

Appendix I: Provincial Planning Staff

- Natural Environment Work Program – Phase 4: Identification and Evaluation of Options – Presentation to Provincial Staff (September 16, 2020)



making our mark

NIAGARA

OFFICIAL PLAN

Niagara Region

Natural Environment Work Program – Phase 4: Identification and Evaluation of Options

Presentation to Provincial Staff

September 16, 2020



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



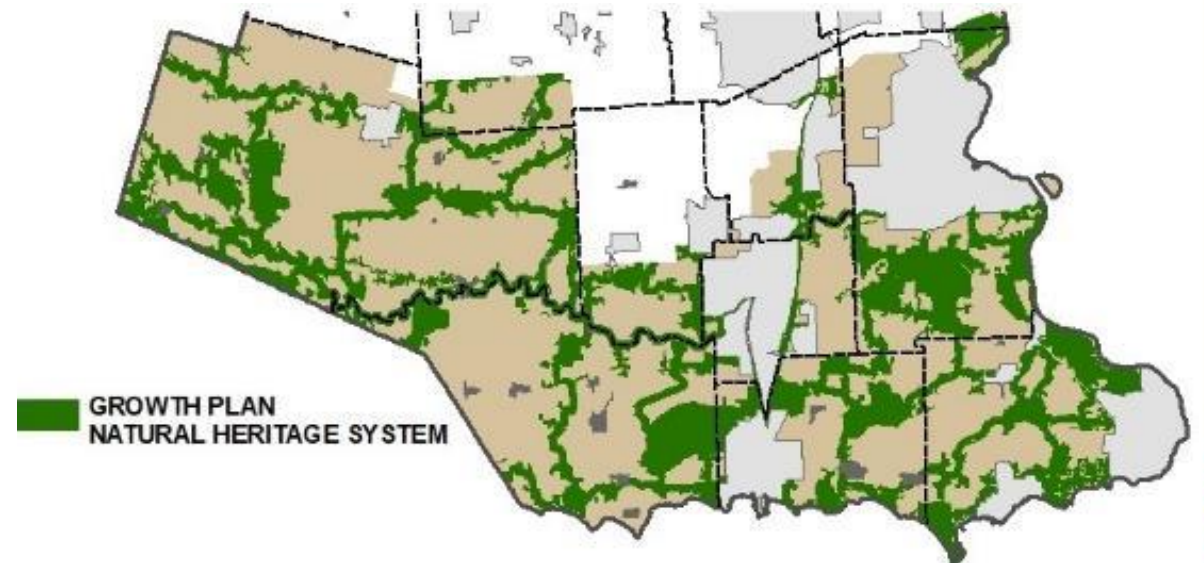
Overview of Phase 4

- Incremental step between the background reports and the mapping and policy development process
- Goal is to establish the overall direction for the natural heritage system (NHS) and water resource system (WRS)
- Based on concepts for the natural systems only. Mapping, criteria, and policies were developed to a level-of-detail that was required to support the evaluation and engagement process only
- Detailed and region-wide mapping to be completed in subsequent phases of the work program



Provincial Direction – Natural Environment

- The **Greenbelt Plan** and **Growth Plan NHSs** have been identified by the Province and are to be implemented by municipalities
- The Growth Plan and PPS also requires that a water resource system be identified and protected.
- The PPS identifies the types of natural features, areas, functions, that must be protected through Official Plan policies



Policy Direction – Natural Heritage System and Agricultural System



- In addition to preparing a map of the NHS, the Province has also mapped the agricultural system
- Within the agricultural system, the PPS and Growth Plan both require that Prime Agricultural Areas be designated in Official Plans
- In contrast, the Growth Plan and Greenbelt Plan requires NHS to be shown as overlay – to recognize the primacy of agriculture



Policy Direction – Natural Heritage System and Agricultural System

- Policies will not limit the ability of agricultural uses to continue (PPS 2.1.9)
- 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



Policy Direction – Water Resource System (WRS)

- The Province has not prepared a map showing a WRS – however, the Growth Plan requires that a WRS be identified
- While some components of a WRS can be identified (such as wetlands and stream corridors), other components can only be identified through future study



“Watershed planning or equivalent will inform ...the identification of water resource systems.” (Growth Plan, 4.2.1.3a)



Development of Options

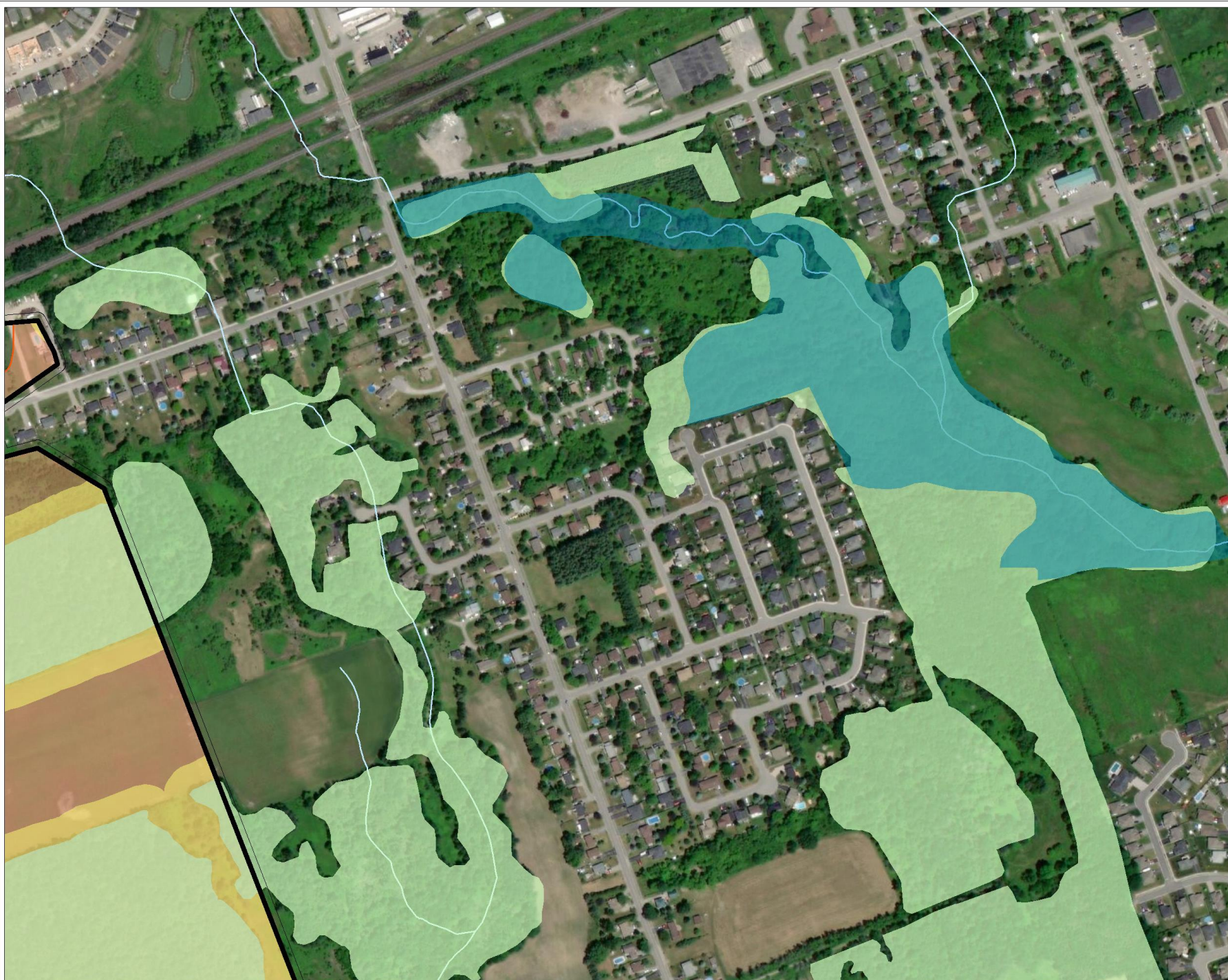
- Range of considerations were reflected in the development of options including:
 - Impacts on agricultural community and rural development
 - Provincial requirements to accommodate growth and plan for complete communities in settlement areas
 - Best practices and recent issues and trends in natural environment planning including climate change & invasive species
 - The range of input received through the 1st point of engagement
 - The range of local needs and priorities across Niagara
- All of the options identified:
 - Conform with provincial requirements
 - Represent an increase as compared to the existing system and policies in Niagara



Natural Heritage System Options

- Option 1 - “Minimum Standards – Overlay”
 - Implements minimum standards of PPS and provincial plans
 - Relies on the provincial NHSs to fulfil the requirements for a ‘system-based’ approach
 - Key features required by provincial plans would be mapped, including significant features identified by the PPS. outside of the Provincial NHSs
 - The NHS including individual features would be shown as an overlay in the Official Plan schedules
- Option 2 - “Minimum Standards – Designation”
 - Same as Option 1 but the key/significant features would be designated as a mutually exclusive land use on the Official Plan schedules
- Option 3 – “Going Beyond Minimum Standards”
 - Builds upon Option 1 and 2 by providing three scenarios that exceed minimum provincial standards, and includes an increasing range of additional components, regional linkages, and buffers.





Conceptual Natural Heritage System Settlement Area Option 1 and 2

Legend

Settlement Area

Required Components

Growth Plan Natural Heritage System

Vegetation Protection Zones

Significant Woodlands

Provincially Significant Wetland

Watercourses

These maps are conceptual and for illustration purposes. These maps were prepared to demonstrate the differences between the various NHS options and are not intended to depict specific areas in Niagara Region.

0 100 200 300 Meters

Project Number
20-1149

Date:
2020-09-09



Map Produced by North South Environmental (NSE) Inc.
This map is proprietary and confidential and must not be duplicated or distributed by any means without permission of NSE.
Imagery: ESRI

north-south
ENVIRONMENTAL





Conceptual Natural Heritage System Outside Settlement Area Option 1 and 2

Legend

Required Components

-  Growth Plan Natural Heritage System
-  Vegetation Protection Zones
-  Significant Woodlands
-  Provincially Significant Wetlands
-  Watercourses

These maps are conceptual and for illustration purposes. These maps were prepared to demonstrate the differences between the various NHS options and are not intended to depict specific areas in Niagara Region.



Project Number
20-1149

Date:
2020-09-09



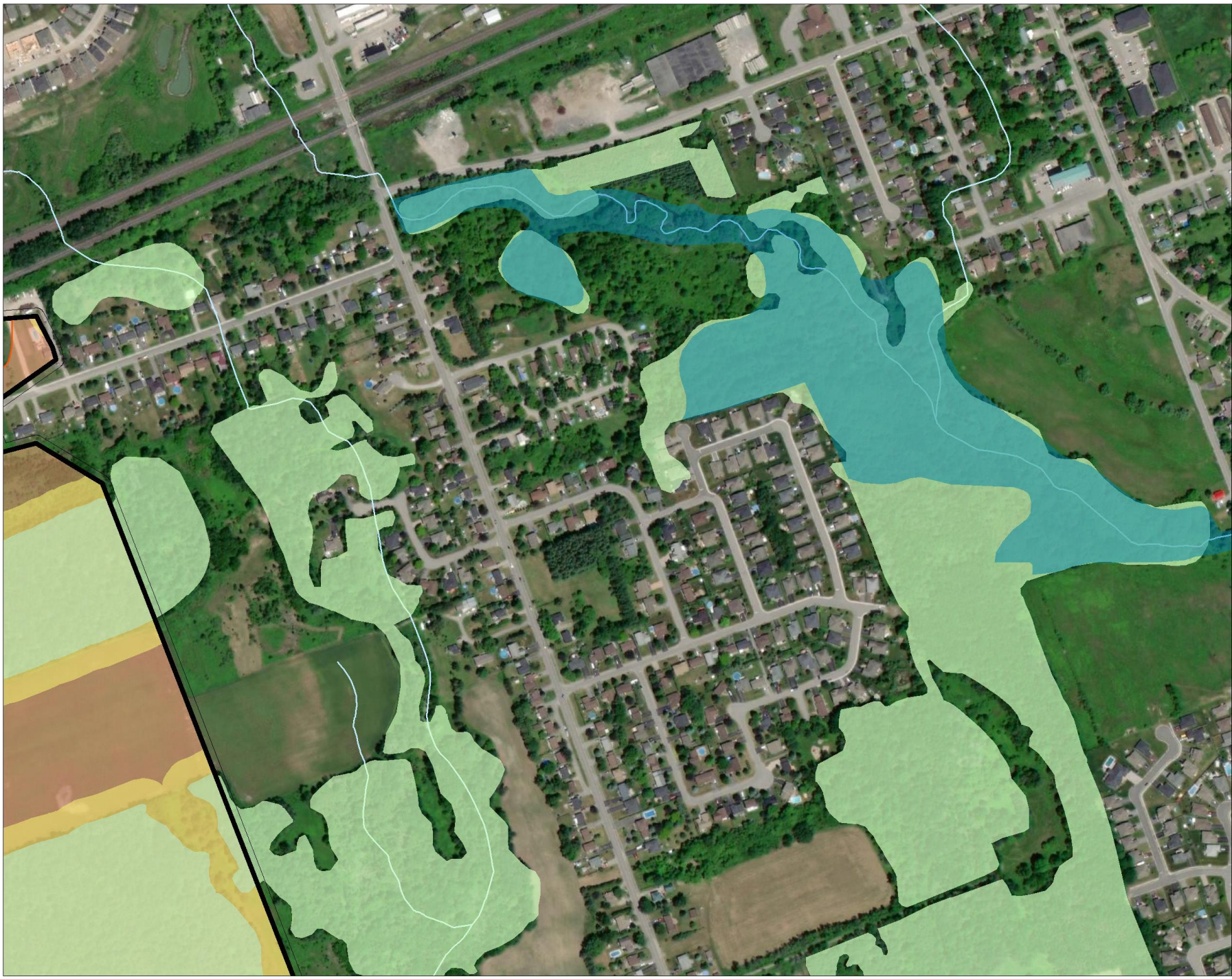
Map Produced by North South Environmental (NSE) Inc.
This map is proprietary and confidential and must not be duplicated or distributed by any means without permission of NSE.
Imagery: ESRI

north-south
ENVIRONMENTAL



Comparison of Option 3A, 3B, & 3C

	N.H.S. 3A	N.H.S. 3B	N.H.S. 3C
Component Features and Areas	<ul style="list-style-type: none"> • Key Natural Heritage Features within the N.E.P. • Other Key Natural Features and Areas outside of provincial N.H.S.s, but only outside of settlement areas 	<ul style="list-style-type: none"> • Key Natural Heritage Features within the N.E.P. as per Option 3A • Other Key Natural Features and Areas outside of provincial N.H.S.s both outside and in settlement areas • Supporting Features and Areas outside of settlement areas 	<ul style="list-style-type: none"> • Key Natural Heritage Features within the N.E.P. as per Options 3A and 3B • Other Key Natural Features and Areas outside of provincial N.H.S.s both outside and in settlement areas as per Option 3B • Supporting Features and Areas in all of the Region, including both outside and within settlement areas
Connecting the System (linkages)	<ul style="list-style-type: none"> • Large Linkages only between Key Natural Features and Areas outside of settlement areas 	<ul style="list-style-type: none"> • Large and Medium Linkages between Key Natural Features and Areas outside of settlement areas 	<ul style="list-style-type: none"> • Large, Medium and Small Linkages between Key Natural Features and Areas outside of settlement areas • Small Linkages between Key Natural Features and Areas in settlement areas where the potential linkage area is in a natural state
Buffers/ Vegetation Protection Zones (to Key Natural Features and Areas)	<ul style="list-style-type: none"> • Suggested policy minimums outside of provincial N.H.S.s and outside of settlement areas 	<ul style="list-style-type: none"> • Suggested policy minimums outside of provincial N.H.S.s, both inside and outside of settlement areas 	<ul style="list-style-type: none"> • Mandatory buffers outside of settlement areas (that can be reduced through study) with suggested policy minimums inside settlement areas



Conceptual Natural
Heritage System
Settlement Area
Option 3A

Legend

- Settlement Area
- Required Components**
- Growth Plan Natural Heritage System
- Vegetation Protection Zones
- Significant Woodlands
- Provincially Significant Wetland
- Watercourses

These maps are conceptual and for illustration purposes. These maps were prepared to demonstrate the differences between the various NHS options and are not intended to depict specific areas in Niagara Region.



Project Number 20-1149	Date: 2020-09-09	
---------------------------	---------------------	--

Map Produced by North South Environmental (NSE) Inc.
This map is proprietary and confidential and must not be duplicated or distributed by any means without permission of NSE.
Imagery: ESRI





Conceptual Natural Heritage System Outside Settlement Area Option 3A

Legend

Required Components



-  Growth Plan Natural Heritage System
-  Vegetation Protection Zones
-  Significant Woodlands
-  Provincially Significant Wetlands
-  Watercourses

Optional Components

Other Key Features

-  Wetlands (non-Provincially Significant)

Linkages

-  Large Linkage (400m)
-  Mandatory Buffers

These maps are conceptual and for illustration purposes. These maps were prepared to demonstrate the differences between the various NHS options and are not intended to depict specific areas in Niagara Region.



Project Number
20-1149

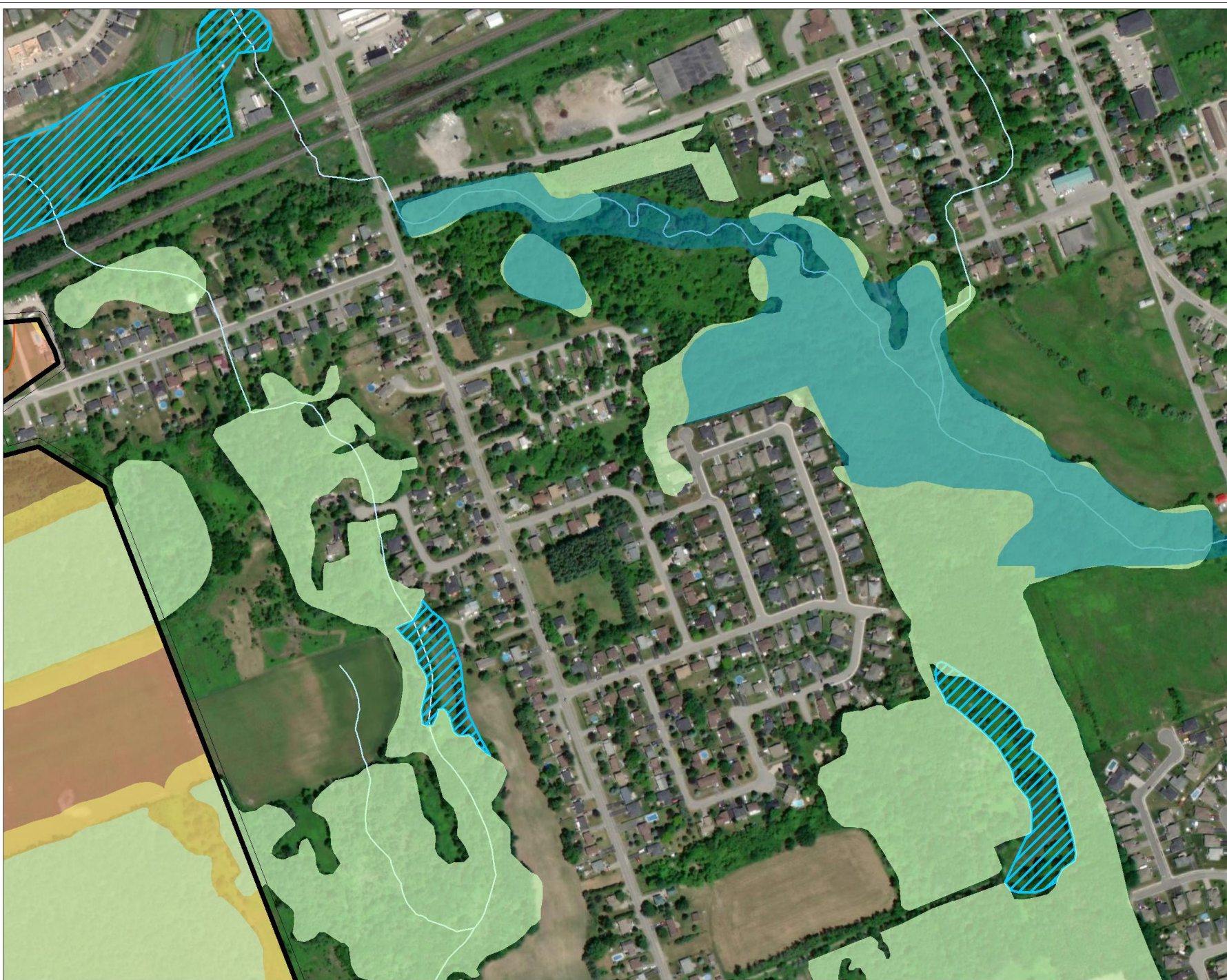
Date:
2020-09-09



Map Produced by North South Environmental (NSE) Inc.
This map is proprietary and confidential and must not be duplicated or distributed by any means without permission of NSE.
Imagery: ESRI

north-south
ENVIRONMENTAL





Conceptual Natural Heritage System Settlement Area Option 3B

Legend

 Settlement Area

Required Components

-  Growth Plan Natural Heritage System
-  Vegetation Protection Zones
-  Significant Woodlands
-  Provincially Significant Wetland
-  Watercourses

Optional Components

Other Key Features

-  Wetland (non-Provincially Significant)

These maps are conceptual and for illustration purposes. These maps were prepared to demonstrate the differences between the various NHS options and are not intended to depict specific areas in Niagara Region.

0 100 200 300 Meters

Project Number
20-1149

Date:
2020-09-09



Map Produced by North South Environmental (NSE) Inc.
This map is proprietary and confidential and must not be duplicated or distributed by any means without permission of NSE.
Imagery: ESRI

north-south
ENVIRONMENTAL





Conceptual Natural Heritage System Outside Settlement Area Option 3B

- Legend**
- Required Components**
- Growth Plan Natural Heritage System
 - Vegetation Protection Zones
 - Significant Woodlands
 - Provincially Significant Wetlands
 - Watercourses
- Optional Components**
- Other Key Features
- Wetlands (non-Provincially Significant)
- Supporting Features and Areas
- Enhancement Areas
 - Other Woodlands
- Linkages
- Large Linkage (400m)
 - Medium Linkage (200m)
 - Mandatory Buffers

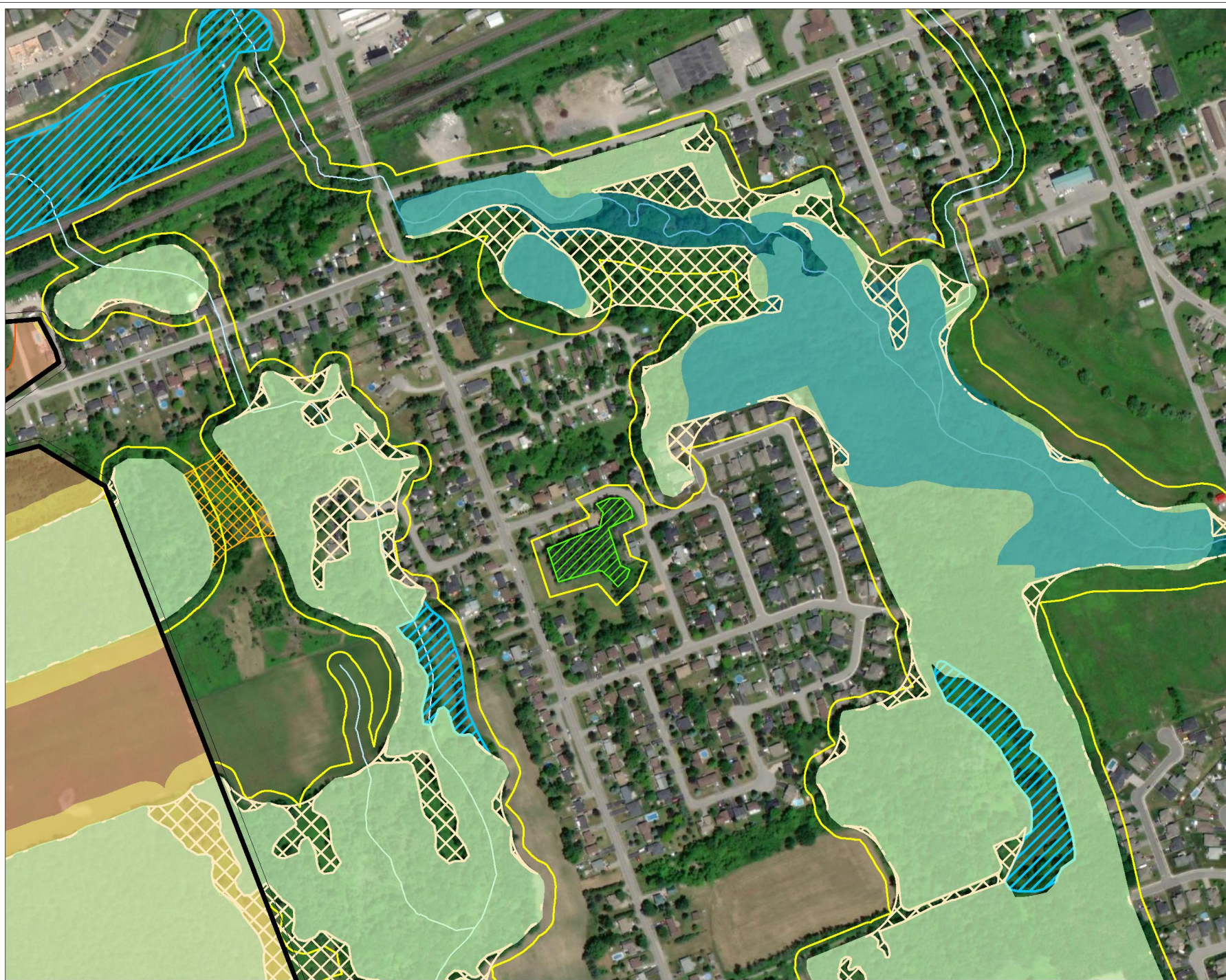
These maps are conceptual and for illustration purposes. These maps were prepared to demonstrate the differences between the various NHS options and are not intended to depict specific areas in Niagara Region.



Project Number 20-1149	Date: 2020-09-09	N ▲
---------------------------	---------------------	--------

Map Produced by North South Environmental (NSE) Inc.
This map is proprietary and confidential and must not be duplicated or distributed by any means without permission of NSE.
Imagery: ESRI





Conceptual Natural Heritage System Settlement Area Option 3C

Legend

Settlement Area

Required Components

Growth Plan Natural Heritage System

Vegetation Protection Zones

Significant Woodlands

Provincially Significant Wetland

Watercourses

Optional Components

Other Key Features

Wetlands (non-Provincially Significant)

Supporting Features and Areas

Other Woodlands

Enhancement Areas

Linkages

Small Linkage (100m)

Minimum Buffers

These maps are conceptual and for illustration purposes. These maps were prepared to demonstrate the differences between the various NHS options and are not intended to depict specific areas in Niagara Region.

0 100 200 300 Meters

Project Number
20-1149

Date:
2020-09-09



Map Produced by North South Environmental (NSE) Inc.
This map is proprietary and confidential and must not be duplicated or distributed by any means without permission of NSE.
Imagery: ESRI

north-south
ENVIRONMENTAL





Conceptual Natural Heritage System: Outside Settlement Area Option 3C

Legend

Required Components

- Growth Plan Natural Heritage System
- Vegetation Protection Zones
- Significant Woodlands
- Provincially Significant Wetlands
- Watercourses

Optional Components

Other Key Features

- Wetlands (non-Provincially Significant)

Supporting Features and Areas

- Enhancement Areas
- Other Woodlands

Linkages

- Large Linkage (400m)
- Medium Linkage (200m)
- Small Linkage (100m)
- Minimum Buffers

These maps are conceptual and for illustration purposes. These maps were prepared to demonstrate the differences between the various NHS options and are not intended to depict specific areas in Niagara Region.

0 100 200 300 400 500 Meters

Project Number
20-1149

Date:
2020-09-09



Map Produced by North South Environmental (NSE) Inc.
This map is proprietary and confidential and must not be duplicated or
distributed by any means without permission of NSE.
Imagery: ESRI

north-south
ENVIRONMENTAL



Water Resource System Options

- “Informed by watershed planning or equivalent”
 - ‘Niagara Watershed Plan’ project has been initiated by the Region
- Option 1 - “Minimum Standards – Overlay”
 - Implements minimum standards of PPS, Growth Plan, and Greenbelt Plan
- Option 2 - “Going Beyond Minimum Standards”
 - Same as Option 1 but identified additional/optional components:
 - Option 2A – additional/optional features outside of settlement areas only
 - Option 2B – additional/optional features Region-wide, including within settlement areas



Niagara Region Natural Environment Work Program Water Resource System - Option 1 and 2

Legend

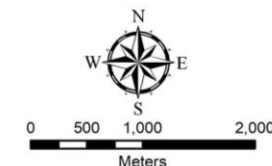
Key Hydrologic Features

- Wetlands
- Waterbodies
- Watercourses

Key Hydrologic Areas

- Significant Groundwater Recharge Areas
- Highly Vulnerable Aquifers
- Roads
- Railway
- Settlement Areas

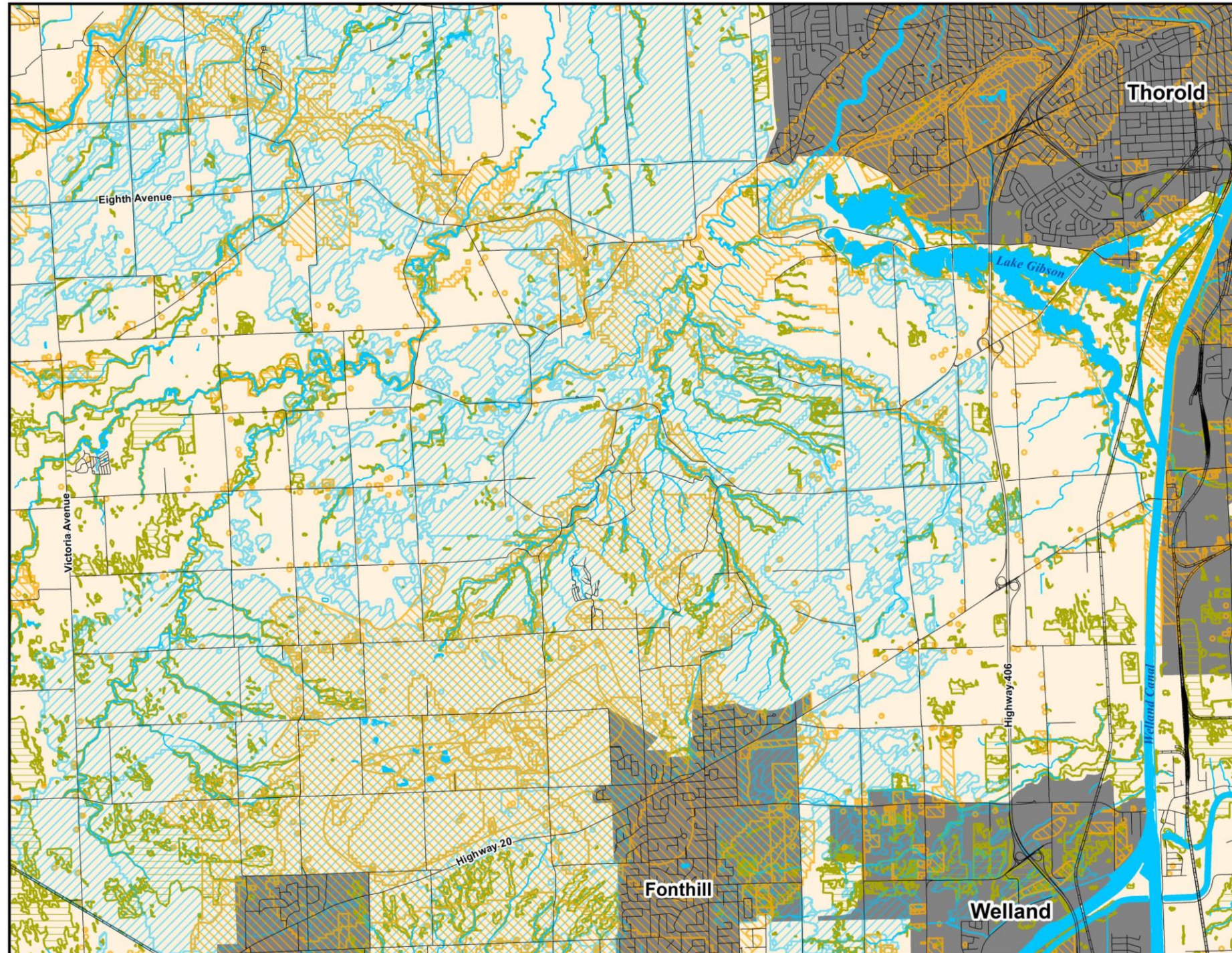
Conceptual figure for
discussion purposes only



north-south
ENVIRONMENTAL



June 11, 2020



Your Feedback is Requested



Next Steps



1. Receive feedback through 2nd point of engagement with public, stakeholders, and Indigenous groups
2. Analyze the input received to recommend the final preferred options
3. Seek council endorsement of final preferred options
4. Prepare detailed design of the preferred options and recommendations for OP policies



Updates on Supporting Projects

- Ecological Land Classification (ELC) Mapping Project
 - Update to the existing Natural Areas Inventory (NAI) dataset using 2018 aerial imagery. Project is being completed in collaboration with NPCA staff.
 - Field verification process is currently wrapping-up. Final dataset is expected by the end of 2020.
- Niagara Watershed Plan Project
 - Tertiary-level watershed planning project being completed in accordance with provincial direction for an 'watershed planning equivalency document'. Project is being completed in collaboration with NPCA staff.
 - Early-stages, reviewing background information and preparing draft goals and objectives.



Discussion Questions

- Do you require any additional information or clarification on the options presented?
- Do you agree with our interpretation of Provincial policies? Do you agree that all of the identified options would conform with Provincial requirements?
- Are there any Provincial policies or other Provincial direction that we may be overlooking?
- Are there any best practices or lesson-learnt from other Regional municipalities that you could share with us?
- Should we be anticipating any changes or new material or guidelines from the Province?

