system
- Identify 'core' areas of the natural environment system and have clear and strong policies to ensure that they are protected and enhanced for the future
- Mapping and policies should provide for restoration and enhancement opportunities
- Official plan policies should consider climate change adaptation in addition to mitigation
- The conventional approach to natural environment system planning needs to be reconsidered in light of continued threats from invasive species and emerging threats from climate change

7.1 Considerations for the Natural Environment Work Program

Based on the input received during the February 22 TAG meeting, the following key points should be considered when identifying and evaluating options and developing the natural environment mapping and policies.

Key Points for Consideration:

- Natural environment systems should be represented by up-to-date and accurate datasets
- Data gathered from site specific studies should be regularly incorporated into datasets managed by the Region, including a user-friendly on-line mapping tool
- Natural environment policies should be clear, and where appropriate, guidelines provided to ensure proper interpretation and implementation of guidelines

- Changes to natural environment policies will require updates to guidelines and related by-laws to ensure consistency and appropriate interpretation
- Natural environment policies should be developed to address threats, such as climate change and invasive species
- Ensure policies allow flexibility where appropriate but maintain protection of the natural environment system
- The agricultural system needs to be carefully considered when developing mapping and policies for the natural environment system
- The Region should produce a clear framework, roles and responsibilities, and identify a consistent approach to undertake watershed planning
- Buffer definitions, policies and guidelines need to be science-based and clear to ensure appropriate implementation
- Natural environment policies need to be developed in part to achieve natural environment objectives
- Ensure policies are developed to protect and enhance the natural environment system by recognizing changes in the natural environment resulting from natural and anthropogenic impacts
- Policies should be clear and strong to protect and enhance 'core' areas and features for the future

8.0 Planning Advisory Committee Presentation

The Planning Advisory Committee (PAC) consists of 8 public members with subject matter expertise who provide input on topics to be addressed by the new ROP. The PAC is responsible for reviewing background studies and other inputs and providing comments, high-level direction/confirmation. The PAC will also provide comments on draft policies as they are being developed

At the May 22, 2019 PAC meeting, a presentation (**Appendix F**) was made by staff from the Region and the consultant team about the work underway as part of the Natural Environment Work Program for the new Regional Official Plan. During the presentation several questions were asked for clarification: these have been transcribed as comments below:

- Policies should be clear regarding exemptions to allow planting of crops in buffers
- The Natural Heritage System for the Growth Plan does not apply in urban areas
- The natural environment planning framework in Niagara Region needs to clearly describe the Provincial plans as they relate to the differing geographies
- There are concerns with the application of biological offsetting in natural environmental planning
- Need for clarity regarding watercourse types in agricultural areas

Similar to the stakeholder workshops, the '4-S' exercise was conducted with the members of the PAC to receive feedback on the presentation (**Appendix F**). A summary of the input received through the '4-S' exercise is provided in Table 6 below.

Table 6. Planning Advisory Committee Presentation – general comments received during '4-S' exercise.

Stressing <ul style="list-style-type: none"> • Lack of engagement from younger individuals/groups • Need to ensure all voices are heard equally • Area municipalities with fewer resources will need support from Region 	Strategically Important <ul style="list-style-type: none"> • Natural environment planning needs to be forward thinking • Have a complete set of baseline information/datasets • Recognize and celebrate the uniqueness of Niagara • Ensure clear definitions and criteria for natural environment features • Ensure natural environment policies account for climate change • Identify and protect water resource system
Surprising <ul style="list-style-type: none"> • That not all features can be mapped • The complexity of natural environment planning due to Provincial Plans • That the natural environment system and agricultural system are linked • That the Region is reviewing the use of biological offsetting in natural environment planning 	Sticking <ul style="list-style-type: none"> • That the Provincial Plans put a primacy on the agricultural system • The importance of linkages in a strong natural environment system • The water resource system must be adequately identified

8.1 Considerations for the Natural Environment Work Program

Based on the input received during the May 22 PAC meeting, the following key points should be considered when identifying and evaluating options and developing the natural environment mapping and policies.

Key Points for Consideration:

- Natural environment policies should recognize the primacy of the agricultural system and exemptions for normal farming practices and from Provincial plans
- Application of biological offsetting is a concern for use in natural environment planning
- Water resource system should be adequately identified and protected, noting differences of feature types/uses in agricultural areas

- Natural environment policies should be written with consideration of climate change
- Regional support should continue for area municipalities with limited resources
- Natural environment planning and mapping of the natural environment system should be informed by a complete set of baseline information/datasets
- Ensure adequate consultation, representation and engagement in natural environment planning

9.0 Niagara Peninsula Conservation Authority (NPCA) Board and Staff Meetings

Throughout the course of the 1st Point of Engagement several meetings were held with NPCA staff to receive input. Topics of discussion included the relationship between the Region and NPCA in environmental planning, the experience and expertise of NPCA staff related to watershed planning, and the history of previous NPCA projects including the Natural Areas Inventory and Nature for Niagara's Future.

A presentation - similar to that given to the Local Council – is scheduled to be given to the NPCA Board on September 18.

9.1 Considerations for Natural Environment Work Program

Based on the input received through several meetings and discussions with NPCA staff, the following key points should be considered when identifying and evaluating options and developing the natural environment mapping and policies.

Key Points for Consideration:

- Watershed planning needs to take an integrated approach and be completed to benefit a range of users in the watershed
- NPCA has the expertise and resources in-house to support many of the inputs and tasks related to watershed planning
- NPCA is willing to partner with the Region and other stakeholders to advance watershed planning and other initiatives in the Region
- Much of the previous framework for watershed planning is embedded in NPCA business activities; further dialogue is recommended before changes are made
- Continued dialogue and exchange of technical information with NPCA staff is recommended
- Nature for Niagara's Future contains data that can inform the Region's NOP (e.g., data to set targets for natural area cover)

10.0 Regional Planning and Economic Development Committee Presentation

At the February 20, 2019 Planning and Economic Development Committee (PEDC) meeting, the staff report PDS 10-2019 (**Appendix G**), an update on the natural environment work program, was presented to members of the PEDC (**Appendix G**). Following the presentation members of the PEDC discussed the presentation and asked questions for clarification (**Appendix G**).

10.1 Considerations for Natural Environment Work Program

Based on the input received at the February 20 Planning and Economic Development Committee, the following key points should be considered when identifying and evaluating options and developing the natural environment mapping and policies.

Key Points for Consideration:

- Natural environment planning is intended to protect natural areas from natural and anthropogenic impacts (e.g., climate change), recognizing that natural areas are also an important asset for mitigating impacts from climate change
- The water resource system should ensure protection of vulnerable aquifers
- Biological offsetting is a controversial topic that requires careful review

11.0 Key Themes and Implications for the Natural Environment Work Program

Through the 1st Point of Engagement 9 key themes emerged. These are presented below, in no particular order, with the implications that will need to be considered by the Region and consultant team when identifying and evaluating options developing the natural environment policies and mapping.

1. Consistent Policies and Clear Roles and Responsibilities

There is a strong desire for greater consistency/harmony/jurisdictional alignment between the Region and others with a role in establishing or implementing natural environment policies and regulations — including the Province, NPCA, area municipalities, federal departments (fisheries directives/proposals, etc.). In addition, definitional and policy vagueness/imprecision create confusion and uncertainty.

Implication: It will be important to address questions of role and jurisdiction, primacy of legislation and policy, and levels of respective authority. Moreover, emphasis should be placed on ensuring consistent definitions of key terms, and the consistent application of policies and rules — and reconciling sometimes conflicting priorities, policies and jurisdictional focuses. To the degree possible, the natural environment components of the OP should emphasize clarity and specificity (i.e. What is a buffer? What is a watershed/sub-watershed? Etc.). Notwithstanding the need for clear definitions, Niagara Region's natural environment OP policies can (and likely should) include some flexibility to reflect unique circumstances, requirements associated with different land uses (including urban areas vs. rural areas), and so forth.

2. Take a Systems Approach to Natural Environment Planning

There is strong support for taking a holistic approach to the natural environment component of the OP — and broad recognition that the inter-relationships between multiple issues (and their cumulative impacts) need to be considered in combination.

Implication: There is no single issue on which the natural environment work can focus. Rather, this planning must explore the connections between issues — from invasive species, to climate change, to ongoing development, to loss of canopy, to pollution, etc. — and consider multiple issue-related dimensions, address connectivity and linkages, take into account inter-relationships between natural and built forms, consider issues of long-term sustainability, and appreciate the degree to which watershed planning forms the basis for land use planning.

3. Recognize the Uniqueness of Niagara's Geography, Natural Environment and Agriculture

There is a strong desire for natural environment planning that recognizes the uniqueness of the Region and that considers key differences between agriculture and the natural environment.

Implication: There is a need for a balanced approach that considers multiple factors: population growth, agricultural practices and needs, natural environment protection, etc. Future work needs to consider policies that reflect specific and distinct agriculture and natural environment needs and issues, including the degree to which agricultural watercourses are defined and treated as fish habitat.

4. Accurately Mapping the Natural Environment

Mapping accuracy and specificity is critical — and the mapping needs to be accessible and understandable.

Implication: Going forward, the Region should work with agencies and the community to ensure that the most up-to-date and reliable information is harnessed in the creation of future mapping (including the tapping of local understanding and traditional knowledge). Moreover, the mapping needs to reflect and be consistent with provincial requirements, be made easily available and user-friendly, and be updated on a regular basis to keep pace with notable changes in the different natural elements. The updates can vary in timing based on such criteria as the type of natural feature, the areas of greatest concern, areas of known gaps or significant change, etc.

5. Monitor Federal Legislation and Provincial Policy Direction

The natural environment work in support of the new Niagara OP is being undertaken in a time of provincial and federal uncertainty — both the federal and provincial governments have draft legislation, policy, guidelines and other tools that will need to be reviewed when finalized.

Implication: The Region must take the draft documents into account as planning moves forward, must continue to monitor and work closely with the provincial and federal government to help influence future decisions, and must build some flexibility into the process to allow for required changes that may be required.

6. Protect the Natural Environment

There is strong interest in protecting and enhancing the natural elements within the Region that exist today, and doing more to secure the future. Many comments were explicit about the need to protect water resources, wetlands and trees/forests.

Implication: Future natural environment OP-related work needs to reflect multiple focuses — protecting existing important natural environment features, and restoring/enhancing others. A wide variety of tools and techniques — some controversial and relatively untested — need to be explored and considered, such as: monetizing eco-system services, providing incentives for protection/enhancement and environmental stewardship, undertaking invasive species management, public education, providing more resources/tools to support natural environment planning, and focusing development in the right areas.

7. Explore Challenging Issues in Natural Environment Planning

There are a number of issues that elicit strong responses for a variety of reasons or that are of interest to many — for example: the handling of buffers, setbacks and vegetative protection zones; offsetting/net gain; addressing invasive species; restrictions on agricultural operations; man made vs. natural watercourses; fish habitat in agricultural drainage areas/irrigations systems; enforcement, etc.

Implication: These issues will need to be thoroughly explored and explained. Though public input is an important part of the process, each policy needs to be assessed on its merits, using a scientific, fact-based, outcomes-focused approach that includes clear measures and success indicators. Ongoing public education and dialogue will be critical as part of the process.

8. Forward Thinking Natural Environment Policies and Official Plan

The long list, complexity of, and inter-relationships between, natural environment-related issues can seem daunting and overwhelming. There is no consensus on priorities and only moderate confidence in the policies of the past.

Implication: The new OP can help set the foundation of the natural environment agenda for the Region. It can help define the core issues and areas of greatest priority and, more importantly, focus on the policies, directions and geographic areas that will deliver the greatest value. This is an opportunistic time to consider — and potentially implement — bold new approaches that speak to modern times.

9. Build Trust Through Continued Engagement, Collaboration and Education

Based on past experiences and a focus on previous site-specific issues, there is some cynicism and skepticism about the potential outcomes of the new OP's environmental component. There remains a lot of interest in and, in some cases, high expectations of the new OP. However, the expectations of what the natural environment policies should be or should emphasize can differ considerably among stakeholder groups — from calls for more flexible, development permissive/friendly approaches, to much greater environmental protection.

Implication: This process needs to continue to build the bonds of reciprocity and trust with various stakeholders by demonstrating a sincere commitment to achieving the best outcome for the region as a whole. Going forward, this reinforces the importance of continuing to meaningfully engage multiple groups, providing sound/fact-based rationales for policy directions and engaging in ongoing education to clarify and explain what is being proposed. The process must remain open, transparent and substantive. The initiative needs to be forward-looking and not weighed down by a rehash of past site-specific outcomes. Community engagement and education are critical — there must continue to be meaningful opportunities for input, ongoing dialogue and information sharing, and a true commitment to securing buy-in throughout the process. The shared adoption of best practices should be a focus. Given the scarcity of resources and growing environmental focuses, it is clear that no single entity can do everything. The NOP should identify opportunities for all parties to play a meaningful role in natural environment planning in Niagara Region.

12.0 Next Steps

The input received through the 1st Point of Engagement was considered when finalizing the mapping discussion paper, watershed planning discussion paper and natural environment background study. The discussion papers, background study and this Consultation Summary Report will be presented to Regional Planning and Economic Development Committee for information.

Following the presentation of the background study, the consultant team will undertake the next phase of the work program to develop and evaluate options for the natural systems. The preliminary findings of this work inform the second technical paper: Identification and Evaluation of Options for Regional Natural Environment System(s). Following the development of this second technical paper, the Region will commence with the 2nd Point of Engagement. The consultation for the 2nd Point of Engagement will follow a similar approach as described in this consultation summary report.

Appendix A: Local Council Presentations

Appendix A-1: Presentation: Natural Environment Work Program – New Niagara Official Plan



making our mark

NIAGARA

OFFICIAL PLAN

Natural Environment Work Program

New Regional Official Plan

**<Date> – Presentation to
<Municipality> Council**



Natural Environment Planning



An important component of the new Regional Official Plan to:

- Support the identification of areas for growth and development
- Meet Provincial requirements for the protection of features, areas, and system
- Support a range of industries that benefit from a healthy natural environment
- Support public health, recreation, and overall well-being of residents
- Plan for climate change



Scope for Natural Environment Work Program

In-Scope

Natural Heritage Features

- Woodlands, wetlands, habitat, habitat of endangered and threatened species, fish habitat, etc.

Hydrologic Features

- Streams, seepage areas, wetlands, etc.
- Region's watercourse identification and mapping project

Water Resource Systems

- Groundwater systems
- Surface water systems

Natural Hazards

- Flooding hazards, erosion hazards, and dynamic beach hazards, etc.
- Wildland fires as per Section 3.1.8 of the PPS

Provincial Natural Heritage Systems

- Greenbelt Natural Heritage System and Urban River Valley designation
- Growth Plan Natural Heritage System
- Niagara Escarpment Plan as it relates to the municipal planning process

Watershed Planning & Stormwater Management

Out-of-Scope

- Aggregates & Petroleum Resources
- Source Water Protection

**Official Plan policy development for out-of-scope items to be addressed separately*



Project Overview – Natural Environment

PHASE 1: Project Initiation and Procurement

PHASE 2: Background Study and Discussion Papers for Mapping and Watershed Planning Priority Areas

PHASE 3: 1st Point of Engagement: Inform on Background Study

PHASE 4: Develop and Evaluate Options for Natural System(s)

PHASE 5: 2nd Point of Engagement: Consultation on Options for the Natural System(s)

PHASE 6: Develop Regional Natural System(s)

PHASE 7: Develop OP Policies & Finalize Mapping

PHASE 8: 3rd Point of Engagement: Draft OP Policies and Schedules

PHASE 9: Other Implementation Tools



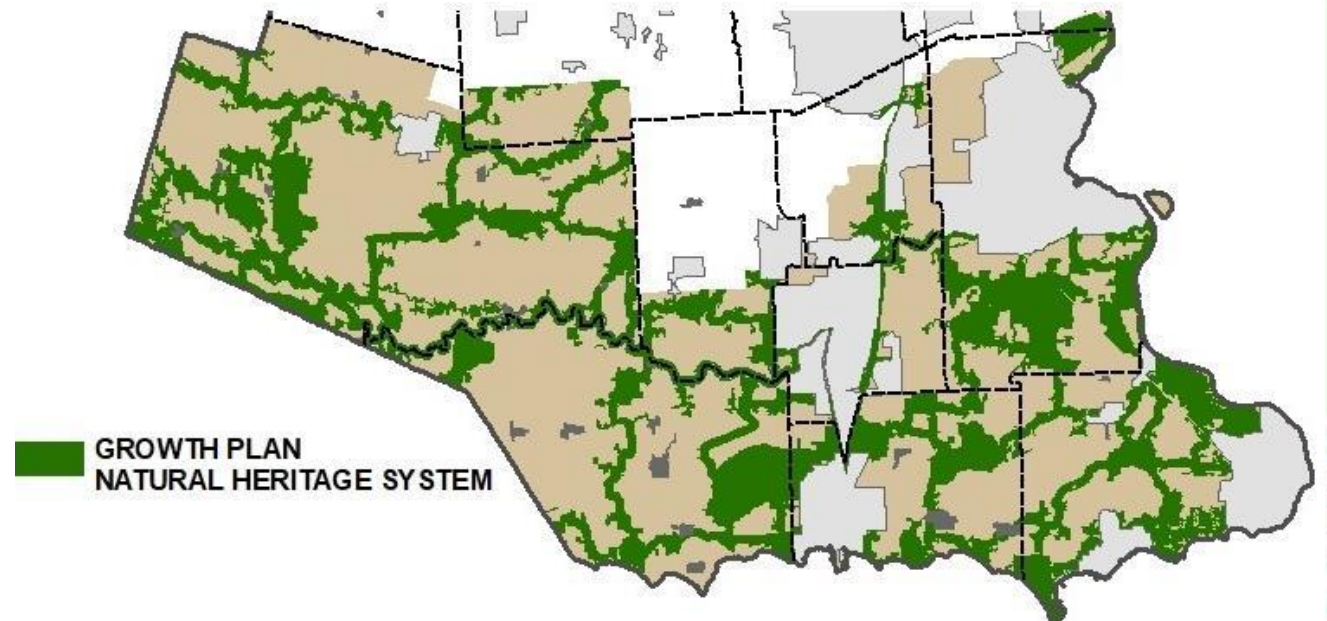
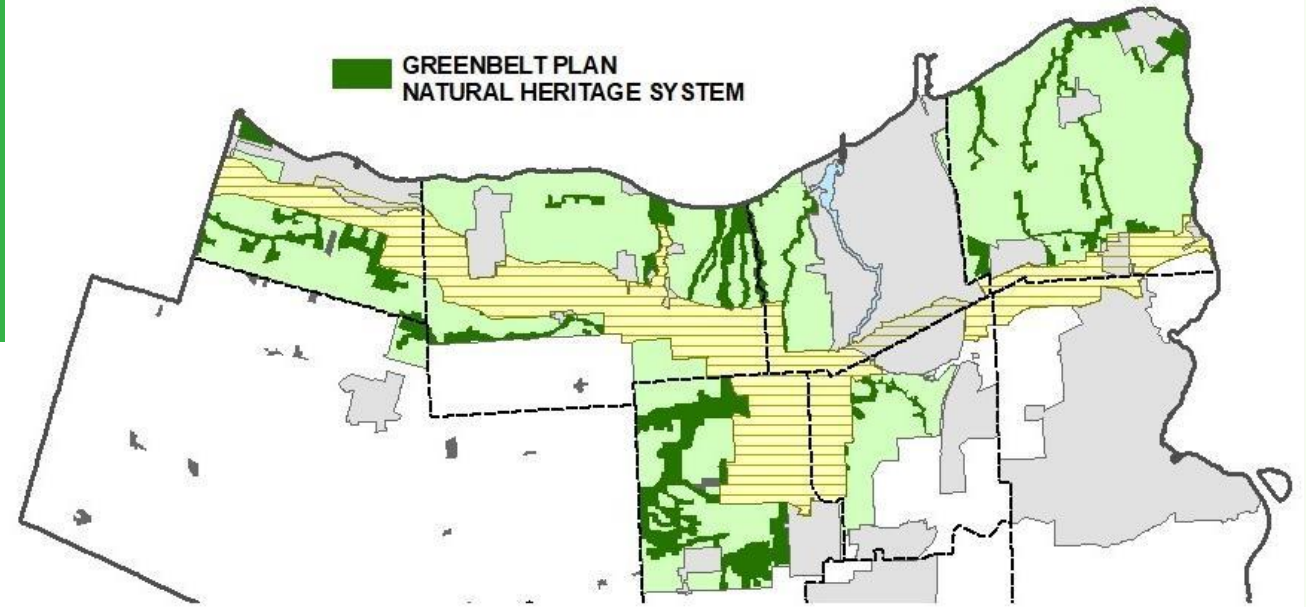
Natural Environment Background Study

Key Topics



Provincial Direction

- Provincial direction starts with the Provincial Policy Statement (PPS, 2014)
- Greenbelt and Growth Plan Natural Heritage Systems to be implemented by Municipalities
- Province provides a number of guidelines and other tools to assist Municipalities



Interaction with Agriculture

- Clear direction that natural environment policies are not intended to limit the ability of agricultural uses to continue
- Greenbelt and Growth Plan NHS policies both provide a wide range of exemptions for new agricultural and agricultural-related buildings and structures
- The requirement for a natural buffer is exempt where lands will continue to be used for agricultural purposes



Woodlands

- Process for identifying significant woodlands as a 'key feature' :
 1. Identify and map 'Woodlands' in the Region based on defined criteria
 2. Develop and apply criteria to determine 'Significance'. Local context and conditions are a factor in determining significance.
- Local and Regional Tree By-Laws are a related tool for the management and protection of trees and woodlands



Climate Change & Invasive Species

- Two of the most significant threats to the natural environment
- Natural environment systems are an important tool to reduce risk and mitigate the impacts of climate change
- Many invasive species in Niagara including Emerald Ash Borer. Additional tools beyond the scope of the Official Plan Policies will be required.



Emerald Ash Borer
(*Agrilus planipennis*)



Watershed Planning

1

Planning at a watershed scale that considers the relationship between the human and natural environments - with a focus on protecting water resources

2

Watershed planning in the Province has been evolving for decades

- The 2014 PPS and 2017 Provincial Plans place a much greater emphasis on integration - planning and land use activities must be “informed by” watershed planning

3

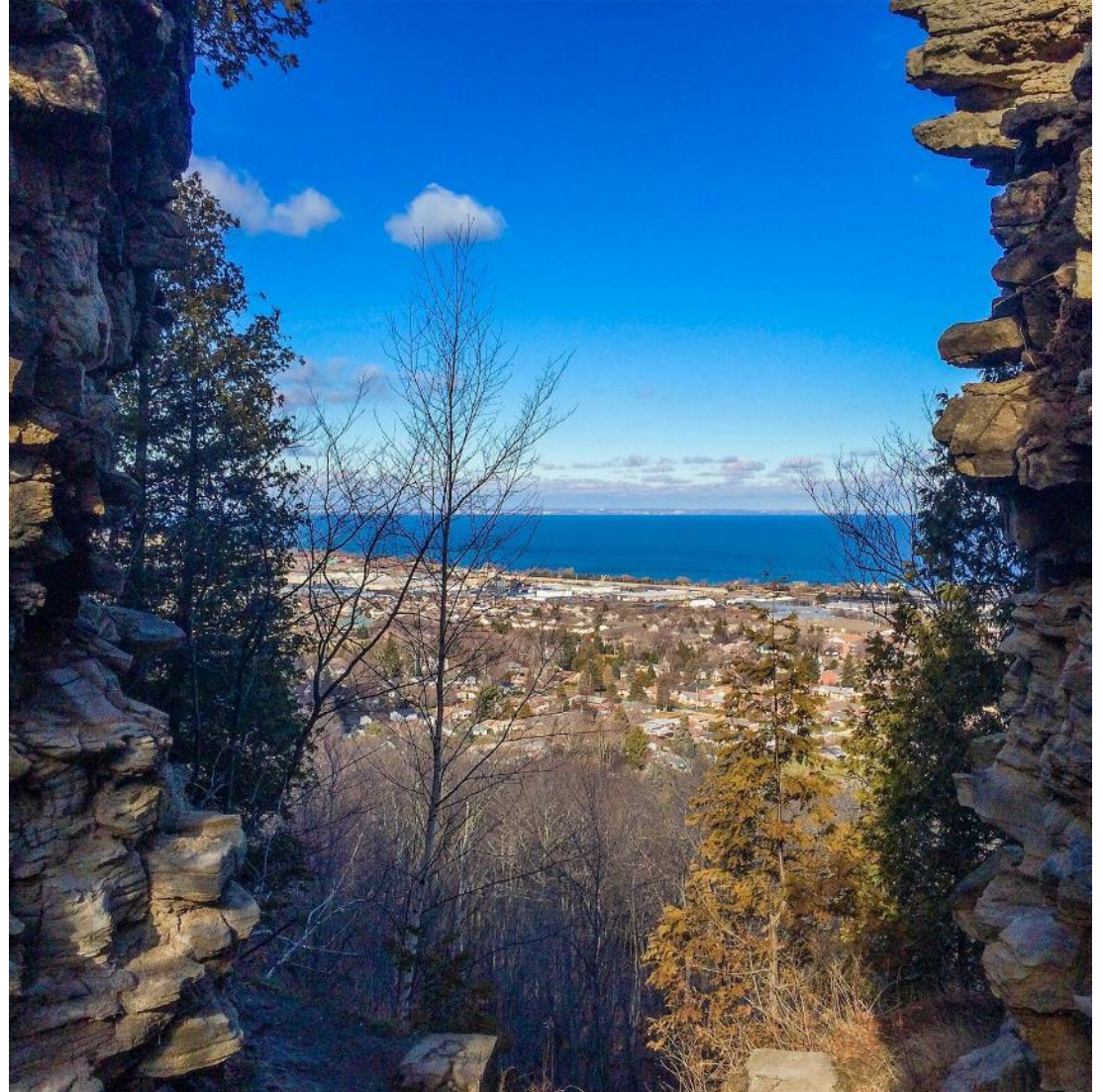
The new Regional Official Plan will need to provide a framework and policies for watershed planning



Ongoing Consultation and Engagement

1st major point of engagement focusing on education and sharing information:

- Local Councils
- Public
- Local Planning Staff
- Agricultural and Environmental Stakeholder Groups
- Development Community
- Indigenous Groups
- Planning Advisory Committee (PAC)
- Agricultural Policy and Action Committee (APAC)
- Region's Planning and Economic Development Committee



Next Steps



1. Complete 1st Point of Engagement and finalize Background Study and Discussion Papers
2. Identify and evaluate options
3. Present preliminary preferred option to Regional Council and initiate 2nd Point of Engagement



Appendix B: Stakeholder Workshops

Appendix B-1: Invitation to Stakeholder Workshops

Appendix B-2: Workshop Agendas

Appendix B-3: Presentation for Each Workshop

Appendix B-4: Questions Posed to Participants at Each Workshop

Appendix B-5: Photos of Notes/Sheets Produced through Each Workshop



*You are invited to attend a Workshop hosted by the
Niagara Region for members of the Agricultural
Community to discuss:*

NATURAL ENVIRONMENT WORK PROGRAM IN SUPPORT OF THE NEW REGIONAL OFFICIAL PLAN

The purpose of the Workshop will be to discuss and learn about a variety of topics related to Natural Environment planning, the relationships with agriculture, and the development of the Region's new Official Plan.

Date: Thursday, May 16, 2019
Time: 1:30pm – 4:00pm
Location: Rockway Community Centre
2021 Pelham Road, Lincoln, L2R 6P7

Please RSVP by Friday, May 3, 2019

Sean Norman

Senior Planner

905-980-6000 ext. 3179

sean.norman@niagararegion.ca

Please feel free to forward this invitation to other members of the Agricultural Community who may be interested.





*You are invited to attend a Workshop hosted by the
Niagara Region for representatives of Environmental
Stakeholder groups in Niagara to discuss:*

NATURAL ENVIRONMENT WORK PROGRAM IN SUPPORT OF THE NEW REGIONAL OFFICIAL PLAN

The purpose of the Workshop will be to discuss and learn about a variety of topics related to Natural Environment planning, and the development of the Region's new Official Plan.

Date: Thursday, May 16, 2019
Time: 6:00pm – 8:30pm
Location: Rockway Community Centre
2021 Pelham Road, Lincoln, L2R 6P7

Please RSVP by Friday, May 3, 2019

Sean Norman

Senior Planner

905-980-6000 ext. 3179

sean.norman@niagararegion.ca

Please feel free to forward this invitation to members of other Environmental Stakeholder groups who may be interested.



YOU'RE INVITED

Please join staff from Niagara Region Planning & Development Services to learn about and discuss:

- 1. Review Agency Roles & Responsibilities in Development Approvals**
- 2. Key Environmental Impact Study (EIS) Requirements and Expectations**
- 3. Natural Environment Work Program in Support of New Regional Official Plan Policies**

Date:	Friday, May 3, 2019
Time:	9:00am – 3:00pm (lunch included)
Location:	Holiday Inn Express & Staybridge Suites 524 York Road, Niagara-on-the-Lake
For Who:	Land Developers, Environmental Consultants and Municipal Planning Staff
Cost:	Free

Agenda to be distributed

RSVP by April 19, 2019
bonnie.dewar@niagararegion.ca

For more information contact:

Jennifer Whittard
Manager, Environmental Planning
905-980-6000 ext. 3430
jennifer.whittard@niagararegion.ca

Sean Norman
Senior Planner
905-980-6000 ext. 3179
sean.norman@niagararegion.ca

Please feel free to forward this invitation to your contacts who may be interested.

Niagara Region

Planning & Development Services

1815 Sir Isaac Brock Way,
PO Box 1042, Thorold, ON L2V 4T7
Tel: 905-980-6000 Toll-free: 1-800-263-7215
Fax: 905-685-0013
niagararegion.ca

Workshop Agenda

Natural Environment Work Program – New Niagara Official Plan May 16th, 2019 – Agricultural Community

1:30 – 1:50	Opening Remarks & New Niagara Official Plan Overview Glenn Pothier, Facilitator, GLPi Sean Norman, Senior Planner, Niagara Region
1:50 – 2:20	Natural Environment Background Study - Highlights Sal Spitale, Principal/Senior Ecologist, North-South Environmental Inc. Nick McDonald, President, Meridian Planning Consultants Inc.
2:20 – 3:00	Table Discussions & 4-S Exercise Glenn Pothier, Facilitator, GLPi Sal Spitale, Principal/Senior Ecologist, North-South Environmental Inc.
3:00 – 3:10	Break
3:10 – 3:50	Key Issue Exploration Glenn Pothier, Facilitator, GLPi Sal Spitale, Principal/Senior Ecologist, North-South Environmental Inc.
3:50 – 4:00	Wrap-Up & Next Steps Glenn Pothier, GLPi

Niagara Region

Planning & Development Services

1815 Sir Isaac Brock Way,
PO Box 1042, Thorold, ON L2V 4T7
Tel: 905-980-6000 Toll-free: 1-800-263-7215
Fax: 905-685-0013
niagararegion.ca

Workshop Agenda

Natural Environment Work Program – New Niagara Official Plan May 16th, 2019 – Environmental Stakeholder Groups

6:00 – 6:20	Opening Remarks & New Niagara Official Plan Overview Glenn Pothier, Facilitator, GLPi Sean Norman, Senior Planner, Niagara Region
6:20 – 6:50	Natural Environment Background Study - Highlights Sal Spitale, Principal/Senior Ecologist, North-South Environmental Inc. Nick McDonald, President, Meridian Planning Consultants Inc.
6:50 – 7:30	Table Discussions & 4-S Exercise Glenn Pothier, Facilitator, GLPi Sal Spitale, Principal/Senior Ecologist, North-South Environmental Inc.
7:30 – 7:40	Break
7:40 – 8:20	Key Issue Exploration Glenn Pothier, Facilitator, GLPi Sal Spitale, Principal/Senior Ecologist, North-South Environmental Inc.
8:20 – 8:30	Wrap-Up & Next Steps Glenn Pothier, GLPi

Friday, May 3, 2019

Niagara Region Environmental Planning Partnership Workshop for Land Developers, Environmental Consultants and Municipal Planning Staff

AGENDA

8:30 – 9:00	Continental Breakfast and Sign-In
9:00 – 9:10	Welcome & Open Remarks Glenn Pothier, Facilitator, GLPi
9:10 – 9:15	Background & Context Diana Morreale, Director, Development Approvals, Niagara Region
9:15 – 9:40	Environmental Planning in Niagara Jennifer Whittard, Manager, Environmental Planning, Niagara Region <ul style="list-style-type: none"> • Provincial & Regional Policy Framework Overview • Agency Roles & Responsibilities • <i>Questions of Fact or Clarification?</i>
9:40 – 10:00	NPCA's Role Post MOU David Deluce, Senior Manager, Plan Review & Regulations, NPCA
10:00 – 10:15	BREAK
10:15 – 11:00	Key EIS Terms of Reference Requirements & Expectations Jennifer Whittard, Manager, Environmental Planning, Niagara Region Adèle Labbé, Senior Environmental Planner, Niagara Region Adam Boudens, Planning Ecologist, Niagara Region <ul style="list-style-type: none"> • Environmental Impact Study (EIS) Overview • Pre-Consultation Process • Scoping Checklist & Terms of Reference Development • Species at Risk (SAR) & Significant Wildlife Habitat (SWH) Screening • <i>Group Discussion & Feedback</i>
11:00 – 11:45	Key EIS Requirements & Expectations Adèle Labbé, Senior Environmental Planner, Niagara Region Adam Boudens, Planning Ecologist, Niagara Region <ul style="list-style-type: none"> • EIS Preparation & Natural Heritage System Characterization • Assessment & Evaluation of Significance • Ecological Impact Analysis & Mitigation • <i>Group Discussion & Feedback</i>
11:45 – 12:00	Role of the NEC in EIS Reviews & Key NEP Policies Nancy Mott, Senior Strategic Advisor, Niagara Escarpment Commission

12:00 – 12:30	LUNCH
12:30 – 12:50	Natural Environment Work Program Opening Remarks & Key Context Glenn Pothier, Facilitator, GLPi Sean Norman, Senior Planner, Niagara Region
12:50 – 1:30	Natural Environment Background Report Highlights Sal Spitale, Principal/Senior Ecologist, North-South Environmental Inc.
1:30 – 2:10	Roundtable Discussions/Stakeholder Feedback Glenn Pothier, Facilitator, GLPi Sal Spitale, Principal/Senior Ecologist, North-South Environmental Inc.
2:10 – 2:50	Key Issue Exploration Glenn Pothier, Facilitator, GLPi Sal Spitale, Principal/Senior Ecologist, North-South Environmental Inc.
2:50 – 3:00	Wrap-Up & Next Steps Glenn Pothier, GLPi



making our mark

NIAGARA

OFFICIAL PLAN

Natural Environment Work Program

New Regional Official Plan

Workshop

May 3rd, 2019



New Regional Official Plan

- Niagara Region is in the process of preparing a new Regional Official Plan (ROP)
- The ROP is a series of objectives and policies that guide the short-term and long-term physical development of all lands within the Region
- The *Planning Act* requires municipalities to undertake regular reviews of their Official Plans to align with Provincial requirements
- In 2016 Council endorsed the approach of the preparation of a new Regional Official Plan from start to finish rather than a series of site specific topic amendments. The new Regional Official Plan will be processed under Section 26 of the *Planning Act*, and is proposed to be finalized by the end of 2021



Creating a New Regional Official Plan

The new Official Plan will be a cohesive, concise, user-friendly document that:

- Implements new provincial policy and plans, as amended
- Reflects current goals and priorities of the community and Regional Council
- Provides clear direction for local planning, with flexibility where appropriate



Priority Background Studies

GROWTH MANAGEMENT



RURAL AND NATURAL SYSTEMS



Natural Environment Planning



An important component of the new Regional Official Plan to:

- Support the identification of areas for growth and development
- Meet Provincial requirements for the protection of features, areas, and system
- Support a range of industries that benefit from a healthy natural environment
- Support public health, recreation, and overall well-being of residents
- Plan for climate change



Scope for Natural Environment Work Program

In-Scope	Out-of-Scope*
<ul style="list-style-type: none"> • Natural Heritage Features <ul style="list-style-type: none"> • Woodlands, wetlands, habitat, habitat of endangered and threatened species, fish habitat, etc. • Hydrologic Features <ul style="list-style-type: none"> • Streams, seepage areas, wetlands, etc. • Region's watercourse identification and mapping project • Water Resource Systems <ul style="list-style-type: none"> • Groundwater systems • Surface water systems • Natural Hazards <ul style="list-style-type: none"> • Flooding hazards, erosion hazards, and dynamic beach hazards, etc. • Wildland fires as per Section 3.1.8 of the PPS • Provincial Natural Heritage Systems <ul style="list-style-type: none"> • Greenbelt Natural Heritage System and Urban River Valley designation • Growth Plan Natural Heritage System • Niagara Escarpment Plan as it relates to the municipal planning process • Watershed Planning & Stormwater Management 	<ul style="list-style-type: none"> • Aggregates & Petroleum Resources • Source Water Protection

*Official Plan policy development for out-of-scope items to be addressed separately



Project Overview – Natural Environment

Project Phase	Activities
1	Project Initiation and Procurement
2	Background Study and Discussion Papers for Mapping and Watershed Planning Priority Areas
3	1 st Point of Engagement: Inform on Background Study
4	Develop and Evaluate Options for Natural System(s)
5	2 nd Point of Engagement: Consultation on Options for the Natural System(s)
6	Develop Regional Natural System(s)
7	Develop OP Policies & Finalize Mapping
8	3 rd Point of Engagement: Draft OP Policies and Schedules
9	Other Implementation Tools



Preliminary Framework for New Official Plan



GROWING REGION

How we manage growth and development, with a range and mix of housing forms, including affordable housing

CONNECTED REGION

How we improve connections with transit, recreation and trails, infrastructure and technology

COMPETITIVE REGION

How we increase our competitiveness by supporting employment opportunities and protecting agricultural lands

VIBRANT REGION

How we enhance the vibrancy of communities by supporting strong urban design and protecting cultural heritage

SUSTAINABLE REGION

How we protect our natural environment and plan for climate change



Process to Create the New Official Plan



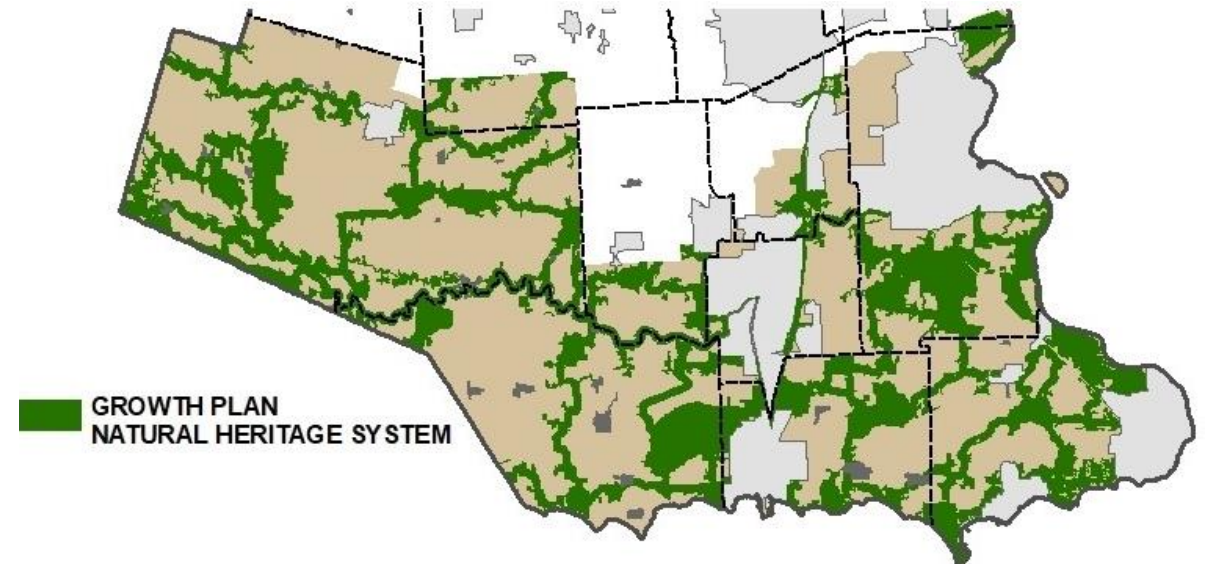
Natural Environment Background Study

Key Topics



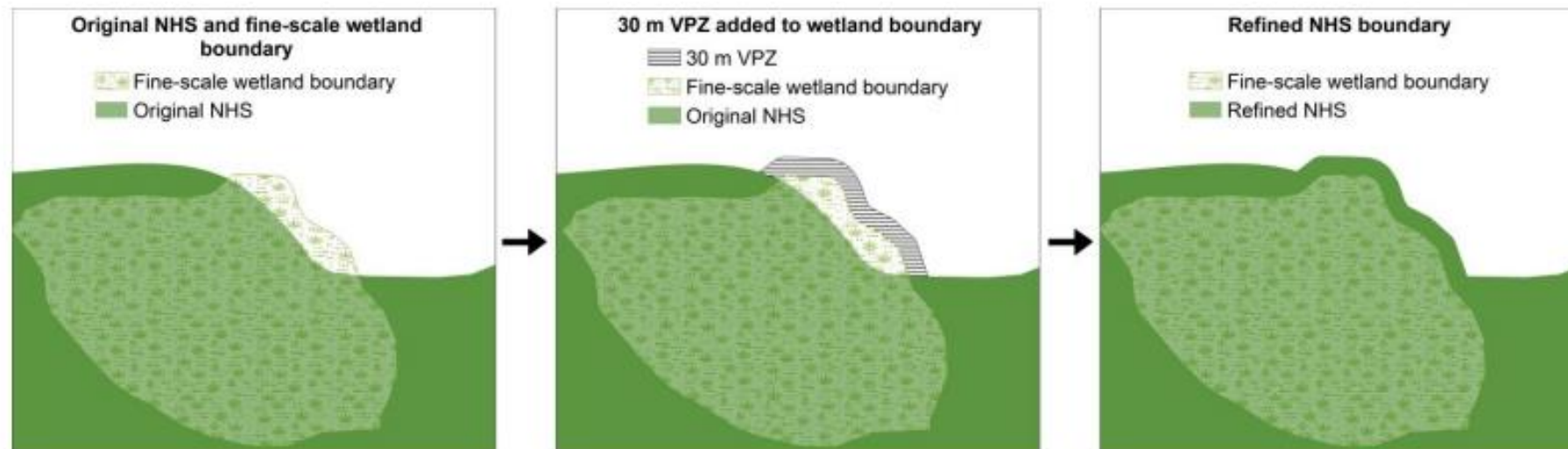
Provincial Direction

- Provincial Policy Statement requires that Natural Heritage Systems (NHS) be identified - nature of system can vary depending on context
- Province has identified Greenbelt and Growth Plan Natural Heritage Systems



Provincial Direction – Growth Plan

- The Growth Plan NHS can be refined through MCR process – however, refinements are intended to be minor in scope
- Water resource system is also required to be identified – based on watershed planning and other available



Provincial Direction – Growth Plan

- Growth Plan policies restrict development in key features inside NHS and in key hydrologic features anywhere in the Region
- These features include all wetlands, all ANSI's and significant woodlands – this is a new restriction
- Existing agricultural uses are exempt
- Expansion to existing buildings and structures in key features inside NHS and in key hydrologic features anywhere in the Region permitted subject to criteria
- Expansions to existing agricultural buildings permitted if no alternative subject to criteria



Provincial Direction – Growth Plan

- Growth Plan policies require EIS for development within 120 metres to fix width of vegetation protection zone
- However, minimum width is already fixed around some features (30 metres)
- The above means that new single detached dwellings within a significant woodland are not permitted and are required to be setback a minimum of 30 metres from the key feature
- Some exemptions apply for new agricultural buildings



Interaction with Agriculture

- PPS and Growth Plan require that Prime Agricultural Areas be designated
- In contrast, Growth Plan and Greenbelt Plan requires NHS to be shown as overlay – to recognize the primacy of agriculture
- There is still a need to determine how key features will be mapped



Natural Heritage System (NHS)

Feature/Area	PPS 2014	Growth Plan 2017	Greenbelt Plan 2017
Significant wetlands, significant coastal wetlands	X	X	X
Significant woodlands	X	X	X
Significant valleylands	X	X	X
Significant wildlife habitat	X	X	X
Significant ANSIs	X	X	X
Coastal wetlands	X	X	X
Fish habitat	X	X	X
Habitat of endangered species and threatened species	X	X	X
Linkages	X	X	X
Life Science ANSI			X
Permanent and intermittent streams			X
Lakes (and their littoral zones)			X
Seepage areas and springs			X
Wetlands			X

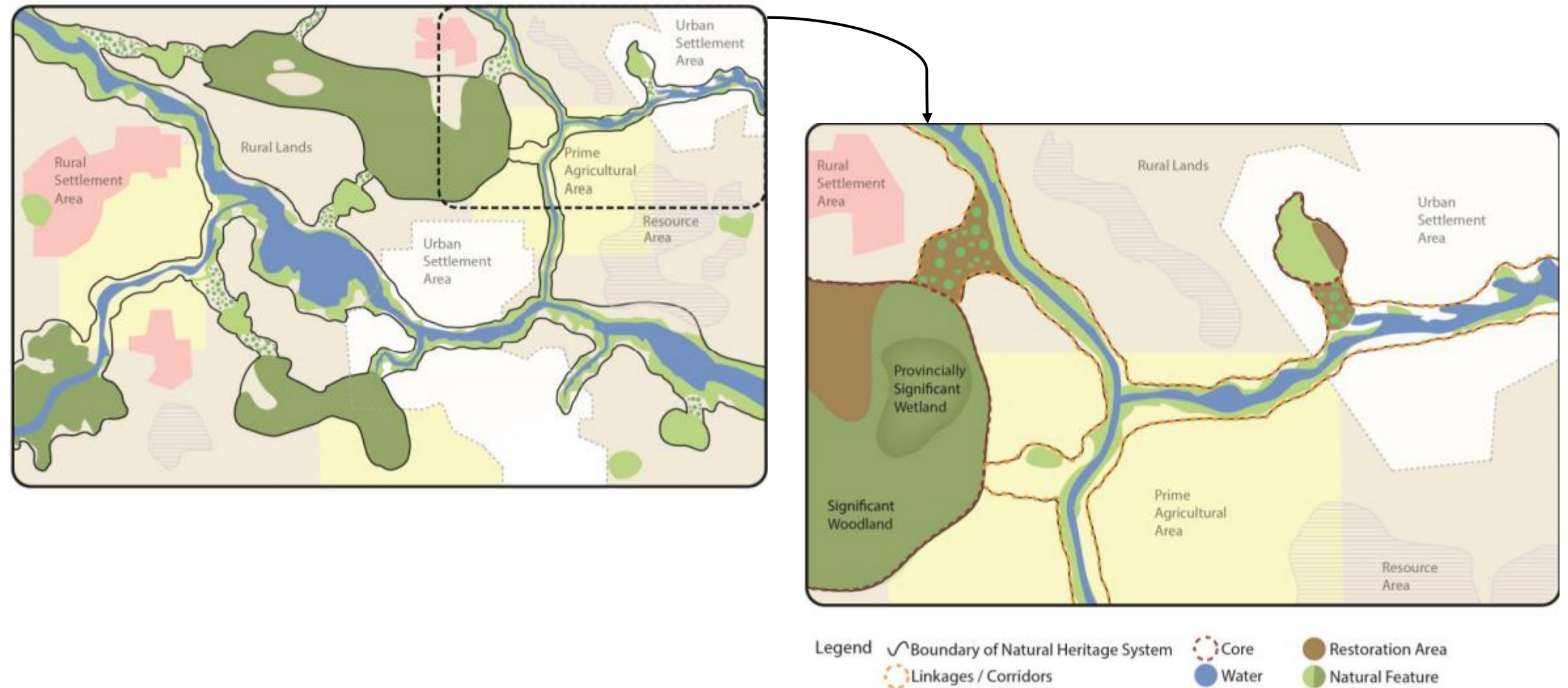


Water Resource System (WRS)

Feature/Area	PPS 2014	Growth Plan 2017	Greenbelt Plan 2017
Ground water features	X		
Hydrologic functions	X		
Shoreline areas necessary for the ecological and hydrological integrity of the watershed	X		
Headwaters	X		
Rivers	X		
Stream channels	X		
Inland lakes	X		
Recharge/discharge areas	X		
Associated riparian lands	X		
Significant groundwater recharge areas		X	X
Highly vulnerable aquifers		X	X
Significant surface water contribution areas		X	X
Permanent streams		X	X
Intermittent streams		X	X
Inland lakes and their littoral zones		X	X
Seepage areas and springs	X	X	X
Wetlands	X	X	X



Natural Environment System – Linkages and Enhancement Areas



Natural Environment System – Buffers / Vegetation Protection Zone

- Mitigation tool
- Requirement for buffers
 - Minimum – applied through development planning applications and not to existing uses.
- Prescribed – opportunity for refinement through approved study



Woodlands

- Process for identifying significant woodlands as a 'key feature' :
 1. Identify and map 'Woodlands' in the Region based on defined criteria
 2. Develop and apply criteria to determine 'Significance'. Local context and conditions are a factor in determining significance.
- Local and Regional Tree By-Laws are a related tool for the management and protection of trees and woodlands



Climate Change & Invasive Species

- Two of the most significant threats to the natural environment
- Natural environment systems are an important tool to reduce risk and mitigate the impacts of climate change
- Many invasive species in Niagara including Emerald Ash Borer. Additional tools beyond the scope of the Official Plan Policies will be required.

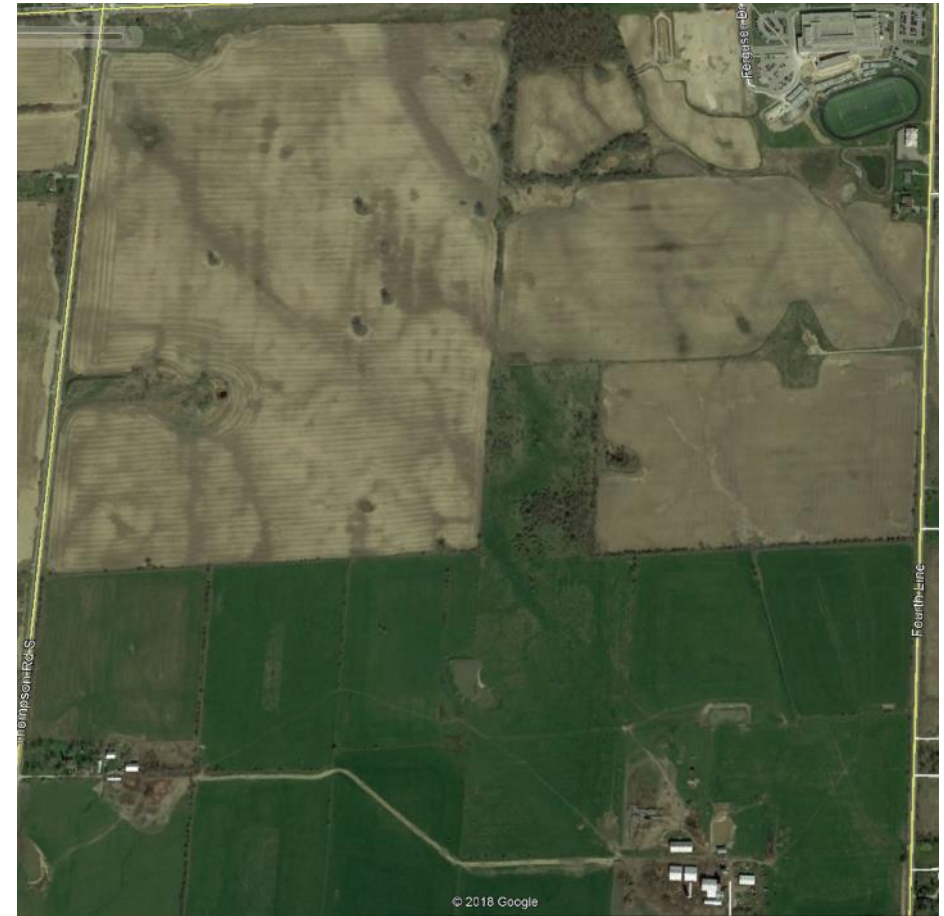


Emerald Ash Borer
(*Agrilus planipennis*)



Offsetting

- May represent an opportunity but introduces a concern
- Mitigation hierarchy -> offsetting as last resort
- Restricted to minimum types of features (e.g. small, isolated non-significant, limited function)
- 'No net loss' or 'net gain'
- Offsetting ratios
- Location



Species at Risk – Endangered Species Act

- Regulated under the ESA
- Responsibility of MECP to enforce ESA and issue permits
- Responsibility of municipality to ensure conformance with policy 2.1.7 of PPS
 - Habitat of endangered species and threatened species



Photo credit: Wasył Bakowsky



Photo credit: Sam Brinker



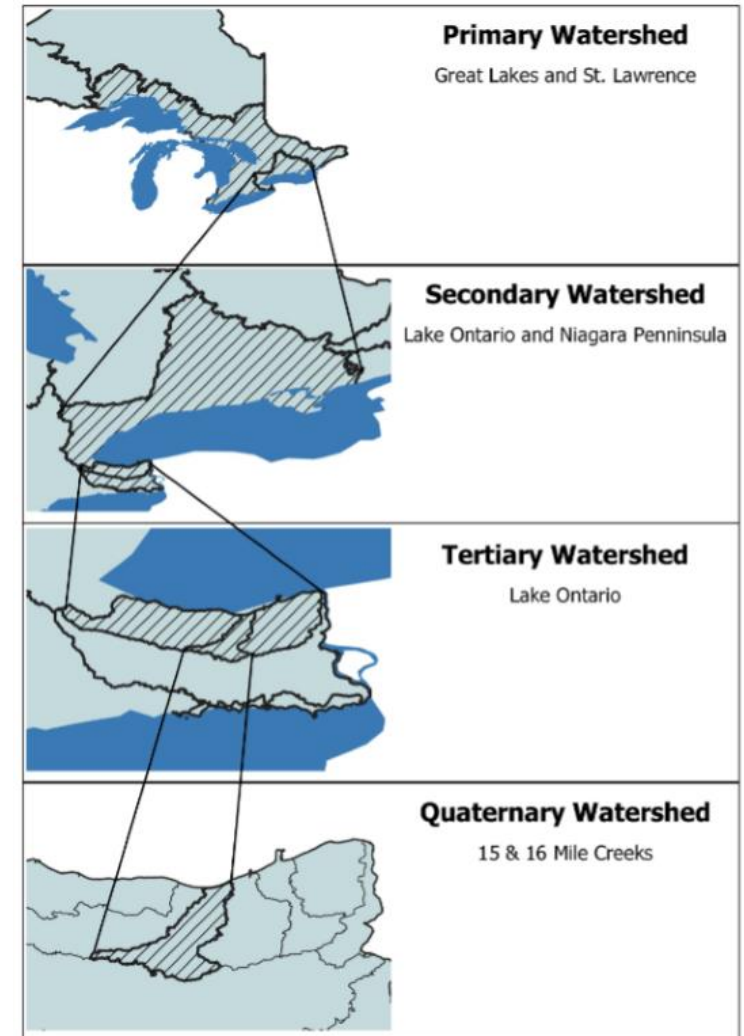
Natural Hazards

- Flooding
- Shoreline
- Erosion
- Unstable Soils
- Unstable Bedrock (Karst)



Watershed Planning

- Planning at a watershed scale that considers the relationship between the human and natural environments
- Informs municipal decision regarding growth and used to define values, objectives and targets that support the protection, enhancement, or restoration of the natural environment system
- The 2014 PPS and 2017 Provincial Plans place a much greater emphasis on integration - planning and land use activities must be “informed by” watershed planning



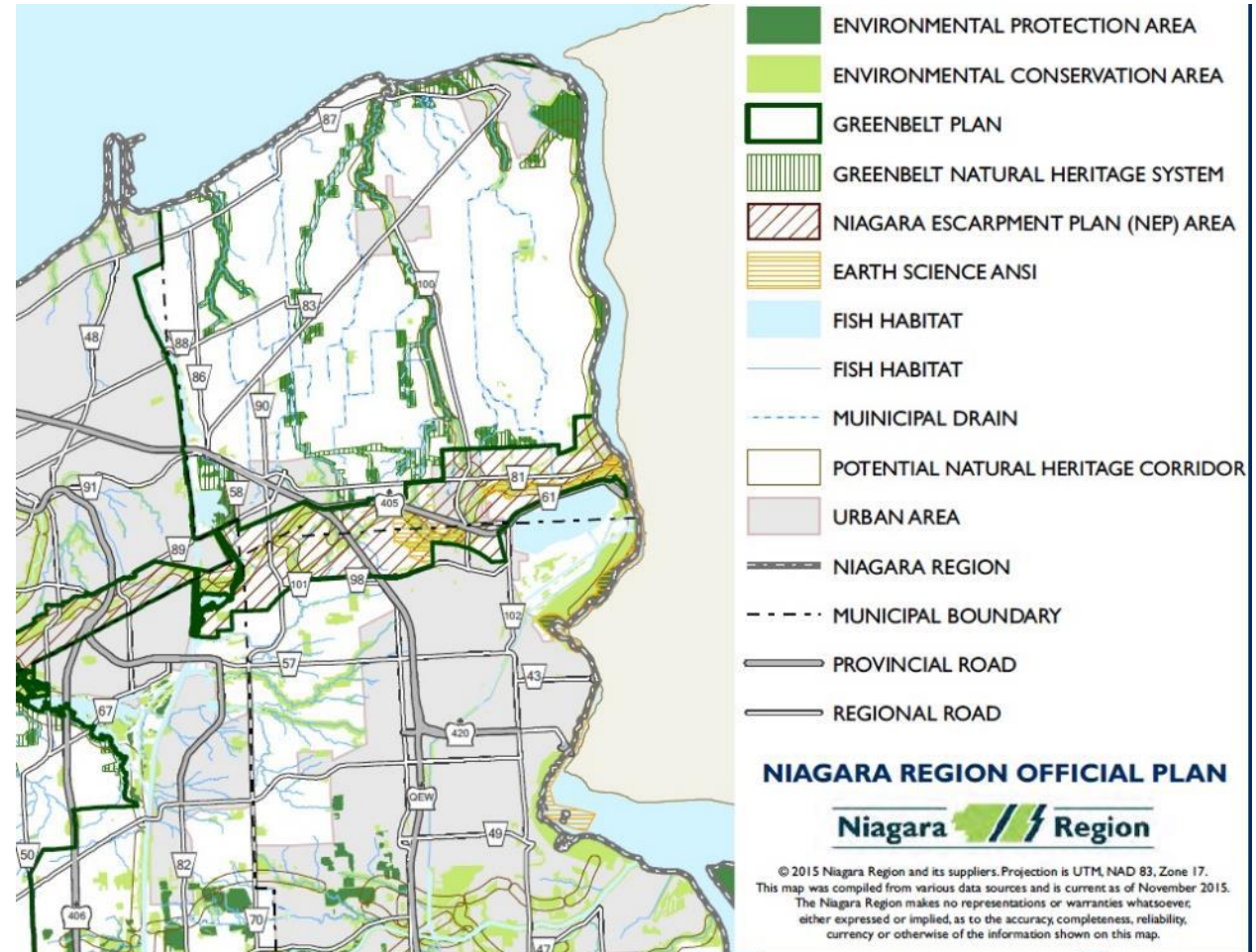
Watershed Planning

- Provincial direction coming from the Growth Plan (2017) section 4.2.1.1: *“Municipalities, partnering with conservation authorities as appropriate, will ensure that watershed planning is undertaken to support a comprehensive, integrated, and long-term approach to the protection, enhancement, or restoration of the quality and quantity of water within a watershed.”*
- The new Regional Official Plan will need to provide a framework and policies for watershed planning



Mapping the Natural Environment System

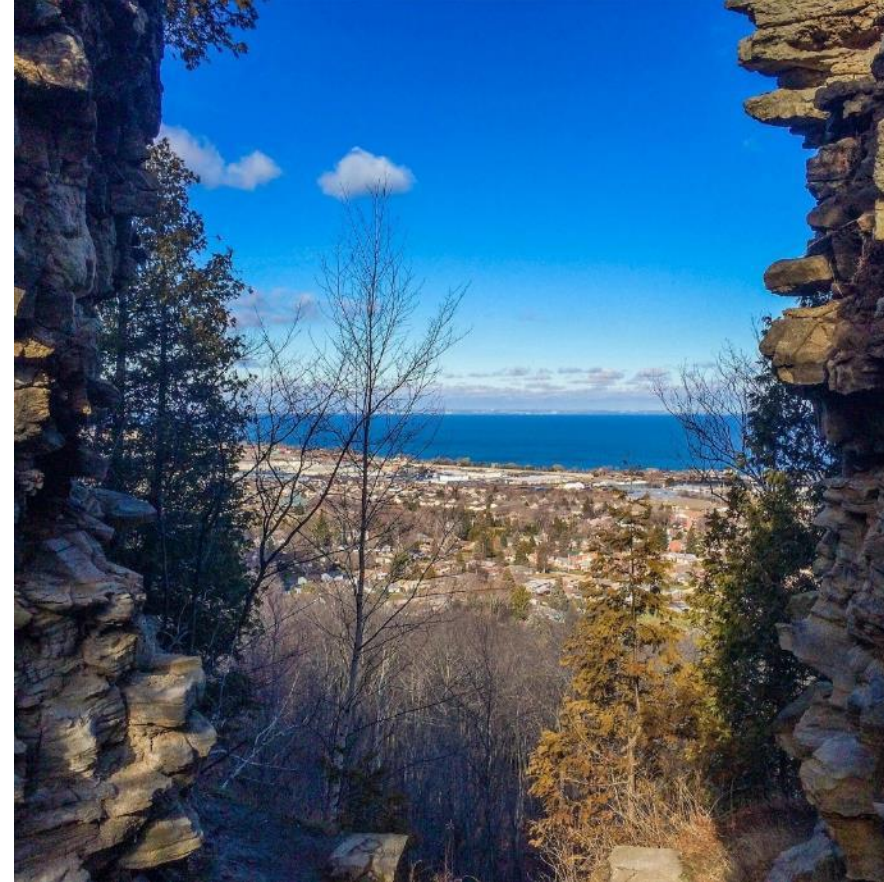
- NHS and WRS
- What features to map?
 - Available data
 - Accuracy
- Not all features/components can be mapped
- Policies to permit refinement of the boundaries of features



Ongoing Consultation and Engagement

1st major point of engagement focusing on education and sharing information:

- Local Councils
- Public
- Local Planning Staff
- Agricultural and Environmental Stakeholder Groups
- Development Community
- Indigenous Groups
- Planning Advisory Committee (PAC)
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Next Steps



1. Complete 1st Point of Engagement and finalize Background Study and Discussion Papers
2. Identify and evaluate options
3. Present preliminary preferred option to Regional Council and initiate 2nd Point of Engagement



Roundtable Discussions/Stakeholder Feedback

- 4-S exercise
 - Sticking — that is, resonating strongly?
 - Surprising — that is, unexpected or at odds with your take on things?
 - Stressing — that is, causing some concern?
 - Strategically important — that is, of critical importance going forward?



Key Issue Exploration

1. What have been the experiences and challenges in the past related to: 'adjacent lands', buffers, setbacks, vegetative protection zones (VPZs), etc.?
2. With changes to the natural environment resulting from climate change, invasive species, and other threats, what needs to be considered in designing a system that is sustainable for the long-term?
3. The next step in the natural environment work program is the development and evaluation of options for a natural environment system. What criteria and measures should be considered for evaluating the options?
4. What resources would assist with Official Plan policy implementation (e.g., guidelines, decision frameworks, screening tools, etc.)?
5. How should the Region reflect the natural environment system in mapping? Are there good examples from other municipalities of natural environment mapping the Region should review?
6. What role can the development community play in helping to meet the goal of a sustainable and healthy natural environment system?
 - a) What are some planning and development best practices that can support this goal?





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May 16, 2019 – 1:30 - 4:00



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GROWTH MANAGEMENT



RURAL AND NATURAL SYSTEMS



Natural Environment Planning



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- Support the identification of areas for growth and development
- Meet Provincial requirements for the protection of features, areas, and system
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How we enhance the vibrancy of communities by supporting strong urban design and protecting cultural heritage

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How we protect our natural environment and plan for climate change



Process to Create New Official Plan



Natural Environment Background Study

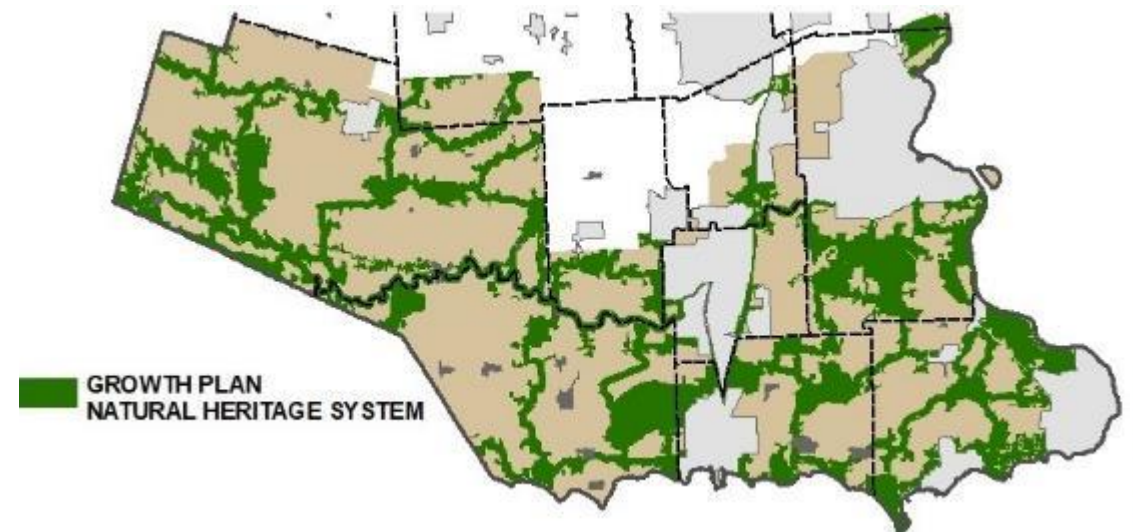
Key Topics



Provincial Direction – Natural Environment

Provincial direction starts with the **Provincial Policy Statement (PPS, 2014)**

- The PPS identifies the types of natural features, areas, functions, and systems that must be protected through the municipal official plan
- The **Greenbelt Plan** and **Growth Plan Natural Heritage Systems** have been identified by the Province and are to be implemented by municipalities
- Beyond Provincial Natural Heritage Systems, Provincial direction requires **Natural Heritage Systems** and **Water Resource Systems** be identified and appropriately protected through Official Plan policies.



Provincial Direction - Agriculture

- PPS and Growth Plan require that Prime Agricultural Areas be designated
- In contrast, Growth Plan and Greenbelt Plan requires NHS to be shown as overlay – to recognize the primacy of agriculture
- There is still a need to determine how key features will be mapped



Natural Environment – Agriculture Interaction



- Clear direction that natural environment policies are not intended to limit the ability of agricultural uses to continue
- Greenbelt and Growth Plan NHS policies both provide a wide range of exemptions for new agricultural and agricultural-related buildings and structures
- The requirement for a natural buffer is exempt where lands will continue to be used for agricultural purposes



What is a Natural Heritage System?

- “... 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 ...”.
“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.”
- 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).



Biodiversity

Ecosystem Functions

Ecosystem Services



Natural Heritage System (NHS)

Natural Heritage Features and Areas	PPS 2014	Growth Plan 2017	Greenbelt Plan 2017
Significant wetlands, significant coastal wetlands	X	X	X
Significant woodlands	X	X	X
Significant valleylands	X	X	X
Significant wildlife habitat	X	X	X
Significant ANSIs	X	X	X
Coastal wetlands	X	X	X
Fish habitat	X	X	X
Habitat of endangered species and threatened species	X	X	X
Linkages	X	X	X
Life Science ANSI			X
Permanent and intermittent streams			X
Lakes (and their littoral zones)			X
Seepage areas and springs			X
Wetlands			X



Woodlands

- Woodlands are important for wildlife, cycling of nutrients, carbon and water, moderating the impacts of climate change and the urban heat island effect, and improving the overall health and wellbeing of residents.
- Process for identifying significant woodlands as a **‘key feature’**:
 1. Identify and map ‘Woodlands’ in the Region based on defined criteria
 2. Develop and apply criteria to determine ‘Significance’.
 - Criteria to identify significant woodlands can include size, age, proximity to other features such as watercourses, wetlands, and the Great Lakes.
 - size criteria to identify significant woodlands may vary geographically and in urban vs. rural areas.
- Local and Regional Tree By-Laws are a related tool for the management and protection of trees and woodlands. Following the completion of the new Niagara Official Plan there will be process to ensure alignment with the Regional Tree By-Law.



Fish Habitat

- All provincial plans have adopted the definition of fish habitat from the Federal Fisheries Act (1985):

“spawning grounds and any other areas, including nursery, rearing, food supply and migration areas, on which fish depend directly or indirectly in order to carry out their life processes” (Federal Fisheries Act 1985).
- Municipalities are responsible for the identification and protection of fish habitat through their official plan policies to ensure conformity with applicable Provincial plans and Federal legislation.
- The Region may decide to classify fish habitat based on:
 - an analysis of the ecological and hydrological function of the watercourse (often classified as ‘types’)
 - warmwater, coolwater or coldwater streams



Central Mudminnow (bottom) can be found in slow moving streams, marshes, weedy ponds and ditches.



Natural Hazards

- Flood Plain
 - Shoreline
 - Erosion
 - Unstable Soils
 - Unstable Bedrock (Karst)
-
- These features/areas can provide connectivity, and support hydrologic functions and “natural processes that are necessary to maintain biological diversity and natural functions”



Species at Risk

- Regulated under the Endangered Species Act (ESA)
- Responsibility of Ministry of Environment Conservation and Parks (MECP) to enforce ESA and issue permits
- Responsibility of municipality to ensure conformance with policy 2.1.7 of PPS
 - Habitat of endangered species and threatened species



Photo credit: Wasyl Bakowsky



Photo credit: Sam Brinker



Climate Change and Invasive Species

- Two of the most significant threats to the natural environment
- Natural environment systems are an important tool to reduce risk and mitigate the impacts of climate change
- Many invasive species in Niagara including Phragmites. Additional tools beyond the scope of the Official Plan Policies will be required.



Common Reed (*Phragmites australis*) clogging a drainage ditch.



What is a Water Resource System?

- “A system consisting of ground water features and areas and surface water features (including shoreline areas), and hydrologic functions, which provide the water resources necessary to sustain healthy aquatic and terrestrial ecosystems and human water consumption. The water resource system **will** comprise **key hydrologic features** and **key hydrologic areas**. (based on PPS 2014)”
- Provincial plans require that “Planning authorities shall protect, improve or restore the quality and quantity of water by:” ... “**identifying water resource systems** consisting of ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas, which are necessary for the ecological and hydrological integrity of the watershed”.



Water Resource System (WRS)

Water Resource Features and Areas	PPS 2014	Growth Plan 2017	Greenbelt Plan 2017
Ground water features	X		
Hydrologic functions	X		
Shoreline areas necessary for the ecological and hydrological integrity of the watershed	X		
Headwaters	X		
Rivers	X		
Stream channels	X		
Inland lakes	X		
Recharge/discharge areas	X		
Associated riparian lands	X		
Significant groundwater recharge areas		X	X
Highly vulnerable aquifers		X	X
Significant surface water contribution areas		X	X
Permanent streams		X	X
Intermittent streams		X	X
Inland lakes and their littoral zones		X	X
Seepage areas and springs	X	X	X
Wetlands	X	X	X

Watercourses

Watercourses convey water and can be characterized by their size and flow regime. Types of watercourses include:

- Headwater drainage features
- Ephemeral streams
- Permanent and Intermittent streams
- Rivers (higher order watercourses)
- Agricultural swales, roadside ditches, and municipal drains

As a component of the natural environment systems, the new Niagara Official Plan will need to identify watercourses in order to conform with Provincial plans. This will require clarifying the relationship between drainage ditches and agricultural drains with fish habitat, and exemptions to manage these man-made features.



Types of watercourses: headwater drainage feature (top) and permanent watercourse.



Municipal Drains and Irrigation Systems

- The Region includes a large agricultural land base that contains many watercourses, including municipal and agricultural drains.
 - Some watercourses also function as part of an irrigation system which can include features with augmented flow.
- Although created for or managed as municipal or agricultural drains, or as part of an irrigation system, these features can exhibit characteristics of natural watercourses.
- The background review recognizes the intended function and purpose these features as supporting normal farming practices
 - Need to ensure conformity with Provincial and Federal requirements
 - The natural environment systems are not intended to encumber normal farming practices



Watershed Planning

- Planning at a watershed scale that considers the relationship between the human and natural environments - with a focus on protecting water resources
- Watershed planning in the Province has been evolving for decades -
 - The 2014 PPS and 2017 Provincial Plans place a much greater emphasis on integration - planning and land use activities must be “informed by” watershed planning
- The new Niagara Official Plan will need to provide a framework and policies for watershed planning
- Additional consultation and engagement during any Watershed Planning process
- Water Resource Systems shall be informed by watershed planning



Buffers and Vegetation Protection Zones (VPZs)

- Mitigation tool for new development
- Requirement for buffers
 - Minimum – applied through development planning applications and not to existing uses.
- Prescribed – opportunity for refinement through approved study
- Greenbelt Plan and Growth Plan require 30 m VPZs - Exemptions for agricultural uses
 - Crops can be planted in VPZ
 - For new buildings for agriculture-related activities in Greenbelt Plan area a reduced buffer of 15 m from watercourses that also function as agricultural swale, roadside ditch or municipal drain



Vegetated 30 m buffer between fenced property line and natural feature (top photo). Vegetated riparian area between watercourse (off image to right) and agricultural field (bottom photo)



Mapping the Natural Environment System

- NHS and WRS
- What features to map?
 - Available data
 - Accuracy
- Not all features/components can or should be mapped
- Policies to permit refinement of the boundaries of features



Ongoing Consultation and Engagement

1st major point of engagement focusing on education and sharing information:

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- Public
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- Agricultural and Environmental Stakeholder Groups
- Development Community
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 - Surprising — that is, unexpected or at odds with your take on things?
 - Stressing — that is, causing some concern?
 - Strategically important — that is, of critical importance going forward?



Key Issues Exploration

1. **Finish this sentence:** Farmland and the natural environment can coexist by...
2. With changes to the natural environment and agricultural practices resulting from climate change, invasive species, and other threats, what needs to be considered in designing a system that is sustainable for the long-term?
3. The next step in the natural environment work program is the development and evaluation of options for a natural environment system. How can the environment be enhanced while ensuring agricultural practices continue unencumbered?
4. How could the Region reflect the natural environment system in mapping recognizing the existing agricultural system? What features should not be mapped as part of the natural environment system and are better addressed through policy?
5. What role does the agricultural community play in helping to meet the goal of a sustainable and healthy natural environment?
6. What are some of the agricultural best practices that are currently being implemented in Niagara that are having a positive impact on the environment?
7. What do you see as the biggest challenges and/or opportunities for Niagara's natural environment system planning?





making our mark

NIAGARA

OFFICIAL PLAN

Natural Environment Work Program

New Niagara Official Plan

Workshop

May 16, 2019 – 6:00 - 8:30



New Niagara Official Plan

- Niagara Region is in the process of preparing a new Niagara Official Plan
- The Official Plan will be a series of objectives and policies that guide the short-term and long-term physical development of all lands within the Region
- The *Planning Act* requires municipalities to undertake regular reviews of their Official Plans to align with Provincial requirements
- In 2016 Council endorsed the approach of the preparation of a new Regional Official Plan from start to finish rather than a series of site specific topic amendments. The new Regional Official Plan will be processed under Section 26 of the *Planning Act*, and is proposed to be finalized by the end of 2021

PRIORITY BACKGROUND STUDIES

GROWTH MANAGEMENT



RURAL AND NATURAL SYSTEMS



Natural Environment Planning



An important component of the new Niagara Official Plan to:

- Support the identification of areas for growth and development
- Meet Provincial requirements for the protection of features, areas, and system
- Support a range of industries that benefit from a healthy natural environment
- Support public health, recreation, and overall well-being of residents
- Plan for climate change



Scope for Natural Environment Work Program

In-Scope	Out-of-Scope*
<ul style="list-style-type: none"> • Natural Heritage Features <ul style="list-style-type: none"> • Woodlands, wetlands, habitat, habitat of endangered and threatened species, fish habitat, etc. • Hydrologic Features <ul style="list-style-type: none"> • Streams, seepage areas, wetlands, etc. • Region's watercourse identification and mapping project • Water Resource Systems <ul style="list-style-type: none"> • Groundwater systems • Surface water systems • Natural Hazards <ul style="list-style-type: none"> • Flooding hazards, erosion hazards, and dynamic beach hazards, etc. • Wildland fires as per Section 3.1.8 of the PPS • Provincial Natural Heritage Systems <ul style="list-style-type: none"> • Greenbelt Natural Heritage System and Urban River Valley designation • Growth Plan Natural Heritage System • Niagara Escarpment Plan as it relates to the municipal planning process • Watershed Planning & Stormwater Management 	<ul style="list-style-type: none"> • Aggregates & Petroleum Resources • Source Water Protection



Project Overview – Natural Environment

Project Phase	Activities
1	Project Initiation and Procurement
2	Background Study and Discussion Papers for Mapping and Watershed Planning Priority Areas
3	1 st Point of Engagement: Inform on Background Study
4	Develop and Evaluate Options for Natural System(s)
5	2 nd Point of Engagement: Consultation on Options for the Natural System(s)
6	Develop Regional Natural System(s)
7	Develop OP Policies & Finalize Mapping
8	3 rd Point of Engagement: Draft OP Policies and Schedules
9	Other Implementation Tools



PRELIMINARY FRAMEWORK FOR NEW OFFICIAL PLAN



GROWING REGION

How we manage growth and development, with a range and mix of housing forms, including affordable housing

CONNECTED REGION

How we improve connections with transit, recreation and trails, infrastructure and technology

COMPETITIVE REGION

How we increase our competitiveness by supporting employment opportunities and protecting agricultural lands

VIBRANT REGION

How we enhance the vibrancy of communities by supporting strong urban design and protecting cultural heritage

SUSTAINABLE REGION

How we protect our natural environment and plan for climate change



PROCESS TO CREATE THE NEW OFFICIAL PLAN



Natural Environment Background Study

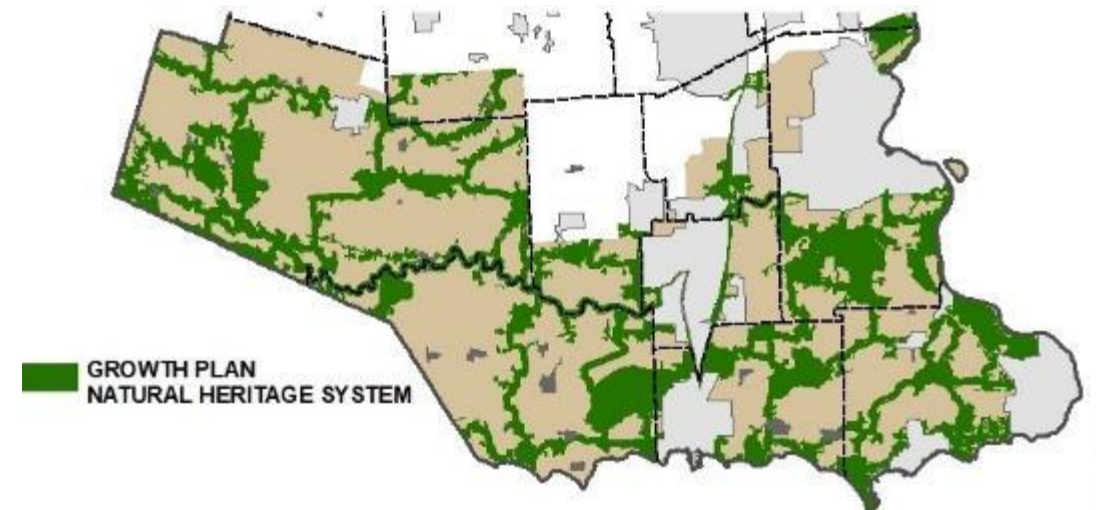
Key Topics



Provincial Direction – Natural Environment

Provincial direction starts with the **Provincial Policy Statement** (PPS, 2014)

- The PPS identifies the types of natural features, areas, functions, and systems that must be protected through the municipal official plan
- The **Greenbelt Plan** and **Growth Plan Natural Heritage Systems** have been identified by the Province and are to be implemented by municipalities
- Beyond Provincial Natural Heritage Systems, Provincial direction requires **Natural Heritage Systems** and **Water Resource Systems** be identified and appropriately protected through Official Plan policies – together referred to as the "**natural environment system**"



Provincial Direction – Agriculture

- PPS and Growth Plan require that Prime Agricultural Areas be designated
- In contrast, Growth Plan and Greenbelt Plan requires NHS to be shown as overlay – to recognize the primacy of agriculture
- There is still a need to determine how key features will be mapped



What is a Natural Heritage System?

- “... 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 ...”.
“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.”
- 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).



Biodiversity

Ecosystem Functions

Ecosystem Services



Natural Heritage System (NHS)

Natural Heritage Features and Areas	PPS 2014	Growth Plan 2017	Greenbelt Plan 2017
Significant wetlands, significant coastal wetlands	X	X	X
Significant woodlands	X	X	X
Significant valleylands	X	X	X
Significant wildlife habitat	X	X	X
Significant ANSIs	X	X	X
Coastal wetlands	X	X	X
Fish habitat	X	X	X
Habitat of endangered species and threatened species	X	X	X
Linkages	X	X	X
Life Science ANSI			X
Permanent and intermittent streams			X
Lakes (and their littoral zones)			X
Seepage areas and springs			X
Wetlands			X



Woodlands

- Woodlands are important for wildlife, cycling of nutrients, carbon and water, moderating the impacts of climate change and the urban heat island effect, and improving the overall health and wellbeing of residents.
- Process for identifying significant woodlands as a **‘key feature’**:
 1. Identify and map ‘Woodlands’ in the Region based on defined criteria
 2. Develop and apply criteria to determine ‘Significance’.
 - Criteria to identify significant woodlands can include size, age, proximity to other features such as watercourses, wetlands, and the Great Lakes.
 - size criteria to identify significant woodlands may vary geographically and in urban vs. rural areas.
- Local and Regional Tree By-Laws are a related tool for the management and protection of trees and woodlands. Following the completion of the new Niagara Official Plan there will be process to ensure alignment with the Regional Tree By-Law.



Natural Hazards

- Flood Plain
 - Shoreline
 - Erosion
 - Unstable Soils
 - Unstable Bedrock (Karst)
-
- These features/areas can provide connectivity, and support hydrologic functions and “natural processes that are necessary to maintain biological diversity and natural functions”



Species at Risk

- Regulated under the Endangered Species Act (ESA)
- Responsibility of Ministry of Environment Conservation and Parks (MECP) to enforce ESA and issue permits
- Responsibility of municipality to ensure conformance with policy 2.1.7 of PPS
 - Habitat of endangered species and threatened species



Photo credit: Wasyl Bakowsky



Photo credit: Sam Brinker



What is a Water Resource System?

- “A system consisting of ground water features and areas and surface water features (including shoreline areas), and hydrologic functions, which provide the water resources necessary to sustain healthy aquatic and terrestrial ecosystems and human water consumption. The water resource system **will** comprise **key hydrologic features** and **key hydrologic areas**. (based on PPS 2014)”
- Provincial plans require that “Planning authorities shall protect, improve or restore the quality and quantity of water by:” ... “**identifying water resource systems** consisting of ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas, which are necessary for the ecological and hydrological integrity of the watershed”.



Water Resource System (WRS)

Water Resource Features and Areas	PPS 2014	Growth Plan 2017	Greenbelt Plan 2017
Ground water features	X		
Hydrologic functions	X		
Shoreline areas necessary for the ecological and hydrological integrity of the watershed	X		
Headwaters	X		
Rivers	X		
Stream channels	X		
Inland lakes	X		
Recharge/discharge areas	X		
Associated riparian lands	X		
Significant groundwater recharge areas		X	X
Highly vulnerable aquifers		X	X
Significant surface water contribution areas		X	X
Permanent streams		X	X
Intermittent streams		X	X
Inland lakes and their littoral zones		X	X
Seepage areas and springs	X	X	X
Wetlands	X	X	X

Watercourses

Watercourses convey water and can be characterized by their size and flow regime. Types of watercourses include:

- Headwater drainage features
- Ephemeral streams
- Permanent and Intermittent streams
- Rivers (higher order watercourses)
- Agricultural swales, roadside ditches, and municipal drains

As a component of the natural environment systems, the new Niagara Official Plan will need to identify watercourses in order to conform with Provincial plans.



Types of watercourses: headwater drainage feature (top) and permanent watercourse.



Watershed Planning

- Planning at a watershed scale that considers the relationship between the human and natural environments - with a focus on protecting water resources
- Watershed planning in the Province has been evolving for decades -
 - The 2014 PPS and 2017 Provincial Plans place a much greater emphasis on integration - planning and land use activities must be “informed by” watershed planning
- The new Niagara Official Plan will need to provide a framework and policies for watershed planning
- Additional consultation and engagement during any Watershed Planning process
- Water Resource Systems shall be informed by watershed planning



Buffers and Vegetation Protection Zones (VPZs)

- Mitigation tool for new development
- Requirement for buffers
 - Minimum – applied through development planning applications and not to existing uses.
- Prescribed – opportunity for refinement through approved study
- Greenbelt Plan and Growth Plan require 30 m VPZs - Exemptions for agricultural uses
 - Crops can be planted in VPZ
 - For new buildings for agriculture-related activities in Greenbelt Plan area a reduced buffer of 15 m from watercourses that also function as agricultural swale, roadside ditch or municipal drain



Vegetated 30 m buffer between fenced property line and natural feature (top photo). Vegetated riparian area between watercourse (off image to right) and agricultural field (bottom photo)



- Two of the most significant threats to the natural environment
- Natural environment systems are an important tool to reduce risk and mitigate the impacts of climate change
- Many invasive species in Niagara including Emerald Ash Borer. Additional tools beyond the scope of the Official Plan Policies will be required.



Trends and Issues

Offsetting

- May represent an opportunity but introduces a concern
- Mitigation hierarchy -> offsetting as last resort
- Restricted to minimum types of features (e.g. small, isolated, limited function)
- 'No net loss' or 'net gain'
- Offsetting ratios
- Location



Mapping the Natural Environment System

- NHS and WRS
- What features to map?
 - Available data
 - Accuracy
- Not all features/components can or should be mapped
- Policies to permit refinement of the boundaries of features



Ongoing Consultation and Engagement

1st major point of engagement focusing on education and sharing information:

- Local Councils
- Public
- Local Planning Staff
- Agricultural and Environmental Stakeholder Groups
- Development Community
- Indigenous Groups
- Planning Advisory Committee (PAC)
- Agricultural Policy and Action Committee (APAC)
- Region's Planning and Economic Development Committee



Next Steps



1. Complete 1st Point of Engagement and finalize Background Study and Discussion Papers
2. Identify and evaluate options
3. Present preliminary preferred option to Regional Council and initiate 2nd Point of Engagement



Roundtable Discussions / Feedback

- 4-S exercise
 - Sticking — that is, resonating strongly?
 - Surprising — that is, unexpected or at odds with your take on things?
 - Stressing — that is, causing some concern?
 - Strategically important — that is, of critical importance going forward?



Key Issues Exploration

All groups to answer:

- Are there natural areas or features in Niagara Region that you feel we should know about and should be considered for protection (and why)?
 - “Does your group or organization maintain any mapping or data that could be made available to the Region to support our work?”

One designated questions, additional questions optional:

1. What does a healthy natural environment system look like in Niagara Region? What components and features are included?
2. What are the top 3 Niagara natural environment issues?
3. With impacts to biodiversity and changes to the natural environment resulting from climate change, invasive species, and other threats, what needs to be considered in designing a system that is sustainable for the long-term?
4. What role can the environmental community play in helping to meet the goal of a sustainable and healthy natural environment system?
5. Provide some words or phrases that describe what your ideal Niagara Region looks like.
6. What do you see as the biggest challenges and/or opportunities for Niagara’s natural environment system planning?



Niagara Region

Planning & Development Services

1815 Sir Isaac Brock Way,

PO Box 1042, Thorold, ON L2V 4T7

Tel: 905-980-6000 Toll-free: 1-800-263-7215

Fax: 905-685-0013

niagararegion.ca

Natural Environment Work Program – New Niagara Official Plan May 16th, 2019 - Environmental Stakeholder Groups Workshop 6:00 - 8:30

Key Issues Exploration:

Consider these questions based on your experiences with the natural environment in Niagara Region.

All groups to answer:

1. Are there natural areas or features in Niagara Region that you feel we should know about and should be considered for protection (and why)?
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Natural Environment Work Program – New Niagara Official Plan
May 16th, 2019 - Agricultural Community Workshop
1:30 - 4:00

Key Issues Exploration:

Consider these questions based on your experiences with agriculture in Niagara Region.

1. **Finish this sentence:** Farmland and the natural environment can coexist by...
2. With changes to the natural environment and agricultural practices resulting from climate change, invasive species, and other threats, what needs to be considered in designing a system that is sustainable for the long-term?
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Niagara Region Natural Environment Work Program Stakeholder Workshop – May 3rd 2019

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 3rd, 2019.

Sticking — that is, resonating strongly?

- Complexity
- Interrelationship
- Designations not overlays - stronger

Surprising — that is, unexpected or at odds with your take on things?

- Idea to have H on environmental adjacent lands
- 500 m linkages
- Enhancement areas
- 50-200 m local linkages

Stressing — that is, causing some concern?

- Constant change to policy
- Governance review
- Invasive species - how to deal with affect on woodlands, etc.

Strategically important — that is, of critical importance going forward?

- Articulate clearly urban and rural requirements
- Prefer site specific setbacks to environmental features to having formal/regulated setbacks. Reductions would trigger ROPA
- Climate change - ie flooding (ie Lake Erie)

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 3rd, 2019.

Sticking — that is, resonating strongly?

Appears comprehensive approach

Surprising — that is, unexpected or at odds with your take on things?

NPEA removal from SWM disconnect

Stressing — that is, causing some concern?

- lack of clarity on field verification work for this exercise
- Timeline - provincial changes.

Strategically important — that is, of critical importance going forward?

Connection between policy flexibility and field verification

- look at climate change LTD. - climate change section
- look at options on transitional areas /
↳ policy flexibility, enhancement.

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 3rd, 2019.

Sticking — that is, resonating strongly?

Surprising — that is, unexpected or at odds with your take on things?

causing some concern?

- WILL COME WHEN THE MPS + DETAILS ARE RELEASED.
- NEED FOR SOME LEVEL OF OFFSETTING CONSIDERATIONS TO ALLOW SOME DEVELOPMENT TO OCCUR. BUT APPROPRIATELY TO ENHANCE EXISTING FEATURES IS A MEANS OF NO NEGATIVE IMPACTS.
 - ↳ OTHER JURISDICTIONS ALLOW IT BASED ON REPLACING FUNCTION LOSS, NOT JUST A 1:1 RATIO

Strategically important — that is, of critical importance going forward?

GIVEN SIGNIFICANCE OF RURAL LAND USE REGULATIONS, NEED FOR FLEXIBILITY AND COORDINATION WITH VARIOUS AGENCIES. PROVIDE INTERACTIVE MAPPING TO SHOW FEATURES, AND UPDATE/REFINE AS STUDIES ARE COMPLETED/PROVIDED. ABILITY TO COMPENSATE FOR FEATURES TO RESOLVE AGENCIES COOPERATION.

#1

- offsite features + requirement for completion of EIS
(ie. wetland on neighbouring property, adjacent property needed to complete EIS for development)

issues in agricultural uses requiring structure (medical marijuana) and VPZ / buffer from woodlot - ag uses do not typically require buffer from features, buffer required because of structure

lack of transitional policies + fast changing policies
impact implementation / interpretation of policies

requirement for buffers regardless of what EIS states
re: significance of the features

implementation of buffer / VPZ on adjacent lands to subject property

Niagara Region: Natural Environment Work Program Stakeholder Workshop – May 3rd, 2019.

Sticking — that is, resonating strongly?

Surprising — that is, unexpected or at odds with your take on things?

Province is in the business of regulating the construction of buildings specifically

Stressing — that is, causing some concern?

Regulatory Act vs Planning policies which don't align (ie. buffers from features)

-focus/consideration for features within + outside of urban areas - greater protection for features w/in rural/ag areas? how does this impact growth w/in urban areas?

Strategically important — that is, of critical importance going forward?

consultation strategy

Flexibility (eg. zoning is applicable for some details (eg. London) but be more restrictive than Province (to avoid compliance issues)
Tie into other plans/projects (eg. PRA - infrastructure) permitted
Alignment of agency policy sets (eg. Region vs NPA)

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 3rd, 2019.

Sticking — that is, resonating strongly?

- How will new policies be implemented
- Setbacks in ROP -- pot. need for ROPA → put in zoning
- Need for transitions (make sure it gets into OP)

Surprising — that is, unexpected or at odds with your take on things?

- Staff vs. consultant roles
- No transition
- Mapping changes in Prov. NTHS

Stressing — that is, causing some concern?

- Abrupt changes to nat. heritage mapping from Province
- Provincial changes (PPS, CA Act) → how to keep up
↳ show conformity w/ ever changing documents
- Interpretation conflicts
- Infrastructure permitted -- ~~but~~ (to wipe out woodlands) to wipe out features but can't for a ^{new} home on lot of record

Strategically important — that is, of critical importance going forward?

- Timing - need ASAP, no public consultation yet
- Flexibility (eg. zoning is applicable law)
↳ no need for some details (eg. London)
- Can't be more restrictive than Province (to avoid compliance issues)
- Tie into other plans/projects (eg. Phragmites, EAs → infrastructure) ~~permitted~~
- Alignment of agency policy sets (eg. Region vs. NPCA)

Q5. Mapping

- importance of ground-truthing
- use of apps to delineate feature boundaries
- GPS
- Get georeferenced info from consultants for each applications
- Central repository (i.e.
- Use of existing datasets (eg. MNRF → redact sensitive info)
- Perhaps Hamilton? User friendly → availability to download

Q9. "No negative impact" is too subjective
↳ "worm can't eat"

"No significant -ve impact" would be better
Restoration HAS to be factored in
↳ plus overall benefits (eg. economic considerations)
↳ need bigger picture thinking

"Net gain" → emphasis positive results
↳ developers want good development

Q12a. Municipalities don't have funds to improve natural features - we rely on developers.

↳ public ownership of nat. lands wouldn't happen without development

pg. 2 →

New OP

- Eventually going to Province for approval
↳ don't want to undermine ~~the~~ flexibility

Q9 "No net loss" - ~~would be~~ good thing b/c
it's compensation w/in same features

Q2. Invasive species -- native can be
↳ climate change will change which
species thrive

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 3rd, 2019.

Sticking — that is, resonating strongly?

Is that the Nat. Env. System includes NHS + WRS

Surprising — that is, unexpected or at odds with your take on things?

- Lack of link of NHS to cultural heritage landscapes
- Lack of focus on what Region will do to support the Nat. env. system.
- too focussed on development/planning
- how can municipalities budget for natural heritage restoration.

Stressing — that is, causing some concern?

Is that the Natural Env. System is separated from Agricultural System
Designations are a stressor because you'd get it wrong.
It's extremely complicating
Inconsistent definitions

Strategically important — that is, of critical importance going forward?

- Accurate mapping that we can rely.
- Flexibility for change without an ROPA
- Climate change adaptation → the system is not static
- Restoration of system that is degraded *
- Warmer and wetter → what will it look like.
- putting a buffer on it, doesn't actually conserve it → need enhancement
- Invasive species are the biggest threat to biodiversity.
- Strategic planning outside of planning act applications
 - ↳ develop biodiversity strategy
 - ↳ Stewardship

Table 4
(Adele)

TABLE 4

Q 4. What resources would assist w OP policy implementation?

- offsetting guidelines #
- flow charts for planning process
- Social media information releases <.
- include mapping tools → links to data
- Visuals to assist implementation
- no negative impacts guidelines. (look at Ontario Heritage Toolkit)

Q #2 climate change/invasives...

- Policies that also include support for Stewardship inside the feature; not just a line around it
- policies for Low Impact Devt - Develop a monitoring program for follow up to approvals, could be in partnership w other agencies.
- Restore riparian zones
- Focus restoration in headwater areas
- rapid response protocol for invasives.
- long-term management - set canopy cover targets.

Q #6 Devt community role.

- embrace low impact development
- do water balances
- Work w municipalities for Green Development Standards
- do net zero development

(Adèle)

TABLE 3

QUESTION 3

[CRITERIA TO BE CONSIDERED]

WHAT COMPONENTS TO INCLUDE:

- Significance - what's included and what's not

→ PSW

- PSW vs non-PSW

- Greenbelt area vs outside of Greenbelt

- system should be consistent across the Region

- how they treat the linkages / enhancement areas.

→ restrictive.

→ how to determine components to evaluate linkages

→ fairness - constrain one property and not the other

→ what's included in linkage.

→ more direction needed in policy

→ target species?

→ restoration

→ how much effort

→ who manages it?

→ long-term guidance needed.

→ funding

→ how does this cumulative affects

→ who enforces it?

→

→ BUILDING PERMIT VS DRAINING PERMITS

→ is the PDHS meant to apply outside of the Planning Act.

→ how?

→ CONSISTENCY IS KEY!!

GUIDANCE DOCUMENTS + CRITERIA

[4]

→ WATERBODIES REGION has good guidance on what is included when your delineating features.

→ GUIDANCE IS KEY
→ stating woodlands

→ RESOURCING OF MUNICIPALITIES

→

[5]

→ interactive electronic mapping
→ mapping should be linked to policy
→ better mapping can give false impressions
(wetland not mapped but it's actually there)

→ updating mapping changes should occur routinely.
→ for all species including ECAs.

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 3rd, 2019.

Sticking — that is, resonating strongly?

- Client Govt Plan Changes - more restrictive for the time being.

Surprising — that is, unexpected or at odds with your take on things?

- As mentioned in the report around all features

Stressing — that is, causing some concern?

- All the Provincial Changes
- How Linkages / Restoration Areas will be enforced (very subjective)
- Operating and how it will grow
→ very subjective

Strategically important — that is, of critical importance going forward?

- Consistency across Applications / Agency
→ uniform interpretation / cross jurisdiction
- Invasive Species Management Plans
- Ash (is significant?)
→ What comes next?
→ Different comment with land changes
- Buffers
→ Should all be treated the same?
→ Pinch Points - variable with buffers

Niagara Region: Natural Environment Work Program Stakeholder Workshop – May 3rd, 2019.

Sticking — that is, resonating strongly?

how restrictive the provincial policy changes are and how they will change or revise development applications.

Surprising — that is, unexpected or at odds with your take on things?

Emerald Ash Borer → policy implications and that the Region is looking @ a policy

Stressing — that is, causing some concern?

- the need for mgmt strategy for Invasive Species.
- NHS system overlay vs agricultural designation (what does this mean for zoning)
- NHS system that the province has mapped and how the Region is going to have to ground truth it.

Strategically important — that is, of critical importance going forward?

NHS or

* provincial policy changes / governance review / and how this impacts applications in process
→ ie (more restrictive / less restrictive)

Question ②

- SAR - reintroduce extirpated plant species back as the range (moves (ie Carolinian Zone) moves back)
- wetland restoration should be a priority - identifying where in the floodplain it should be done * most opportunistic area
- Invasive species the magnet of that - we just can't wait for these areas to die off - need a strategy

→ Natural heritage supporting areas should be considered in OP

- would be green infrastructure
 - carb. sequestration
 - LID planted
 - constructed wetlands
 - urban canopy
 - biodiversity enhancements (need secondary species in (especially those that place) not PSW)

* need to change the way we think of Wetlands → change the story to flood control, attenuation, storage → we just think of their importance of Natural Heritage system. *

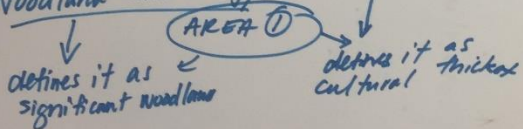
* putting a "Value" on Ecosystems *
monetary

+ should the province think about funding a program that would buy these properties that are restricted environmental areas, flood plain areas

Secondary Question #⑦

↳ having clear definitions in the bylaw and that they mirrored other policy definitions (ie. tree canopy)

↳ Woodland methodology vs ELC classification



~~Recommendation~~

* use flowcharts

#6

- is it the role of the devel. community?
- preserve natural system as good for marketing
- requirements for SWM impacts on smaller developments/areas - impractical/expensive
 - look at outflow on watershed level & developers contribute → implement systems approach at development stage
- Offsetting
 - mitigation resulting in incremental reduction
 - offsetting & enhancement provides tools to improve natural systems
- Opportunity for Stewardship
 - Provide opportunity for appreciation by landowners of natural areas → trails, etc.
- "Safe Harbour" - short term benefits

0.5 15

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 3rd, 2019.

Sticking — that is, resonating strongly?

Consideration for Addressing Invasive Species/
Impacts on Significant Woodlands, etc.
- Flexibility to make changes

Surprising — that is, unexpected or at odds with your take on things?

Stressing — that is, causing some concern?

- No Flexibility
- Accuracy of NHS Mapping

Finding Balance between
Environmental Policies
and Landowner/Developer
Interests

Strategically important — that is, of critical importance going forward?

Flexibility for Site Specific Circumstances
Consistent Definitions
e.g. Significant Woodland - ROP vs. Provincial

6) Gap expectations developers / property owner
what can go on property
- "It's not viable"

- Use natural features as a selling/marketing point. Mature trees.

- Sustainable landscaping - bioswales
building design

- Use environmental features to create a unique environment/development for residents

- different variety of trees

- green infrastructure

Land efficiencies - build with

Differences in interpretation of Regional DP Rules

- NPCA

- new Regional staff

Open - use of natural features

Open - use of natural features

Open - use of natural features

②

Adaptability - Resiliency (ie. variety species permeable surfaces)
Stewardship ——— Connectivity (CNHS)
Incentives

Responsiveness - to emergencies

Pro-active policies

- not development only focused
- adaptability / resiliency
- ecosystem management

Councils / OP policies receptive to obtaining Environmental land or having public / private environmental groups (Heritage Trust, NPCA)

Land efficiencies - build well

Differences in interpretation of Regional OP Policies

- NPCA
- now Regional staff

Urban - can it be more flexible in urban areas and to land uses (ie open space / parks within a buffer should be allowed)

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 3rd, 2019.

Sticking — that is, resonating strongly?

Surprising — that is, unexpected or at odds with your take on things?

- Growth Plan changes → Feature policy application in Niagara.
- Prov. + Region restrictive policies

Stressing — that is, causing some concern?

Strategically important — that is, of critical importance going forward?

- Lots of information, opaque
 - Public understanding can be restricted → doesn't allow for as much pushback
- Policy changes so fast → hard ^(public) to process before needing to understand new
- Clarity on "Net-Gain" "Net-loss" →
- inside UA - designated for growth → yet need discussions on how infill around features can work.
 - reverse thought → what is negative impact on developing growth areas when

- Process for public input, beyond PICs
 - where + how this will work
 - Landowner concerns (features on properties)
- Communication of events for OP development etc. (how can public find out)
 - Facebook/Instagram
 - Linked in All Social media

isn't considered
diff. for
prop.

TO

FB

10:00

Table #11 - Karen

Question #5

- open data → interactive mapping
 - schedule to mapping app
 - ex. type in address + see features at site
- high accuracy where possible.
- site visit refinements straight to mapping
 - policy to allow for this.
- drone technology to expedite mapping vs. ground
- consider expanding mapping/surveying capabilities at Region
- Quick + updated mapping → real-time as possible.

scope

— Consideration of when man-made action results in a feature becoming "designated" + applied restrictions under policies — criteria for designations

— criteria in policies actually sometimes causes people to "get rid" (fill in, cut down) so they don't get stuck to policies that restrict them in future.

— option → use criteria which uses human interpretation, background, current considerations

9

see graphic
separate paper

Table #11 - Karen

- defining how to offset, shouldn't be prescriptive
- flexibility of options
- case by case flexibility
- Urban Area considerations → how to develop
- flexibility to "fill" out feature in exchange for developing in other part of lot(s).

different
interpretations

- no net loss → can't cut anything?
- net gain → ex. cut 5 plant 10

*
Separate thoughts

- consideration of when man-made action results in
 - o feature becoming "designated" + applied restrictions under policies - criteria for designations

- criteria in policies actually sometimes causes people to 'get rid' (fill in, cut down) so they don't get stuck in policies that restrict them in future.

- having opposite
effect of
policy intention

- option → use criteria which uses human interpretation, background, general considerations when defining features

→ Stewardship is not enabled because of fear of future policy implications

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 3rd, 2019.

Sticking — that is, resonating strongly?

- natural environment an evolving system / dynamic system
- invasive species - rapid impacts

Surprising — that is, unexpected or at odds with your take on things?

- no transition provisions for provincial mappings
- width of linkages

Stressing — that is, causing some concern?

- changes to Growth Plan - understanding the impacts
- mapping of features / refinement
- ensuring mapping reflects features on the ground
- communication / information sharing with landowners - inform people of changes being made
- mapping needs to be accurate - onus should not be on developers

Strategically important — that is, of critical importance going forward?

- importance of consultation during mapping development
- communication of policy changes
- how to make system more robust + accurate
- importance of policy flexibility
- consistency across system - Region + LHM ops - alignment across jurisdictions in Niagara

#6

- natural features - view as opportunity / incorporate into dev. plans
- positive messaging with politicians / communities
- view as asset, not hindrance (eg. increased property value)
- exploring benefits / incentives for developer / celebrating successes
- celebrating efforts to maintain / enhance features / functions as part of development.
- • publicity + community awareness
- more flexibility in zoning

- #5
- importance of accuracy of mapping
 - communication with landowners
 - policy flexibility
 - guidance on climate change / speed of change
 - public opinion (eg. flooding, Greenbelt boundaries)
 - ↳ real life experiences

- #8
- Natural heritage reference manual
 - Regional + local op mappings
 - Navigator
 - Google Streetview
 - Natural area ~~map~~ inventory
 - Wildlife Atlases
- * City of London - Invasive Species protocol

- #1
- working with min. setbacks

STO
Q4

- Scoping criteria as early as possible prior to pre-consult.
- Timeframe for TOR approval - Push time frames prior to sensitive field time windows
- * - Where criteria are interpretive - need regions interpretive rationale ~~at~~ in a framework
- * - Examples or characterizations of negative impact and what can be mitigated.
- ~~Workshop before sensitive time window~~
OA
- Use webinars for explanation
- * - Policy clarity on responsible agencies.
- Policies and guidelines to ensure there can be open discussion for adjustments on features where significance has changed or new feature.
- * - Weight credibility to fieldwork over mapping

Q3

- URBAN VS. RURAL PRIORITIES
- TYPE OF DEVELOPMENT
- LOCALIZED PLANNING ISSUES/INTERESTS FOR TYPES OF DEV.
 - ↳ OTHER ECONOMIC FACTORS, JOBS, HOUSING AFFORDABILITY.
- RECOGNITION THAT ITS NOT A ZERO SUM GAME. RESTRICTING INFILL CAUSES OUTWARD PRESSURE + VISA VERSA
- RARITY OF FEATURES, NOT ALL ARE CONSIDERED EQUAL.
- PRESENCE OF INVASIVES
- GREATER ABILITY TO RANK + CLASSIFY FEATURES + PERMISSIONS FOR EACH.
- CONSIDERATION OF FUNCTIONALITY OF LINKAGES
- HOW WILL EXISTING PROJECTS BE GRANDFATHERED, AND WHAT IS THE STATUTE OF LIMITATIONS?

Q9

- TERMS ARE SUBJECTIVE AND SHOULDN'T BE USED.
- ¹
THOSE • SHOULD BE MORE ENFORCEMENT OF POST CONST. MONITORING
- SYSTEMS COULD BE PUT IN PLACE TO HAVE CA'S ~~TO~~ DO THIS WORK IF FUNDED BY THE RESPONSIBLE DEVELOPMENT IF OFFSETTING OR COMPENSATION WOULD BE ALLOWED

- Ag
- ④ Sweden is not accurate! biased in favour of primacy of NHS
- All man-made in NOTL
 - if possible - good pictures mapping would be great.
 - Need for more clarity on where NHS is and is not
 - What is a feature and what is not a feature
 - Consistent mapping and policy is important
 - Should be more of an ability to establish contact - specific decision making processes.
 - Should be common-sense.
-
- ② Big differences between north and south
- Challenges in Greenbelt Plan
 - Very concerned about impact on natural system mapping
 - Do not believe that there has been discussion about separating agricultural
 - Should recognize that north has limited natural systems
 - Concerned about naturalizing man-made features.
 - Don't forget about 725,000 trees in NOTL.
 - Don't support 30% forest cover idea as a natural principle as it relates to agriculture
 - Landscape has changed dramatically below the brow (manufactured landscape)
 - Thousand of miles of tiles
-
- ⑥ - ag community has adopted many new best practices with spraying
- greenhouses are recycling water.

TABLE 5

Question 5

- Agriculture can cover 50% of the land
- bring in tourism
- if not farmland likely to be lost (prevent urban sprawl)
- safeguard carbon from the atmosphere (crops)
- diversity has allowed for increased yields while maintaining healthy soil technology
- lands mitigate flooding.
- decreases erosion as compared to urban/suburban areas
- corridors for animals / food
- heating opportunities / recreation.
- buffer between urban centers and natural wildlife areas.

Question 1

- cover crops
- providing pollinator habitats
- feed wildlife
- ensuring that farming is sustainable
- respect between farmers and recreational users (snow mobile trails)

Question 2

- importance of irrigation to sustainable farming
- research - govt driven as industry/private can be biased
- ensuring that farm drains remain farm drains
- farmers' seasons are later → mapping needs to happen at a proportion - mapping at right time of year
- change in government → we need consistency
- who pays for invasive species management?
- invasive control requires exemptions - use of pesticides
- would be great to work collaboratively with native and other agencies.

Question 3

- agricultural mapping exists → implement it.
- update drainage mapping.

[3]

- recognize the positive impact of orchards and vineyards in sequestering carbon
- if farmland isn't protected, what happens to it.
- helps environment by cleaning up land

- Q7: - Recognize farmland + ag. infrastructure isn't natural → provide separate policies + mapping
- Ag
- People writing ag. policies must know agriculture
 - OWES process should be done collaboratively with landowner and able to appeal the findings -- only find out when you apply for a big permit

Q3. cont'd → "Air currents" in vineyards are req'd → woodlots beside vineyards impede wind flow, making them more susceptible to disease, cold air, etc.

Q5. Tie with Q6 → farmers protect watercourses thru best mgmt practices

★ → Ag. community/industry leaders need to be consulted before new policies are finalized

Q2. Invasive species (eg. Cattails AND phragmites) need to be addressed for long-term sustainability of ag.
 lantern flies

→ ~~should be~~

- proof of invasive species but climate change is still controversial -- shouldn't be hung up on it

Q5. Most woodlots are on ag. properties -- want them recognized but no req't to enhance ~~them~~ them

Challenge:

- How to categorize fish habitat? Type 1 vs. 2, Direct etc.

- perennial crops provide with the natural habitat

Q1. Farmland & the nat. env. can coexist by...

- common sense & good farm practices.
- by recognizing they're different ~~& recognizing~~ and treating them ^(-farmland + nat. env.) such

Q4. Agri. infrastructure (ponds, farm swales + municipal drains) should not be mapped because they are NOT natural features/part of NHS

- perhaps they should have a diff. map?
- b/c they're treated differently (eg. can't + restore + enhance municipal drains)

Q3. Setbacks/enhancements may be well-intentioned but why should farmers enhance?

- enhancements adjacent to nat. features (eg. woodlots) is difficult → diseases/come from adjacent (insecticides/rodents/bird damage etc.)
- woodlands (for example) → they impact ag.

- can't "enhance" without recognizing impacts to ag.
- why would farmers increase woodlands on their lands? They'd have to (enhance) use more spray to combat disease etc.

Q6. - Irrigation provides water to the NHS downstream of the far that wouldn't otherwise get water

- permanent sod planted up to edge of drain/water features
- planting of perennial crops (trees/vines) absorbs CO₂
- integrated pest mgmt (by scouts) to monitor orchards/vineyards to reduce pesticides
- perennial crops provide wildlife habitat + corridors

Sean
② - Don't limit the ability of farmers act quickly (i.e. pesticides for phragmites) or act in general.

• Balance between environment & crops.
• Biosecurity.
(What needs to be done to get product to market)
↳ tourism

- New insects (lady beetles). Spray.
- later fly from Pennsylvania.

• Keep Farmers / Agriculture at the table. Dialogue.

• Traffic.

• Climate Change is impacting Water Flow. It is not the same it used. Drainage & Irrigation.

• Farmers have a vested interest in their land.

• Look at options for resilience. Need to move faster in new technology.

• Changes has happen fast. Policy review needs to keep up.
5 years?

④ • Consider Multiple layers i.e. Ag drain is designation
→ Fish habitat or other Env. features are overlay.

• Maybe not wrap fish habitat.

• Do linkages need to be mapped.

• After the System is designed ~~an appeal process~~ a fair appeal Process that can react faster than five year appeal of OP.
↳ act quickly and make changes
↳ Make Mapping 'a living' document

⑥ BMP's.

↳ ~~BMP's~~ IPM (Integrated Pest Management)
↳ Safe area Management
↳ Rotating product
↳ following buffers

↳ Using ~~least~~ amount of chemicals as process
(Pub. 360)

↳ Sunny Morning!

Table 1: Jen W.

no x in will
Table 3

Niagara Region: Natural Environment Work Program Stakeholder Workshop – May 16th, 2019.

Sticking — that is, resonating strongly?

- Concern about mapping of water courses (Duff's)
- Man made vs natural waterways
- Buffers → have to be science based.
- Irrigation canal should not be allowed in natural drain to direct water to downstream users.
- Restoration in environment area → must consider nature next to area
→ insect / disease
→ increased bird density to crop
→ recreation of an old dam.

Surprising — that is, unexpected or at odds with your take on things?

- Who separates - Region vs Province - if provincial rules change.
- existing building vs other buildings
→ direct restrictions depending on building
→ and impact succession planning.
- will landscape be affected if these policies get merged?
- will there be compensation? if property gets impacted in order.

Stressing — that is, causing some concern?

- existing more water drain
remain than water drain
and are allowed to be
maintained as such.

- Municipalities don't maintain ditches with which has impacts
- Provincial RTR are not considering agricultural like they should.
- Policies not meant to impact - but what happens if they do.
- Natural water system → will there be public domain? (access)
→ trespassers.
- Interpretation of different policies
→ each township has different interpretation.
- if trespassers are allowed in non-managed natural corridor → how does this impact biodiversity?
- new tree bylaw update.
→ what will this look like
→ restrictions??
- municipalities don't maintain ditches
→ ditches maintenance not get regulated?
- impacts of fill being brought in that changes drainage.
- impacts of species at risk
→ new bird species comes to woodland which could have 30m restriction buffer.

Strategically important — that is, of critical importance going forward?

- What can be planted in buffers (CVR's)
→ how can that be managed (practically?)
- enhancement and linkage ditches / wetlands
- completed agriculture mapping should separate non natural habitat mapping

Community on what is a proper MHS

more focus diff. in policy

MONDAY

#

Table 1: Jen W.

Niagara Region: Natural Environment Work Program
Stakeholder Workshop - May 16th, 2019.

Table #1: Jen W.

Sticking - that is, resonating strongly?

Drains doesn't include compensation system and points to LSN/PSN
- is drains in not? - start in 1940s - start in farmland + will be done by mid-May

- remove municipal drains from mapping → + farm swales + irrigations
- flow will be seen b/c of drainage of farmland
↳ not Type 1 etc. Fish Habitat (full of phragmites)

- wetlands

30 woodlots have been remapped as wetlands → no reqmt's for EIS on farmland

Stressing - that is, causing some concern?

- ↳ stay outside woodland boundary
- irrigation ponds constructed decades ago w/in agri. swale (drawn from wetland canal)
↳ what happens if they're considered part of the nat. system or habitat?
↳ today they're identified as fish habitat
↳ must be removed!

- Greenbelt doesn't protect farmland -- more interested in fish habitat

- policy comes from Province -- would need to soften stance → every tree + pond isn't significant

Surprising - that is, unexpected or at odds with your take on things?

- Phragmites - not included in OP
- hand-dug ditch still shown → but it's gone on the imagery → need updated, accurate mapping.
- anything constructed (they are not fish habitat!)

- streams that drop 50' could be considered fish habitat → providing food

- drain

Strategically important - that is, of critical importance going forward?

- no more restrictive policies -- municipal drains aren't KHF's
- all features should be treated diff. under policy

- farm ponds (ag. constructed farm features) should not be identified/mapped
↳ ditches need to be maintained
↳ can't "enhance + restore" beside fish habitat → not applicable to mun. drains

- offshore buyers - farmland not being used is converting back to nat. heritage
* treat fallow fields diff. in policy

community or what is a proper NHS

Memo

Table 1: Jen W.

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 16th, 2019.

Sticking — that is, resonating strongly?

- Primacy of Ag over NHS. - overlay (depends on NHS policies).
- opportunity to provide input to map what is important.

Surprising — that is, unexpected or at odds with your take on things?

- planting in buffers was a bit of surprise info.

Stressing — that is, causing some concern?

- lack of clarification on overlay is a stress
- talk to MNR but not OMAFRA for input.
- definitions of watercourse
- what will be done regarding floodplains.
- not being allowed to build in buffer is a problem (not practical)

Strategically important — that is, of critical importance going forward?

- definitions of linkages
- little guidance for water resource systems
- How much weighting to primacy of Ag.
- NHS for urban area will have an impact on NHS features outside Agriculture Urban area

Table 1: Jen W.

Niagara Region: Natural Environment Work Program (Sean) Stakeholder Workshop – May 16th, 2019.

Sticking — that is, resonating strongly?

also irrigator-
of these
↳ civilisation
↳ what are they doing
wrong?

↳ Easier

So many layers.
So many layers of government
↳ Fed, Prov, Region
local, NPCA.

Surprising — that is, unexpected or at odds with your take on things?

Stressing — that is, causing some concern?

Man-made
ponds. These
can have fish

Conner that
current 'exceptions'
do not seem forward
Mapping
go. Where?
↳ tough to get
exceptions

Although they
can plant in
buffer, cannot spray
↳ setback in
irrigation

Woodlots that
farmers cannot maintain
Use. cut down
tree

Bio security.
People / tourists
coming into
field.
Liability.
Trails, paths.

Strategically important — that is, of critical importance going forward?

H2O
Water to farmers is of utmost
important.

Right to use land. is leaving
woodlots on land that now becoming
protected

Right to enjoy property.
Rights

Tourism
pressure in
NOTL.
↳ need to keep
this in mind.*

community or what is a proper NHS

Table 1: Jen W.

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 16th, 2019.

Sticking — that is, resonating strongly?

- What is the Region going to do about Fish Habitat mapping — include in OP?
- ↳ how to do?

Surprising — that is, unexpected or at odds with your take on things?

Nothing is surprising!

Stressing — that is, causing some concern?

- Natural disturbances — as ag drains
- municipal drains

Ag Farmers are not against fish

Comes into play with lot division and lot addition applications

Strategically important — that is, of critical importance going forward?

- lack of different rules north vs south
- how to deal with drains
- The province is very supportive of agriculture.
- issue of a need for portable water.
- Can this be done — outside of urban area
- need to brush out drains to keep the water flow.
- Drainage Act supp. to brushing cleaning out drains — Technical Fisheries Act mumps

Jen W.

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 16th, 2019.

Sticking — that is, resonating strongly?

- not enough finances + staff allocated to the Project for it to be done properly.
- effort being put forward / primacy of agriculture seems to be acknowledged.
 - whether its execution of it remains to be determined / seen / proven

Surprising — that is, unexpected or at odds with your take on things?

- that the agr. system is being designated and the NHA is being an overlay.

Stressing — that is, causing some concern?

- lack of "irrigation" being used / explained
 - how it be addressed in policy + how it will be incorporated in the NRS + NHA?
- lack of ground-truthing
- ability to make adjustments.
 - improper identification of man-made vs. natural features.
- proximity of features to agr. systems result in ^{obscures}

Strategically important — that is, of critical importance going forward?

- important to carry this out throughout the new NP.
 - ↳ agr. system primacy over NHA.
- proper identification of features. (ie. fish habitat)

Mangrove

#6 - Environ Farm Plans - voluntary
- high degree of application

- - Integrated Pest Management - Common sense
(when economic thresholds are crossed)
- - use cover crops instead of fertilizer
- - no till
- Grassed waterways
- tile drainage.
- livestock fencing - keep out of natural watercourses.
- greenhouse - closed system recycling.
- wineries - created wetlands to deal with wastewater.

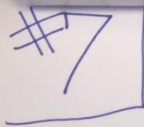
- #1
- Primacy of agriculture (ag has an inherent environ side in operation)
 - Can learn from both
 - * • farmers are first and foremost environmentalists

#5 - best management practices role.
- flip question

- Positives - wind breaks, clean water for raw and potable
- Managing Negatives - animal (deer, coyote - damage) birds

#7 - Opportunity - a proper NHS in urban area will help protect features in agricultural area.

#4 - Follow input of agricultural community on what is a proper NHS



challenge → identifying what are truly nat. heritage features
→ ground truthing

opp. - action → proactive for land-use planning
→ what are opportunities for Agr. land → requires action

opp. → prioritizing areas through policy

→ intent of policies → ex. safety is intent → so is there actually risk? → look at whole picture

→ is there something to protect and if so is there an actual risk.

opp. → balancing nat. env. w/ thoughtful planning
→

~~challenge~~

→ conflicts between policies ex. PPS + CA regs. etc.
→ who do you follow? Who has final say?

#4

- Farm drainage ditches (non municipal drain ID) → not natural watercourses → should not be mapped as such.

- fish hab → "potential fish hab" → water which feeds bigger channels (ex. feeds 12 mile)

- mapping not on-ground based

- science vs. person's interpretation vs. on-ground

- Agr. features → re-designated as nat. features
→ where is the limit?

ex. crops as feeding grounds for wildlife.

- man-made many years ago (ex. for stewardship)

- now have buffers on it + landowner is restricted

- Urban areas → don't change so much

→ Rural → changing often → consideration

→ maps don't reflect changing land scopes

#1

- working with the landowner

- common sense.

Table 1: Jen W.

Niagara Region: Natural Environment Work Program Stakeholder Workshop - May 16th, 2019.

Sticking - that is, resonating strongly?

~~Surprising~~ - that is, unexpected or at odds with your take on things?

Surprise → decisions not made on mapping
→ what does that mean?

→ "bad" on ground to determine exactly what is there → "real hazard" or nothing

- multiple levels of policy.

- Farmers are taking care of land, are good stewards → that should be considered → farmers take care of their lands
- understand tilling also contributes to runoff flow

Strategically important - that is, of critical importance going forward?

programs to encourage projects + plans to support natural env. → ex: plans to encourage enhancement
ex. Europe → compensation for hedgerows

→ using "aged" proven policies from other places as guides
→ understanding larger scale issues ex. lake levels
→ Niagara is diverse → agr. differs across
→ ex. development → how to compensate for changes to env. that are caused
→ using new tech (ex. drones) for precision mapping

- Invasive → taking care of invasives we can focus on maintaining our native species + nat. env.
- Invasive → ex. Phragmites → Region doesn't take on ditch cleaning
- concern about lack of maintenance of water due to development → how is Flow (previous vs. post development) considered?
- Growth (residential dev.) → what is their level of responsibility vs. Agr. Community?
- How does dev. community contribute to helping the Nat. Env. By system.
- How are responsibilities of these impacts addressed?
- Equal treatment between dev.

3

- our group finds this question insulting

- not using DDT + other harmful chemicals

- larger operations

→ not sure how more environmentally friendly we can become.

- attend conferences, read articles, attend workshops for best practice/ Ireland.
- farming community is already going above & beyond.
→ supports OMAFRA research + others.

6

- Research → grower now (funded by gov^{but} research is spurred by growers).

- targeted spraying (more frequent).

- soil tests (not over spraying)

- using cover crops.

- Concern - by using best practices is having an impact on agricultural uses/abilities

6. Words or phrases +

Provide some words or phrases that describe what your ideal Niagara Region looks like

Green - ecotourism - clean water - stronger education

Managed growth - affordable housing - affordable living

'leaders in environmental protection' and accessibility

natural areas accessible to all - less invasive species

Sustainable agriculture - openness, more informative on ^{regional} concerns

Stewardship opportunities and outreach ^{for all types of landowners}

#2. ^{what healthy natural system looks like?}

lakes - wildlife + forests have legal ^{status} protection.

- more linkages, no fragmentation

- biodiversity is restored

- Starting point is protection, then how development can fit around it → not the other way around

- Need strong goals + policy for protection + Restoration

- all features should be included in the system.

7. Challenges / Opportunities

broken trust - rebuilding trust → need environmental ^{committees.} ~~committees~~ but they need to be heard

get stuck in same planning processes

municipal budget should include restoration and

invasive species management

more stewardship opportunities

enforcement is lacking

strengthen environmental policies, not weaken

Shorelines

- End. spp.
- corridors / linkages
- Wetlands (Psws + LShs) - all wetland protections
- Wawaby Woods + Thundering Waters
- Wainfleet Bog
- Cultural landscape. (15/2)
- ANSI

- important bird Areas. (Niagara Birds Online)

- Buck University Geoconserv. \rightarrow good issue.
- \rightarrow Darren Platikas - workshops.
- citizen science platforms (eBird + iNat)

- long-term protection for features *

③ change "other" to development.

④ Development plan vs NHTs.

- transparency!
- Spatial mapping sensors
- Regional EAC is needed!
- advisory committee

- qualified comm.

- local food (re. sustainable systems).

② Wetlands
Woodlots
Shorelines
aquifers

⑥ Trust

having qualified people.

⑤ env'tal community wants to help. do not want to argue.

- env'tal planner. at the Region. (several).

- Env'tal stronger voice
 \downarrow concerns.

① NCC has data for their properties.

Env.

- Save Wantfleet has soil testing done.
for Lakewood camp in Wantfleet.
↳ Lake Erie water testing data.

4 → Can you map where the "threats" i.e., Inv. sp., are located in order to prioritize mgmt.

↳ Inv. sp. Management Plan

- should 1 final decision maker who takes responsibility for management.
- should identify man-made features, e.g. SW ponds & municipal drains, as part of water resource system
- linking health & well being to a healthy env.
& ensuring development/impacts recognize this.

6 → Biggest challenges:

→ no recourse when permit provided by NRCA for the removal/filling of wetland.

→ opportunity

↳ how much is left compared with other areas in S. Ont.

→ challenge → development pressure & economic pressure drive for development.

5 → Words

↳ sustaining/protecting what we have

↳ protect PRW.

↳ connecting features → ensuring connectivity

Table 1: Jen W.

May 16, 2019 - 6:00 - 8:30

Niagara Region: Natural Environment Work Program
Stakeholder Workshop - May 16th, 2019.

Sticking - that is, resonating strongly?

Better explanation of current policies
Buffer Zones → change in future
become greater for
climate change.
Offsetting - should be eliminated

Stressing - that is, causing some concern?

No Tools to deal w Climate Change
but offsetting being talked
about.

Surprising - that is, unexpected or at odds with your take on things?

- lack of info on Endangered Species
and process. → where are we in process
- No mention of green infrastructure, brown fields
- Surprised there are no environmental
organizations included
- add → lack of advertisement
- and other
take - why we doing another studies

Strategically important - that is, of critical importance going forward?

- Stop using offsetting and use
environmental planning
- plan environmentally to
protect and create
- Revival of municipal parkland
dedication for preservation
- Need targets and
better metrics for how
we are meeting targets.
- Have a Niagara Birding
Strategy.

... be limited to overland flow

... support + programs for landowners to help fight off hives

Table 1: Jen W.

May 16, 2019 - 6:00-8:30

sounds like people are starting to listen (heartening)
decrease in tree canopy b/c of invasives (EAB)
developer shouldn't just be able to develop those lands

need to establish our own standards, not lower the bar to Provincial benchmarks

- invasive species aren't separate from climate change \Rightarrow need to declare a climate change emergency

Stressing

- offsetting has no scientific basis - why are we looking at it?
- loophole of canopy dieoff
- no combined will for holistic watershed planning/mgmt (eg. 20 Mile Creek)
 \hookrightarrow eg. Kraft Drain rolled into watershed plan
- denuding of forests will further cause flood impacts

- more parkland dedication
- NRECA NHF was removed from their website
- need to include SWH criteria

- think about location
- need more advertising \Rightarrow public transit access needed
- **OTHERS**
 - ruin of ag lands by fill
 - greenfields vs. brownfields
 - clearly defining where growth can take place - not "leap-frogging"
 - green infrastructure needed

Surprising

- Not one env^m committee/organization being consulted
- No EAC at Region (used to be)
- No incentives for env^m groups

borrow from
TRECH, CVC, etc.
approach to maintaining
water balance
 \hookrightarrow keeping post & pre
development flows
same

healthy watershed has to
have 40% tree cover
(need to understand
where we are in
order to work to
those goals)

Strategically Important

- Scientific approach over pocket-lining
- focus on watercourse systems
- evidence-based policy
 - ecological-objective based policies across the landscape
- broader resource mgmt. cycle has to keep going on behind the scenes after this process
- working collaboratively with various agencies
- normalization of SWM \Rightarrow ad hoc watershed mgmt isn't acceptable - need a more holistic approach, not development-by-development
- watershed planning based on water balance, not quantity
 \hookrightarrow can't be shunted to overland flow

official support + programs for landowners to help fight Aflamer

Table 1: Jen W.

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 16th, 2019.

- More aggressive use of parkland
dedication

Sticking — that is, resonating strongly?

- Need to do better. Go above and beyond PROVINC. Enforcement. Want to strengthen Policy above minimum
 - ↳ Stormwater Mgmt. Pipes. Daylight (open system no pipes)
 - ↳ 1980's Region report on no

Surprising — that is, unexpected or at odds with your take on things?

- What is EAB's doing to our forest. (what are some natural pesticides)?
- Not everything can be mapped.
 - ↳ With all of the existing data.
 - ↳ historical maps. look at what was done in the past.

Stressing — that is, causing some concern?

- Designation errors. Good general that should be tender front.
- Overwhelming and challenging. Very hard to participate.
- Hard on fair families.
- loss of forest. Dumping + Farmland
- Pollution. Sewage overflows. Blackwater. (garage + laundry lane)
- Garbage Dumps.
 - ↳ incineration.
- Offsetting:
 - ↳ then no enforcement under Fed Fisheries Act.

Strategically important — that is, of critical importance going forward?

- don't go against God's law. Environment should be left the way it is.
- Policy that is informed by Science.
- Timeframes. Need data. 2021 is not far away. lots to be done.
- Public awareness. Consultation + engagement.
 - ↳ Political pressure.

- build up not out
- Financial support + programs for landowners to help fight off lawns

Developers. illegal cutting/dumping
Fines are too low.

May 16, 2019 - 6:00 - 8:30

Mapping

- mapping → understood can't always be mapped perfectly → but have to be objective about it because dev. community can use it to their benefit
 - be as accurate as possible
 - requires review by objective professionals

Surfacing Program

- map of Niagara ^{NHS} → only 1 East-West corridor
 - Niag. Escarp
 - why not shorelines (great lakes)
 - Niag. river.

Stressing

- offsetting → hard to quantify, allows loopholes
 - shouldn't be considered
 - understanding of connectivity
 - monitoring + follow up when it happens
 - typically doesn't happen
 - economic component why it never happens

- GMOs sprayed in round-up → shouldn't be allowed in buffer → "superweeds"
 - = more invasives.

- Phragmites → what to do?

Strategically Important

- buffers → should be ~~thicker~~ more strict around Agr. → filtering
- Monitors factors draining wetlands: East permission.
- Agri. incorporated important
 - keeping data up to date
 - groundwater should be evaluated + understood
 - when not happening buffers become very important
- porous paver → allows for saturation into groundwater
 - = interlocking or special asphalt → allows for saturation into groundwater
 - include in urban area regulations + policy
- encouraging dev. where redevelopment could occur instead of expansion into env.
 - build up not out
- financial support + programs for landowners to help fight Ash Lawn

1: Jen W.

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 16th, 2019.

Sticking — that is, resonating strongly?

- emphasis on connectivity.
- looking for potential restoration area.
- tying NE benefits to human health

Stressing — that is, causing some concern?

- How much is this sticking?
- Offsetting → who & what decides offsetting.
- accuracy of PSW layer from MNRF.
- Protection of all (locally significant)
- Mainfleet permitting removal of BAEA tree/ nest.
- How do citizens get Region to step in when impact at local level?

Surprising — that is, unexpected or at odds with your take on things?

- Offsetting.
- End. Species → need protection
- When ash die, why ~~are~~ is reforested or underplanting not happening?
↳ particularly after deer cut.
- How little this workshop was publicized.

Strategically important — that is, of critical importance going forward?

- Monitoring → contractors draining wetlands w/out permission.
↳ who is keeping an eye on this
- Using LiDAR / Drones to improve accuracy of mapping.
- New mapping → accurate mapping of wetlands.

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 16th, 2019.

Sticking – that is, resonating strongly?

- aquifer protection
- off-setting

Surprising – that is, unexpected or at odds with your take on things?

- off-setting (only w/ research).
uncommon
- not having addressed chemicals / run-off.
- ground-truthing local knowledge.
- little advertising → need better networking system to communicate

Stressing – that is, causing some concern?

- off-setting.
- ESA - Review above + beyond
- too much wiggle room for developers.
→ developers always win
- Doug Ford!
- this plan needs to be strong to cover lower level municipalities if amalgamation

Strategically important – that is, of critical importance going forward?

- off-setting. should not be considered.
- wetland protection
 - ongoing monitoring
 - landscape management.
- woodland protection long-term.
→ following the Regional treeing laws.
- aquifer protection:
 - evaluate all wetlands within the Region (YOWES)
 - Federal + Provincial Status of top consideration. Not just the.
- EAC
- shoreline protection
- ~~consultations~~
- links to linkages. & enhancement areas.
- stronger protections + enforcement.
- more communication

1: Jen W.

Niagara Region: Natural Environment Work Program
Stakeholder Workshop — May 16th, 2019.

Sticking — that is, resonating strongly?

Offsetting: is a topic for consideration.

Natural heritage system only done as an overlay → especially in the urban and rural areas - where system is not.

Protecting linkage and corridors, not 'islands of green'

Landscape level planning

Reliance on science - we only know what we know today.

Surprising — that is, unexpected or at odds with your take on things?

Offsetting

Linkages + enhancement areas → planning decisions need to be informed by science.

No discussion of green infrastructure or brownfields

No environmental committee at region

Limited consultation process → missing out on so much local expertise

Stressing — that is, causing some concern?

Offsetting: will be used as trade off mechanism.

There's been a lack of trust, and it needs to be rebuilt one step at a time.

Politicians are biasing decisions / conflict of interest
Feel like we give input, but nothing ever changes

Strategically important — that is, of critical importance going forward?

Offsetting: not scientifically valid; so if it's done it needs to be minimized through good criteria. Follow mitigation hierarchy. Need to think about who will enforce it to make sure it's done correctly.

This plan needs enough mechanisms to be defensible + enforceable; regardless of who owns the land.

Assign ~~ecological~~ value to natural system; in economic terms.

→ be careful about location (relative value)

→ Natural Assets: municipalities need budgets for natural systems too.

Need to set ambitious targets for protection and restoration. Need to know our ^{existing} cover numbers.

2021 UN - decade of restoration → region should participate in larger discussion

NAI + watershed plans are out of date, need to update.

Not allow fill back into old quarries

Peer review process of EIS should be used

Adele

Karen's table.

- study of private lands → NPCA (2015?)
→ should be looked at for this program

- Consult Nature clubs

NF Nature clubs
Bert Miller
Perry Field Naturalists

- land care Niag. → Niag. Nat. Heritage Ecological Framework.

→ Niag. Coast Comm. Collabo website

- 2010?

N.F. → Sig woodlots → in city

→ study → remaining woodlots → valuable info still there

- Thundering Waters → Significant area.

- Coastal wetlands.

#7 Challenge → sustainability → Toronto growth pushing into Niag.
What are the limits?

Challenge → Handovers → programs + funding + info → they want to help
but not great resources

Opportunity → to address this

→ get programs in place for land stewardship

Challenge mapping → all over, different platforms

→ unifying source would be helpful

→ data depot.

#6 - UNESCO Heritage Site → emphasize unique Nat. heritage of
Niag + try to enhance it.

- Sustainable.

- Connectivity.

#5 Educate the public → what can they do, reporting → citizen science
→ engage community more.

→ provide environmental expertise at all opportunities available

le 1: Jen W.

Common question:

*don't wallow in past -- let's move forward
with protections

- Niagara River doesn't prominently feature in mapping
- 12 Mile Creek headwaters
- Federal govt lands on Lake Ontario in NOTL (Old National Defense property)
- Lakeshores (where most rare species are)
- Clear delineation of wetlands (agreed to by multiple levels of govt)
- Carolian forest
- Full enumeration of existing slough wetlands
↳ see opendata ~~help~~ from "Open North"

Q1/2. Healthy system includes:

- balanced watershed (i.e., infiltration/evapotransp. + SWM flow protected)
- hard to answer at this point -- needs to be quantified + work towards obj's
(how we measure a healthy system, eg. % of woodland/wetlands, sloughforests, etc.)
- sustainability
- benchmarking against more forward-thinking municipalities (eg. neighbouring municipalities)
- urban forest canopy and by-law to enforce it
- transparent (open data for all discharges, eg. San. sewer disch, SWM, etc.)
↳ should be available online,
to ensure good water quality for ex.

~~Handwritten signature/initials~~

Data

NF Nature Club

- ↳ yes years & years of species lists
- ↳ Photos.

- E-Bird
- (naturalist)
- NAI

Climate Change

- Storms, flooding.
- Volume of water.

Niagara is unique

- Demand funding

Soil has not been placed that is what ties to diversity

Biodiversity

Water 2/3

Phragmites

- Native species
- Policies

1/3

TOP 3 Niagara Issue

- Raw sewage overflows / 280 in pamphlet. : Blackwater in Creek / Dirty.
- Preservation of Woodlands.
- Dumping of garbage, fill, debris, construction debris (illegal)
- Preservation of all habitat.
- Lack of watershed plans (became law)
- EAB / Mitigation & Restoration.
- Lack of enforcement



- lack in the forest Area.

Allow forest to restore, allow natural forest.

(Poor forest Mgmt)

↳ better forest management of Private Woodlands

↳ Strengthen the protection of at areas under threat.

"Encouragement Policies"

• Promote, undisturbed Soils, M.

we don't know for sure that Blackthorn has permanently interrupted succession

#30

Common Q

- #1 Use Collaboratives working on material to tap into - process (system is also process)
- a natural system includes areas in transition
 - the natural system is most important component of O.P.
 - resurrect a regional EAC. (lower tiers feed issues to regional EAC).
 - system - develop brownfields instead of natural heritage
 - a system which blends with economic (ecotourism) & recreation plan
 - use an ecological vision

#2 3 issues

- threat to successional & transitional habitats from inappropriate development
 - threat to old growth forests
 - how to link stewardship and restoration to increase biodiversity in to a land use policy plan (collaboratives)
 - ↳ how to address fragmentation
 - ↳ work w environ groups more often.
- other talk
↳ gov't needs to lead & educate public what an ecosystem is

#/. a) Two areas in south niagara ^{Falls} with old growth Black Gum trees - contact jsankay@cogeco.ca - she will send locations
Sherk Road area.

b) Thundering waters slough forest

c) Morgan's Point in Wainfleet (migratory route birds + butterflies)
Sand Dune. Entire point, not just the park
everything south of Lakeshore Rd.

d) all existing natural areas should be protected, and if there's a natural feature that's degraded it should be restored
Aligns with 'Canada Pathway to Target 1'

DATA → "Carolinian Canada Protected Area Strategy for S. Ont"

e) Wainfleet Bog

f) Marshville Forest (in threat by subdn)

g) Waverley ~~Woods~~ ^{Erie} Beach

h) decommissioned quarry sites should be naturalized.

DATA - Save Wainfleet Terry Maxner

DATA - Niagara Falls Nature Club → Joyce jsankay@cogeco.ca

Appendix C: Public Information Centre

Appendix C-1: Newspaper Advertisement of Public Information Centres

Appendix C-2: Display Boards Presented at the Public Information Centres

Appendix C-3: Comment Forms submitted as Part of Public Information Centres

NOTICE OF PUBLIC INFORMATION CENTRES

Natural Environment Work Program for the New Niagara Official Plan

OVERVIEW

The Region is developing a new Niagara Official Plan – a process known as a “municipal comprehensive review”. The Niagara Official Plan is a long-range policy planning document to shape Niagara’s physical, economic, and social development.

Natural Environment planning which includes natural heritage, water resources, and watershed planning is an important part of the process. The Natural Environment Work Program for the new Niagara Official Plan is progressing and we are currently undertaking the first major point of engagement. Niagara Region Planning Staff in conjunction with our Consulting Team will be hosting two public information centres (PICs) as follows.

PURPOSE

The purpose of the PICs will be to introduce the Natural Environment Work Program and to share some of the key findings of the Natural Environment Background Study and Mapping and Watershed Planning Discussion Papers. Including for example the following topics:

- Woodland and Wetlands
- Invasive Species and Climate Change
- Watercourse and Watershed Planning
- Natural Heritage Systems

These documents will form the basis of the project moving forward. We will be seeking feedback on key themes and issues of importance.

PUBLIC INFORMATION CENTRE DATES

Public Information Centre #1

Thursday May 30, 2019

5:30 - 7:30 pm

**West Lincoln Arena and Community Centre
177 West Street, Smithville**

Public Information Centre #2

Thursday June 6, 2019

5:30 - 7:30 pm

**Welland Civic Square – Community Room
60 East Main Street, Welland**

The PICs will be an open house format. The same material will be available at each location, and will be made available at niagararegion.ca/official-plan

MORE INFORMATION

For more information about the project please visit niagararegion.ca/official-plan or contact **Sean Norman**, Senior Planner, by phone at 905-980-6000 ext. 3179 or e-mail sean.norman@niagararegion.ca

If you require any accommodations for a disability in order to attend and participate in meetings or events, please let us know in advance so that arrangements can be made in a timely manner. Special accessibility accommodations and materials in alternate formats can be arranged by contacting the Niagara Region’s Accessibility Coordinator at 905-685-4225 ext. 3252 or accessibility@niagararegion.ca.



making our mark

NIAGARA OFFICIAL PLAN

WHAT IS AN OFFICIAL PLAN?

The Niagara Official Plan will be a long-range, policy planning document used to guide the physical, economic and social development of Niagara. It will contain objectives, policies and mapping that form the Region's approach to managing growth and the economy, protecting the natural environment, resources and agricultural land, and providing infrastructure.

WHY ARE WE CREATING A NEW OFFICIAL PLAN?

The first Regional Official Plan was approved in the mid 1970's. Over the years, amendments were made to reflect the Region's increased planning functions under an evolving provincial planning system. In 2017, resources were allocated to develop the Niagara Official Plan. The new plan will be contemporary and user friendly, provide a consistent structure, and reflect the current comprehensive planning framework.

WHAT ARE THE COMPONENTS OF THE NIAGARA OFFICIAL PLAN?



GROWING REGION

How we manage growth and development, with a range and mix of housing forms, including affordable housing

CONNECTED REGION

How we improve connections with transit, recreation and trails, infrastructure and technology

COMPETITIVE REGION

How we increase our competitiveness by supporting employment opportunities and protecting agricultural lands

VIBRANT REGION

How we enhance the vibrancy of communities by supporting strong urban design and protecting cultural heritage

SUSTAINABLE REGION

How we protect our natural environment and plan for climate change

SUSTAINABLE REGION

NATURAL ENVIRONMENT



PLEASE SIGN-IN

PURPOSE OF THE PUBLIC INFORMATION CENTRE:

- Introduce the Natural Environment Work Program being completed as part of the new Niagara Official Plan
- Present key findings from the background studies that are being completed
- Detail next steps, including opportunities for ongoing public participation
- Answer questions and receive feedback



SUSTAINABLE REGION

NATURAL ENVIRONMENT



NIAGARA'S NATURAL ENVIRONMENT

From an ecological perspective, every place is defined by a unique suite of conditions including landform, soils, water resources, and climate, which gives rise to the vegetation and wildlife that characterizes it.

Niagara Region is bound by Lakes Erie and Ontario and the Niagara River is bisected by the Niagara Escarpment World Biosphere Reserve. This boasts a high diversity of flora and fauna owing to the climate that supports Carolinian species and their habitats. The physical and biotic features of the Region provide the character that defines it and which constitute the Region's natural environment.

The **natural environment** is a broad term that includes:

- **natural heritage** (e.g., woodlands, wetlands, and fish habitat, etc.)
- **water resources** (e.g., surface water, groundwater, seepages, etc.)
- **natural hazards** (e.g., floodplains, dynamic beaches, etc.), and recognizes the **contributing land uses** (e.g., agricultural land) and surrounding landscapes that support a healthy environment.

NATURAL ENVIRONMENT PLANNING

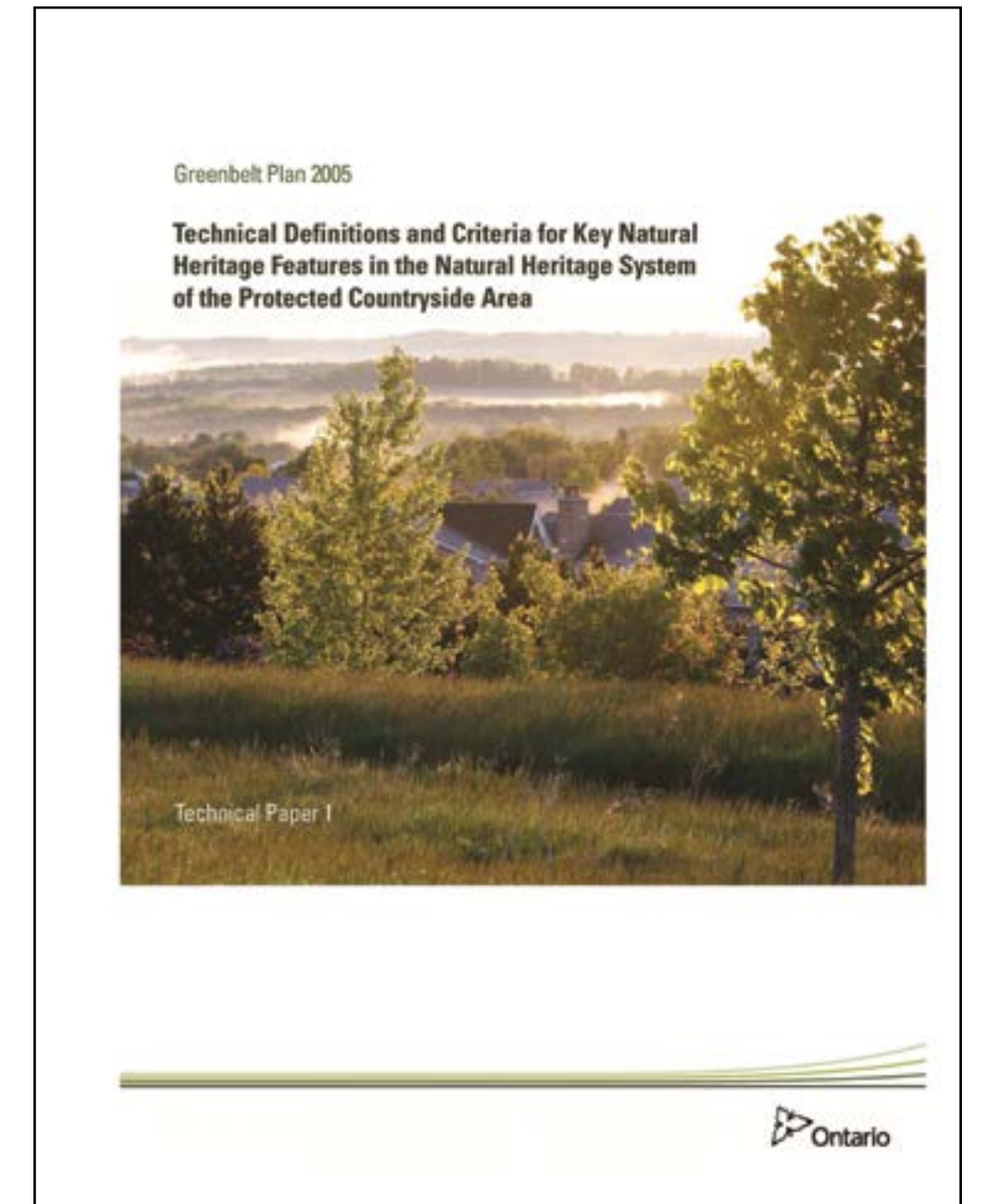
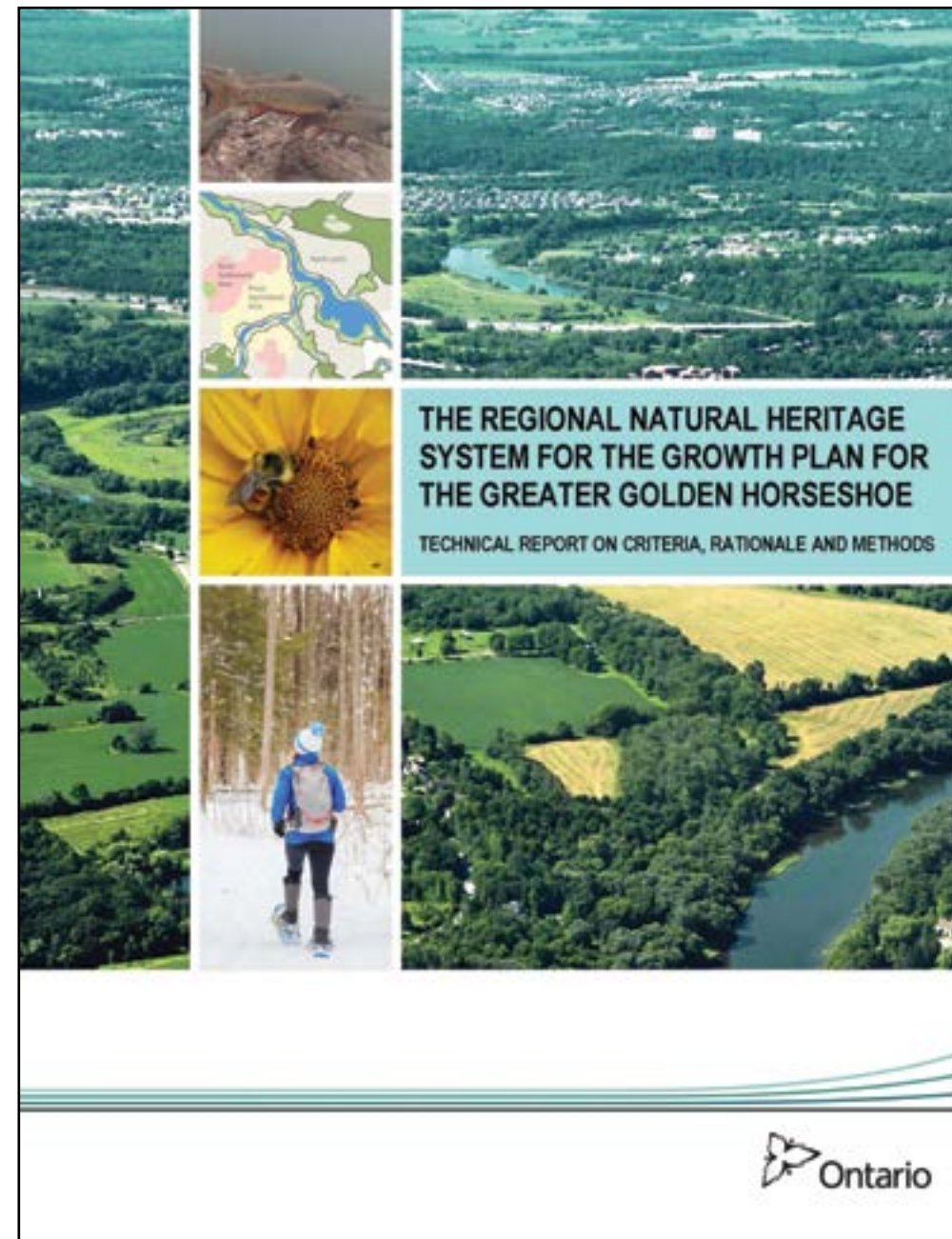
Natural environment planning is intended to provide guidance for the protection of features, areas and natural systems while informing the identification of areas for growth and development. A healthy and resilient natural environment supports a range of industries, supports public health, recreation, and improves the overall well-being of residents.

Natural environment planning needs to consider our current natural features, functions and systems while planning for climate change and other threats to the health and ecological integrity of our natural environment.

Provincial plans, including the Provincial Policy Statement (PPS, 2014), Growth Plan for the Greater Golden Horseshoe (2019), Greenbelt Plan (2017), provide direction for planning and policies that need to be implemented through the new Niagara Official Plan.

SUSTAINABLE REGION

NATURAL ENVIRONMENT



PROVINCIAL DIRECTION

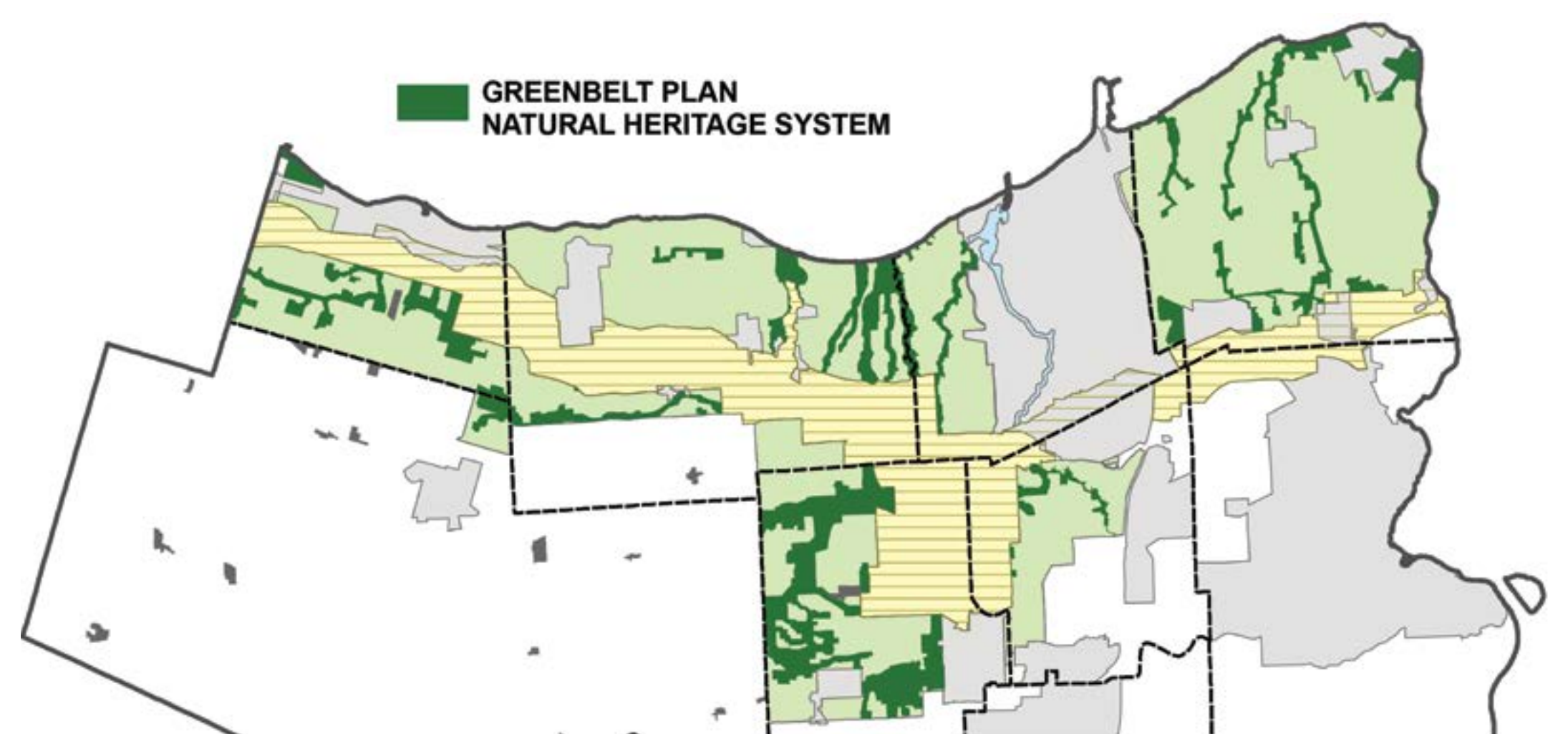
Much of the direction for natural environment planning is provided by the Province. Provincial direction starts with the Provincial Policy Statement (PPS, 2014). The PPS identifies the types of natural features, areas, functions, and systems that must be identified and protected through the new Niagara Official Plan.

In some areas, the Province has identified more detailed natural heritage systems and policies. In Niagara we are responsible for implementing the Provincial Greenbelt Natural Heritage System and the Provincial Growth Plan Natural Heritage System (right). The Greenbelt NHS has been in place for a number of years and is generally reflected in existing Regional Official plan policies. The Growth Plan NHS is new, and will be implemented in the new Niagara Official Plan for the first time. Both the Greenbelt and Growth Plan natural heritage system's apply outside of urban areas only.

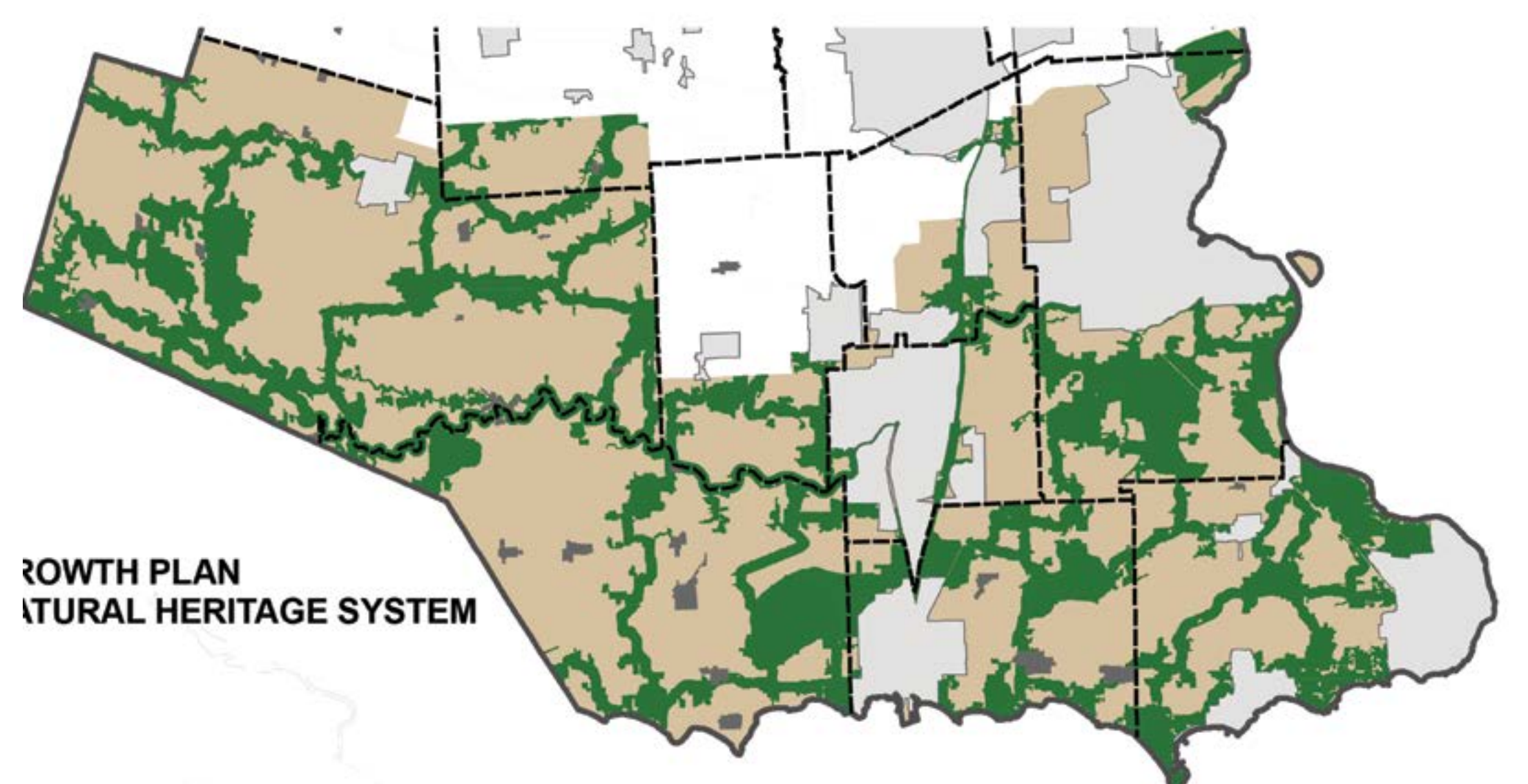
Beyond Provincial natural heritage systems, Provincial direction requires natural heritage systems (NHS) and water resource systems (WRS) be identified by municipalities in accordance with the PPS and appropriately protected through Official Plan policies.

The Province provides a number of guidelines and other tools to assist municipalities in mapping natural systems, identifying natural features, and developing natural environment systems. These include for example, the Natural Heritage Reference Manual and Greenbelt Technical Paper.

Provincial Natural Heritage Systems to be Implemented by Municipalities



Greenbelt Plan Natural Heritage System



Growth Plan Natural Heritage System

SUSTAINABLE REGION

NATURAL ENVIRONMENT



INTERACTION WITH AGRICULTURE

The biodiversity of the Region that the new Niagara Official Plan seeks to protect reflects several hundred years of co-existence with agricultural practice. The natural environment system is a mitigation response to development pressure, not agricultural use. Thus, it should be recognized that the natural environment system resides within and is integrated with the agricultural system and can be enhanced and protected while ensuring the agricultural system and normal farming practices are not encumbered.

The natural environment policies in the Greenbelt Plan and Growth Plan are not intended to restrict existing agricultural practices. In addition, exemptions are provided to “expansions or alterations to existing buildings and structures for agricultural uses, agriculture-related uses or on-farm diversified uses and expansions to existing residential dwellings may be considered within key natural heritage features, key hydrologic features and their associated vegetation protection zones” under certain conditions, such as ensuring impacts are minimized and mitigated to the extent possible.

The natural environment system can include features that are natural (e.g., woodlands and wetlands) as well as features that are created or modified, such as ditches and agricultural drains. Features that have been created for an intended purpose such as irrigation or drainage may also have characteristics that support



other natural features and ecological functions. The development of the natural environment systems and policies will need to be consistent with Provincial Plans while recognizing the important function these created features have in supporting normal farming practices. As such, an important part of the natural environment work program will be to identify the required components of the natural environment system, protect those features and functions that are significant and important for the long-term resilience of the natural environment system, while ensuring normal farming practices are encouraged and can continue to take place.

The new Niagara Official Plan will need to remain consistent with the Provincial policies that provide exemptions to certain agricultural uses.



SUSTAINABLE REGION

NATURAL ENVIRONMENT

TRENDS AND ISSUES IN NATURAL ENVIRONMENT PLANNING

Natural environment planning needs to recognize the trends, issues and threats that have a potential to impact our natural systems. For example, threats can result in changes to our natural environment requiring a new thinking and approach to the identification of component features in the natural environment system and how these features are protected through policy.

Further, there is increased recognition of the important ecosystem services provided by the natural environment, such as, mitigation of impacts from climate change, flood attenuation, carbon cycling, air purification, healthy communities, etc. There is an increased emphasis to maintain and manage our natural areas to ensure they are resilient and sustainable for the long-term and continue to provide the ecosystem services we rely on.

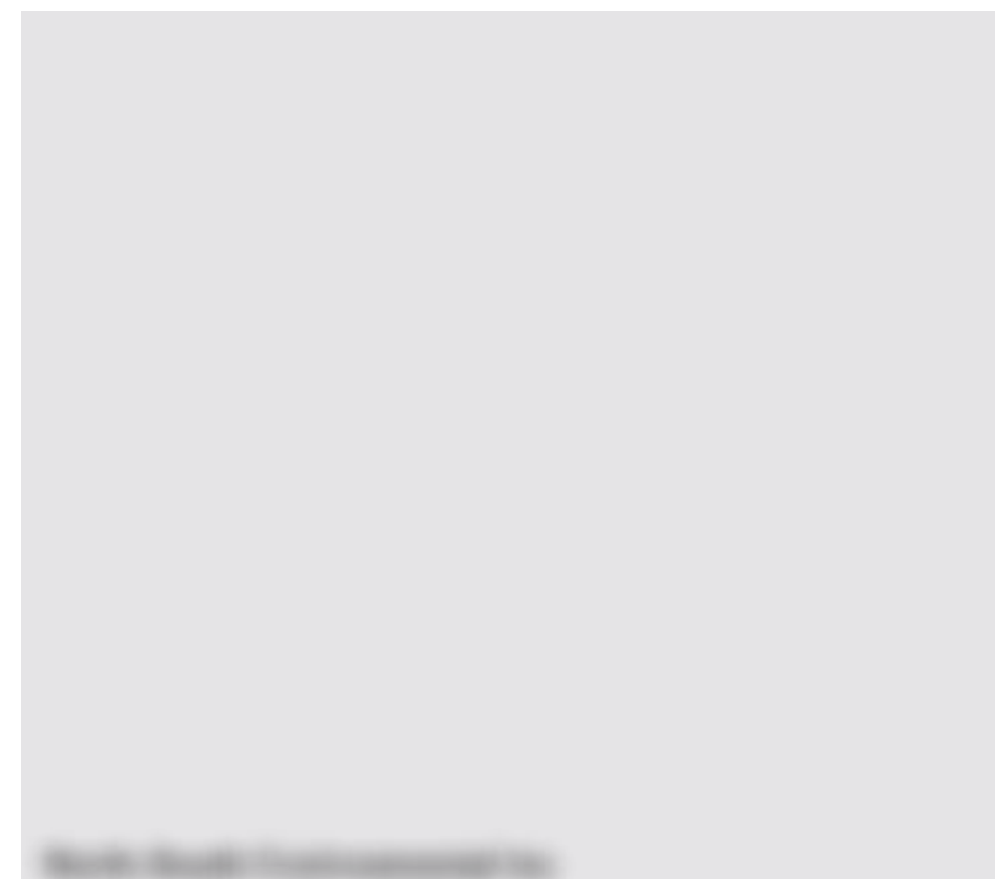
Maintaining or enhancing natural area cover in the Region is increasingly difficult to achieve as a result of natural and anthropogenic impacts. For example, certain forms of development and infrastructure may result in the removal of portions of, or even entire features where permitted through policy. An approach to preventing the cumulative loss of natural area cover is to adopt policies and provide tools to prevent the net loss of natural cover, or even require the demonstration of net gain, in order to ensure the natural environment system and associated ecological functions remain resilient for the long-term.



Garlic Mustard dominating forest floor



Common Buckthorn forms a dense understory in woodlands



Dead ash trees in canopy of woodland as a result of Emerald Ash Borer



Natural areas provide important ecosystem services



Emerald Ash Borer
(*Agrilus planipennis*)

THREATS FACING NIAGARA REGION'S NATURAL HERITAGE SYSTEM

Climate change is recognized as a significant threat to the natural environment, and can often work in conjunction with other threats to accelerate the deterioration of our natural areas. Consequently, planning should consider how to protect our natural areas from the impacts of climate change, while also understanding that natural areas are an important tool for mitigation and resilience. For example floodplains and wetlands can help mitigate the impacts of large storm events - by storing stormwater, allowing infiltration and releasing stormwater more slowly.

Similarly, invasive species, such as Phragmites, Garlic mustard, and European Buckthorn have a significant impact on the health of our natural environment. Emerald Ash Borer (left) is a well known invasive beetle that is currently devastating ash forests across Niagara. Directly controlling invasive species is difficult through the land use policies of Official Plans alone, and can often be better addressed through by-law and other management tools.

SUSTAINABLE REGION

NATURAL ENVIRONMENT

NATURAL ENVIRONMENT WORK PROGRAM

The purpose of the Natural Environment Work Program is to:

- To complete the necessary background studies to ensure the system development and policy formulation is informed by science and best available information
- To identify and evaluate options, and select a preferred option
- To develop Official Plan policies and mapping in conformance with Provincial direction and requirements
- To undertake public and stakeholder consultation to support the technical aspects of the work program
- To recommend tools that will be required to support the implementation of policy

SCOPE FOR NATURAL ENVIRONMENT WORK PROGRAM

The definition of 'natural environment' can mean something different to everyone. To ensure that the scope of the work program would be well understood - we attempted to clearly define it as an early step in the project. In-scope includes all of the environmental features and environmental systems as generally defined by the Province.

IN-SCOPE

Natural Heritage Features

- Woodlands, wetlands, habitat of endangered and threatened species, fish habitat, etc.

Hydrologic Features

- Streams, seepage areas, wetlands, etc.
- Region's watercourse identification and mapping project

Water Resource Systems

- Groundwater systems
- Surface water systems

Natural Hazards

- Flooding hazards, erosion hazards, and dynamic beach hazards, etc.
- Wildland fires as per Section 3.1.8 of the PPS

Provincial Natural Heritage Systems

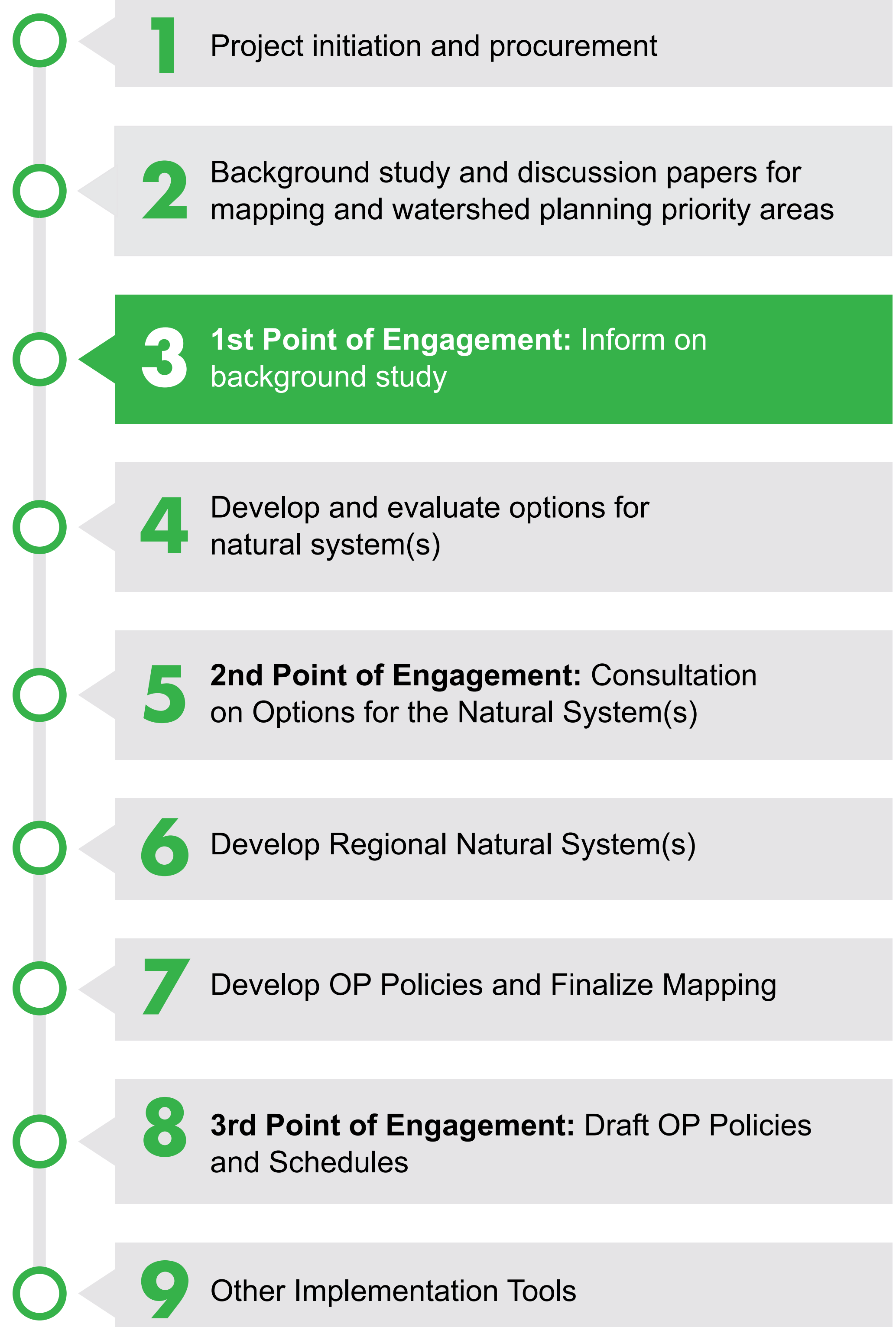
- Greenbelt Natural Heritage System and Urban River Valley designation
- Growth Plan Natural Heritage System
- Niagara Escarpment Plan as it relates to the municipal planning process

Watershed Planning and Stormwater Management

PROJECT OVERVIEW – NATURAL ENVIRONMENT

The process that is being undertaken is generally the same as would be used for any other planning or scientific study. Information is collected, options are developed and analyzed, and an implementation plan is created for the preferred option. As highlighted - we are currently on Phase 3 - and are striving to inform and educate our stakeholders, partners, and the public on some of the key topics and issues related to natural environment planning in the Region.

PROJECT PHASES

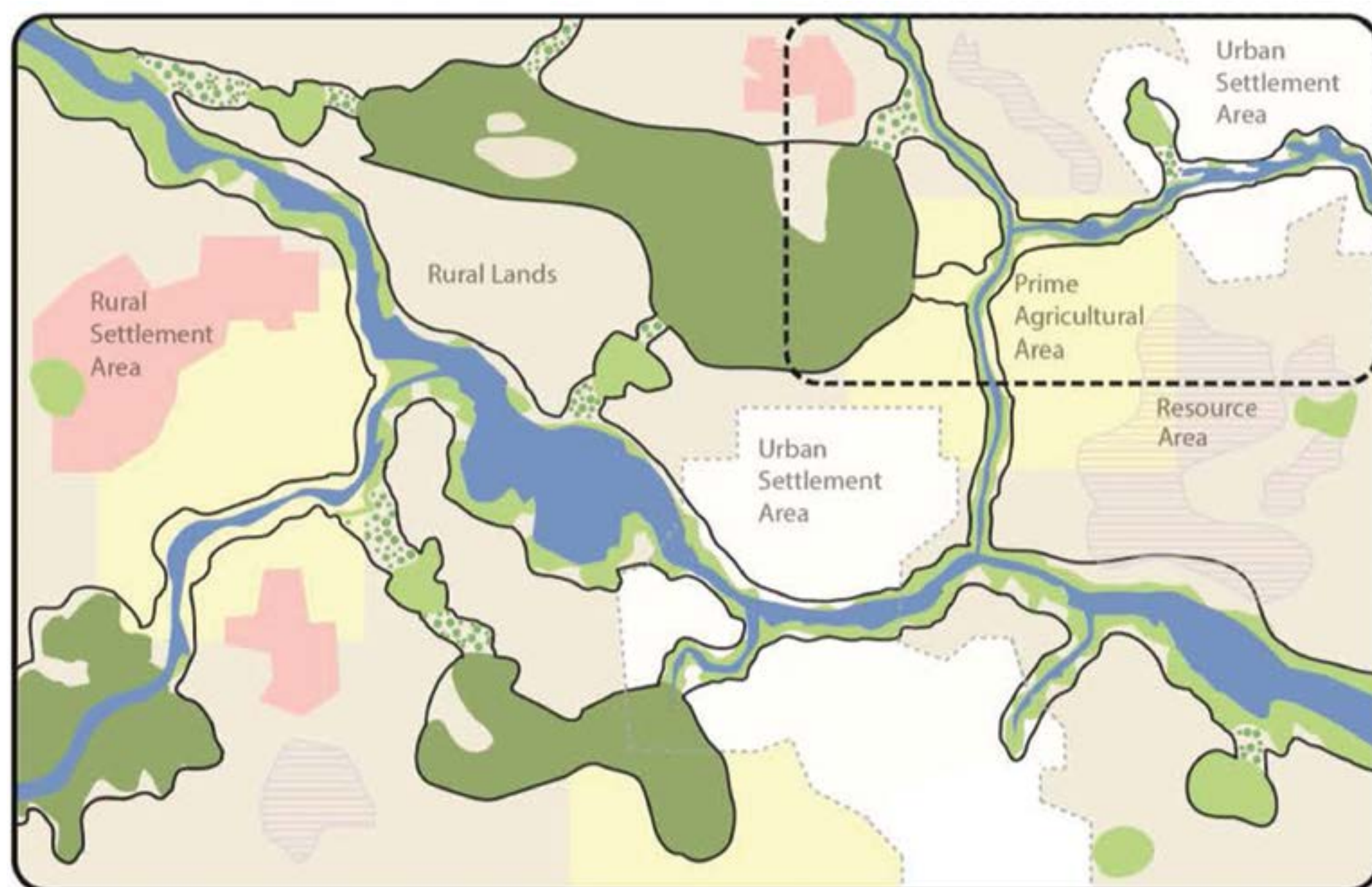


WHAT IS A NATURAL HERITAGE SYSTEM?

A Natural Heritage System (NHS) is a network of interconnected natural features and areas such as wetlands, woodlands, valleylands, watercourses, seepage areas and springs, and associated functions, such as wildlife habitat.

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).

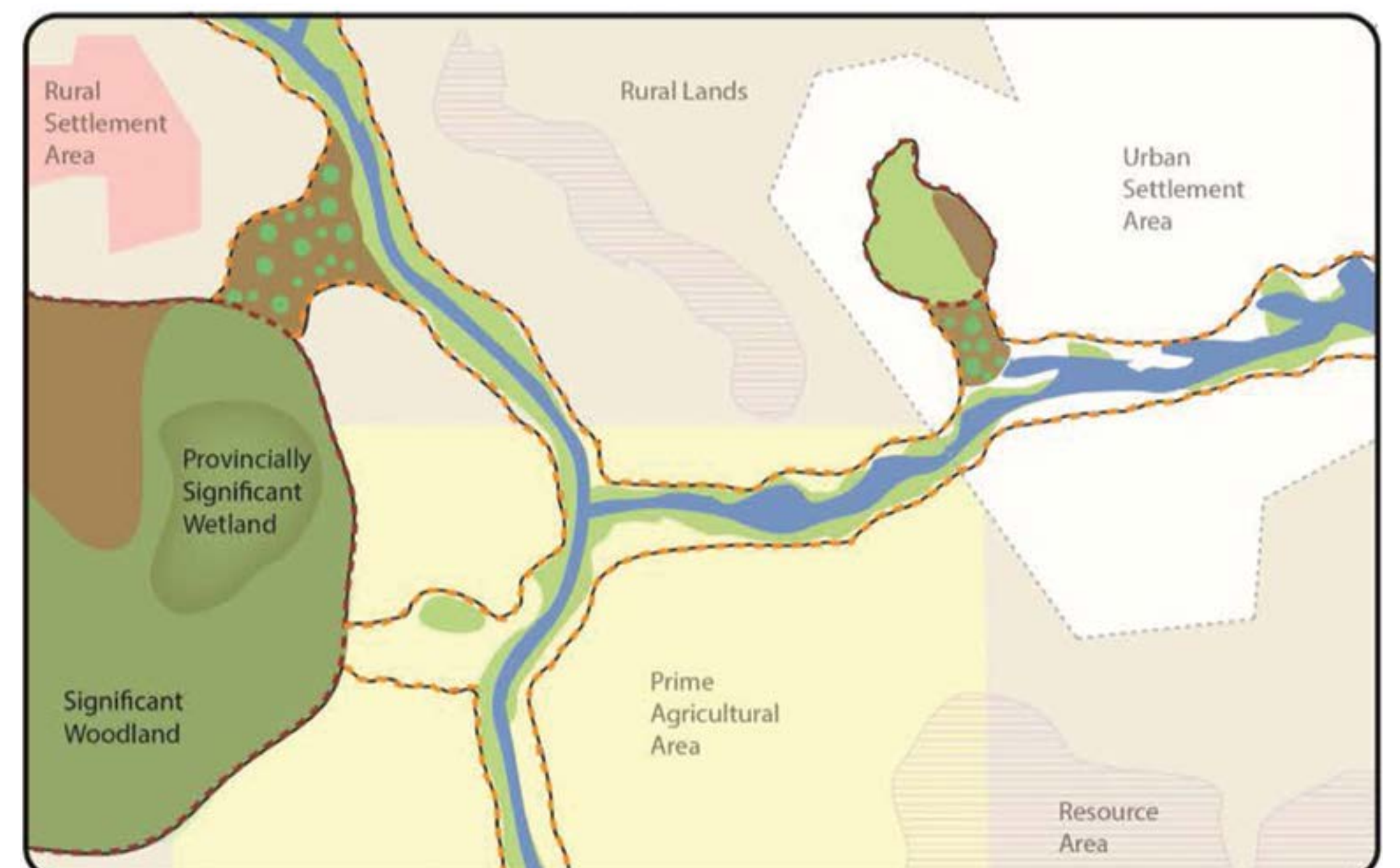
Natural Heritage System



Legend

- Boundary of Natural Heritage System
- Linkages / Corridors
- Core
- Water
- Restoration Area
- Natural Feature

Some Building Blocks of a Natural Heritage System



Legend

- Boundary of Natural Heritage System
- Linkages / Corridors
- Core
- Water
- Restoration Area
- Natural Feature

Source: Growth Plan Regional NHS Mapping – Technical Report



Biodiversity

Niagara is one of the most biodiverse Regions in Ontario, supporting over 300 bird species, 53 mammals, 36 reptiles and amphibians, 90 types of fish and over 1500 plants.



Ecosystem Functions

Forests provide important ecosystem functions such as air purification, carbon storage, water cycling, and opportunities for nature appreciation.

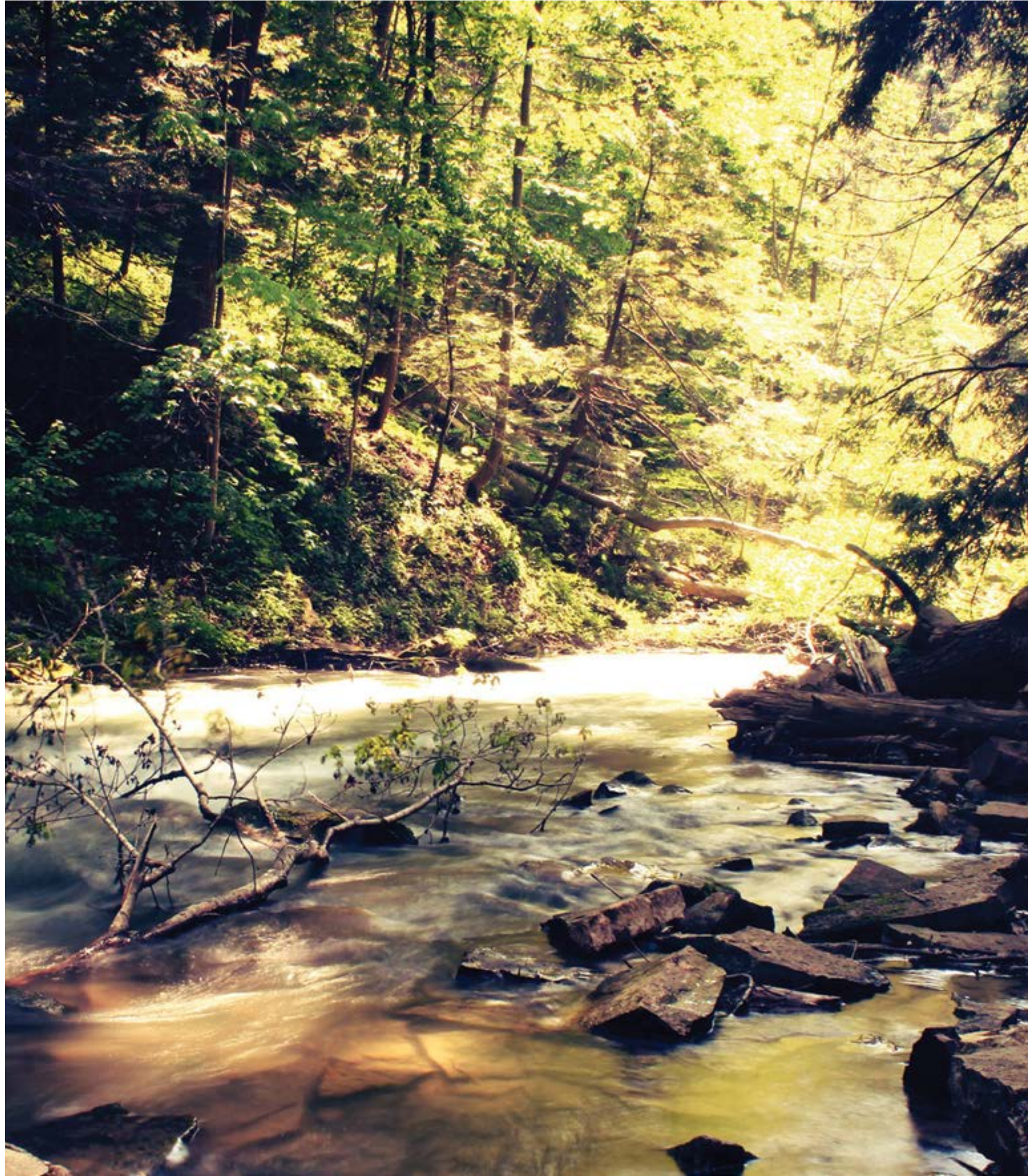


Ecosystem Services

Bees, butterflies and other pollinators are crucial for the pollination of many native plants and crops including many fruit, vegetable, oil, seed, and nut crops

SUSTAINABLE REGION

NATURAL ENVIRONMENT



WHAT IS A WATER RESOURCE SYSTEM?

The Provincial Policy Statement (PPS) recognizes the need for linkages and relationships that exist between natural heritage and water resource systems. In this regard, the PPS includes policies on water resource systems that also need to be considered, such that:

“Planning authorities shall protect, improve or restore the quality and quantity of water by:” ... “identifying water resource systems consisting of ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas, which are necessary for the ecological and hydrological integrity of the watershed.”

Provincial Plans provide direction to protect the Region’s water resources including drinking water supplies which are vulnerable to stresses by development, population growth and climate change. The Niagara Escarpment Plan also includes policies to protect water quality and quantity.



Ground Water Features

Ground water features include: recharge/discharge areas, water tables, aquifers and unsaturated zones that can be defined by surface and subsurface hydrogeologic investigations.



Hydrologic Functions

Means the functions of the hydrological cycle that include the occurrence, circulation, distribution and chemical and physical properties of water on the surface of the land, in the soil and underlying rocks, and in the atmosphere, and water’s interaction with the environment including its relation to living things (Ministry of Municipal Affairs and Housing, 2014).



Surface Water Features

Shoreline areas which are necessary for the ecological and hydrological integrity of the watershed; headwaters; rivers; stream channels; inland lakes; seepage areas; recharge/discharge areas; springs; wetlands; associated riparian lands that can be defined by their soil moisture, soil type, vegetation or topographic characteristics.

WATERSHED PLANNING

Watersheds are defined as an area that is drained by a river and its tributaries. The Provincial Policy Statement (2014) requires that watersheds be the ecologically meaningful scale for integrated and long-term planning.

Watershed planning is a methodology which provides a framework for the protection of water resources, and the management of human and natural resources at a watershed scale. Watershed planning typically includes the characterization of the watershed, the identification of natural features, the evaluation of potential threats and impacts, recommendation of mitigation measures, and a plan for implementation. Furthermore, watershed planning has evolved to include the consideration of climate change and cumulative impacts, and can often result in recommendations for land-use planning, monitoring, and restoration.

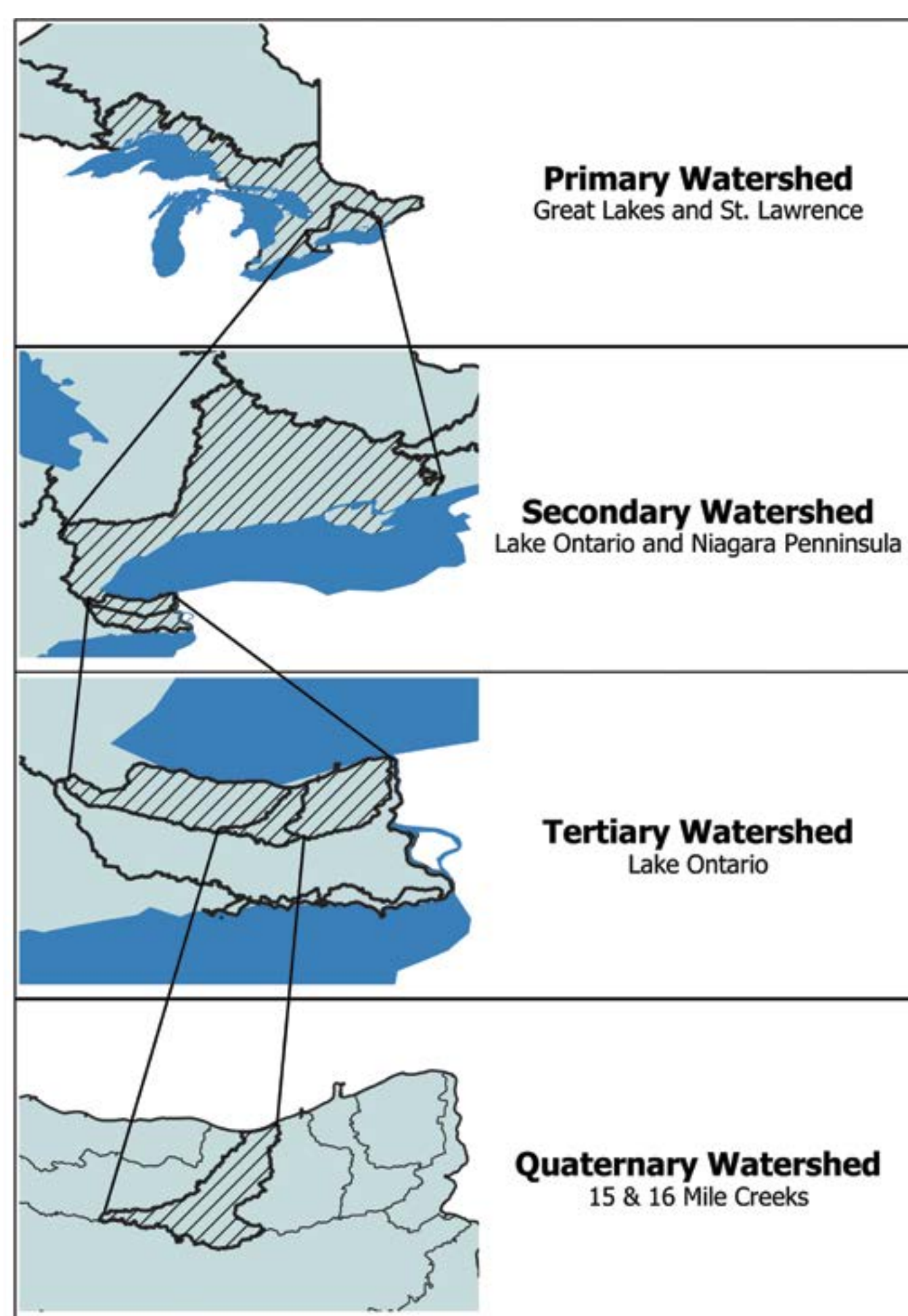
Subwatershed studies are completed under the overall framework of watershed planning and are done at a smaller-scale intended to address local issues. Subwatershed planning is often undertaken to specifically inform growth and development in a Municipality or secondary plan area.

Watershed planning in the Province has been evolving for decades. The 2014 PPS and new Provincial Plans now place a much greater emphasis on integration - planning and land use activities must be “informed by” watershed planning with the intent of achieving better outcomes.

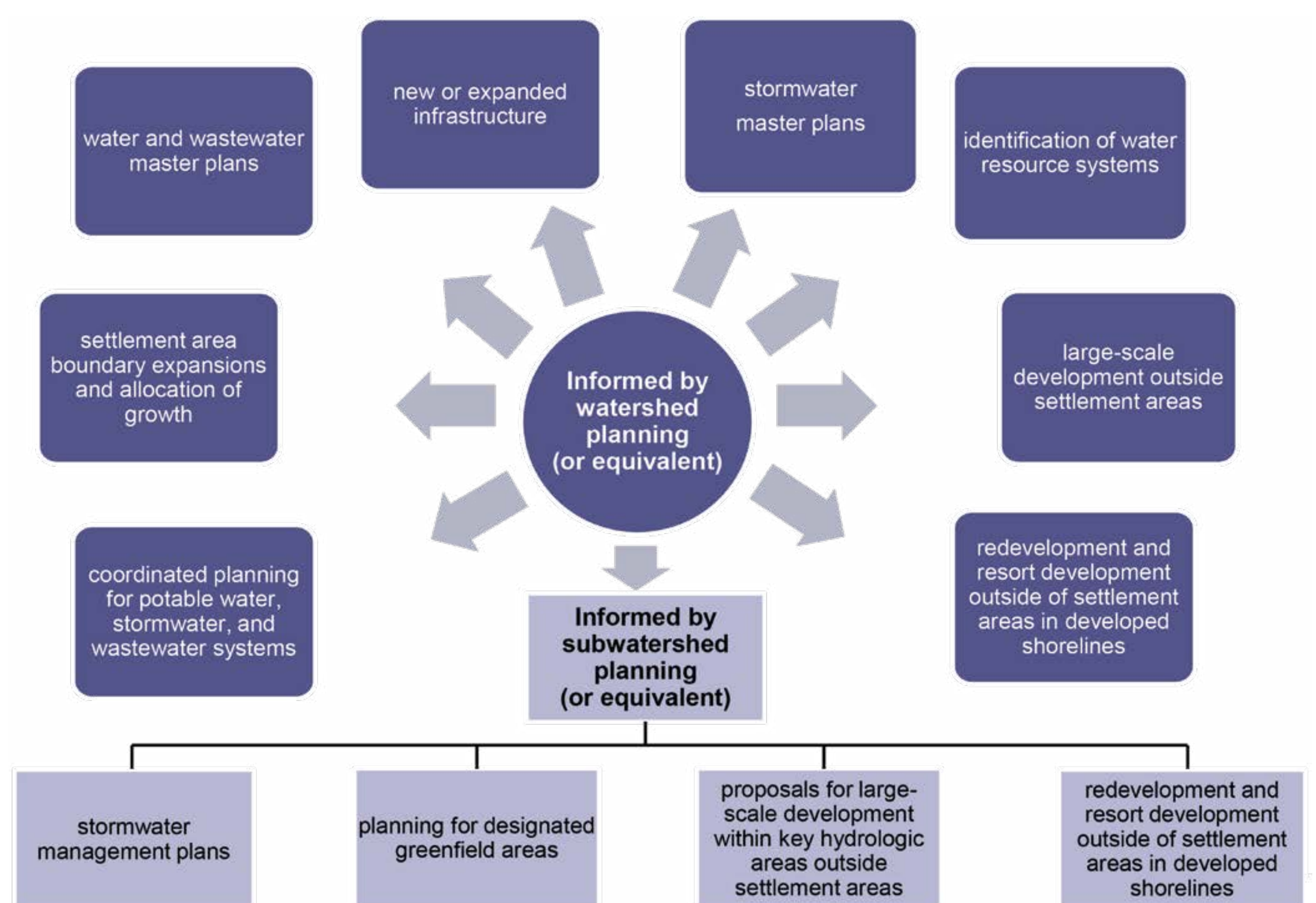
The new Growth Plan and Greenbelt Plan both have similar language that require the Region partnering with Local Area Municipalities and Conservation Authorities as appropriate, to ensure that watershed planning is undertaken, and that the results inform the land-use planning process.

By our estimation there are over 30 policies in the PPS, Growth Plan, Greenbelt Plan, and Niagara Escarpment Plan which reference the requirement for watershed and subwatershed planning.

The implication of this is that there is the need for the Region to have a framework for watershed planning – which will ensure that watershed plans are in place, and that there is direction for subwatershed planning to be completed at the local level.



Various scales of watersheds at which watershed planning may be undertaken.



This figure, which was provided by the Province in the 2018 DRAFT Watershed Planning Guidelines, illustrates the extent to which watershed planning is to “inform” other planning, infrastructure, and development activities.

SUSTAINABLE REGION

NATURAL ENVIRONMENT



WOODLANDS

Woodlands play an important role in providing habitat for wildlife, cycling nutrients and water, storing carbon, moderating the impacts of climate change and urban heat effects, and improving the overall health and wellbeing of residents.

The new Niagara Official Plan will provide a clear set of criteria for identifying those woodlands considered as 'significant' that should be protected through policy, and mapped as part of the natural system. Criteria to identify significant woodlands can include size, age and proximity to other features such as watercourses, wetlands, and the Great Lakes.

Due to the uneven distribution of woodlands across the Region and the desire to direct growth to urban areas, size criteria to identify significant woodlands may vary geographically, such as:

- North and south of the escarpment
- Urban areas vs. rural areas

Local and Regional Tree By-Laws are a related tool for the management and protection of trees and woodlands. Following the completion of the new Niagara Official Plan there will be process to ensure alignment with the Regional Tree By-Law.



WETLANDS

Wetlands are seasonally or permanently inundated by water and are characterized by plants adapted to saturated soil conditions. Wetlands include marshes, wet meadows and thickets, bogs and fens, and seasonally flooded forests including slough forests.

Wetlands are considered one of the most productive ecosystems. They support a high diversity of wildlife and provide numerous beneficial ecosystem services for people, such as, protecting and improving water quality, storing floodwaters and maintaining surface water flow during dry periods.

Wetlands are an important component of both the natural heritage system and water resource system. Wetlands are also generally regulated by Conservation Authorities. Wetlands can be identified as provincially significant (according to a set of protocols and criteria developed by the Province) or locally significant (as determined by the municipality or conservation authority). The new Niagara Official Plan will include policies to protect those wetlands considered as 'significant'. Criteria to identify significant wetlands can include for example:

- Size
- Proximity to other significant wetlands
- Wildlife species the wetland supports

SUSTAINABLE REGION

NATURAL ENVIRONMENT



SPECIES AT RISK

Species at Risk are regulated under the Endangered Species Act (ESA) 2007 (currently under review). It is the responsibility of the Province to enforce the Endangered Species Act and issue permits.

It is the responsibility of municipalities to ensure planning applications conform with the Provincial Policy Statement (2014) regarding the protection of the habitat of endangered species and threatened species. For example, municipalities can require proof of proper correspondence and documentation, ensuring permits are obtained prior to issuing an approval for an application, or at least issue a condition of approval that requires all relevant correspondence be provided and permits be obtained.

The new Niagara Official Plan may include policies to clarify the Region's role or the Region may provide additional guidance in its Environmental Impact Study guidelines regarding submission requirements and species at risk.

WATERCOURSES AND FISH HABITAT

Watercourses convey water and can be characterized by their size and flow regime. Types of watercourses include:

- Headwater drainage features
- Ephemeral streams
- Permanent and Intermittent streams
- Rivers (higher order watercourses)
- Agricultural swales, roadside ditches, and municipal drains

Watercourses may also provide fish habitat, which is defined by the Federal Fisheries Act as: "spawning grounds and any other areas, including nursery, rearing, food supply and migration areas, on which fish depend directly or indirectly in order to carry out their life processes"

As a component of the natural environment systems, the new Niagara Official Plan will need to define watercourses and fish habitat in order to be consistent with Provincial Plans and Federal requirements. This will require clarifying the relationship between agricultural infrastructure and fish habitat, and exemptions to manage these features.

BUFFERS/ VEGETATION PROTECTION ZONE (VPZ)

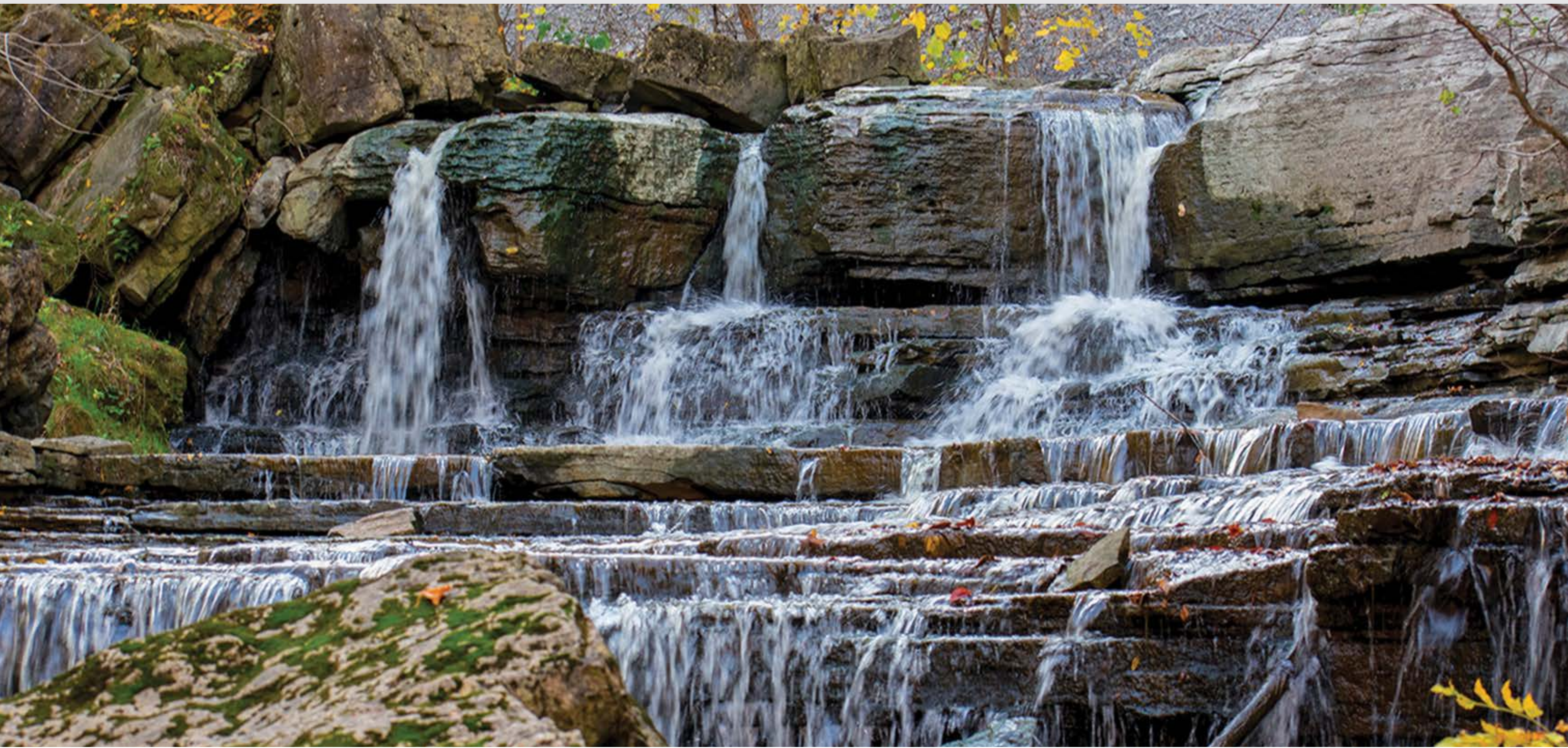
An ecological buffer (or simply 'buffer') is an area of land located between a natural feature and lands that are subject to development or site alteration. A vegetation protection zone (VPZ) is a naturally vegetated buffer that is left in a 'free to grow' state. Buffers and VPZs are mitigation tools intended to protect natural features and associated ecological functions from impacts associated with a change in land use.

The width of the buffer and activities that may be permitted within it should be based on the sensitivity and significance of the natural feature and their contribution to the long term ecological functions of the overall natural environment system determined through an ecologically and/or hydrologically-based study.

The Growth Plan and Greenbelt Plan prescribe minimum 30 m VPZs from most natural heritage and hydrologic features. Exemptions are provided for certain agricultural uses (i.e. crops are permitted within buffers). The approach to prescribing buffers varies across municipalities, as well as within municipalities.

SUSTAINABLE REGION

NATURAL ENVIRONMENT



NEXT STEPS

- 1 Complete this 1st Point of Engagement and finalize Background Study and Discussion Papers
- 2 Identify and evaluate options
- 3 Present preliminary preferred option to Regional Council and initiate 2nd Point of Engagement

OPPORTUNITIES FOR ONGOING PUBLIC PARTICIPATION

- Visit niagararegion.ca/official-plan
- Attend future Public Information Centres
- **For further information, please contact:**
Sean Norman, Senior Planner
Planning and Development Services, Niagara Region
1815 Sir Isaac Brock Way, Thorold, ON
905-980-6000 ext. 3179
sean.norman@niagararegion.ca

WE WANT TO HEAR FROM YOU!

Please leave your comments and suggestions on the comment form.
Your comments will be reviewed and considered when developing and evaluating the options for Niagara's natural environment systems and when developing policies.

Public Information Centre - Comment Form

**NATURAL ENVIRONMENT WORK PROGRAM FOR THE NEW
NIAGARA OFFICIAL PLAN**

Date: June 6, 2019 **Time:** 5:30pm – 7:30pm
Location: Welland Civic Square, 60 East Main St., L3B 5X6

**WE WOULD APPRECIATE YOUR THOUGHTS. PLEASE FILL OUT AND LEAVE THIS FORM
WITH STAFF AT TODAY'S EVENT OR SUBMIT BY JUNE 14TH, 2019.**

Mail: Sean Norman, Senior Planner
C/O Niagara Region, Planning and Development Services
1815 Sir Isaac Brock Way, PO Box 1042, Thorold, ON, L2V 4T7

Email: sean.norman@niagararegion.ca

1. What is important to you about Niagara's natural environment and planning for the future?

THAT IT BE PRESERVED AND ENHANCED, END
DEVELOPMENT IN UNTOUCHED AREAS UNTIL
ALL BROWNFIELDS AND RUN DOWN COMMERCIAL
AREAS HAVE BEEN REDEVELOPED.

2. What do you see as the biggest challenges and/or opportunities for Niagara's natural environment system planning?

THINKING LONG TERM INSTEAD OF LOOKING
TO MAKE A FAST BUCK WITH BAD DEVELOPMENT.

3. What are the top 3 Niagara natural environment issues?

- ① LOSS OF FOREST COVER AND WETLANDS.
- ② QUARRY REHABILITATION, NOT FILLING THEM WITH GARBAGE FIRST.
- ③ SPRAWLING GROWTH. ~~SPRAWLING GROWTH~~

4. Additional Comments/Feedback:

CONTACT INFORMATION:

NAME:

EMAIL:

Public Information Centre - Comment Form

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1815 Sir Isaac Brock Way, PO Box 1042, Thorold, ON, L2V 4T7

Email: sean.norman@niagararegion.ca

1. What is important to you about Niagara's natural environment and planning for the future?

Being protective and proactive to ensure the natural environment is preserved. The natural environment of the Niagara Peninsula is a wonder of the world and un planned development puts this spectacular area at risk. There are current developments that are being allowed and being proposed that need to be taken into consideration now.

2. What do you see as the biggest challenges and/or opportunities for Niagara's natural environment system planning?

*Walking the talk.
The Niagara Region is placing a high importance on the natural environment but historically have not stood up to those that destroy it. To date what I have seen looks good but what I have heard doesn't support anything substantial enough to preserve our natural environment.*

TURN OVER →

3. What are the top 3 Niagara natural environment issues?

Protecting rural water sources and aquifers.
Protecting agricultural lands
Development that is compatible with the natural environment

4. Additional Comments/Feedback:

I wish you minds and endpoints weren't already
set. This seems like a make the public feel
good exercise.

CONTACT INFORMATION:

NAME: _____

EMAIL: _____

Public Information Centre - Comment Form

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C/O Niagara Region, Planning and Development Services
1815 Sir Isaac Brock Way, PO Box 1042, Thorold, ON, L2V 4T7

Email: sean.norman@niagararegion.ca

1. What is important to you about Niagara's natural environment and planning for the future?

Preserving our water and natural
environments from the stress that man's
activities - adding chemicals, fertilizers,
general pollution
Trees help combat global warming and
retain water to stop flooding

WATER IS LIFE

2. What do you see as the biggest challenges and/or opportunities for Niagara's natural environment system planning?

The biggest challenge is the people and
industries that only see short term gain
and the future be damaged.
The greatest opportunity is to protect all
water for the benefit of future
generations.

TURN OVER →

3. What are the top 3 Niagara natural environment issues?

PROTECTING WETLANDS
PROTECTING WOODLANDS
PROTECTING ALL WATER

- NO THESE 3 AND BIRD, ANIMAL,
FISH AND MAN WILL BENEFIT.
- GLOBAL WARMING WILL SLOW DOWN

4. Additional Comments/Feedback:

NO AGRICULTURAL BUSINESS SHOULD
BE ALLOWED ON SETBACKS TO ANY
TYPE OF WATER.

THE REGION SHOULD LOBBY THE PROVINCIAL
GOVERNMENT TO INCREASE ALL SETBACKS
TO ANY WATER OR AGRICULTURAL LANDS
SWALES, DITCHES, STREAMS, RIVERS AND
LAKES.

MODERN AGRICULTURE IS TOXIC TO THE
ENVIRONMENT AND THE HEALTH OF MAN.

THE SIGNIFICANT WILD LIFE HABITAT
OF THE BIRDS ON THE EAST SIDE LANDS
OF THE WETLAND CANALS IN PORT COLBORNE
SHOULD BE DESIGNATED AS A SIGNIFICANT
BIRDING COLONY SITE

CONTACT INFORMATION:

NAME: _____

EMAIL: _____



Niagara Region
Planning & Development Services

1815 Sir Isaac Brock Way,
PO Box 1042, Thorold, ON L2V 4T7
Tel: 905-980-6000 Toll-free: 1-800-263-7215
Fax: 905685-0013
niagararegion.ca

Public Information Centre - Comment Form

**NATURAL ENVIRONMENT WORK PROGRAM FOR THE NEW
NIAGARA OFFICIAL PLAN**

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Location: Welland Civic Square, 60 East Main St., L3B 5X6

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Mail: Sean Norman, Senior Planner
C/O Niagara Region, Planning and Development Services
1815 Sir Isaac Brock Way, PO Box 1042, Thorold, ON, L2V 4T7

Email: sean.norman@niagararegion.ca

1. What is important to you about Niagara's natural environment and planning for the future?

SEE COMMENTS ON PAGE 2

2. What do you see as the biggest challenges and/or opportunities for Niagara's natural environment system planning?

TURN OVER →

3. What are the top 3 Niagara natural environment issues?

IF THE BLUE SPOTTED SALAMANDER IS TO SURVIVE IN NIAGARA ITS LINKAGES BETWEEN ITS WETLAND AREAS AND ITS NON-WETLAND HOMERANGES MUST BE PROTECTED. THE PROBLEM IS THAT REGION NO LONGER HAS AN ECOLOGIST ON STAFF AND EEAC WAS DISBANDED SO THEY LACK THE TECHNICAL

4. Additional Comments/Feedback:

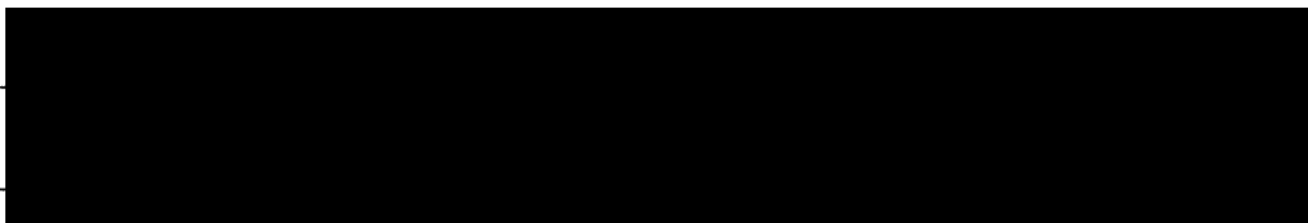
OVER

THERE HAS BEEN A LOT OF MATERIAL PUBLISHED IN THE PUBLIC ARENA ABOUT THE PRO'S AN CONS OF BIODIVERSITY OFFSETTING AND ENVIRONMENTAL CORRIDORS THAT ARE CRITICAL TO THE SURVIVAL OF MANY WETLAND SPECIES. THESE CONCEPTS ARE ONLY BRIEFLY NOTED IN THE PUBLIC INFORMATION DISPLAY ABOUT THE NIAGARA OFFICIAL PLAN

CONTACT INFORMATION:

NAME: _____

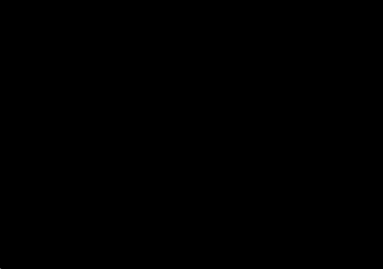
EMAIL: _____



EXPERTISE TO EVALUATE THE ECOLOGICAL
 IMPACTS OF DEVELOPMENT PROPOSALS
 THAT THEY REVIEW.

Attn: Amber LaPoint,
City Clerk,
66 Charlotte Street,
Port Colborne. ON,
L3K 1E3
May 13 2019

Response to:

The Proposed Official Plan & Zoning By-Law Amendment 170 Welland Street,
City Land on Lake Road
And Transport Canada Lands
Files 009-01-19 & D14-03-19
From: 



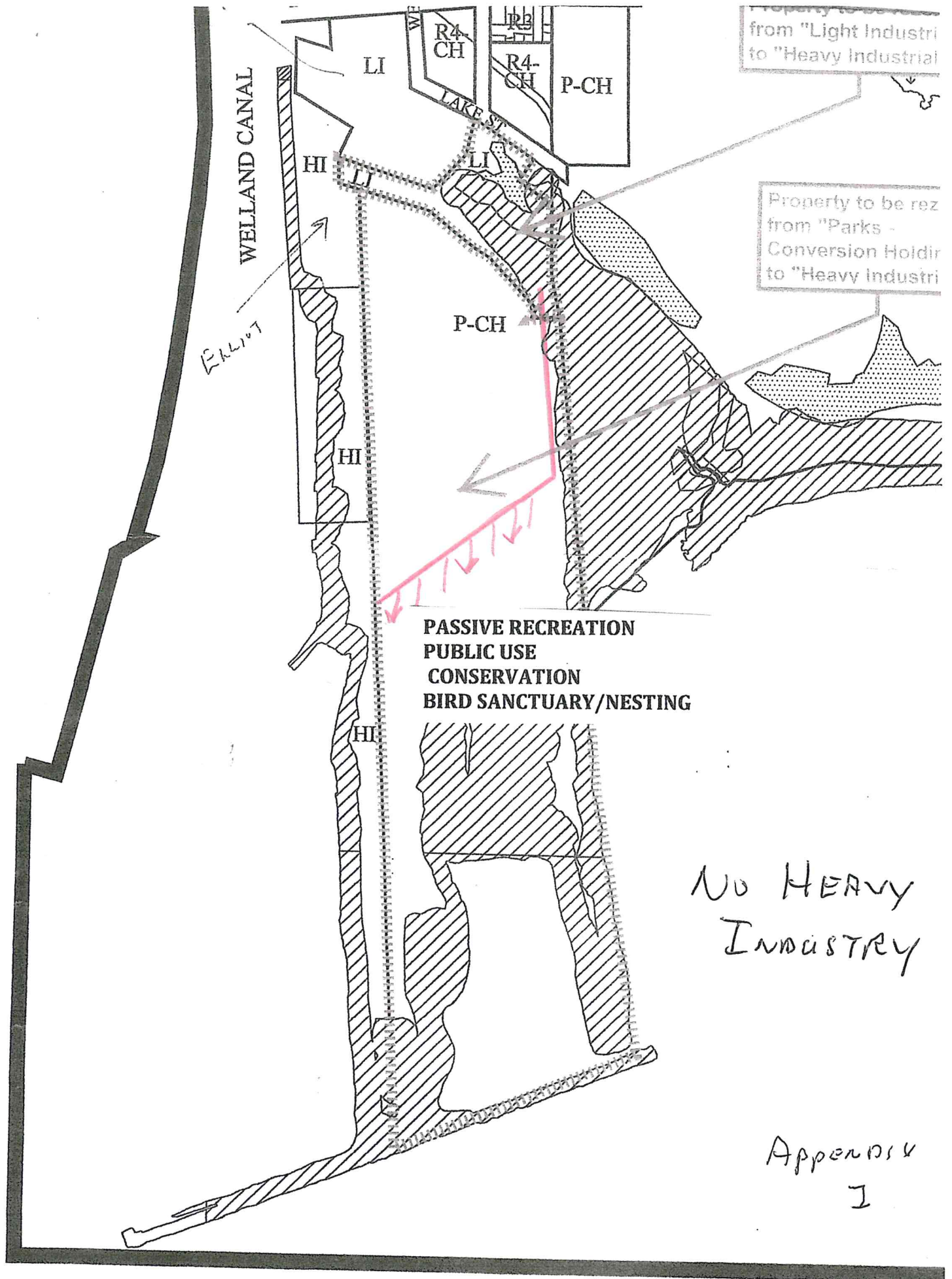
Port Colborne

East

Waterfront Community Improvement Plan and Draft Secondary Plan

March 2012

[http://portcolborne.ca/fileBin/library/East%20Waterfront%20CIP%20-%20FINAL%20VERSION%20\(high%20res\).pdf](http://portcolborne.ca/fileBin/library/East%20Waterfront%20CIP%20-%20FINAL%20VERSION%20(high%20res).pdf)



Section 32: Public and Park (P)

32.1 General

- a) No person shall use any lot or erect, alter or use any building or structure in any Public and Park (P) Zone except in accordance with the applicable provisions of Sections 2, 3 and 32.
- b) In addition to Section 32.1 (a), any lot may be subject to additional regulations or restrictions by the City, upper tier government or agencies as indicated in Section 1.3.

32.2 Permitted Uses

- a) Cemetery;
- b) Community Garden;
- c) Conservation Use;
- d) Cultural Facility;
- e) Food Vehicle;
- f) Park;
- g) Public Use;
- h) Recreation Use; and
- i) Uses, structures and buildings accessory thereto

32.3 Zone Requirements

- | | | |
|----|----------------------------|---|
| a) | Minimum Lot Frontage | no minimum |
| b) | Minimum Lot Area | no minimum |
| c) | Minimum Front Yard | 8 metres |
| d) | Minimum Lot Depth | no minimum |
| e) | Minimum Interior Side Yard | 4.5 metres or half the height of the building, whichever is greater |
| f) | Minimum Corner Side Yard | 7.5 metres |
| g) | Minimum Rear Yard | 7.5 metres |
| h) | Maximum Lot Coverage | 20 percent |

Section 35: Hazard Zone (H)

35.1 General

- a) No person shall use any lot or erect, alter or use any building or structure in any Hazard (H) Zone except in accordance with the applicable provisions of Sections 2, 3 and 35.
- b) In addition to Section 35.1 (a), any lot may be subject to additional regulations or restrictions by the City, upper tier government or agencies as indicated in Section 1.3.

35.2 Permitted Uses

- a) Boat House;
- b) Boat Ramp;
- c) Conservation Uses;
- d) Dock;
- e) Existing Agricultural Uses, excluding buildings and structures;
- f) Flood and Erosion Protection Works;
- g) Forestry Uses;
- h) Passive Recreation Use; and
- i) Public Use

35.3 Zone Requirements

- a) Where a Hazard Zone is shown on the Maps in Section 39, it includes hazards associated with the Lake Erie Shoreline, such as flooding, erosion or dynamic beach hazards as per the Niagara Peninsula Conservation Authority's Regulation of Development, Interference with Wetlands and Alteration to Shorelines and Watercourses O. Reg 1-55/05.
- a) Notwithstanding the permitted uses, where a lot is subject to a Hazard Zone, no uses and no buildings or structures or an expansion to an existing building or structure shall be permitted until a permit for development or site alteration is issued by the Niagara Peninsula Conservation Authority.
- b) Minimum Lot Frontage as existing
- c) Minimum Lot Area as existing
- d) Minimum Front Yard 15 metres

- | | | |
|----|-------------------|--|
| e) | Minimum Side Yard | 7 metres |
| f) | Minimum Rear Yard | 7 metres except the minimum rear yard shall be 30 metres from the 1 in 100 year flood line as determined by the Niagara Peninsula Conservation Authority |

35.4 Additional Zone Requirements – Boat House, Boat Ramp, Dock

- | | | |
|----|-------------------|------------|
| a) | Minimum Rear Yard | No minimum |
|----|-------------------|------------|

Port Colborne (breakwater and mainland) (ON019)

Port Colborne, Ontario

Latitude 42.871°N

Longitude 79.256°W

Altitude 175m

Area 2.00km²

Site Description

Port Colborne is located on the northern shore of Lake Erie at the eastern end of the Lake. The site is comprised of colonies at two locations: on a breakwater, which is located 1 km offshore, to the southwest of the mouth of the Welland Canal; and on a landfill at the southernmost tip of the Algoma Property on the immediate east side of the mouth of the Welland canal.

Construction of the breakwater started in 1901 in association with the operation of the third Welland Canal (part of the St. Lawrence Seaway System). In 1903, a lighthouse was built at the east end of the structure, and a helipad was constructed close by in 1987. The breakwater is about 700 m long east-west, with a south arm about 400 m long. A pile of loosely scattered limestone boulders and gravel occurs at the intersection of the two arms. The mainland site is a human-created landfill stretching along the east side of the Welland Canal. It has a rock base, and a thin layer of organic material that supports grass and other herbaceous plants.

Birds

Large numbers of Common Terns and Ring-billed Gulls nest at these two colonies. The Common Terns are restricted to the Breakwater site, while the Ring-billed Gulls nest at both locations. A peak of 1,311 pairs of Common Terns was recorded at the breakwater site in 1987; however, a major storm on 5 December 1987 washed all of the nesting material into the lake, leaving behind bare concrete slabs. Rock and gravel material was hand-shoveled from the rock pile and redistributed along the east arm in subsequent years. The numbers of nesting terns dropped slightly after this event, with the long term average (over 14 years) being about 1,000 pairs (over 2% of the estimated North American breeding population).

The Ring-billed Gulls nest primarily on the mainland site. In 1990, 43,590 pairs were estimated there, along with 2,500 pairs on the breakwater. This may represent as much as 5% of the estimated North American breeding population.

In addition to Ring-billed Gulls and Common Terns, about 175 pairs of Herring Gulls nest at the colonies, and in 1997 a pair of Great Black-backed Gulls nested there for the first time.

Conservation Issues

The Common Tern and Ring-billed Gull colonies at Port Colborne are the subject of a long term study being undertaken by researchers from Brock University in St. Catharines. The main threats to the colonies are human disturbance and substrate alteration. In addition, the Common Terns are especially susceptible to pressure from the Ring-billed Gulls; in particular the occupation of suitable nesting habitat, as well as egg and chick predation. Despite intense management, the Ring-billed Gulls appear to be gaining control of the Common Tern nesting areas. The number of nesting tern pairs was below 600 (21 May 1998) for the first time since the late 1970s. Management of the breakwater colony is being supervised by researchers from Brock University.

Public Information Centre - Comment Form

**NATURAL ENVIRONMENT WORK PROGRAM FOR THE NEW
NIAGARA OFFICIAL PLAN**

Date: May 30, 2019

Time: 5:30pm – 7:30pm

Location: West Lincoln Arena and Community Centre, 177 West. St., Smithville, L0R 2A0

**WE WOULD APPRECIATE YOUR THOUGHTS. PLEASE FILL OUT AND LEAVE THIS FORM
WITH STAFF AT TODAY'S EVENT OR SUBMIT BY JUNE 14TH, 2019.**

Mail: Sean Norman, Senior Planner
C/O Niagara Region, Planning and Development Services
1815 Sir Isaac Brock Way, PO Box 1042, Thorold, ON, L2V 4T7

Email: sean.norman@niagararegion.ca

1. What is important to you about Niagara's natural environment and planning for the future?

It is important that as much of our natural environment be preserved as possible, taking into consideration agricultural needs and population growth. Policies and procedures must be in place to ensure that the plan is adhered to and a proper procedure must be followed to deal with issues or infractions. The policies & procedures must be readily available.

2. What do you see as the biggest challenges and/or opportunities for Niagara's natural environment system planning?

The biggest challenge is to maintain as much of our natural environment while allowing for agriculture & urban growth. We have an opportunity at this point to set out clear direction, policies & procedures & communicate them effectively so that everyone in the region can refer to them.

TURN OVER →

3. What are the top 3 Niagara natural environment issues?

- 1) Preservation of wetlands
- 2) Better water management to deal with flooding in recent years due to climate change
- 3) Increase public awareness/education of the importance of our natural environment and how it affects and relates to both agriculture + urban life.

4. Additional Comments/Feedback:

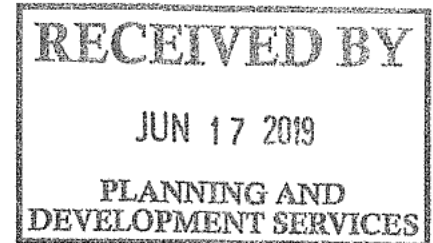
We would be happy to be involved in this at any level

CONTACT INFORMATION:

NAME:

EMAIL:

Niagara Region
Planning and Development Services
1815 Sir Isaac Brock Way
P.O.Box 1042, Thorold, ON, L2V 4T7



Comments on The Niagara Region Official Plan

The development of a new Official Plan provides the Niagara Region with the potential of including new environmental policies which, if implemented, would distinguish this region as an environmental leader in the 21st century. However, this will mean that the rapid degradation of the environment must be halted through these new policies and through the control of development - many environmentalists sincerely doubt that this will be the case and therefore a plan for enforcement must also be included.

There are at least 5 areas that must be codified in the new plan: 1 the preservation and enhancement of biodiversity, 2. the preservation of what remains of habitat including wetlands, 3. the control of invasive species, 4. the reduction of pollution especially pesticide and other toxins, and 5. aggressive response to climate change. (1)

In the meeting held on 16 May, one of the issues that was raised was that of "biological offsetting" to which the attendees responded very negatively. This issue was raised by the NPCA several years ago as a means of supporting the development of "Thundering Waters". At that time our response was the following:

"There is currently a discussion of what has been termed Biodiversity Offsetting which may then be used as the basis for future policy. It is therefore important to understand clearly the concept of Biological Diversity. Firstly, biodiversity includes all species including: animal, plant, microbes, fungi and all other species present in a given area. Secondly, biodiversity includes all genetic variations of each species (usually unknown) which may be present throughout the entire range (niche) of each species. And thirdly, biodiversity includes all of the unique ecological combinations of species (seen and unseen) and physical properties found in a given ecosystem.

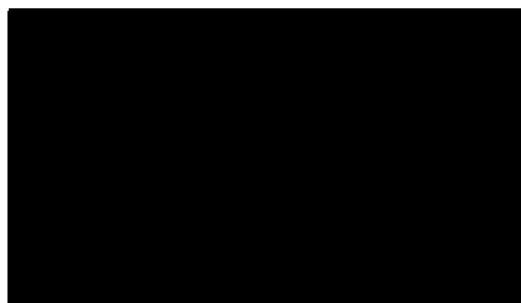
Thus, any forest or wetland or complex grassland has developed a unique set of biodiversity over many years (often centuries) that cannot be traded one for another. A particular example of this would be to an attempt to trade a wetland (even highly degraded) for another property no matter what its characteristics.

Therefore to believe that the trading of one ecosystem as contained in a wetland or forest or complex grassland for another is at best naive and at worst a deliberate misrepresentation.” (2-5)

We therefore believe that any reference to offsetting should be completely eliminated from this plan. In addition, we would like to see an Environmental Advisory Committee (EAC) set up which would include representatives from the 3 nature clubs (Bert Miller, Niagara Falls, Peninsula Field Naturalists) as well a number of members selected for their expertise. We also suggest that you get additional input from environmentalists through meetings held a more accessible locations (e.g. Fort Erie, Niagara Falls, St. Catharines). The preservation and enhancement of the environment requires an active stewardship by the people of Niagara. The Region must be strongly committed to educating the public to the inherent value of nature and encouraging the stewardship of natural resources. Where this fails, there must also be a strong commitment to enforce Provincial and Regional policies. (6)

References:

- 1). WWF, (2018). Living Planet Report 2018. Groton,M. and Almond, R.E.A. (Eds). WWF, Gland, Switzerland.
- 2). Gardner,T.A., et.al. (2013). Biodiversity Offsets and the Challenge of Achieving No Net Loss. Conservation Biol. v ,pp.1-11.
- 3). Moreno-Mateos,D. et.al. (2015). The True Loss Caused by Biodiversity Offsets. Biol. Conservation v192,pp.552-9.
- 4). Poulton,D.W. (2015). Key Issues in Biodiversity Offset Law and Policy: A Comparison of six Jurisdictions. Ontario Nature.
- 5). Spash, C.L. (2015). Bulldozing Biodiversity: The Economics of Offsets and Trading-in Nature. Biol. Conservation. v192,pp.541-51.
- 6). Provincial Policy Statement (2014). Government of Ontario, CA.



Appendix D: Indigenous Group Meetings

Appendix D-1: New Niagara Official Plan Presentation

Appendix D-2: Natural Environment Planning Presentation



making our mark

NIAGARA

OFFICIAL PLAN

Role of Regional Niagara Planning and Development

Community and Long Range Planning

- Develop Region Official Plan
- Review Local Official Plans and Zoning Bylaws
- Develop District Plans and approve Local Secondary Plan policies
- Strategic planning projects

Development Planning

- Provide comments, analysis and approvals on development planning applications and policies
- Develop the Regional position on development planning applications circulated by the 12 area municipalities

Infrastructure Planning and Development Engineering

- Growth infrastructure planning and water and wastewater master planning
- Review and approval of private sewage systems regulation



What is an Official Plan

- The Niagara Official Plan will be a long-range, policy planning document used to guide the physical, economic and social development of Niagara
- It will contain objectives, policies and mapping that form the Region's approach to managing growth and the economy, providing infrastructure and protecting the natural environment, cultural resources and agricultural land



Creating a New Regional Official Plan

The new Official Plan will be a cohesive, concise, user-friendly document that:

- Implements new provincial policy and plans, as amended;
- Reflects current goals and priorities of the community and Regional Council; and
- Provides clear direction for local planning, with flexibility where appropriate.



Background Studies and Reports

Growth Management

Land Needs Assessment

- Amount of land needed for residential and employment growth to 2041

Urban Structure

- Strategic areas to direct growth best served by transit, infrastructure and services

Housing Strategy

- Appropriate range/mix of housing to promote choice, affordable options and aging in place

Employment Lands Strategy

- Identify and protect a sufficient supply of land for employment uses to meet market demands

Rural + Natural Systems

Natural Environment

- Identify a natural system or systems and protect important natural features

Climate Change

- Identify climate change mitigation and adaptation opportunities

Agriculture

- Identify and protect farmland and support the agricultural industry

Aggregate Resources

- Ensure aggregate resources are available close to market, while addressing land use compatibility and environmental considerations

Cultural Heritage + Archeology

Policies for Official Plan

- Develop policies to conserve significant built heritage and archaeological resources

Archeological Management Plan

- Develop an Archaeological Management Plan to protect resources through the planning process

Consultation + Engagement

New Official Plan

- Confirm preferred approach for Indigenous engagement on the creation of the new Official Plan, including use of an Information Sharing Portal

Archaeological Management Plan

- Establish approach for Indigenous engagement on the archaeological management plan

Indigenous Engagement Policies and Procedures

- Policies and procedures for future Indigenous engagement on regional land use planning matters (e.g. policies for new Official Plan)



Growth Management – Housing Strategy

What is it?

- Plan for an appropriate range and mix of housing forms to provide choice, affordable options and aging in place
- Will align with the Region's Housing and Homelessness Action Plan (to be updated in 2019)

Current Status

- A region wide data set has been prepared that identifies housing and affordable housing requirements to 2041. This data set will be made available in mid-2019



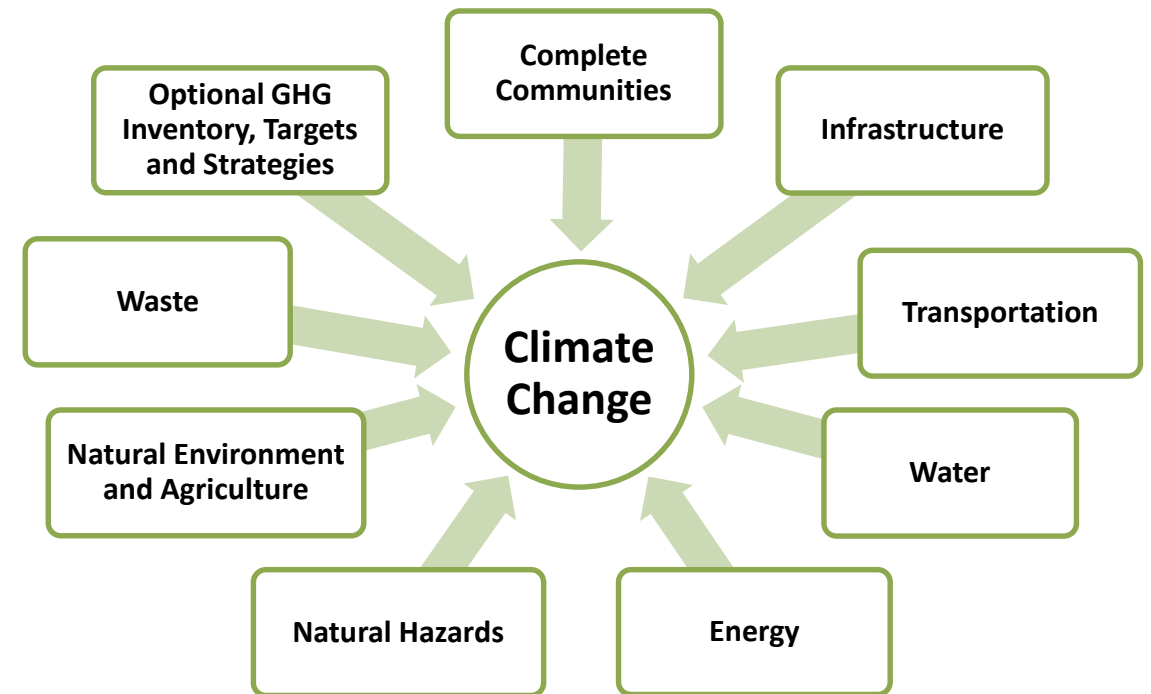
Rural and Natural Systems – Climate Change

What is it?

- Will explore opportunities to reduce greenhouse gas emissions in our communities and better adapt to the effects of climate change in Niagara, such as flooding

Current status

- Target completion date for climate change discussion paper is Fall 2019



Cultural Heritage & Archeology

Develop Regional policies for conservation of significant built heritage and archaeological resources – protect and preserve the physical remains of the cultures important to us all

- Adopt a Region-wide planning tool that maps areas of resource potential and establishes guidance for when archaeological assessments are required (Archaeological Management Plan) to protect the resource through the planning process
- Hired a consulting group to prepare the AMP – consultative discussion coming in June
- Establish a protocol for meaningful Indigenous engagement in the archaeological process
- Timeline: April 2019 – September 2020



Consultation Overview

- Consultation framework endorsed by Regional Council in March 2019
- Consultation with Indigenous groups early in the process
- Consult on background studies, draft policies and draft consolidated official plan
- Stakeholder sessions, public information centres (open houses), public meetings, online comments
- Establishment of a sharing portal



Process to Create the New Official Plan



Preliminary Framework for New Official Plan



GROWING REGION

How we manage growth and development, with a range and mix of housing forms, including affordable housing

CONNECTED REGION

How we improve connections with transit, recreation and trails, infrastructure and technology

COMPETITIVE REGION

How we increase our competitiveness by supporting employment opportunities and protecting agricultural lands

VIBRANT REGION

How we enhance the vibrancy of communities by supporting strong urban design and protecting cultural heritage

SUSTAINABLE REGION

How we protect our natural environment and plan for climate change





making our mark

NIAGARA

OFFICIAL PLAN

Natural Environment Work Program

New Niagara Official Plan



Preliminary Framework for New Official Plan



GROWING REGION

How we manage growth and development, with a range and mix of housing forms, including affordable housing

CONNECTED REGION

How we improve connections with transit, recreation and trails, infrastructure and technology

COMPETITIVE REGION

How we increase our competitiveness by supporting employment opportunities and protecting agricultural lands

VIBRANT REGION

How we enhance the vibrancy of communities by supporting strong urban design and protecting cultural heritage

SUSTAINABLE REGION

How we protect our natural environment and plan for climate change



Natural Environment Systems

Includes:

- Natural Heritage (Woodlands, Wetlands, Aquatic and Terrestrial Habitats)
- Water Resources (Streams, Rivers, Lakes, Groundwater)
- Watershed Planning and Stormwater Management

Commonly referred to as NHS or Natural Heritage System

- This is the tool used to identify, protect, and plan at a Regional Level
 - At the Provincial-level it is done more broadly - at site-level more detailed work is done



Natural Environment Planning



An important component of the new Niagara Official Plan with a range of ecological and other benefits:

- Clean water and air
- Increased biodiversity and resilience
- Better integration of the urban and natural worlds
- Supports human health and overall well-being
- Consideration of the impacts of climate change
- Identification of degraded areas in need of restoration



Natural Environment Background Study



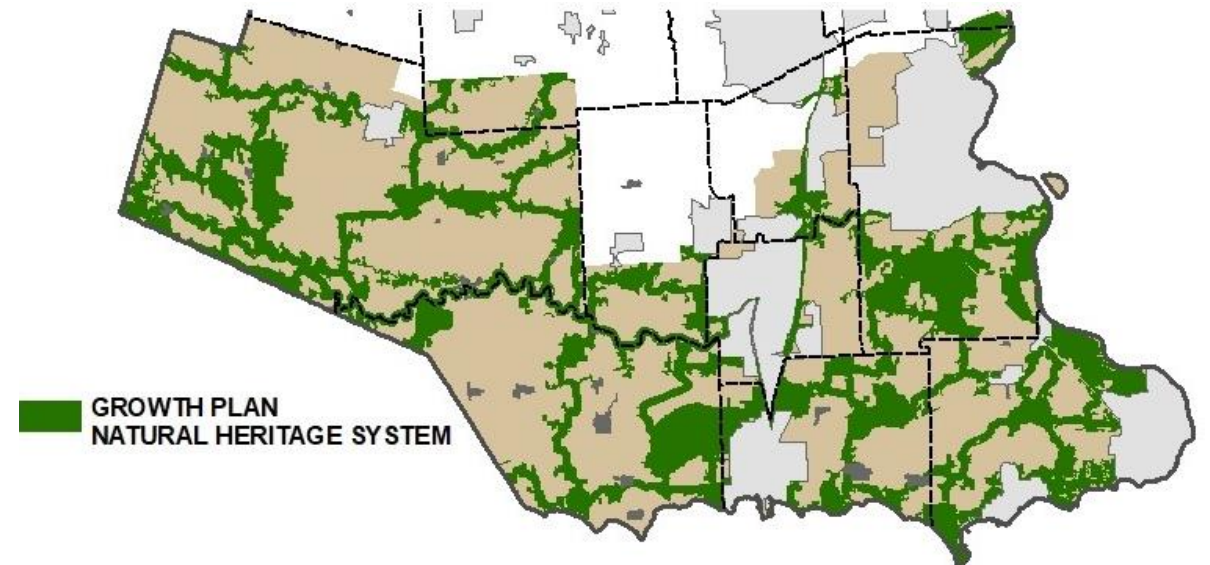
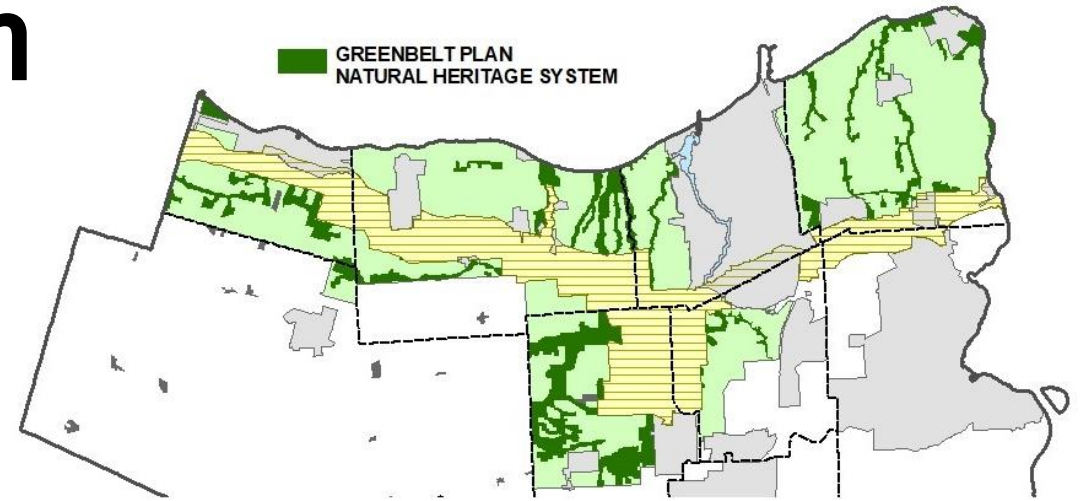
Key Topics

- Provincial Direction
 - Growth Plan
 - Greenbelt Plan
 - Niagara Escarpment Plan
- Endangered Species
- Climate Change
- Invasive Species
- Natural Hazards
 - Floodplains, Wildland fires
- Mapping of Watercourses and other Water Resources
- Fish Habitat
- Woodlands
- Setbacks and Buffers for Development
- Watershed Planning
- Relationship with Agriculture



Provincial Direction

- Provincial direction starts with the Provincial Policy Statement (PPS, 2014)
- Greenbelt and Growth Plan Natural Heritage Systems to be implemented by Municipalities
- Province provides a number of guidelines and other tools to assist Municipalities



Climate Change & Invasive Species

- Two of the most significant threats to the natural environment
- Natural environment systems are an important tool to reduce risk and mitigate the impacts of climate change
- Many invasive species in Niagara including Emerald Ash Borer. Additional tools beyond the scope of the Official Plan Policies will be required.



Emerald Ash Borer
(*Agrilus planipennis*)



Woodlands

- Process for identifying significant woodlands as a 'key feature':
 1. Identify and map 'Woodlands' in the Region based on defined criteria
 2. Develop and apply criteria to determine 'Significance'. Local context and conditions are a factor in determining significance.



Mapping of Watercourses

- Recently completed - detailed identification and mapping of watercourses and other surface water features in the Region
- A range of uses including:
 - New Niagara Official Plan
 - Mapping, classification, policy
 - Archaeological Screening
 - Emergency Response (e.g. spill tracking)
 - Watershed Planning



Watershed Planning

- Planning at a watershed scale that considers the relationship between the human and natural environments - with a focus on protecting water resources
- Watershed planning in the Province has been evolving for decades -
 - The 2014 PPS and 2017 Provincial Plans place a much greater emphasis on integration - planning and land use activities must be “informed by” watershed planning
- The new Niagara Official Plan will need to provide a framework and policies for watershed planning
- Additional consultation and engagement during any Watershed Planning process



Next Steps



1. Complete 1st Point of Engagement and finalize Background Study and Discussion Papers
2. Identify and evaluate options
3. Present preliminary preferred option to Regional Council and initiate 2nd Point of Engagement



Appendix E: Agricultural Policy and Action Committee Presentation

Appendix E-1: Presentation of Natural Environment Work Program to Agricultural Policy and Action Committee



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Natural Environment Work Program

New Regional Official Plan

February 22, 2019 – Presentation to
Agricultural Policy and Action Committee



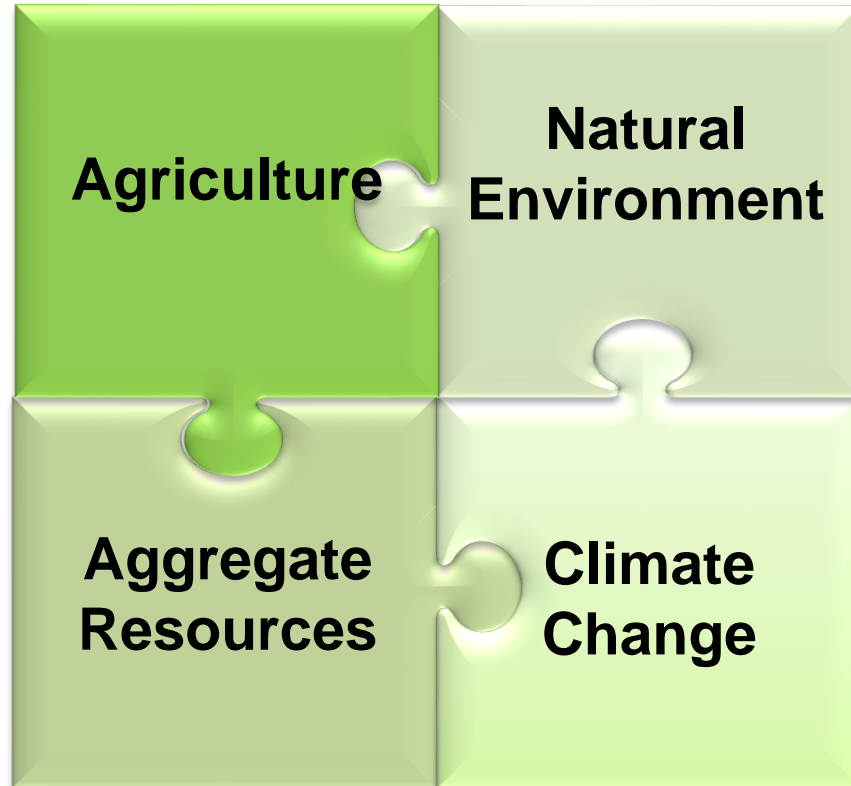
New Regional Official Plan

- Niagara Region is in the process of preparing a new Regional Official Plan (ROP)
- The ROP is a series of objectives and policies that guide the short-term and long-term physical development of all lands within the Region.
- The *Planning Act* requires municipalities to undertake regular reviews of their Official Plans to align with Provincial requirements.
- In 2016 Council endorsed the approach of the preparation of a new Regional Official Plan from start to finish rather than a series of site specific topic amendments. The new Regional Official Plan will be processed under Section 26 of the *Planning Act*, and is proposed to be finalized by the end of 2021.



Priority Background Studies

Natural Systems and Resources



Growth Management



Natural Environment Planning



An important component of the new Regional Official Plan to:

- Support the identification of areas for growth and development
- Meet Provincial requirements
- Supports a range of industries that benefit from a healthy natural environment
- Support public health, recreation, and overall well-being of residents
- Plan for climate change



Background

- **PDS 41-2017** outlined the 8 major background studies required to support the New Regional Official Plan
- **PDS 6-2018** was the project initiation report and sought direction for preliminary consultation
- **PDS 18-2018** was the project framework report



Scope for Natural Environment Work Program

In-Scope	Out-of-Scope*
<ul style="list-style-type: none">• Natural Heritage Features<ul style="list-style-type: none">• Woodlands, wetlands, habitat, habitat of endangered and threatened species, fish habitat, etc.• Hydrologic Features<ul style="list-style-type: none">• Streams, seepage areas, wetlands, etc.• Region's watercourse identification and mapping project• Water Resource Systems<ul style="list-style-type: none">• Groundwater systems• Surface water systems• Natural Hazards<ul style="list-style-type: none">• Flooding hazards, erosion hazards, and dynamic beach hazards, etc.• Wildland fires as per Section 3.1.8 of the PPS• Provincial Natural Heritage Systems<ul style="list-style-type: none">• Greenbelt Natural Heritage System and Urban River Valley designation• Growth Plan Natural Heritage System• Niagara Escarpment Plan as it relates to the municipal planning process• Watershed Planning & Stormwater Management	<ul style="list-style-type: none">• Aggregates & Petroleum Resources• Source Water Protection

**Official Plan policy development for out-of-scope items to be addressed separately*



Key Issues to be Addressed

- The implementation/interaction of the new Provincial Natural Heritage and Agriculture Systems
- A framework for watershed planning in the Region
- Setbacks, buffers, and vegetation protection zones
- Woodlands, invasive species, and climate change



Official Plan Policies

- The Official Plan is a “land-use” document. Policies are triggered by *Planning Act* application (i.e. change of use, severance of land). Policies do not apply to existing uses or normal farm practices.
- There are already some existing Provincial policies that recognize the unique agriculture in Niagara. For example policy 3.2.5.8 of the greenbelt plan allows for reduced setbacks from certain watercourses in the specialty crop area.



Upcoming Consultation and Engagement

- 1st major point of engagement - focusing on education and sharing information:
 - Planning Advisory Committee (PAC)
 - Public
 - Local Councils
 - Planning and Economic Development Committee
 - APAC
 - Agricultural community and other key stakeholders



Appendix F: Planning Advisory Committee Presentation

Appendix F-1: Presentation to Planning Advisory Committee

Appendix F-2: '4-S' Exercise Sheets from Planning Advisory Committee



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Natural Environment Work Program

New Niagara Official Plan

Planning Advisory Committee

May 22, 2019



Project Overview – Natural Environment

Project Phase	Activities
1	Project Initiation and Procurement
2	Background Study and Discussion Papers for Mapping and Watershed Planning Priority Areas
3	1 st Point of Engagement: Inform on Background Study
4	Develop and Evaluate Options for Natural System(s)
5	2 nd Point of Engagement: Consultation on Options for the Natural System(s)
6	Develop Regional Natural System(s)
7	Develop OP Policies & Finalize Mapping
8	3 rd Point of Engagement: Draft OP Policies and Schedules
9	Other Implementation Tools



Natural Environment Background Study

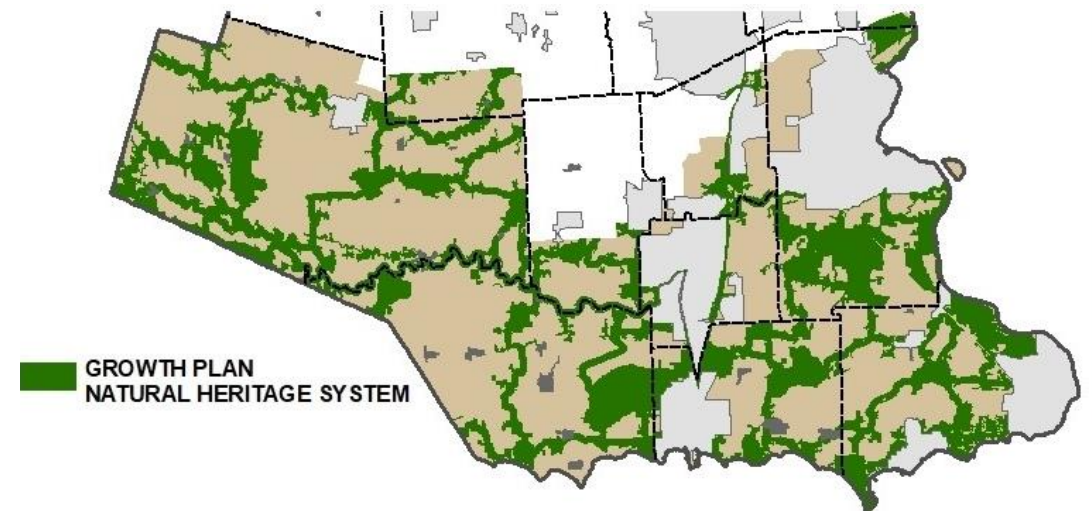
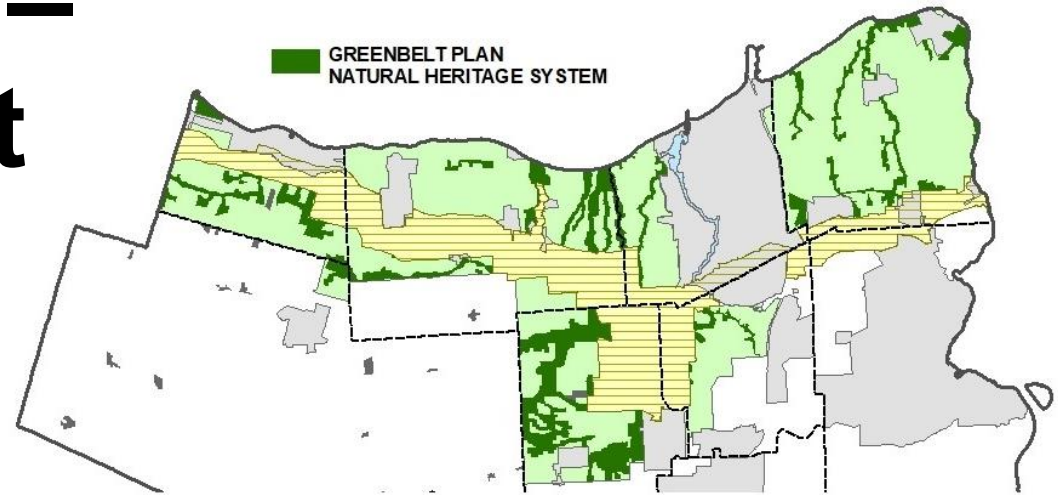
Key Topics



Provincial Direction – Natural Environment

Provincial direction starts with the **Provincial Policy Statement (PPS, 2014)**

- The PPS identifies the types of natural features, areas, functions, and systems that must be protected through the municipal official plan
- The **Greenbelt Plan** and **Growth Plan Natural Heritage Systems** have been identified by the Province and are to be implemented by municipalities
- Beyond Provincial Natural Heritage Systems, Provincial direction requires **Natural Heritage Systems** and **Water Resource Systems** be identified and appropriately protected through Official Plan policies – together referred to as the "**natural environment system**"



Provincial Direction – Growth Plan

- Growth Plan policies require EIS for development within 120 metres to fix width of vegetation protection zone
- However, minimum width is already fixed around some features (30 metres)
- The above means that new single detached dwellings within a significant woodland are not permitted and are required to be setback a minimum of 30 metres from the key feature
- Some exemptions apply for new agricultural buildings



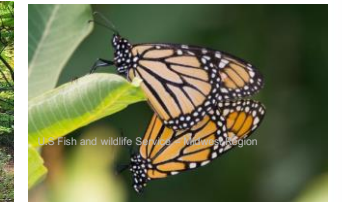
Interaction with Agriculture

- PPS and Growth Plan require that Prime Agricultural Areas be designated
 - In contrast, Growth Plan and Greenbelt Plan requires NHS to be shown as overlay – to recognize the primacy of agriculture
- Clear direction that natural environment polices are not intended to limit the ability of agricultural uses to continue
- Greenbelt and Growth Plan NHS policies both provide a wide range of exemptions for new agricultural and agricultural-related buildings and structures
- The requirement for a natural buffer is exempt where lands will continue to be used for agricultural purposes



What is a Natural Heritage System?

- “... 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 ...”.
“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.”
- 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).



Biodiversity

Ecosystem Functions

Ecosystem Services



Natural Heritage System (NHS)

Feature/Area	PPS 2014	Growth Plan 2017	Greenbelt Plan 2017
Significant wetlands, significant coastal wetlands	X	X	X
Significant woodlands	X	X	X
Significant valleylands	X	X	X
Significant wildlife habitat	X	X	X
Significant ANSIs	X	X	X
Coastal wetlands	X	X	X
Fish habitat	X	X	X
Habitat of endangered species and threatened species	X	X	X
Linkages	X	X	X
Life Science ANSI			X
Permanent and intermittent streams			X
Lakes (and their littoral zones)			X
Seepage areas and springs			X
Wetlands			X



Woodlands

- Woodlands are important for wildlife, cycling of nutrients, carbon and water, moderating the impacts of climate change and the urban heat island effect, and improving the overall health and wellbeing of residents.
- Process for identifying significant woodlands as a **‘key feature’**:
 1. Identify and map ‘Woodlands’ in the Region based on defined criteria
 2. Develop and apply criteria to determine ‘Significance’.
 - Criteria to identify significant woodlands can include size, age, proximity to other features such as watercourses, wetlands, and the Great Lakes.
 - size criteria to identify significant woodlands may vary geographically and in urban vs. rural areas.
- Local and Regional Tree By-Laws are a related tool for the management and protection of trees and woodlands. Following the completion of the new Niagara Official Plan there will be process to ensure alignment with the Regional Tree By-Law.



Fish Habitat

- All provincial plans have adopted the definition of fish habitat from the Federal Fisheries Act (1985):

“spawning grounds and any other areas, including nursery, rearing, food supply and migration areas, on which fish depend directly or indirectly in order to carry out their life processes” (Federal Fisheries Act 1985).
- Municipalities are responsible for the identification and protection of fish habitat through their official plan policies to ensure conformity with applicable Provincial plans and Federal legislation.
- The Region may decide to classify fish habitat based on:
 - an analysis of the ecological and hydrological function of the watercourse (often classified as ‘types’)
 - warmwater, coolwater or coldwater streams



Central Mudminnow (bottom) can be found in slow moving streams, marshes, weedy ponds and ditches.



Natural Hazards

- Flood Plain
 - Shoreline
 - Erosion
 - Unstable Soils
 - Unstable Bedrock (Karst)
-
- These features/areas can provide connectivity, and support hydrologic functions and “natural processes that are necessary to maintain biological diversity and natural functions”



Species-at-Risk

- Regulated under the Endangered Species Act (ESA)
- Responsibility of Ministry of Environment Conservation and Parks (MECP) to enforce ESA and issue permits
- Responsibility of municipality to ensure conformance with policy 2.1.7 of PPS
 - Habitat of endangered species and threatened species



Photo credit: Wasyl Bakowsky



Photo credit: Sam Brinker



What is a Water Resource System?

- “A system consisting of ground water features and areas and surface water features (including shoreline areas), and hydrologic functions, which provide the water resources necessary to sustain healthy aquatic and terrestrial ecosystems and human water consumption. The water resource system **will** comprise **key hydrologic features** and **key hydrologic areas**. (based on PPS 2014)”
- Provincial plans require that “Planning authorities shall protect, improve or restore the quality and quantity of water by:” ... “**identifying water resource systems** consisting of ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas, which are necessary for the ecological and hydrological integrity of the watershed”.



Water Resource System (WRS)

Feature/Area	PPS 2014	Growth Plan 2017	Greenbelt Plan 2017
Ground water features	X		
Hydrologic functions	X		
Shoreline areas necessary for the ecological and hydrological integrity of the watershed	X		
Headwaters	X		
Rivers	X		
Stream channels	X		
Inland lakes	X		
Recharge/discharge areas	X		
Associated riparian lands	X		
Significant groundwater recharge areas		X	X
Highly vulnerable aquifers		X	X
Significant surface water contribution areas		X	X
Permanent streams		X	X
Intermittent streams		X	X
Inland lakes and their littoral zones		X	X
Seepage areas and springs	X	X	X
Wetlands	X	X	X



Watercourses

Watercourses convey water and can be characterized by their size and flow regime. Types of watercourses include:

- Headwater drainage features
- Ephemeral streams
- Permanent and Intermittent streams
- Rivers (higher order watercourses)
- Agricultural swales, roadside ditches, and municipal drains

As a component of the natural environment systems, the new Niagara Official Plan will need to identify watercourses in order to conform with Provincial plans.



Types of watercourses: headwater drainage feature (top) and permanent watercourse.



Watershed Planning

- Planning at a watershed scale that considers the relationship between the human and natural environments - with a focus on protecting water resources
- Watershed planning in the Province has been evolving for decades -
 - The 2014 PPS and 2017 Provincial Plans place a much greater emphasis on integration - planning and land use activities must be “informed by” watershed planning
- The new Niagara Official Plan will need to provide a framework and policies for watershed planning
- Additional consultation and engagement during any Watershed Planning process
- Water Resource Systems shall be informed by watershed planning



Buffers and Vegetation Protection Zones (VPZs)

- Mitigation tool for new development
- Requirement for buffers
 - Minimum – applied through development planning applications and not to existing uses.
- Prescribed – opportunity for refinement through approved study
- Greenbelt Plan and Growth Plan require 30 m VPZs - Exemptions for agricultural uses
 - Crops can be planted in VPZ
 - For new buildings for agriculture-related activities in Greenbelt Plan area a reduced buffer of 15 m from watercourses that also function as agricultural swale, roadside ditch or municipal drain



Vegetated 30 m buffer between fenced property line and natural feature (top photo). Vegetated riparian area between watercourse (off image to right) and agricultural field (bottom photo)



Trends and Issues

Climate Change and Invasive Species

- Two of the most significant threats to the natural environment
- Natural environment systems are an important tool to reduce risk and mitigate the impacts of climate change
- Many invasive species in Niagara including Emerald Ash Borer. Additional tools beyond the scope of the Official Plan Policies will be required.



Emerald Ash Borer
(*Agrilus planipennis*)



Trends and Issues

Offsetting

- May represent an opportunity but introduces a concern
- Mitigation hierarchy -> offsetting as last resort
- Restricted to minimum types of features (e.g. small, isolated, limited function)
- 'No net loss' or 'net gain'
- Offsetting ratios
- Location



Mapping the Natural Environment System

- NHS and WRS
- What features to map?
 - Available data
 - Accuracy
- Not all features/components can be mapped
- Policies to permit refinement of the boundaries of features



Ongoing Consultation and Engagement

1st major point of engagement focusing on education and sharing information:

- Local Councils
- Public
- Local Planning Staff
- Agricultural and Environmental Stakeholder Groups
- Development Community
- Indigenous Groups
- Planning Advisory Committee (PAC)
- Agricultural Policy and Action Committee (APAC)
- Region's Planning and Economic Development Committee



Next Steps



1. Complete 1st Point of Engagement and finalize Background Study and Discussion Papers
2. Identify and evaluate options
3. Present preliminary preferred option to Regional Council and initiate 2nd Point of Engagement



Roundtable Discussion

- 4-S exercise
 - Sticking — that is, resonating strongly?
 - Surprising — that is, unexpected or at odds with your take on things?
 - Stressing — that is, causing some concern?
 - Strategically important — that is, of critical importance going forward?



Key Question for Exploration

1. The next step in the natural environment work program is the **development and evaluation of options** for a natural environment system. What **criteria** should be considered for evaluating the options?



Niagara Region: Natural Environment Work Program Stakeholder Workshop – May 22nd 2019

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 22th, 2019.

Sticking — that is, resonating strongly?

- Primacy of agriculture.
↳ Food Systems.

- ① Early stages

② Importance of getting a strong baseline.

Stressing — that is, causing some concern?

- Need to hear from younger groups

- Do not want groups to take over the process.

↳ Should we be doing combined consultations
or separate.

(pros | cons)

Surprising — that is, unexpected or at odds with your take on things?

- Not everything can be mapped.

- Green belt vs. Growth Plan. vs. PPS.

- Should not. Env. be part of the
ag system.

That you may
not use site
information

Strategically important — that is, of critical importance going forward?

- Need to be agile. Want to be able to react to what we
are seeing along the way

- Getting the baseline right.

↳ understanding of what we have.

- ~~uniqueness~~, uniqueness of Niagara.

• Be sensitive. Be willing to challenge assumptions
and change approach.

Niagara Region: Natural Environment Work Program
Stakeholder Workshop – May 22th, 2019.

Sticking — that is, resonating strongly?

- Emphasis on Linkages
- Water resource system - needs to be comprehensive → links.
- aquifers → could the Region protect them?

Surprising — that is, unexpected or at odds with your take on things?

- that the Region would continue allowing offsetting.

Stressing — that is, causing some concern?

- Worry that downloading to local municipalities where resources are lacking would not

Strategically important — that is, of critical importance going forward?

- Mapping → important to have a good database to know what you have.
- Definitions of features
- How to define wood land → potential?
- How to integrate climate Δ into water resource system & water resource system
- WRS is important

Appendix G: Regional Planning and Economic Development Committee Presentation

Appendix G-1: Report to Planning and Economic Development Committee, Wednesday, February 20, 2019

Appendix G-2: Presentation to Regional Planning and Economic Development Committee

Subject: Update on Natural Environment Work Program – New Regional Official Plan

Report to: Planning and Economic Development Committee

Report date: Wednesday, February 20, 2019

Recommendations

1. That Report PDS 10-2019 **BE RECEIVED** for information; and,
2. That Report PDS 10-2019 **BE CIRCULATED** to the Area Municipalities and the Niagara Peninsula Conservation Authority (NPCA).

Key Facts

- This purpose of this report is to provide an update on the natural environment work program for the new Regional Official Plan including background, work completed to date, and next steps.
- Natural environment planning is a complex and evolving science. There is a wide range of changing Provincial requirements, guidance, and direction; scientific and technical requirements; industry best practices; and local context that must be taken into consideration.
- Natural environment planning is highly-integrated with agricultural system planning. Both natural environment and agricultural systems are foundations of the new Regional Official Plan.
- PDS 6-2018 was the Project Initiation Report for the natural environment work program. The report was presented to Planning and Economic Development Committee on January 31, 2018 and sought direction to begin the consultation program and to prepare a more detailed project framework.
- PDS 18-2018 was the detailed project framework for the natural environment work program, and was endorsed by Planning and Economic Development Committee on April 25, 2018.

Financial Considerations

The costs associated with the natural environment work program can be accommodated within the Council approved Regional Official Plan project budget.

Analysis

Background

Since approval in 1973, first as the Regional Policy Plan, the Regional Official Plan has not been comprehensively updated. The historical structure of the Regional Official Plan never contemplated the comprehensive long range planning guidance required by the current contemporary Provincial planning requirements. A new Regional Official Plan that reflects Provincial Policy and up-to-date current planning practice is required.

By approval of Report PDS 40-2016, Council endorsed the approach of the preparation of a new Regional Official Plan from start to finish rather than a series of site specific topic amendments.

Subsequently, PDS 41-2017 outlined eight background studies that needed to be initiated as a first priority towards the development of the new Regional Official Plan. Four of these are generally classified as they relate to growth: land needs assessment, employment lands strategy, urban structure, and a regional housing strategy. The remaining four are generally classified as resource and environment related: aggregates, climate change, agriculture, and natural environment.

PDS 6-2018 was the project initiation report for the natural environment work program and sought direction to consult with Area Planners and local municipal planning staff. During that consultation process the scope, methodology, and key issues to be incorporated in the work program were confirmed. PDS 18-2018 provided a summary of the early consultation process; framework for the work program moving forward; an outline of the proposed consultation and engagement process; and a schedule for reporting to Committee and Council. That reporting scheduled identified that a status report on the project would be made in Q1 2019.

Scope

Through early consultation with the Area Planners group and other stakeholders the scope of the natural environment work program was refined and confirmed. The natural environment work program will include evaluation and consideration of:

- Natural Heritage Features:
 - All features as identified in the PPS (Provincial Policy Statement) and Provincial Plans including woodlands, wetlands, wildlife habitat, habitat of endangered and threatened species, fish habitat, significant valleylands, etc.

- Hydrologic Features:
 - All features as identified in the PPS and Provincial Plans including streams, seepage areas, wetlands, etc.
 - Significant work to date on the Region's watercourse identification and mapping project (known as the "contemporary mapping of watercourses")
- Water Resource Systems:
 - Groundwater systems
 - Surface water systems
- Natural Hazards:
 - All features as identified in the PPS and Provincial Plans including flooding hazards, erosion hazards, and dynamic beach hazards, etc.
 - Wildland Fires as per Section 3.1.8 of the PPS.
- Provincial Natural Heritage Systems:
 - Greenbelt Natural Heritage System and Urban River Valley designation
 - Growth Plan Natural Heritage System
- Niagara Escarpment Plan as it relates to the municipal planning process
- Watershed Planning & Stormwater Management

Although there will be a connection with some of the 'in scope' items, this project will not result in the development of Official Plan policies related to:

- Aggregates & Petroleum Resources
- Source Water Protection

Framework for Natural Environment Work Program

As outlined previously in further detail in PDS 18-2018, the natural environment work program will be undertaken as follows. A consulting team has now been retained to undertake Phases 2-6 and to support Region staff with Phase 7 and 8. Phase 9, which is the development of other implementation tools is outside of this work program and will be considered once the Regional Official Plan policies have been developed and endorsed.

- Phase 1 - Project Initiation and Procurement
- Phase 2 - Background Study and Discussion Papers for Mapping and Watershed Planning Priority Areas
- Phase 3 - 1st Point of Engagement: Inform on Background Study
- Phase 4 - Develop Options for the Natural System(s)

- Phase 5 - 2nd Point of Engagement: Consultation on Options for the Natural System(s)
- Phase 6 - Develop Regional Natural System(s)
- Phase 7 - Develop Official Plan Policies & Finalize Mapping
- Phase 8 - 3rd Point of Engagement: Draft OP Policies and Schedules
- Phase 9 – Other Implementation Tools

Work Completed to Date

Since the endorsement of PDS 18-2018, Region staff have completed Phase 1 of the work program which included: preparing a request for proposal (RFP) document, undertaking a procurement process, and retaining a consulting team. A Technical Advisory Group (TAG) comprising of local, NPCA, and provincial planning staff has also been formed.

Phase 2 of the work program is well underway and has included a meeting of the TAG as well as several meetings with a mapping working group which was formed to support the development of the high-priority mapping discussion paper.

Next Steps

The next steps in the work program are the completion of mapping and watershed planning discussion papers, followed by the comprehensive background study. These studies will provide the necessary background information for the system and policy development and are the foundation of the work program moving forward.

Following this is the 1st major point of engagement with the full range of stakeholders. The purpose of this point of engagement is to educate and share the findings of the background studies. Public open houses and presentations to local councils will also be completed during the 1st point of engagement.

Alternatives Reviewed

N/A

Relationship to Council Strategic Priorities

The natural environment work program is part of the new Regional Official Plan which will assist in implementing Council's Strategic Priority of Innovation, Investment, & Entrepreneurship.

Other Pertinent Reports

- PDS 40-2016 – Regional Official Plan Update
- PDS 41-2017 – New Official Plan Structure and Framework
- PDS 3-2018 – New Official Plan Update
- PDS 6-2018 – Natural Environment Project Initiation Report
- PDS 18-2018 – Natural Environment – Project Framework

Prepared by:

Sean Norman, PMP, MCIP, RPP
Senior Planner
Planning and Development Services

Recommended by:

Rino Mostacci, MCIP, RPP
Commissioner
Planning and Development Services

Submitted by:

Ron Tripp, P. Eng
Acting Chief Administrative Officer

This report was prepared in consultation with Karen Costantini, Planning Analyst – Regional Official Plan, and reviewed by Erik Acs, MCIP, RPP, Manager, Community Planning, Dave Heyworth, MCIP, RPP, Official Plan-Policy Consultant, and Doug Giles, Director, Community and Long Range Planning.



making our mark

NIAGARA

OFFICIAL PLAN

PDS 10–2019

Update on Natural Environment Work Program

February 20, 2019 – Presentation to Planning and Economic
Development Committee



Background

- **PDS 41-2017** outlined the 8 major background studies required to support the New Regional Official Plan
- **PDS 6-2018** was the project initiation report and sought direction for preliminary consultation
- **PDS 18-2018** was the project framework report



Drivers for Natural Environment Work Program

- Conformity with Provincial requirements
- Need to develop new natural system(s) and policies to address concerns from a range of stakeholders and other users:
 - Feedback has been that existing policies are out-of-date and difficult to use.
Mapping also requires review and update
- Need to have a system that considers, and is compatible with agriculture and other land uses



Scope for Natural Environment Work Program

In-Scope	Out-of-Scope*
<ul style="list-style-type: none"> • Natural Heritage Features <ul style="list-style-type: none"> • Woodlands, wetlands, habitat, habitat of endangered and threatened species, fish habitat, etc. • Hydrologic Features <ul style="list-style-type: none"> • Streams, seepage areas, wetlands, etc. • Region's watercourse identification and mapping project • Water Resource Systems <ul style="list-style-type: none"> • Groundwater systems • Surface water systems • Natural Hazards <ul style="list-style-type: none"> • Flooding hazards, erosion hazards, and dynamic beach hazards, etc. • Wildland fires as per Section 3.1.8 of the PPS • Provincial Natural Heritage Systems <ul style="list-style-type: none"> • Greenbelt Natural Heritage System and Urban River Valley designation • Growth Plan Natural Heritage System • Niagara Escarpment Plan as it relates to the municipal planning process • Watershed Planning & Stormwater Management 	<ul style="list-style-type: none"> • Aggregates & Petroleum Resources • Source Water Protection

**Official Plan policy development for out-of-scope items to be addressed separately*



Project Overview – Natural Environment

Project Phase	Activities
1	Project Initiation and Procurement <i>[Complete]</i>
2	Background Study and Discussion Papers for Mapping and Watershed Planning Priority Areas <i>[Ongoing]</i>
3	1 st Point of Engagement: Inform on Background Study
4	Develop Options for Natural System(s)
5	2 nd Point of Engagement: Consultation on Options for the Natural System(s)
6	Develop Regional Natural System(s)
7	Develop OP Policies & Finalize Mapping
8	3 rd Point of Engagement: Draft OP Policies and Schedules
9	Other Implementation Tools



Key Issues to be Addressed

- The scale and methodology that natural environment features and systems are mapped by the Region
- A framework for watershed planning in the Region
- Offsetting, compensation, mitigation, vegetation protection zones, and buffers
- Woodlands, shorelines, invasive species, and climate change





Progress to Date

- Consulting team has been retained
- Technical Advisory Group (TAG) has been formed and engagement has begun
- Meetings with mapping working group in support of high-priority Mapping Discussion Paper



Next Steps

- Complete the high-priority Mapping and Watershed Planning Discussion Papers and Comprehensive Background Study
- 1st major point of engagement - focusing on education and sharing information:
 - Stakeholders
 - Planning Advisory Committee (PAC)
 - Public
 - Local Councils
 - Planning and Economic Development Committee



