

YORK REGIONAL FOREST HAZARD TREE MANAGEMENT STRATEGY

**Natural Heritage and Forestry Services Section
Transportation and Works Department**

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TABLE OF CONTENTS

SECTION 1 – Introduction	1
1.1 Rationale	1
1.2 Definition of a Hazard Tree and Target	1
1.3 Responsibility for Hazard Tree Management	1
SECTION 2 - York Regional Forest and Property Descriptions	1
2.1 History of the York Regional Forest	1
2.2 Description of Forest Properties	2
SECTION 3 - Assessment of Risk and Priorities for Hazard Tree Assessment and Abatement	2
SECTION 4 – Protocol for Inspections, Marking, Documenting, and Tracking	2
4.1 Inspections	2
4.2 Documentation	3
SECTION 5 – Hazard Tree Management Strategy Review	3
SECTION 6 – References	4
APPENDICES	5
APPENDIX A – Key Map of the York Regional Forest Tracts	6
APPENDIX B – Summary of Features in the York Regional Forest	7
APPENDIX C – Forest Tracts Categorized by Level of Use and Adjacent Use	8
APPENDIX D – Hazard tree inspection schedule	9
APPENDIX E – Hazard tree abatement guidelines	10

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SECTION 1 - Introduction

1.1 Rationale

York Region has been a proud owner of the Regional Forests since the early 1920's. Maintaining a healthy, productive public forest involves a variety of silvicultural and other management practices, including abatement of hazard trees that could affect the safety of forest users and adjacent land owners. This hazard tree management strategy provides a formal process for identifying and treating trees which pose a hazard in the York Regional Forest. The objectives of the strategy include:

- Identifying responsibility for implementation
- Providing criteria for determining the level of risk
- Establishing a protocol for inspection and abatement of hazard trees

1.2 Definition of a Hazard Tree and Target

In a forest environment all trees have the potential to fail under certain conditions. A “hazard tree” is a tree with significant visible structural defects likely to cause failure of all or part of the tree which could damage a “target”. A target can be a person or property.

1.3 Responsibility for Hazard Tree Management

The Regional Municipality of York will be responsible for implementing this strategy. The public, adjacent landowners, forestry contractors, the Regional Forest Advisory Team (RFAT) and others who use the York Regional Forest also provide valuable assistance by informing Regional staff of potential hazard trees. The decision to designate a tree as a hazard tree will be made by Regional staff or designate. Implementation of hazard tree abatement will be the responsibility of Regional staff.

SECTION 2 – York Regional Forest and Property Descriptions

2.1 History of the York Regional Forest

The York Regional Forest was first established in 1924. Management objectives are described in the York Regional Forest Management Plan 1998 – 2018 (Regional Municipality of York 1998) and accompanying York Regional Forest Five-Year Forest Operating Plan 2003-2007 (Regional Municipality of York 2003). The Natural Heritage and Forestry Services Section within the Transportation and Works Department is responsible for the administration and management of the York Regional Forest.

The York Regional Forest is managed for a variety of environmental, social, and economic values. Silvicultural management of the timber resources in the forest follows Provincial guidelines and best management practices for site protection and conservation of biodiversity and wildlife habitat. These practices include retaining dead standing trees (“snags”) and trees with cavities for wildlife habitat where they do not pose a hazard to forest users or property.

The York Regional Forest is used for passive recreation and outdoor education. Activities such as hiking, nature appreciation, horseback riding, dog walking, and mountain biking occur in all tracts. Hunting and snowmobiling are limited to specific tracts. The Region operates a public education program in various forest tracts through its forest events and festivals, and the Nature's Classroom program. Groups and agencies hosting events in the Regional Forest are required to obtain a Forest Use Permit.

2.2 Description of Forest Properties

A key map and summary of the York Regional Forest tracts can be found in Appendices A and B. The summary illustrates the size of each tract, number of kilometres (km) of sanctioned trails, parking lots, and identifies special features including ponds and other areas where forest users are likely to congregate. Detailed forest tract maps can be found in the York Regional Forest Access Plan 2002 (Regional Municipality of York 2002a).

SECTION 3 – Assessment of Risk and Priorities for Hazard Tree Inspection and Abatement

The level of forest use by the public is varied among tracts depending on a number of factors including location, proximity to urban areas, and type of use. Tracts with a high level of use potentially have more targets. The same is true for tracts that adjoin private property with active use areas or facilities in close proximity to Regional property. Forest tracts have been categorized into high and low use according to their level of public use and the type of adjacent land use, Appendix C. Such groupings help to prioritize and schedule tracts for hazard tree management.

Parking lots and other features where people are likely to congregate are considered high use areas for hazard tree management. The location of Region sponsored activities such as Nature's Classroom, and forest events and festivals are also considered high use areas for the purpose of hazard tree management. Catastrophic natural disturbances (e.g., tornados, severe ice storms, forest fires, disease, and insect infestations) have the potential to produce large numbers of hazard trees. Locations subject to catastrophic natural disturbances will be considered a high priority for hazard tree management.

The Region also receives information from forest users and adjacent landowners regarding potential hazard trees on an ongoing basis.

Locations which fall into the high use category are considered a high priority for hazard tree inspection and abatement, and will be inspected more frequently than those identified in the low use category.

Guidelines for abatement of hazard tree are identified in Appendix E.

SECTION 4 – Protocol for Inspections, Marking, Documenting, and Tracking

4.1 Inspections

Inspections for hazard trees in the York Regional Forest will occur as follows:

- Inspection for hazard trees along trails and residential property boundaries in tracts categorized as high use will occur on a two year cycle and follow the schedule set out in Appendix D.

- Inspection for hazard trees along trails in tracts categorized as low use will occur on a four year cycle and follow the schedule set out in Appendix D.
- Parking lots and areas where people are likely to congregate, as identified in Appendix B, will be inspected annually.
- Natures Classroom, forest event, and forest festival, locations will be inspected in accordance with the procedures set out in the York Regional Forest: Education Program Draft Crisis, Safety, and Risk Management Procedure Manual (Regional Municipality of York, 2002b).
- Information received from forest users and adjacent landowners regarding potential hazard trees will be assessed as high or low priority. Those assessed as high priority will be inspected within 3 business days. Low priority items will be dealt with on a prioritized basis within the annual program cycle.
- When catastrophic natural disturbances have occurred, these locations will be inspected for hazard trees starting no later than 2 days following the event.

During the inspection hazard trees will be assigned to an abatement priority as set out in Appendix E.

In addition to the inspection cycles set out above, all primary and secondary access routes are inspected and cleared of any obstructions (eg. fallen trees) on a biannual basis, spring and fall. During these inspections any hazard trees observed which meet the criteria for high priority abatement contained in Appendix E will be addressed.

4.2 Documentation

The Region will maintain a database which will include records of trail sections, parking lots and other locations that have been inspected, a priority list for abatement action, and date the abatement was completed. Public inquiries will be logged in the Transportation and Works Customer Action and Response System (CARES).

SECTION 5 – Hazard Tree Management Strategy Review

The York Regional Forest Hazard Tree Management Strategy will be reviewed as necessary and updated on a 5 year cycle. During this review the strategy will be updated as necessary to document inclusion of new forest tracts, assess changes in level of forest use, review adjacent land use, and confirm a new inspection schedule.

REFERENCE LIST

Regional Municipality of York. 1998. York Regional Forest – Management Plan 1998-2018. Regional Municipality of York, Newmarket. 52pp + appendices.

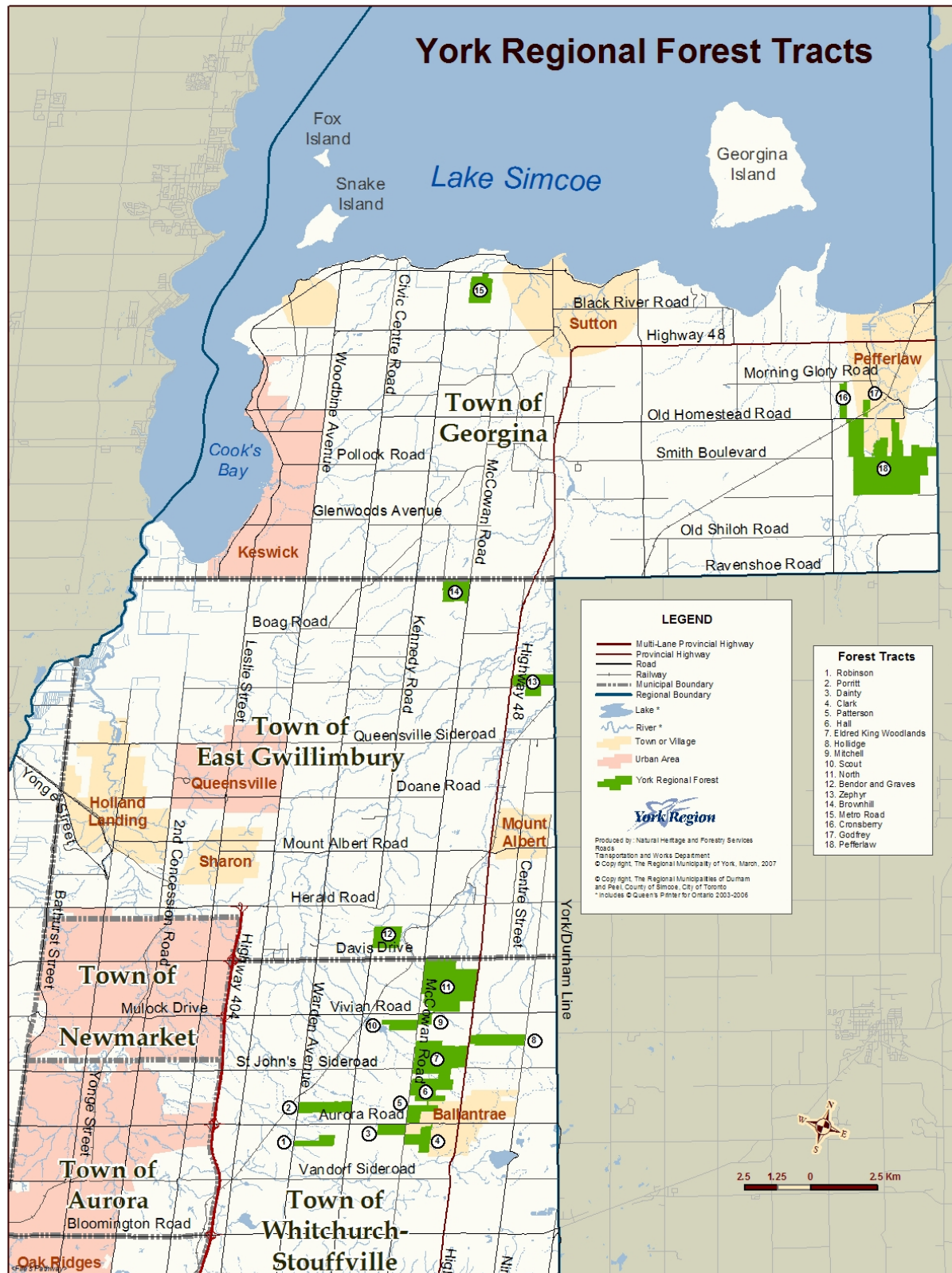
Regional Municipality of York. 2002a. York Regional Forest Access Plan 2002. Regional Municipality of York, Newmarket. 80pp

Regional Municipality of York. 2002b. York Regional Forest: Education Program Draft Crisis, Safety, and Risk Management Procedure Manual. Regional Municipality of York, Newmarket. 9pp

Regional Municipality of York. 2003. York Regional Forest Five-Year Forest Operating Plan 2003-2007. Regional Municipality of York, Newmarket. 51pp

APPENDICES

Appendix A - Key Map of the York Regional Forest Tracts



Appendix B – Summary of Features in the York Regional Forest

Tract	Area (hectares)	Length of sanctioned trails (m)	Parking lots	Special features	Adjacent use
Bendor & Graves	81	5754			
Brown Hill	83	12453	2		Yes
Clarke	63	7656			Yes
Cronsberry	36	1647			
Dainty	41	4060			Yes
Eldred King Woodlands	220	17904	1	Pond	
Godfrey	16	183			Yes
Hall	109	8593	1		Yes
Hollidge	83	7608	1	Creek/bridge, pond, buildings	
Metro Road	84	1760	1		
Mitchell	21	1488			
North	332	17450	1		Yes
Patterson	48	4108			Yes
Pefferlaw	581	11400	1		
Porritt	81	4575	1		
Robinson	43	3187			
Scout	48	3158		Pond	Yes
Zephyr	87	5992	1		

Source: York Regional Forest 2005 GIS layers.

Appendix C - Forest Tracts Categorized by Level of Use and Adjacent Use

Forest tracts categorized by level of use and adjacent use.

Adjacent Use	Level of use ¹	
	High	Low
Active Use²	Brown Hill North Hall 	Godfrey Dainty Clarke Patterson Scout 
Other³	Eldred King Woodlands Porritt Bendor & Graves Hollidge 	Pefferlaw Robinson Mitchell Zephyr Metro Road Cronsberry 

H – Indicates high use. Inspect sanctioned trails and active use property boundaries every two years.

L – Indicates low use. Inspect sanctioned trails every four years.

¹Level of forest use based on the results of the 2006 forest user survey and observations by Regional staff.

²Active Use - adjacent properties containing a structure or amenity use areas, e.g. gardens, play structures, barns etc, which could be damaged by a hazard tree within the York Regional Forest

³Other - adjacent properties not containing structure or amenity use areas, e.g. forested lands, agricultural lands, which could be damaged by a hazard tree within the York Regional Forest

Appendix D - Hazard Tree Inspection Schedule

Features	Year 1 - 2008	Year 2 - 2009	Year 3 - 2010	Year 4 - 2011	Year 5 - 2012	Year 6 - 2013
Parking lots and other special features	13	13	13	13	13	13
Sanctioned trails in high use tracts and active use boundaries	Hollidge Brown Hill North Tract Hall	Dainty Clarke Patterson Scout Bendor & Graves Godfrey Eldred King Porritt	Eldred King Hollidge Brown Hill North Tract Porritt Hall	Dainty Clarke Patterson Scout Bendor & Graves Godfrey	Hollidge Brown Hill North Tract Hall	Dainty Clarke Patterson Scout Bendor & Graves Godfrey Eldred King Porritt
Sanctioned trails low use tracts	Pefferlaw	Mitchell Zephyr	Metro Road Cronsberry Robinson		Pefferlaw	Mitchell Zephyr

Appendix E - Hazard Tree Abatement Guidelines

Abatement of hazard trees may involve removal of the portion of the tree contributing to the hazard, complete removal of the tree, or removal of the target.

The following abatement priorities will be followed.

- a. **High priority** - abatement for trees that have structurally failed and continue to provide a threat to forest users. Action requires abatement of hazard within 5 business days. In the event the hazard(s) can not be abated within 5 business days the target will be removed by closing the trail or affected area. Current acceptable practices for trail closure may include fencing and signage.
- b. **Low priority** - abatement for trees that do not pose an immediate hazard. Abatement will be dealt with on a prioritized basis within the annual program cycle.
- c. **Other** - abatement of hazard trees identified during the inspection for a forest event will occur prior to the event date. Abatement could include moving the event to an alternate location or maintenance of the hazard tree.