

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2564



The Regional Municipality of Durham Report

To: Planning and Economic Development Committee
From: Commissioner of Planning and Economic Development
Report: #2022-P-7
Date: March 1, 2022

Subject:

Envision Durham – Identifying a Regional Natural Heritage System, File D12-01

Recommendation:

That the Planning and Economic Development Committee recommends:

Receive for information

Report:

1. Purpose

1.1 The purpose of this report is twofold:

- i. To advise Committee that the draft mapping of the Regional Natural Heritage System (NHS) for the new Regional Official Plan (ROP) is being released for public and agency comment; and
- ii. To introduce potential “Enhancement Opportunity Areas”, as proposed by Durham’s conservation authorities that would support the proposed Regional NHS.

1.2 The provincial requirement to identify a Regional NHS is one of many key components of Envision Durham, the Municipal Comprehensive Review (MCR) of the ROP. The inclusion of the NHS is required for the new ROP to be consistent with the Provincial Policy Statement (PPS), and to conform with provincial plans (the Growth Plan, the Greenbelt Plan and the Oak Ridges Moraine Conservation Plan).

1.3 Following Planning and Economic Development Committee on March 1, 2022, the draft Regional NHS will be posted to the Envision Durham [project webpage](#) through an interactive online map viewer and for convenience, is provided as Attachment #1 to this report. Those wishing to provide input may do so by commenting directly within the online map viewer or by submitting comments to EnvisionDurham@durham.ca or by mail. Comments are requested by May 2, 2022, representing a 60-day commenting window.

2. Previous Reports and Decisions

2.1 The following Regional staff reports related to the Regional NHS have been provided to Council since the launch of the MCR:

- Report [#2019-P-36](#) Envision Durham – Environment and Greenlands Discussion Paper; and
- Report [#2021-P-7](#) Envision Durham – Proposed Policy Directions.

3. Existing Policy Requirements

3.1 The PPS requires that natural features and areas be protected for the long term and that municipalities identify a “Natural Heritage System” (NHS). An NHS is defined as *“a system made up of natural heritage features and areas¹, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems. These systems can include natural heritage features and areas, federal and provincial parks and conservation reserves, lands that have been restored or have the potential to be restored to a natural state, areas that support hydrological functions and working landscapes that enable ecological functions to continue.”*

¹ The PPS defines *natural heritage features and areas* as features and areas, including significant wetlands, significant coastal wetlands, other coastal wetlands in Ecoregions 5E, 6E and 7E, fish habitat, significant woodlands and significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River), habitat of endangered species and threatened species, significant wildlife habitat, and significant areas of natural and scientific interest, which are important for their environmental and social values as a legacy of the natural landscapes of an area.

- 3.2 The PPS requires a “systems-based approach” to natural heritage planning. A systems-based approach is required, (as opposed to a “features-based approach”), since isolated features have lower ecological functioning compared to features that form part of a connected system.² Natural communities are dependent on the interchange of resources that support healthy, functioning and resilient ecosystems.³ Natural heritage planning best practice also recognizes the strategic importance of a systems-based approach to protecting, restoring and enhancing the natural environment not only by considering core natural features, but also the connections between them.
- 3.3 The Oak Ridges Moraine Conservation Plan (ORMCP) designates Natural Core Areas and Natural Linkage Areas, which together make up the NHS on the Oak Ridges Moraine as reflected in the current ROP (see Attachment #2). Municipalities are required to protect these areas for their natural heritage and hydrologic value. The ROP has included mapping and policies for these NHS areas on the Oak Ridges Moraine for almost 20 years.
- 3.4 The Greenbelt Plan established the Greenbelt NHS in 2005 which municipalities are required to protect through policy and mapping within official plans that is reflected in the current ROP as Schedule B1 (see Attachment #3).
- 3.5 The Growth Plan for the Greater Golden Horseshoe, 2020 adopts a similar definition as the PPS, and introduced an NHS for areas outside the Greenbelt and the Urban Area Boundary (i.e., in the “whitebelt”), where small areas containing natural heritage features within Pickering and Clarington have been identified (see Attachment #4). The Growth Plan requires that the Growth Plan NHS be included in official plans as an overlay and that policies be applied to maintain, restore, or enhance the diversity and connectivity of the system and its long term ecological and hydrologic functions.

4. Approach

- 4.1 The proposed NHS that is being released for public comment largely exists today in different forms and in different locations. The approach for the Region’s new official plan is to assemble the various NHS datasets in one location in the Region’s new OP, as an “overlay”. An overlay is not a land use designation. An overlay is a way

² Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005, Second Edition, 2010.

³ Ontario Nature: Best Practice Guide to Natural Heritage Systems Planning, 2014.

of depicting information to let the reader know that any development which may be permitted by the underlying land use designation may be subject to some form of site-specific study and review to ensure the NHS is being properly addressed. The proposed NHS consists of the following:

- a. **Within the Rural Area**, the proposed Regional NHS is comprised of the Greenbelt NHS and ORMCP Natural Core and Natural Linkage Areas (as previously described);
- b. **Within the Urban Area**, area municipal datasets were used to establish the proposed Regional NHS, in consultation with area municipal staff. Where features were identified outside the area municipal NHS, area municipal staff determined if these features should be included or excluded;
- c. **Within the “whitebelt”**, the proposed Regional NHS includes the identified Growth Plan NHS areas as required by the Province, approved area municipal NHS datasets, and conservation authority datasets where appropriate, including those developed through watershed planning exercises; and
- d. For the Urban Area and the “whitebelt”, the proposed Regional NHS incorporates additional work undertaken for significant woodlands.

The data sources used to generate the proposed Regional NHS are shown in Attachment #5.

- 4.2 The Region’s conservation authority partners have also identified “Enhancement Opportunity Areas” within their respective jurisdictions to support the proposed Regional NHS. The Enhancement Opportunity Areas are not part of the NHS; rather, these are linkage areas where restoration, stewardship or other efforts would support the health of the Regional NHS, and a more resilient ecosystem in the face of ongoing climate change threats (see Attachment #1).

5. Implementation of the Regional NHS

- 5.1 While precise policy language will be presented through the draft ROP, Proposed Policy Directions identified approaches for a Regional NHS through [Report #2021-P-7](#). In general, these proposed directions include:

- objectives to promote a systems-based approach to protecting the natural environment, to achieve no net loss and to protect, enhance and restore features and areas and their ecological functions;

- that existing identified linkages, including “Open Space Linkages” and “Waterfront Links” and future linkages and enhancement areas identified through watershed plans and/or area municipal assessments be incorporated into a Regional NHS;
- that cross-jurisdictional relationships and impacts on the Regional NHS be considered, and that the importance and intent of external connections, such as Urban River Valleys within the Greenbelt Plan be recognized;
- that the completion of climate vulnerability assessments which identify the most vulnerable areas of the regional NHS and suggest enhancements and/or restoration needed to mitigate climate change impacts be supported;
- that area municipalities develop an NHS and/or refine their existing NHS policies and mapping, including the identification of enhancement areas and linkages as necessary; and
- that the Regional NHS be updated from time-to-time to reflect minor changes as a result of the newest and best available data, at the date of an official plan consolidation, without the need for an amendment to the ROP.

5.2 Once implemented, the Regional NHS and associated features maps can be used by municipalities, conservation authorities and property owners to understand what features could be impacted by development and site alteration. Once in effect, the Regional NHS would act as a screening tool for development applications such as official plan amendments, plans of subdivision, plans of condominium and consent (or land division) applications. During pre-consultation, or when applications are received, staff would determine which environmentally sensitive features, areas, functions, and/or linkages may be present based on the background data. Staff could also advise which Provincial Plan would apply and whether an environment impact study or natural heritage evaluation report, may be required.

6. Relationship to Strategic Plan

- 6.1 This report aligns with/addresses the following goals and priorities in the Durham Region Strategic Plan:
- a. Priority 1.3 under the goal of Environmental Sustainability, a Regional NHS would protect preserve and restore the natural environment, including greenspaces, waterways, parks, trails and farmlands;

- b. Priority 1.4 under the goal of Environmental Sustainability, a Regional NHS demonstrates continued leadership in sustainability and addressing climate change; and
 - c. Priority 5.3 under the goal of Service Excellence, the proposed consultation approach through Envision Durham demonstrates commitment to continuous quality improvement and communicating results.
- 6.2 Identifying a Regional NHS contributes to achieving objectives within the Durham Community Climate Adaptation Plan and is consistent with the Region’s climate emergency declaration. Protection of the natural environment can help to reduce the severity and frequency of riverine flooding and reduce ambient summer temperatures in urban areas to reduce heat stress.

7. Consultation Process

- 7.1 This report, the draft Regional NHS mapping, including instructions on how to use the map viewer, as well as a series of Frequently Asked Questions (FAQ) regarding Natural Heritage Systems, will be posted to the project webpage at www.durham.ca/EnvisionDurham for public and agency review.
- 7.2 Interested parties are encouraged to provide input directly within the online map viewer. Comments may also be submitted to EnvisionDurham@durham.ca or by mail and are requested by May 2, 2022. Information on the release of the draft Regional NHS map will be announced by way of:
- a. News release and public service announcement;
 - b. Social media platforms, including Facebook, Twitter and LinkedIn; and
 - c. Email notifications and report circulation, as detailed below.
- 7.3 A copy of this report and an invitation to provide input through the online map viewer will be forwarded to all Envision Durham Interested Parties, Durham’s area municipalities, conservation authorities, Indigenous communities, BILD – Durham Chapter, and the Ministry of Municipal Affairs and Housing. Circulation will also be provided to Regional Advisory Committees (Durham Environmental Advisory Committee, Durham Agricultural Advisory Committee and Durham Region Roundtable on Climate Change) that may have interest in where and how the Region intends to protect and enhance the Regional NHS.

8. Conclusion

- 8.1 Identification of a Regional NHS is required by provincial legislation and policies.

- 8.2 The approach that is being proposed for the Region's new official plan is to assemble information contained in existing NHS datasets and to clearly depict the NHS as an overlay. The proposed NHS does not introduce any new restrictions that do not exist already.
- 8.3 Input on the draft Regional NHS is requested by May 2, 2022. Feedback received will be reviewed and will inform the preparation of the draft ROP.

9. Attachments

- Attachment #1: Draft Regional Natural Heritage System and Enhancement Opportunity Areas
- Attachment #2: Existing Regional Official Plan Schedule B – Map B3 – Oak Ridges Moraine Conservation Plan Land Use Designations
- Attachment #3: Existing Regional Official Plan Schedule B – Map B1 – Key Natural Heritage and Hydrologic Features and Greenbelt Natural Heritage System
- Attachment #4: Growth Plan Natural Heritage System Areas in Durham
- Attachment #5: Draft Regional Natural Heritage System – Source Data Table

Respectfully submitted,

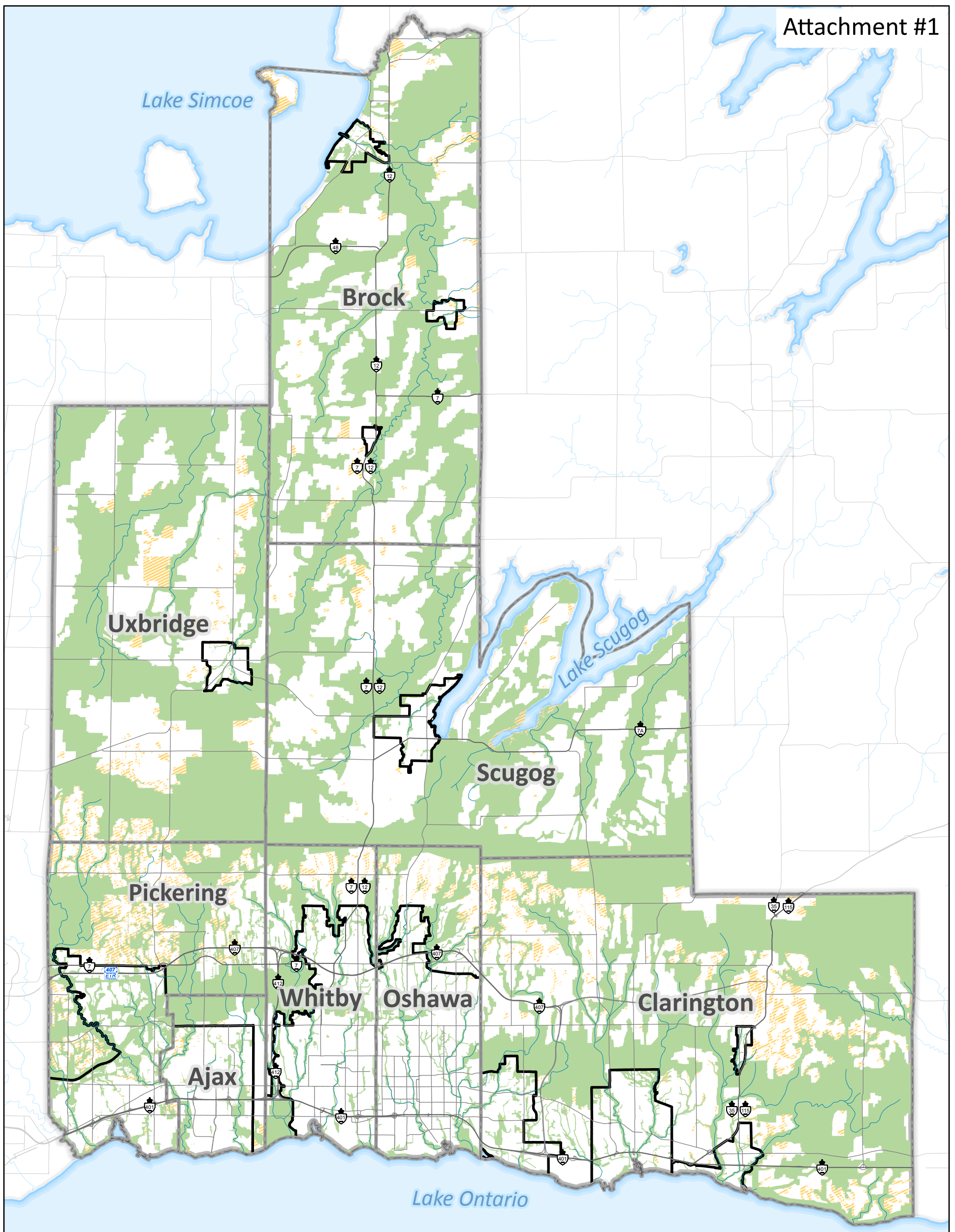
Original signed by

Brian Bridgeman, MCIP, RPP
Commissioner of Planning and
Economic Development




Recommended for Presentation to Committee

Original signed by

Elaine C. Baxter-Trahair
Chief Administrative Officer



Draft Regional Natural Heritage System

-  Draft Regional Natural Heritage System Overlay
-  Enhancement Opportunity Areas
-  Urban Area Boundary

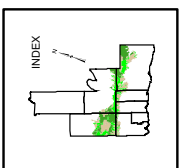


This map has been produced from a variety of sources. The Region of Durham does not make any representations concerning the accuracy, likely results, or reliability of the use of the materials.

The Region hereby disclaims all representations and warranties.










Digital cartography by The Regional Municipality of Durham, Planning and Economic Development Department, 2022.

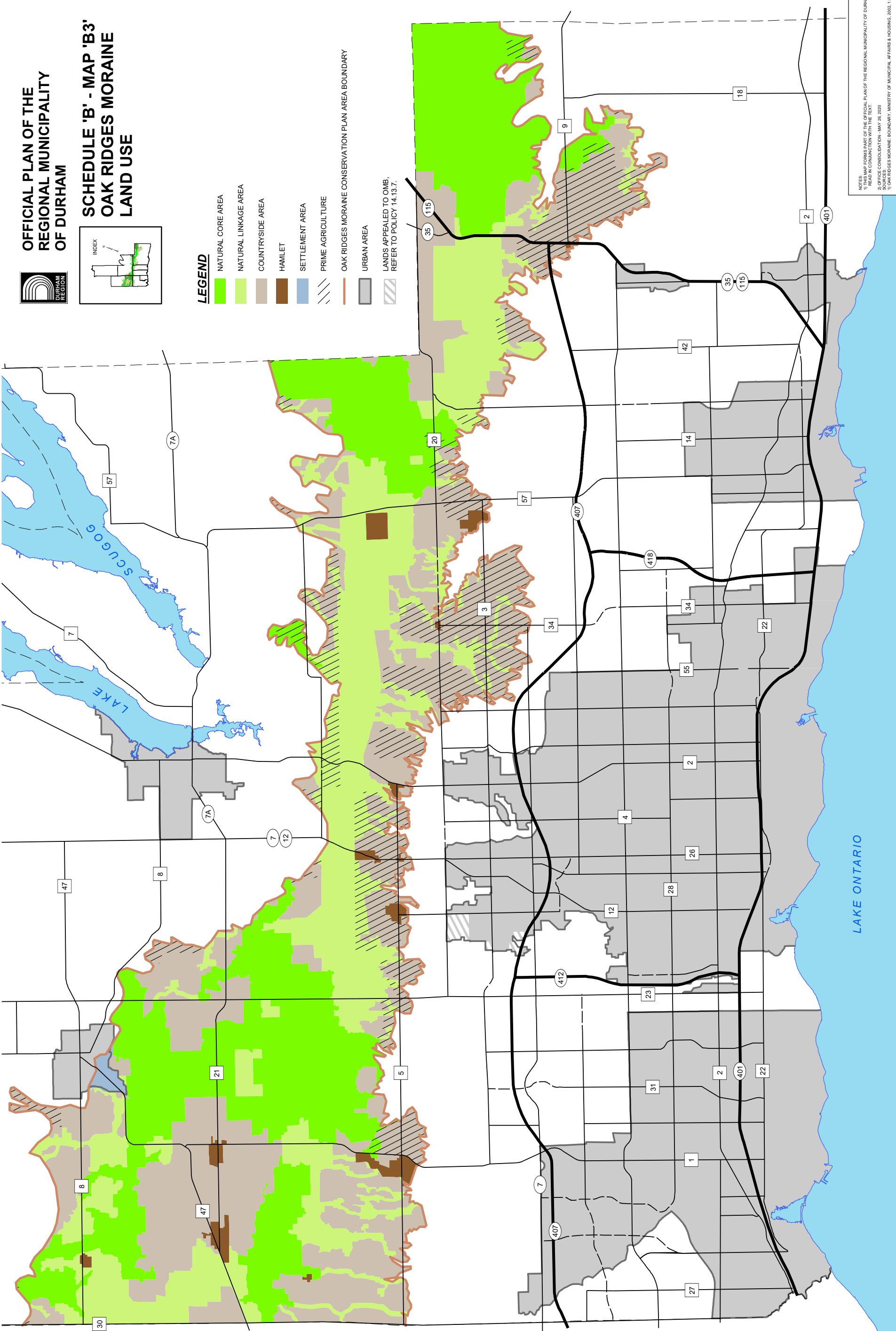
All rights reserved. May not be reproduced without permission.



SCHEDULE 'B' - MAP 'B3' OAK RIDGES MORaine LAND USE

LEGEND

-  NATURAL CORE AREA
-  NATURAL LINKAGE AREA
-  COUNTRYSIDE AREA
-  HAMILET
-  SETTLEMENT AREA
-  PRIME AGRICULTURE
-  OAK RIDGES MORaine CONSERVATION PLAN AREA BOUNDARY
-  URBAN AREA
-  LANDS APPEALED TO OMB,
REFER TO POLICY 14.13.7.









NOTES:
1) THIS MAP FORMS PART OF THE OFFICIAL PLAN OF THE REGIONAL MUNICIPALITY OF DURHAM AND MUST BE READ IN CONJUNCTION WITH THE TEXT.
2) OFFICE CONSOLIDATION - MAY 26, 2020
3) OAK RIDGES MORaine BOUNDARY, MINISTRY OF MUNICIPAL AFFAIRS & HOUSING, 2002, 1:100,000

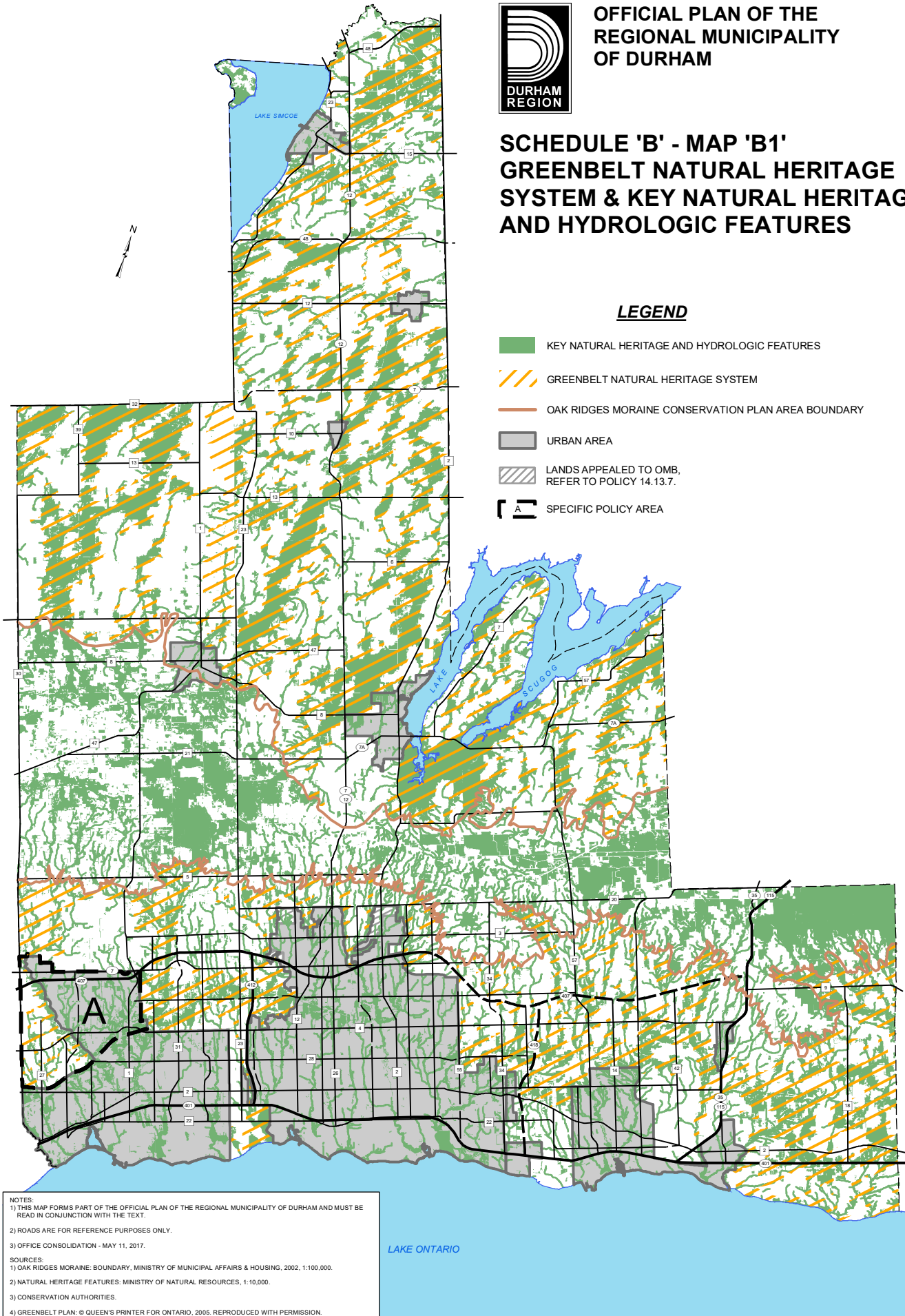


**OFFICIAL PLAN OF THE
REGIONAL MUNICIPALITY
OF DURHAM**

**SCHEDULE 'B' - MAP 'B1'
GREENBELT NATURAL HERITAGE
SYSTEM & KEY NATURAL HERITAGE
AND HYDROLOGIC FEATURES**

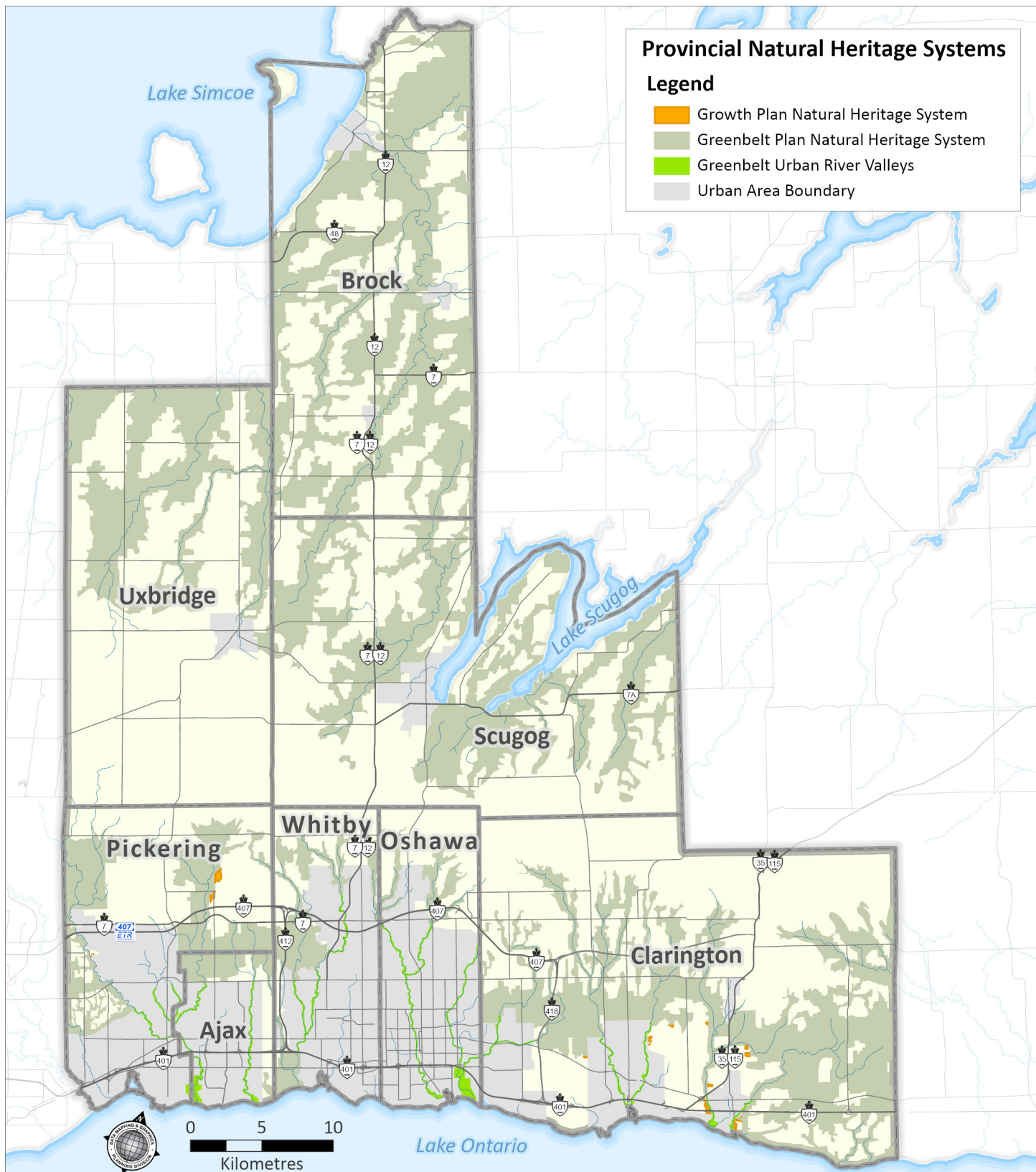
LEGEND

-  KEY NATURAL HERITAGE AND HYDROLOGIC FEATURES
-  GREENBELT NATURAL HERITAGE SYSTEM
-  OAK RIDGES MORAINIC CONSERVATION PLAN AREA BOUNDARY
-  URBAN AREA
-  LANDS APPEALED TO OMB,
REFER TO POLICY 14.13.7.
-  SPECIFIC POLICY AREA



NOTES:
 1) THIS MAP FORMS PART OF THE OFFICIAL PLAN OF THE REGIONAL MUNICIPALITY OF DURHAM AND MUST BE READ IN CONJUNCTION WITH THE TEXT.
 2) ROADS ARE FOR REFERENCE PURPOSES ONLY.
 3) OFFICE CONSOLIDATION - MAY 11, 2017.
SOURCES:
 1) OAK RIDGES MORAINIC BOUNDARY, MINISTRY OF MUNICIPAL AFFAIRS & HOUSING, 2002, 1:100,000.
 2) NATURAL HERITAGE FEATURES: MINISTRY OF NATURAL RESOURCES, 1:10,000.
 3) CONSERVATION AUTHORITIES.
 4) GREENBELT PLAN: © QUEEN'S PRINTER FOR ONTARIO, 2005. REPRODUCED WITH PERMISSION.

LAKE ONTARIO



Data Sources and Disclaimer
 Growth Plan and Greenbelt NHS: MNR, March 2018.
 This map is part of the Envision Durham/MCR process and is for illustrative purposes only. This map has been produced from a variety of sources. The Region of Durham does not make any representations concerning the accuracy, likely results, or reliability of the use of the materials. The Region hereby disclaims all representations and warranties. Digital cartography by The Regional Municipality of Durham, Planning and Economic Development Department, 2019. All rights reserved. May not be reproduced without permission.

Draft Regional Natural Heritage System – Source Data

1. Rural Area

- Greenbelt NHS (MNRF, 2017)
- Natural Core Areas and Natural Linkage Areas on the Oak Ridges Moraine (MNRF, 2017)

2. Urban Area and Whitebelt

- Growth Plan NHS (MNRF, 2017)
- Pickering – area municipal NHS (2018), conservation authority NHS (2018), environmental datasets, Seaton NHS and Carruthers Creek Watershed Plan Enhanced NHS (Existing NHS), 2021
- Ajax – area municipal NHS (2018), environmental datasets and Carruthers Creek Watershed Plan Enhanced NHS (Existing NHS), 2021
- Whitby – area municipal NHS (2020) and environmental datasets
- Oshawa – area municipal NHS (2019) and environmental datasets
- Clarington – area municipal NHS (2018) and environmental datasets
- Uxbridge – area municipal NHS (2018), conservation authority NHS (2019) and environmental datasets
- Scugog – area municipal EP zoning (2021) and environmental datasets
- Brock – conservation authority NHS (2019) and environmental datasets

3. Environmental Datasets

- Fish Habitat – CLOCA, 2019/LSRCA, 2018/TRCA, 2019/MNRF, 2019
- Areas of Natural and Scientific Interest – MNRF, 2019
- Sand Barrens, Savannahs, Tallgrass Prairies and Alvars – CLOCA, 2019/GRCA, 2013/KRCA, 2015/LSRCA, 2017/TRCA, 2018
- Permanent and Intermittent Streams – CLOCA, 2021/KRCA, 2018/LSRCA, 2016/TRCA, 2010 and 2018/MNRF, 2020
- Provincially Significant Wetland – MNRF, 2019
- Wetlands – CLOCA, 2019/GRCA, 2013/KRCA, 2015/LSRCA, 2017/TRCA, 2018
- Significant Woodlands – North South Environmental Inc., 2021
- Significant Valleylands – Matrix Solutions Inc., 2021

4. Enhancement Opportunity Areas

- CLOCA, 2021, GRCA, 2018, KRCA, 2012, LSRCA, 2019, TRCA, 2021