



**STAFF REPORT
ACTION REQUIRED**

**Amendments to the Ravine Protection By-law to Include
Tableland Forests and Forested Portions of the Lake
Iroquois Shoreline: City of Toronto Municipal Code,
Chapter 658**

Date:	March 17, 2008
To:	Parks and Environment Committee
From:	Acting Chief Planner and Executive Director, City Planning Division General Manager, Parks, Forestry and Recreation
Wards:	All Wards
Reference Number:	pe080018

SUMMARY

This report recommends amendments to Municipal Code Chapter 658, Ravine Protection in order to: include tableland forests and forested portions of the Lake Iroquois shoreline; delete some formerly protected areas; change the name of the by-law; make technical amendments to improve clarity and consistency; and update the offence provisions in accordance with the *City of Toronto Act, 2006*. This report also proposes future direction for the by-law.

The Ravine Protection by-law protects ravine features in the City of Toronto by regulating the injury or destruction of trees and alterations to grade. Ravines are important natural landforms that are part of the City’s natural heritage system. Like ravines, tableland forests and forested portions of the Lake Iroquois shoreline are important natural features in the City of Toronto that are also vulnerable to degradation resulting from destruction of trees, changes in grade or lack of management. Policies in the Official Plan recognize the importance and support the protection of these features; however, they are currently not protected under the by-law.

Tableland forests and forested portions of the Lake Iroquois Shoreline have been identified and mapped. The areas recommended for protection in this report include wooded areas which meet the mapping criteria and are within the natural heritage system shown on Map 9 of the Official Plan or designated as Parks and Open Space in the Official Plan. One ravine which meets the criteria used to define ravines in the existing

by-law, but was not included in previous mapping, is also recommended for protection under the by-law. Several formerly protected areas are being taken out of the by-law because the ravine feature has been removed or significantly altered.

A new name for the by-law is proposed, “Ravine and Natural Feature Protection By-law”, to reflect that it now applies to tableland forests and forested portions of the Lake Iroquois Shoreline as well as to ravines. Amendments to the by-law are also being made to accommodate the changes to the protected areas, to make technical changes to improve clarity and consistency and to update the offence provisions in accordance with the *City of Toronto Act, 2006*.

Additional areas which are vulnerable to degradation due to destruction of trees, changes in grade or lack of management and which should be considered for future protection under the by-law are also identified.

RECOMMENDATIONS

City Planning Division and Parks, Forestry and Recreation Division recommend that:

1. The City Solicitor be authorized to amend the City of Toronto Municipal Code Chapter 658, Ravine Protection by deleting the Schedule A-1 Index Maps and the Schedule A-2 Data Maps and replacing them with maps showing the revised Protected Area and by-law name and by making the amendments described in this report.
2. The City Solicitor be authorized to introduce the necessary Bill in Council to give effect thereto.
3. The Chief Planner and Executive Director of City Planning and the General Manager of Parks, Forestry and Recreation notify the owners of properties located in the areas that are being added to the by-law, that their property is now subject to the ravine and natural feature protection by-law.
4. The Chief Planner and Executive Director of City Planning and the General Manager of Parks, Forestry and Recreation report to a future meeting of the Parks and Environment Committee on further amendments to the by-law to include additional areas which have natural heritage value and are vulnerable to degradation due to destruction of trees, changes in grade or lack of management.

Implementation Points

Owners of properties located in the protected areas to be added to the by-law as described in this report will be notified by mail that their property is now subject to the ravine and natural feature protection by-law. The existing protected area and the areas to be added to or deleted from the by-law are shown in Maps 1 - 4 attached to this report.

Financial Impact

The recommendations in this report have no financial impact beyond what has already been approved in the current year's budget.

DECISION HISTORY

At its meeting on July 21, 22 and 23, 2004 City Council, in considering a report on city-wide revisions to the Ravine Protection by-law, recommended that the Commissioner of Urban Development Services and Economic Development Culture and Tourism report on amendments to Schedule A of Municipal Code Chapter 658, Ravine Protection (<http://www.toronto.ca/trees/ravines.htm>) to include tableland forests and forested portions of the Lake Iroquois shoreline.

ISSUE BACKGROUND

The Official Plan identifies the importance of a natural heritage system to the City of Toronto and includes policies to protect, restore and enhance the natural heritage system. The City's natural heritage system is illustrated on Map 9 of the Official Plan. The natural heritage system is a mosaic of natural heritage features and functions, including water courses, valley slopes, forests and significant physical features such as the Lake Iroquois shoreline. Protection of the City's natural heritage system is achieved through policies in the Official Plan and through by-laws such as the Ravine Protection by-law and the Private Tree by-law.

The Ravine Protection by-law was originally passed by City Council on October 3, 2002 to protect ravine features in the City of Toronto and harmonize the policies of the seven former municipalities. The purpose of the by-law is to promote the management, protection and conservation of ravines and associated natural and woodland areas by regulating the destruction of trees and changes in grade. The area subject to the by-law includes the ravine landform plus buffer areas including a 10 metre set back from the top-of-bank and any contiguous tree canopy because these areas contribute to the stability and function of the ravine. Environmentally significant areas were also included if they were contiguous with the ravine feature. Much of the area identified as natural heritage system on Map 9 of the Official Plan is protected under the Ravine Protection by-law because much of the natural heritage that remains in the City of Toronto is found in the ravines and valleys. However, a number of tableland forests and forested portions of the Lake Iroquois shoreline that are identified as part of the natural heritage system or designated as Parks and Open Space Areas in the Official Plan are not associated with ravines. This report recommends that these areas be protected under the Ravine Protection by-law.

COMMENTS

1.0 The Need to Protect Tableland Forest and Forested Portions of the Lake Iroquois Shoreline

A number of significant forested areas that are included in the natural heritage system are not currently protected under the Ravine Protection by-law because they are not associated with a ravine. Forested tableland areas are relatively rare in the City of Toronto. In addition to contributing to the overall urban canopy in the City, they provide habitat, food sources and shelter for wildlife and serve as “stepping stone” locations between other natural areas for wildlife, particularly local and migratory birds. They provide localized environmental benefits such as shade, air quality amelioration and water infiltration, and opportunities to access and experience nature. Some forested areas are located along the former glacial Lake Iroquois shoreline. The Lake Iroquois shoreline is a significant landform in Toronto and is part of the natural heritage system.

As with ravines, tableland forests and the forested portions of the Lake Iroquois shoreline are vulnerable to degradation due to removal of trees, changes in grade or lack of management. Individual trees in these areas are protected by the Private Tree by-law if they are over 30 cm in diameter. However, the Private Tree by-law does not protect the forest system which includes trees, saplings, shrubs and herbaceous plant material which collectively provides habitat and food sources for a variety of wildlife, as well as provide the regenerative capacity of the forest to sustain itself. Similarly, the Private Tree by-law does not regulate changes in grade which can have a negative impact on trees and on the stability of the Lake Iroquois shoreline feature. Protection of tableland forests and forested portions of the Lake Iroquois shoreline will be better achieved through the Ravine Protection by-law because it protects all sizes of trees and regulates the placement of fill and changes to grade.

2.0 Areas to be Added to the By-law

The following features are proposed to be added to the area protected under the by-law:

- a) tableland forests which are identified in the natural heritage system of the Official Plan or designated as Parks and Open Space Areas in the Official Plan;
- b) treed portions of the Lake Iroquois shoreline and contiguous slopes which are identified in the natural heritage system of the Official Plan; and
- c) one ravine which meets the criteria in the existing by-law but was not included in previous mapping.

Tableland forests and forested portions of the Lake Iroquois shoreline were mapped by Survey and Mapping Services using high resolution 2005 geo-referenced aerial photography and reviewed by staff from Urban Forestry and City Planning. The mapping was based on the following criteria:

1. Tableland forest areas > 0.5 ha were mapped to the approximate drip line.
2. Small (e.g., < 20 m wide) non-wooded areas (such as meadows, successional areas, and wetlands) and minor non-natural intrusions (such as trails and small

human-use clearings) were included so as not to fragment the forested area. Large developed openings such as buildings, large roads and parking lots were not included.

3. Lake Iroquois shoreline forested areas were mapped, in a similar fashion as existing ravines, to the canopy drip line or 10 m from the top or bottom of slope, whichever was greater. If there was a discernable landform with a difference in grade of approximately 2 metres or more that extended beyond the forested area, then this was included so as not to fragment the landform.

In some situations, the boundary of the mapped area varies from the natural heritage system layer due to the higher resolution aerial photography used in this mapping exercise or as a result of losses to the feature or natural succession that has occurred since the natural heritage system was mapped in 1999.

Tableland forests and the forested portions of the Lake Iroquois shoreline that meet the mapping criteria above and are also located either within the natural heritage system shown on Map 9 of the Official Plan or within the Parks and Open Space Areas land use designation are proposed to be protected under the by-law. Forested areas that meet the mapping criteria but which are not located within the natural heritage system or within a Parks and Open Space Areas land use designation will be considered for protection under the by-law at a future time as indicated in section 6.0 below.

The revised mapping also includes one ravine which runs in a north-west/south-east direction between Eglinton and Avenue Road (see Map 1) which meets the criteria used to define a ravine in the existing by-law but was not included in previous mapping. This ravine was mapped using the criteria used to map ravines in the existing by-law.

3.0 Changing the Name of the By-law

It is recommended that the name of the Ravine Protection by-law be changed to reflect that it now also applies to the protection of other natural features that are vulnerable to degradation due to removal of trees, changes in grade or lack of management. The amended by-law is proposed to be renamed the “Ravine and Natural Feature Protection by-law”.

4.0 Other Proposed Changes to the By-law

The following additional changes are proposed to be made to the by-law:

- a) Some areas (see map 4) which were formerly protected have been removed from the by-law because the ravine feature has been destroyed or significantly altered as a result of construction of plans approved prior to inclusion of the feature under the by-law or by the OMB.

- b) The Index Maps and Data Maps have been modified to reflect the changes to the protected area and the new name of the by-law.
- c) General housekeeping changes have been made to update titles of officials, references to legislation and policies, and other grammatical changes.
- d) Technical amendments have been made to provide consistency with the City of Toronto Act; to clarify when the General Manager is authorized to issue permits; to harmonize language and definitions shared with the Private Tree By-law, where appropriate; to provide additional definitions; and to reflect existing practice.
- e) The offence provisions have been updated accordance with the City of Toronto Act, 2006 to provide for a remedy in situations where required work has not been done and to provide for fines.

5.0 Notification of Property Owners

There is no statutory requirement to notify affected property owners. However, property owners affected by the harmonized city-wide ravine by-law approved in 2002 were notified as were property owners affected by revised mapping approved in 2004. Property owners located in the protected areas to be added to the by-law as described in this report will be notified by mail. In addition, an updated information pamphlet will be inserted into the water bill advising property owners about the updated ravine by-law and directing them to the Urban Forestry web site for more information.

6.0 Future Directions

The natural heritage system shown on Map 9 of the Official Plan was identified through a 2001 study which was based on information and evaluation techniques that were available at the time. The study recognized that further work would be needed to refine and complete the identification of natural heritage features and functions that are important to the City's natural heritage system. Gaps in the 2001 study include some: tableland forest areas; groundwater discharge/recharge areas; smaller order water courses and wetlands; and significant wildlife habitats. Further work is being carried out to identify these gaps and the importance of these areas to the natural heritage system. Work is also underway to identify and map environmentally significant areas (ESAs) across the City of Toronto and these areas also should be considered for protection under the by-law where they are not already. It is also proposed that consideration be given to amending the Ravine and Natural Feature Protection by-law to include additional features and areas that have natural heritage value and are vulnerable to degradation due to removal of trees, changes in grade or lack of management. There are also some areas that have important natural heritage value which are not currently protected under the by-law. As these areas are similar to public golf courses and the Zoo, which are protected by the by-law, options for protecting the natural heritage values in these areas, including best management practices, should also be considered at that time.

Conclusions

The need to protect natural features and areas for the long term is an important policy direction identified in the Provincial Policy Statement, 2005, and is widely accepted by the public and different levels of government. Protection of the natural heritage system in the City of Toronto is particularly important given the relatively small amount of natural area that remains, the ecological functions these areas perform, and development pressures that affect these areas. Policies in the Official Plan support the protection of the City's natural heritage system, including ravines, trees and forest habitat and landforms. The use of regulation to protect these features helps to achieve these policies and protect the health and integrity of the natural ecosystem. Expanding the protected area of the by-law to include forested areas beyond ravines also contributes to the City's goal of increasing the urban canopy by helping to maintain the existing canopy.

This report has been prepared in consultation with the City Solicitor.

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SIGNATURE

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ATTACHMENTS

Maps 1- 4: Areas to be Protected under the Ravine and Natural Feature Protection By-law