

Appendix A: Regional Planning and Economic Development Committee Presentation

- Staff Report PDS 26-2020
- Natural Environment Work Program – Phase 4: Identification and Evaluation of Options. July 15, 2020 Presentation to Regional Planning and Economic Development Committee

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

Report to: Planning and Economic Development Committee

Report date: Wednesday, July 15, 2020

Recommendations

1. That Report PDS 26-2020 be received for information;
2. That staff **BE DIRECTED** to initiate the 2nd point of engagement with the public, stakeholders, and Indigenous groups;
3. That staff **BE DIRECTED** to report back on the 2nd point of engagement, and that based on the incorporation of input received, staff **BE DIRECTED** to make a recommendation for the final preferred options for endorsement by Council; and
4. That Report PDS 26-2020 **BE CIRCULATED** to the Area Municipalities and the Niagara Peninsula Conservation Authority (NPCA).

Key Facts

- The purpose of this report is to present a summary of the options, evaluation process, and preliminary preferred options for the natural heritage system (NHS) and water resource system (WRS) to be implemented as part of the new Niagara Official Plan.
- The preliminary preferred options are the recommendations of the Consultant team and are supported by the professional opinion of Regional Planning Staff. The preliminary preferred options still require the input of the public, stakeholders, and Indigenous groups. Following the incorporation of input received through the 2nd point of engagement, the preliminary preferred options will be finalized, and then recommended by Planning Staff for the endorsement of Council.
- The direction for the Natural Environment Work Program through PDS 18-2018 was to take an incremental approach to developing the policies and mapping for the new Niagara Official Plan, including a number of decision points of Council and opportunities for consultation and engagement. This report presents the results of

Phase 4, which was the identification and evaluation of options for the NHS and WRS.

- Phase 4 is the incremental step in the work program between the background reports and the mapping and policy development phases to follow. Phase 4 is based on concepts for the natural systems only. Mapping, criteria, and policies were only developed to a level of detail that will be required to support the evaluation and engagement process. Once a direction has been established, detailed and region-wide mapping will be completed in conjunction with policy development during the next phase of the work program.
- There has been a strong desire expressed from the public, Councils, and other stakeholders to see the Region implement systems and policies beyond minimum provincial requirements.
- The full report entitled “Technical Report #2: Identification and Evaluation of Options for Regional Natural Environment System(s)” completed by the Consultant team is attached to this report.

Financial Considerations

The ongoing costs associated with the Natural Environment Work Program will be accommodated within the Council approved Regional Official Plan project budget.

Analysis

Background

The background reports for the Natural Environment Work Program are complete and were presented to Regional Council through PDS 32-2019:

- Mapping Discussion Paper
- Watershed Planning Discussion Paper
- Natural Environment Background Study
- Consultation Summary Report – 1st Point of Engagement

The reports are available for review on the website for the new Niagara Official Plan:

<https://www.niagararegion.ca/projects/rural-and-natural-systems/default.aspx>

The background reports are extensive and reviewed a wide range of topics related to both the mapping and policy development process. Several of the key findings which are essential to understanding the identification and evaluation of options are:

- There is a Provincial requirement for the Region to have both a natural heritage system (NHS) and water resource system (WRS). The requirement for a comprehensive WRS is new, includes surface and groundwater, and will be developed and implemented in the Region for the first time. Together the NHS and WRS will form the Region's natural environment system.
- The Province – through the Provincial Policy Statement (PPS), Growth Plan, Greenbelt Plan, and Niagara Escarpment Plan (NEP) has created a complicated framework for the protection of natural features, areas, and systems. There are different frameworks and policies that need to be considered in each geographic area of the Region (i.e. settlement areas, Growth Plan, Growth Plan NHS, Greenbelt Plan, Greenbelt Plan NHS, PPS, and NEP). This makes designing a system that meets the environmental protection objectives of the Region as well as being simple and flexible very difficult. For a system to be balanced and designed in consideration of the unique attributes of each geographic area of the Region, it will require detailed and well thought-out policies and other implementation tools.
- There is now a requirement for a 'systems-based' approach to natural environmental planning. The current framework in the Region is more reflective of a 'features-based' approach which was common in the late '90 and early 2000s. A 'system-based' approach requires the protection of areas adjacent to and connecting natural features in addition to the features themselves.
- Through the 1st point of engagement there was a strong desire expressed from the public, Councils, and other stakeholders to see the Region implement systems and policies beyond minimum provincial requirements.

Development of Options

The background studies identified a range of considerations that were reflected in the development of options. These considerations are documented in detail as part of the attached "Technical Report #2: Identification and Evaluation of Options for Regional Natural Environment System(s)". As there is a requirement for both a NHS and WRS, a separate process was undertaken to develop options for each.

It is important to note that given the ongoing changes in Provincial requirements, even the most basic options will result in changes in natural environment planning in the Region, in terms of both features and areas identified for protection, and restrictions to development. A brief overview of the options identified in Technical Report #2 is as follows:

Overview of NHS Options:

A range of options for the development of an NHS were designed – starting with those which would meet provincial standards to those which would exceed provincial standards as permitted by the PPS. All of the options identified would meet the test of conformity with respect to provincial requirements.

- NHS Option 1 – Minimum Standards – Overlay:
 - This option would simply implement the minimum standards of the PPS, Growth Plan, Greenbelt Plan, and NEP.
 - This option relies on the Growth Plan NHS and Greenbelt Plan NHS to fulfil the requirements for a ‘system-based’ approach. Other geographic areas of the Region, including settlement areas, would continue to be reflective of a ‘features-based’ system.
 - Key features required to be mapped would be shown, other features would rely only on the policies of the Official Plan for protection.
 - Restrictive development and site alteration policies would rely on the provincial policies of the PPS, Growth Plan, and Greenbelt Plan.
 - All features, areas, and systems would be shown as an overlay in the Official Plan schedules.
- NHS Option 2 – Minimum Standards – Designation:
 - This option would be the same as Option 1 except that features would be a designation in the Official Plan as opposed to an overlay.
 - There are no policy differences between Option 1 and Option 2.
- NHS Option 3 – Going Beyond Minimum Standards: This option builds upon NHS Option 1 and 2 by providing three scenarios that exceed minimum provincial standards, and include an increasing range of additional components, linkages, and buffers/vegetation protection zones. There is specific consideration

given to the design of the system in settlement areas. Table 1 on page 24 of Technical Report #2 provides a more detailed overview of the options which are summarized as follows. Building on Option 2:

- Option 3A -
 - identifies additional features outside of settlement areas (e.g. key features that are required to be included in the Greenbelt Plan NHS but could be identified Region-wide, etc.);
 - includes large linkages outside of settlement areas ; and,
 - suggests policy minimum for buffers outside of provincial NHSs and outside of settlement areas.
- Option 3B -
 - identifies additional features in and outside settlement areas;
 - identifies supporting features outside of settlement areas (e.g. enhancement areas, etc.);
 - includes large and medium linkages outside of settlement areas; and,
 - suggests policy minimums for buffers outside of provincial NHSs, and both inside and outside of settlement areas.
- Option 3C -
 - identifies additional features in and outside settlement areas;
 - identifies supporting features in and outside of settlement areas;
 - includes large, medium, and small linkages outside of settlement areas;
 - includes small linkages inside of settlement areas where the potential area is in a natural state; and,
 - prescribes mandatory buffer minimums outside of settlement areas with suggested policy minimums inside of settlement areas.

Overview of WRS Options:

The identification of a WRS is relatively new in provincial planning. As such, there is limited guidance or existing examples from other jurisdictions to rely on for best

practices. Two primary options for the WRS have been identified, both of which would meet the test of conformity with respect to provincial requirements. Both options rely on watershed planning or equivalent to support the identification of features and areas as well as the policy development process. [Note: a watershed planning project is underway]

- WRS Option 1 – Minimum Standards: This option would implement the standards of the PPS, Growth Plan, Greenbelt Plan, and NEP. The WRS would be identified as an overlay in the new Niagara Official Plan.
- WRS Option 2 – Going Beyond Minimum Standards: This option includes all of the policy direction and components identified in WRS Option 1 as well as additional features and areas (such as headwater drainage features or ecologically significant groundwater recharge areas) which would be considered Regionally important, and are identified thorough watershed planning or equivalent. WRS Option 2 is divided into two sub-options:
 - 2A: would identify additional features and areas outside of settlement areas only.
 - 2B: would identify additional features and areas Region wide, including within settlement areas.

Evaluation of Options

Evaluation Criteria:

Preliminary criteria were identified through the Natural Environment Background Study, refined through discussion with the TAG and other stakeholders through the 1st point of engagement, and finalized in the attached Technical Report #2. A comprehensive set of criteria were developed that included a range of considerations including: ecology, land-use planning, stakeholder needs, and public input. As the Natural Environment Work Program is ultimately a land-use planning exercise, the evaluation criteria went beyond ecological considerations to ensure that an additional land-use planning exercise would not be required.

Evaluation Process:

A separate evaluation process was undertaken for the NHS and WRS options. The evaluation of options was a qualitative comparison of how each option achieves the criteria. The evaluation process was not a scoring, weighting, or quantitative analysis of each option, instead, it was largely a value-based exercise.

Preliminary Preferred Options

Following the evaluation of the options, preliminary preferred options were identified for the NHS and WRS. The preliminary preferred options are the recommendations of the Consultant team and are supported by the professional opinion of Regional Planning Staff. The preliminary preferred options still require the input of the public, stakeholders, and Indigenous groups. Following input received through the 2nd point of engagement the final preferred option will be recommended by Planning Staff for the endorsement of Council. The detailed design process for the NHS and WRS will then begin including detailed region-wide mapping and policy development.

NHS:

Option 3B was identified as the preliminary preferred NHS option. Technical Report #2 provides details of the rationale which is summarized as follows. Option 3B:

- Goes beyond minimum provincial standards for the identification of features and systems which in the long-term will support a more resilient and biodiverse NHS. This option has the added benefit of supporting a range of additional objectives such as helping to mitigate the impacts of climate change.
- Provides a balanced approach for the protection of the NHS by increasing the number of components and features outside of settlement areas and limiting additional constraints to development in settlement areas, thereby helping to support the desire to direct growth to settlement areas. This option is considered defensible from both an ecological and land-use planning perspective.
- Can be designed, mapped, and implemented within the constraints and timelines of the new NOP.
- Effectively considers input received through the 1st point of engagement.

WRS:

Option 2A was identified as the preliminary preferred WRS option. Technical Report #2 provides details of the rationale which is summarized as follows. Option 2A:

- Goes beyond minimum provincial standards for the identification of features and systems which in the long-term will support a more robust and resilient WRS. This option has the added benefit of support a range of additional objectives such as helping to mitigate the impacts of climate change.

- Provides a balanced approach for the protection of the WRS by identifying additional regionally-important areas and features outside of settlement areas and limiting additional constraints to development in settlement areas, thereby helping to support the desire to direct growth to settlement areas. This option is considered defensible from both an ecological and land-use planning perspective.
- Can be designed, mapped, and implemented within the constraints and timelines of the new NOP.
- Effectively considers input received through the 1st point of engagement.

Additional Considerations

In addition to recommending the preliminary preferred options, Technical Report #2 provides some additional direction towards moving the work program forward including:

- Further direction on which natural features are appropriate to be mapped for the new NOP, and which features are more appropriately protected through policy.
- Further direction on what the appropriate source of information and methods are for many of the features and areas that are recommended to be mapped.
- Recommendations on several of the key issues that have been important to the public and other stakeholders. For example, the report recommends:
 - that offsetting not be considered as part of the policy framework for the new NOP and,
 - that fish habitat is not recommended to be mapped as part of the new NOP (although it would be fully protected by policies in the Official Plan as required by provincial policy). This is the approach taken by many of our comparator municipalities.

Next Steps

The next steps in the Natural Environment Work Program are to:

1. Undertake the 2nd point of engagement with the public, stakeholders, and Indigenous group (i.e Phase 5).
2. Incorporate input received through the consultation process and identify the final preferred option for the NHS and WRS.

3. Present the final preferred option for the NHS and WRS to Regional Council for endorsement.
4. Initiate Phase 6 of the work program which is the detailed design of the systems based on the final preferred options.

Alternatives Reviewed

Council could choose not to direct staff to initiate the 2nd point of engagement with the public, stakeholders, and Indigenous groups. This is not recommended.

Relationship to Council Strategic Priorities

This report is being brought forward as part of the ongoing reporting on the new Niagara Official Plan. The Natural Environment Work Program aligns with Objective 3.2 Environmental Sustainability and Stewardship:

“A holistic and flexible approach to environmental stewardship and consideration of the natural environment, such as in infrastructure, planning and development, aligned with a renewed Official Plan.”

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
- PDS 9-2019 – New Official Plan Consultation Timeline Framework
- PDS 10-2019 – Update on Natural Environment Work Program – New Regional Official Plan
- CWCD 122-2019 – Agricultural and Environmental Groups – Draft Stakeholder Lists
- CWCD 150-2019 – Update on Official Plan Consultations – Spring 2019
- CWCD 179-2019 – Notice of Public Information Centres – Natural Environment Work Program, New Regional Official Plan
- CWCD 271-2019 – Update on Consultation for New Official Plan
- PDS 32-2019 – Natural Environment Work Program – Phases 2 & 3: Mapping and Watershed Planning Discussion Papers and Comprehensive Background Study
- PDS 1-2020 – New Niagara Official Plan – Public Consultation Summary

- PDS 3-2020 – Ecological Land Classification Mapping Update
- PDS 9-2020 – Niagara Official Plan – Consultation Details and Revised Framework
- CWCD 153-2020 – Natural Environment Work Program Update – New Niagara Official Plan

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Appendices

Appendix 1 Natural Environment Work Program: Technical Report #2:
Identification and Evaluation of Options for Regional Natural Environment System(s) –
107 pages



making our mark

NIAGARA

OFFICIAL PLAN

PDS 26-2020

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

**July 15, 2020 – Presentation to Planning and Economic
Development Committee**



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

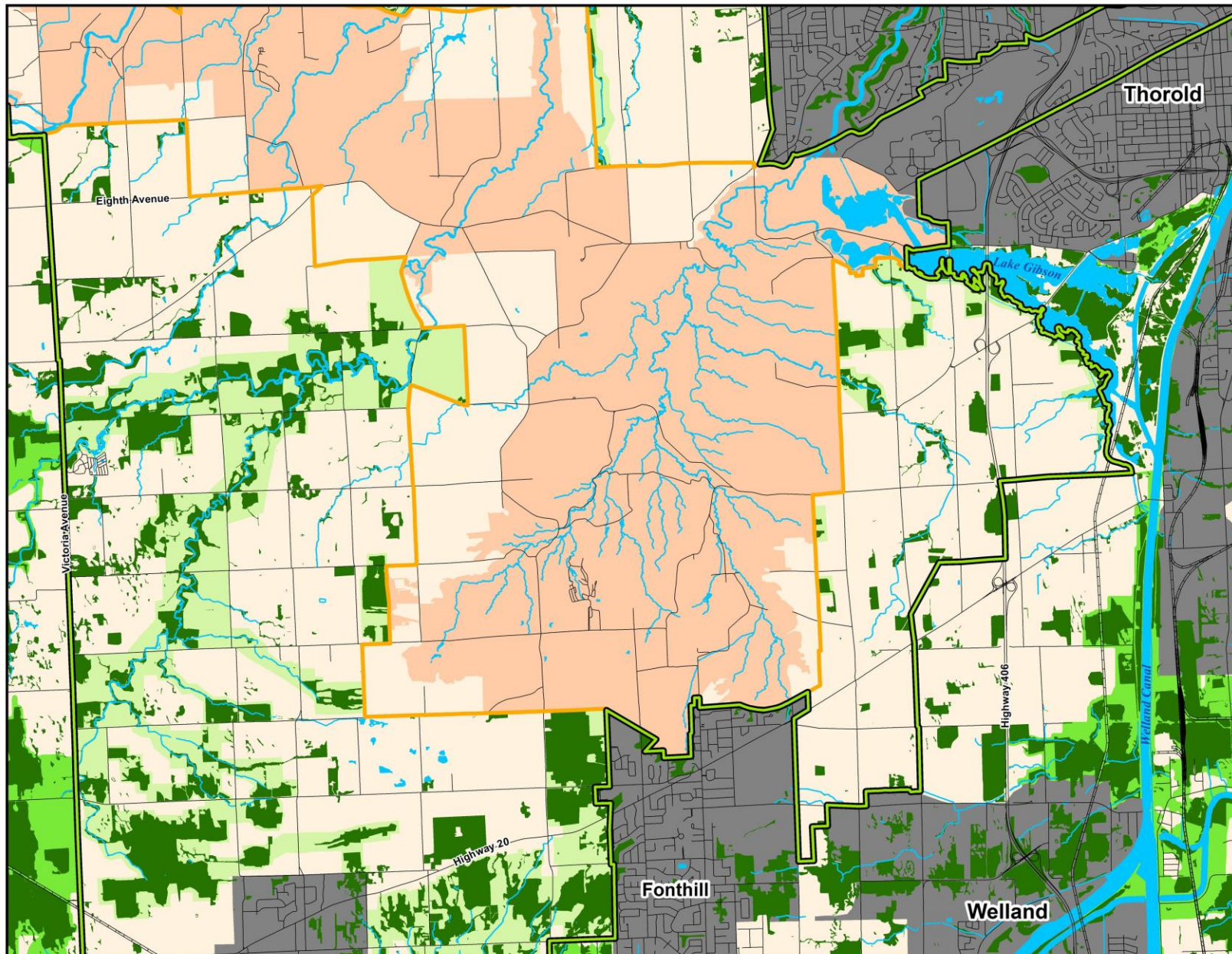
- Incremental step between the background reports and the mapping and policy development process
- Goal is to establish the overall direction for the natural heritage system (NHS) and water resource system (WRS)
- Based on concepts for the natural systems only. Mapping, criteria, and policies were developed 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



Identification & Evaluation of Options

- Separate process for the NHS and WRS
- Range of considerations needed to be reflected in the development of options
- All options would 'conform' with provincial requirements – some options would meet minimum provincial standards other options would exceed minimum standards
- Evaluation process was undertaken based on criteria that were established during the completion of the background studies and during the 1st point of engagement



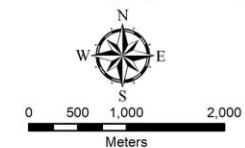


Niagara Region Natural Environment Work Program Conceptual Natural Heritage System Options 1 and 2

Legend

- Greenbelt Plan
- Niagara Escarpment Plan
- Escarpment Protection Area
- Key Natural Features
- Growth Plan NHS Outside of Greenbelt Plan Area
- Greenbelt NHS
- Waterbodies
- Watercourses
- Roads
- Railway
- Settlement Areas

Conceptual figure for
discussion purposes only



north-south
ENVIRONMENTAL



June 11, 2020

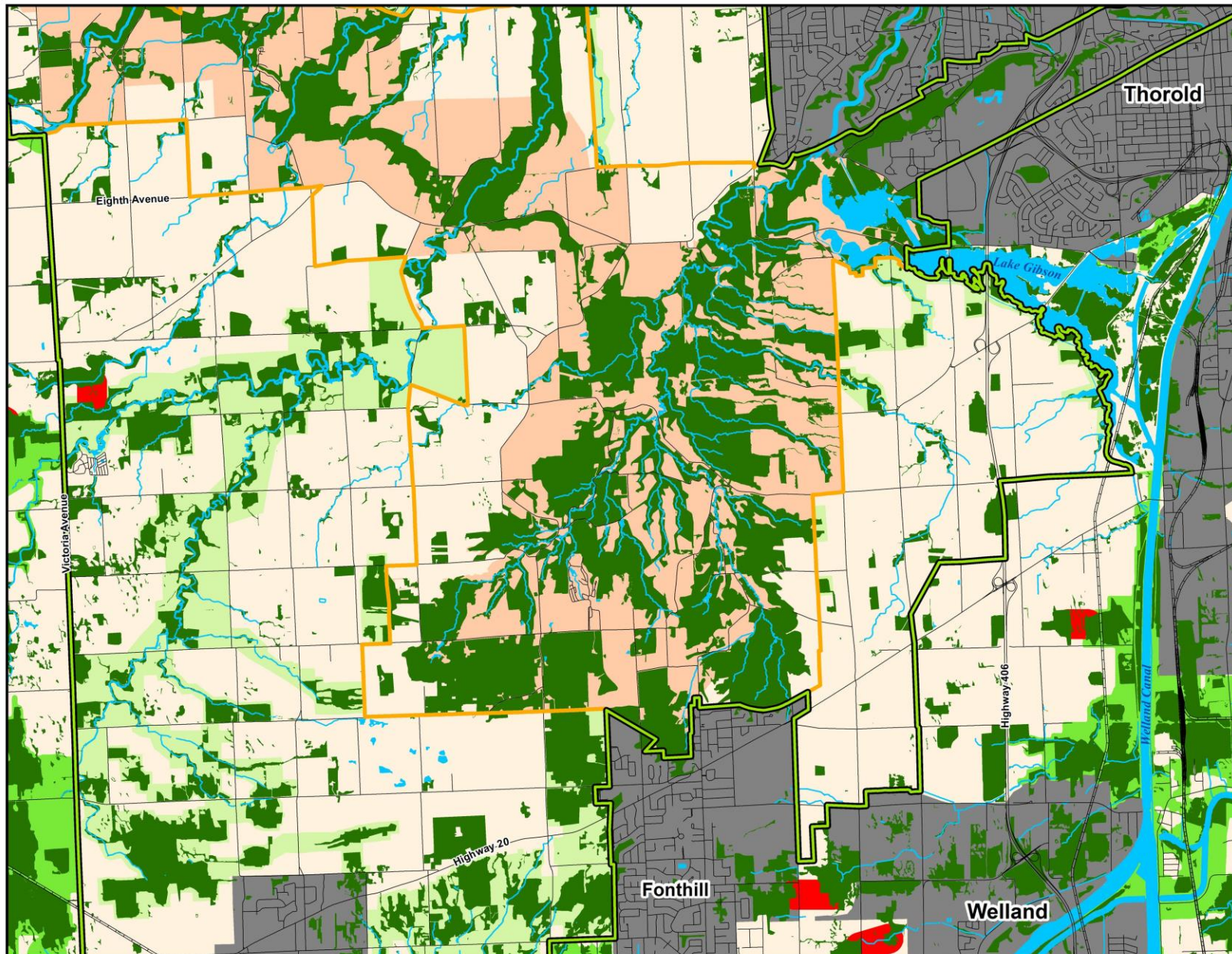


Comparison of Option 3A, 3B, & 3C

Table 1. Overview of Natural Heritage System Options: 3A, 3B and 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



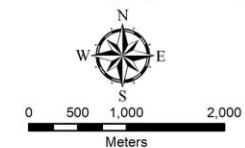


Niagara Region Natural Environment Work Program Natural Heritage System Option 3A

Legend

- Key Natural Features
- Large Linkage (400m Wide)
- Growth Plan NHS Outside of Greenbelt Plan Area
- Greenbelt NHS
- Greenbelt Plan
- Niagara Escarpment Plan
- Escarpment Protection Area
- Waterbodies
- Watercourses
- Roads
- Railway
- Settlement Areas

Conceptual figure for
discussion purposes only

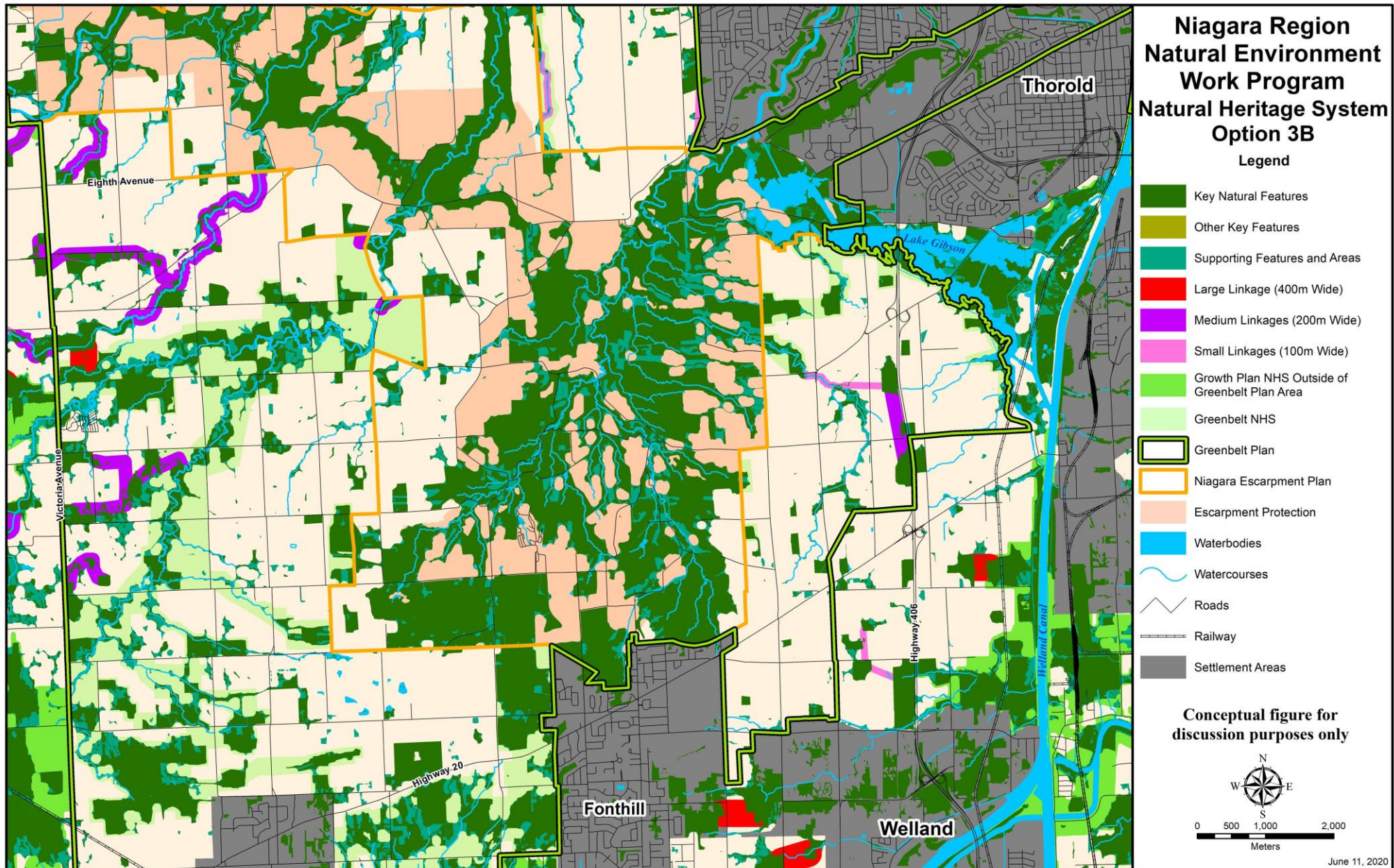


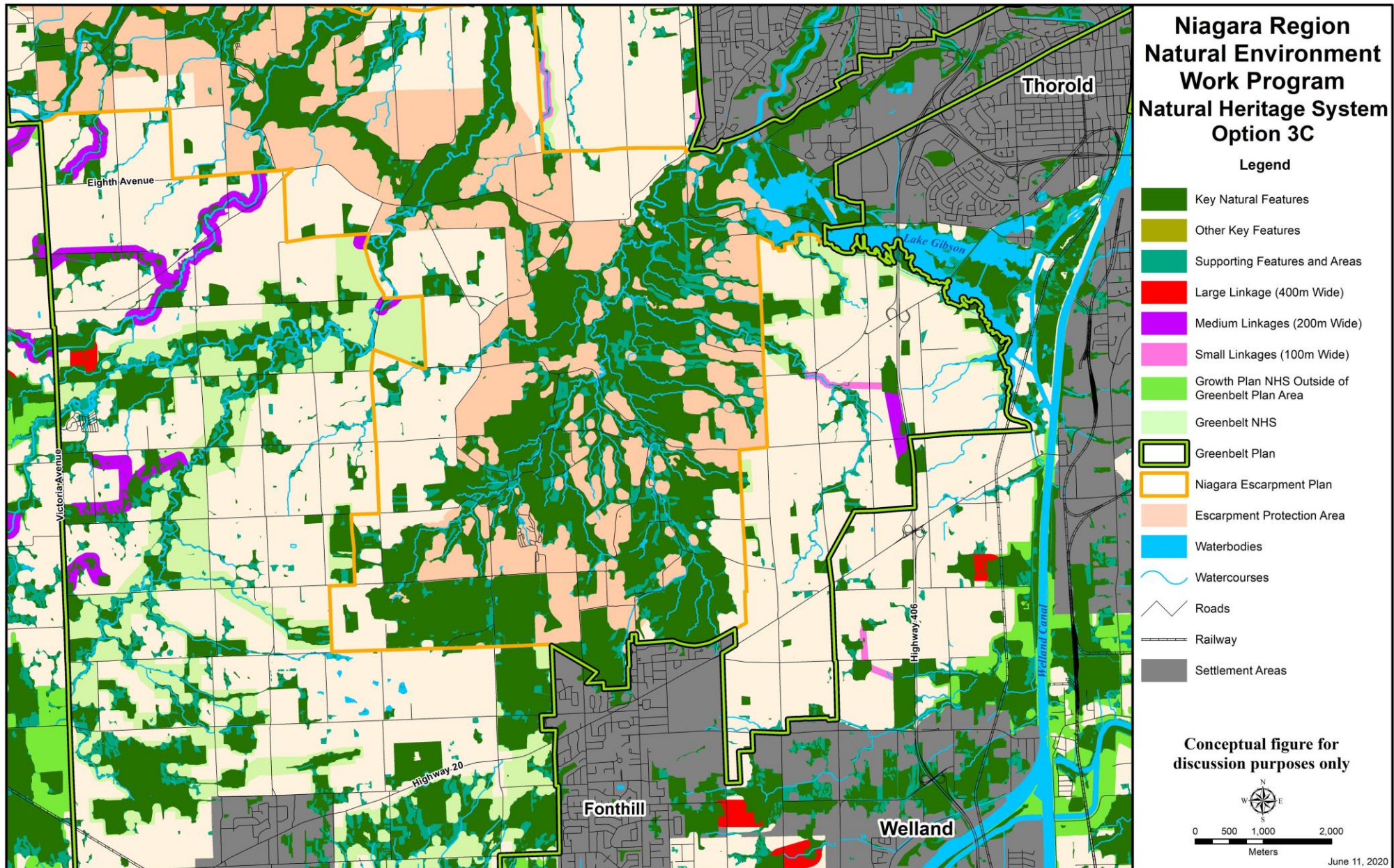
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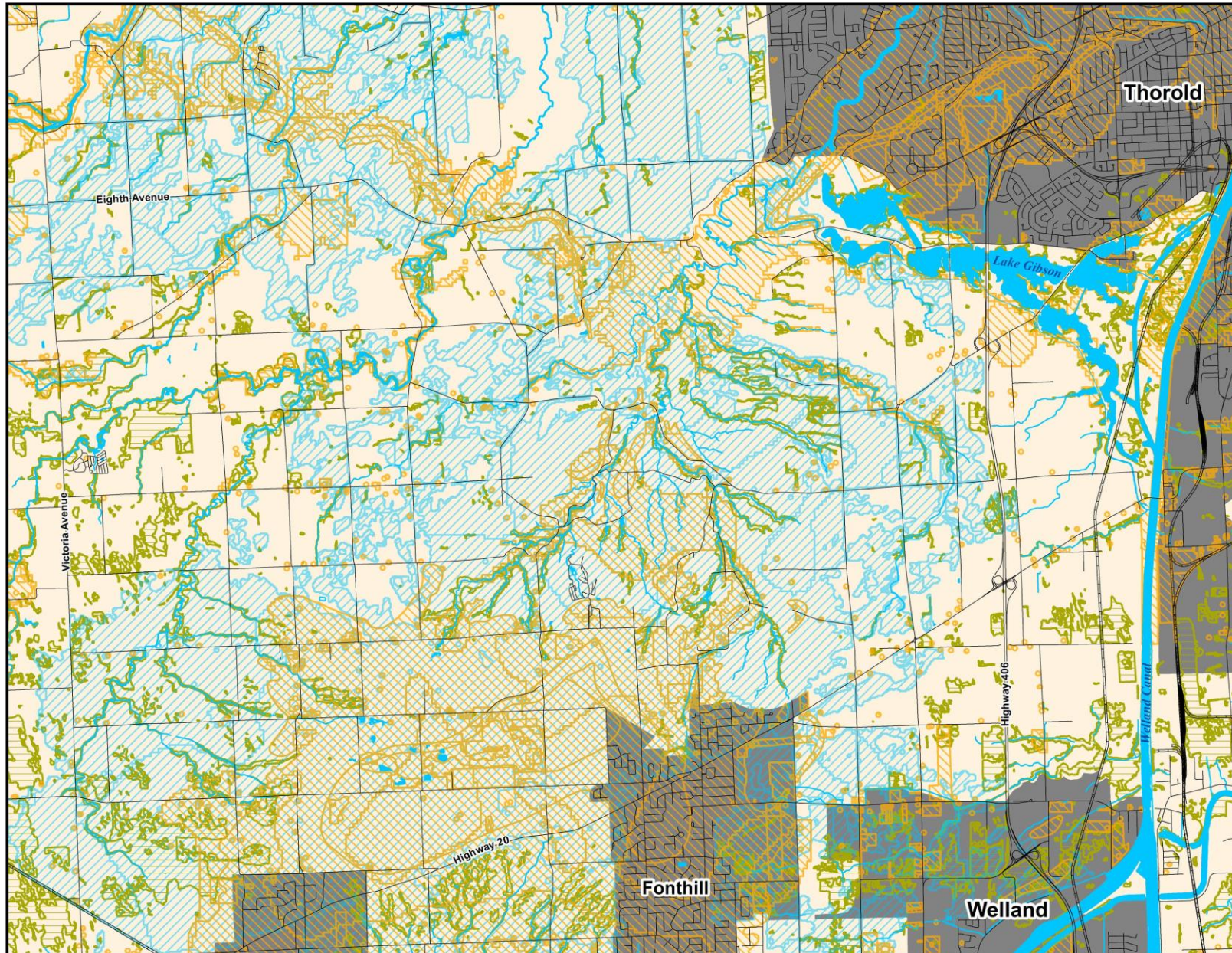


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Niagara Region Natural Environment Work Program Water Resource System - Option 1 and 2 Legend

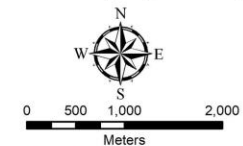
Key Hydrologic Features

- 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



Preliminary Preferred Options

- Option 3B was identified as the preliminary preferred option for NHS
- Option 2A was identified as the preliminary preferred option for NHS
- Both options share similar characteristics:
 - Exceeds minimum provincial standards
 - Incorporates public and stakeholder feedback
 - Provides a balanced approach which directs optional components outside of settlement areas
 - Supports the Region in achieving other objectives such as mitigating the impacts of climate change



Next Steps



1. Initiate 2nd point of engagement with public, stakeholders, and Indigenous groups
2. Incorporate the input received
3. Report back to PEDC with recommendation for final preferred option
4. Initiate the detailed design process

