East Duffins Headwaters
Management Plan
Update

Chapter 1 - Introduction
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1.1. OVERVIEW

This report is an update to the existing *Duffins Headwaters Management Plan for TRCA Properties (2003)*. Whereas the 2003 plan was a document meant to guide the management of all the TRCA lands within all of the Duffins Creek Headwaters, this Management Plan Update is focused on the TRCA managed lands in the upper reaches of the East Duffins Creek Subwatershed.

The East Duffins Headwaters (EDH) Management Plan Update will address property management, public safety, site securement and restoration opportunities as well as respond to future demands for nature based recreation in the region. It will establish a framework for appropriate environmental protection and restoration techniques, facilitate public input regarding appropriate use, and create a sense of stewardship among users and adjacent land owners. The update will be guided by recommendations outlined in *A Watershed Plan for Duffins Creek and Carruthers Creek (2003)*. In addition, the management plan update will integrate plans such as Ontario’s Places to Grow Plan (PTG), the Oak Ridges Moraine Conservation Plan (ORMCP) and the Greenbelt Plan (GBP) which are designed to manage growth and development in Ontario.

The EDH represents some of the most unspoiled lands in the Greater Toronto Area. The lands make up over 1400 ha, over 1100 ha of which is made up of largely intact forest cover. The properties are located within the Oak Ridges Moraine and make up valuable parts of the headwaters of not only the Duffins Creek but also the Lynde Creek, Pefferlaw River and Lake Scugog Watersheds. Further underscoring the environmental significance of the property, the EDH intersects with major sections of both the Uxbridge Kames Environmentally Sensitive Area and the provincially designated Uxbridge Glen Major Forest Area of Natural and Scientific Interest. The area is home to several regional species of concern and various Ontario Species at Risk.

In addition to the regional natural heritage asset that the property represents, the property also boasts a rich cultural heritage legacy and as such, eight individual areas have been identified in the EDH as areas of cultural value that are to be protected.

The study properties currently provide the opportunity for passive, year-round public use. There is an extensive 100km long multi-use trail system that links the majority of the EDH lands. Permitted trail uses include hiking, horseback riding, leashed dog-walking, cycling and cross-country skiing. In addition, TRCA trails are connected to an inter-regional trail system via the Oak Ridges Trail and the Trans Canada Trail.

The updated Management Plan will complement a number of TRCA initiatives, including:

- *The Living City vision*;
- *A Watershed Plan for Duffins Creek and Carruthers Creek (2003)*;
- *Fisheries Management Plan for Duffins Creek and Carruthers Creek (2004)*;
- *Terrestrail Natural Heritage System Strategy*; and
- *The Former Timbers Brother Gravel Pit restoration project*. 
Deliverables of the EDH Management Plan update will include the following:

- Identification of existing property features, including natural and cultural heritage resources;
- Evaluation of the property based on conservation planning policies, landscape features and functions, site environmental opportunities and constraints, community needs, and municipal policies, plans and requirements;
- A site securement and protection plan;
- Refinement of conservation land management zones;
- Management guidelines and recommendations for each management zone;
- Expanded trail plan including hazard management and emergency response.

The management plan process will follow the study approach used by TRCA for the preparation of management Master Plans for Heart Lake, Bruce’s Mill and Greenwood Conservation Areas.

Of the approximately 1400 hectares of land included within the management plan All of the lands are owned by TRCA, with the exception of approximately 71 hectares in the Glen Major Resource Management Tract that is owned by Ontario Heritage Trust and managed by TRCA. The management plan area extends east approximately from Brock Road to Lakeridge Road and from just south of the Uxbridge-Pickering Townline to Goodwood Rd, in the Region of Durham. The TRCA properties included in the management plan area include (See map 1.1):

- Walker Woods Tract;
- Glen Major Resource Management Tract;
- Brock Tract;
- Wilder Forest and Wildlife Area;
- TRCA Pleasure Valley Forest;
- TRCA Skyloft;
- TRCA Dagmar Forest; and
- The Purcell Property.
Map 1.1 East Duffins Headwaters Study Boundary
The EDH properties consist of forest, meadows, wetlands and many headwater streams that provide quality habitat in the Duffins Creek watershed, as evidenced by the variety of flora and fauna species of regional concern.

The Management Plan Update process occurred in several phases that consisted of compiling background materials and research; holding public information and consultation sessions; holding public advisory committee meetings; refining the vision, goals and objectives for the properties; developing management recommendations; and developing a trail and recreation plan. Additionally, the plan identifies specific management zones for the site that guide both natural and cultural heritage protection as well as identifying recreational opportunities on the site. Detailed plans for future trail systems and presented along with a recommended implementation schedule and predicted budget.

The EDH Management Plan Update will guide management and use of the property for approximately 15 years. Various plan components, such as Management Zones, Management Recommendations, Trail Plan and Recreation Plan have been included so that related management issues likely to arise in the future have already been discussed, and recommendations are provided. This Management Plan Update process has been one which has engaged technical staff of the TRCA and its partners, as well as local interest groups and the public. Although this plan is designed to be in place for 15 years, recommendations and implementation strategies may need to be revisited from time to time to ensure it is adaptable to issues not addressed in this plan.

1.2 CONTEXT

Situated in the upper reaches of the Duffins Creek watershed (Map1.2) the EDH is located in a largely a rural environment, although there are future development plans in Coppins Corners and further to the south in the Seaton Lands that will significantly alter the area. The establishment of Rouge Park as Canada’s first Urban National Park, the implementation of the Greenwood Conservation Lands Master Plan and the potential development of the Transport Canada Lands in Pickering to build an international airport will have a significant impact on the local area.
Map 1.2 Jurisdiction Context
Existing plans for the surrounding land use development, as well as regional and municipal official plans, all have influence on the long term condition of the EDH and have been considered in the development of the management plan update. Consistency must also exist with the visions and plans of the TRCA. Moving forward, the Management Plan Update will be developed in accordance with the TRCA’s vision for The Living City as well as the Watershed Plan for the Duffins and Carruthers Creek (2003). The visions, goals and objectives of all of the supporting reports were reviewed and incorporated as part of the process for developing the EDH Management Plan Update.

1.1.1 Living City Vision

The quality of life on Earth is being determined in the rapidly expanding city regions. The vision of TRCA is for a new kind of community – The Living City® – where human settlement can flourish forever as part of nature’s beauty and diversity. This vision of a Living City® Region has four objectives:

- **Healthy Rivers and Shorelines** - To restore the integrity and health of the region’s rivers and waters from the headwaters in the Oak Ridges Moraine, throughout each of the nine watersheds in TRCA’s jurisdiction, to the Toronto waterfront on Lake Ontario.

- **Regional Biodiversity** - To protect and restore a regional system of natural areas that provide habitat for plant and animal species, improve air quality and provide opportunities for the enjoyment of nature.

- **Sustainable Communities** - To facilitate broad community understanding, dialogue and action toward integrated approaches to sustainable living and city building that improves the quality of life for residents, businesses and nature.

- **Business Excellence** - To produce continuous improvement in the development and delivery of all programs through creative partnerships, diverse funding sources, and careful auditing of outcomes and effectiveness.

The TRCA maintains the responsibility to ensure the conservation, restoration and responsible management of Ontario’s water, land and natural habitats located within the TRCA’s jurisdiction. This is accomplished through the development and implementation of programmes and reports that aim to balance the human, environmental and economic needs.

Two key TRCA Living City strategies that have been integrated into this Management Plan Update are:

- *Terrestrail Natural Heritage System Strategy (2007)*
- *A Watershed Plan for Duffins and Carruthers Creek (2003)*
1.1.2 TRCA’s Terrestrial Natural Heritage System Strategy (2007)
This Management Plan Update recognizes the implications of rapid urbanization in the Greater Toronto Area and is based on two principles:

- That rare species protection is not enough for ensuring regional health; and
- That the protection of more than “significant sites” is needed to ensure regional health.

This approach considers the site within the context of the region and regional pressures. It provides clear and detailed direction for gathering and analyzing information about natural habitats, vegetation communities, and species and forms the basis for developing strategies for protection and restoration. This approach moves beyond the contemporary model of defining natural heritage systems based on a series of cores and corridors. It recognizes that all habitat patches have some value and make a contribution towards ecological health across the landscape. This approach evaluates a site’s contribution at three levels:

1. The entire TRCA jurisdiction
2. Other defined areas of planning units such as the watershed and sub-watershed
3. Municipal areas.

A key component of the TRCA Terrestrial Natural Heritage Approach is the scoring and ranking of vegetation communities and fauna species. This ranking information is used to determine if there are any species or vegetation communities of concern on the site. A second key component of the approach is the terrestrial natural heritage indicators and measures that are used to establish quantitative targets for the terrestrial ecosystem. The indicators are:

- Quantity of Natural Cover
- Distribution
- Matrix Influence
- Patch Size and Shape
- Landscape Connectivity
- Biodiversity.

All of the terrestrial natural heritage information that was gathered was analyzed and used to determine the appropriate management zones and trail alignments. By scoring and ranking the vegetation communities and fauna species, it reflects the primary resistance to urbanization and human encroachment. Species are ranked based on local distribution or local (L) ranks. These L ranks are in some ways analogous to the provincial (S) and global (G) ranks that are assigned to vegetation communities, flora and fauna. The TRCA ranks range from L1 to L5. Generally, L1 to L3 species or vegetation communities are of regional conservation concern (i.e., within TRCA jurisdiction) and the locations have been preserved.

1.1.3 A Watershed Plan: For Duffins Creek and Carruthers Creek (2003)
The Vision and Recommendations created within the Watershed Plan for Duffins Creek and Carruthers Creek (2003) has been integrated within the EDH Management Plan Update to ensure a consistent watershed management approach. The Watershed Plan was designed to evaluate the potential effects of current and future watershed activities, and identifies management actions needed for watershed protection and enhancement. The watershed vision, developed by a task force of elected representatives, is as follows;

“It is envisioned that the Duffins Creek and Carruthers Creek watersheds will be healthy, dynamic and sustainable watersheds that continue to have clean, safe water with functioning wetlands and diverse self-sustaining communities of native plants, fish and wildlife, where natural and human heritage features are protected and valued. Residents will recognize the watersheds as essential community resources that enhance their quality of life. All stakeholders will participate in the stewardship of the watersheds and growth and development will reflect this vision and the importance of protecting and enhancing this priceless legacy.”

This vision is supported by a management philosophy that promotes five key elements.

1. Net Gain
2. Environment First
3. Balance Land Use
4. Human Health and Safety
5. Everyone Counts — Ownership, Commitment and Follow Through

Indicators, targets and measures for management actions were set in the Watershed Plan. Integral management actions, which are the top priorities for implementation, can be found in A Watershed Plan for Duffins and Carruthers Creek (http://www.trca.on.ca/dotAsset/25961.pdf).

1.1.5 Duffins Creek Headwaters Management Plan for TRCA Properties (2003)

The Duffins Creek Headwaters Management Plan for TRCA Properties (2003) provided direction on the management of the properties in the upper reaches of the entirety of the Duffins Creek. This included not only lands within the East Duffins Headwaters, but also lands such as the Secord, Goodwood and Clubine Properties and the Claremont Field Centre. The plan provided general management recommendations; management zones a trail plan, and an implementation plan for the properties.

While still valid to this day, upon conducting a 5 year review, it was determined that significant enough changes by way of property acquisitions, major restoration efforts, and changes in recreational users warranted a focused management plan update for the properties within the East Duffins Headwater Area. The strengths and structure of the existing management plan have been incorporated into the update and have been built upon in a more refined and detailed level.
Other plans, strategies, and documents, similar to those mentioned above, have been consisted and incorporated into the EDH Management Plan Update. These items which have been reviewed are outlined in the background report, which can be obtained by contacting the TRCA.

1.3 STUDY PROCESS

Experience has shown that there is not only a demand for access to public lands, but also an increased awareness with the public for the preservation and protection of the remaining natural green space within the Greater Toronto Area. Simultaneously there has been a growing interest from various user groups, businesses, and municipalities for outdoor recreation and education opportunities on public lands.

TRCA initiated the preparation of a comprehensive Management Plan Update for EDH in 2008. The goal of this proposal is to effectively protect the natural features on TRCA owned lands, while meeting the changing needs of the community with the updating of a the management strategy for the properties.

At Authority Meeting #08/08 resolution #A237/08 was adopted direct Staff was directed to:

“establish a Project Steering Committee and a Public Advisory Committee to facilitate the opportunity for public input, which would include members of the Glen Major Forest and Walker Woods Stewardship Committee, interested community groups, business representatives, community residents, agency staff, municipal staff and area councillors to assist with the completion of the East Duffins Creek Management Plan Update for Toronto and Region Conservation Authority (TRCA) properties;

AND FURTHER THAT the final version of the management plan be presented to the Authority for approval.”

The East Duffins Headwaters Management Plan Update was undertaken in three phases as follows:

Phase One (October 2008 – March 2009)

- update property inventories including natural heritage data, geo-referenced trail locations,
- forest management, restoration opportunities and site securement;
- establish staff steering groups and a management plan advisory committee and host
- meetings;
- update plan vision, goals and objectives;
- establish and circulate a study newsletter;
- host one public information session to introduce the project.

Phase Two (December 2008 – June 2011)
• review and update management zones;
• integrate updated watershed management recommendations;
• develop a site securement and protection plan including public use hazard management;
• review and update an overall trail plan for the properties including emergency response;
• host staff steering and advisory committee meetings;
• circulate a study newsletter update;
• host one public meeting to review draft material.

Phase Three (July 2011 – March 2013)

• review and update management recommendations;
• finalize draft management plan document;
• finalize site securement and protection plan;
• finalize trail plans;
• host staff steering and advisory committee meetings;
• host public meeting to present final draft plan;
• obtain partners and TRCA board endorsement and / or approval of the plan;
• circulate a study update newsletter.

Consultation and engagement with project partners and stakeholders has been an intricate part of developing the EDH Management Plan Update. To develop a plan which has engaged both the people who will manage the site as well as the visitors who will enjoy the site was paramount to developing the plan and the support of those consulted is an indication of a well-developed plan. To ensure the planning process is inclusive of all project partners, stakeholders and the community at large, extensive consultation was completed. The following outlines the consultation process of the EDH Management Plan Update and those who were engaged.

1.3.1 Project Steering Committee

The Project Steering Committee worked alongside TRCA staff to establish the vision, goals and objectives, determine the management zones and management recommendations, and develop the trail and public use plans. The continued cooperation from each of these municipalities has assisted the development of this Management Plan Update. Copies of the minutes for the PSC meetings have been compiled and can be obtained from TRCA upon request. The PSC for EDH consisted of an internal working group of staff from key divisions within the TRCA including Property Services, Restoration Services, Ecology, Archaeology, Stewardship and Enforcement.
1.3.2 Public Advisory Committee (Glen Major and Walker Woods Executive Stewardship Committee)

The Public Advisory Committee (PAC) worked with TRCA staff to finalize the vision, goals and objectives, management zones and management recommendations. Since the PAC is composed of the user groups which will be actively using the lands members of the PAC played an important role in the development of the trail and recreation plans. The committee also provided technical input and assisted with the public consultation program for the Management Plan Update.

In summary, the advisory committee was responsible for the following major functions:

- Ensuring that appropriate staff and members at their respective user group/agencies/associations were adequately informed throughout the process
- Providing commentary and input on suggestions brought to the committee
- Assisting in the identification of current outstanding issues and making suggestions regarding appropriate ways to resolve them
- Assisting TRCA in presentations and public forums, where appropriate.

The Management Plan Update advisory committee consisted of or had input from representatives from the following groups and municipalities:

- Durham Mountain Biking Association
- Green Durham Association
- Oak Ridges Moraine Land Trust
- Oak Ridges Trail Association
- Ontario Heritage Trust
- City of Pickering Staff
- Region of Durham Staff
- Trans Canada Trail - Ontario
- Uxbridge Horseman’s Association
- Township of Uxbridge Environmental Advisory Committee
- Township of Uxbridge Council and Staff
- Township of Uxbridge Watershed Advisory Committee
- Local Residents

This study is the result of many months of work and commitment by this dedicated committee. Copies of the minutes for the PAC meetings have been compiled and can be obtained from TRCA upon request.

1.3.3 Public Consultation

At the outset of the Management Plan Update, it was identified that public use, enjoyment and stewardship of EDH would be important to the community. As a result, public input would become a priority in the development of integral plan components.
The public consultation program included:

- Meetings with interested organizations and user groups in the community to provide comment on specific plan components. During the planning process TRCA staff met with the cycling community, dog walking community, and the hiking community to discuss proposed plans and public interest.
- Information sessions, newsletters, and mailings to the community to share information and updates on the Management Plan Update.
- An online user survey to gain a better understanding of who is using the property, and future recommendations. More detail on this survey is provided in Chapter 5.
- Two rounds of public information sessions. The functions of the first round of meetings were to present draft plan components and obtain feedback from the public. Questions, comments and recommendations gathered from these meetings have been compiled and can be found in Appendix #3 – EDHPublic Meeting Questions and Answer Summary. The second round of meetings was conducted to present the updated and revised plan components. In total four public meetings were held in 2012.

In summary, the public was supportive regarding the development of the Management Plan Update and its components. The public, local community and users were kept well informed and consulted throughout the Management Plan Updating process, and their concerns, comments and suggestions were integrated into the plan wherever possible.

1.3.4 Aboriginal Engagement

Several cultural heritage features have been recorded onsite, and as a result it was established that Aboriginal communities may have a special interest in the planning process. Public engagement and support play an important role in an effective planning process; therefore TRCA utilized various consultation methods to engage a number of Aboriginal groups.

A letter introducing the project and a brief synopsis of the vision, goals and objectives were sent to Aboriginal groups in early 2012. For a list of the all the Aboriginal groups who were contacted please see Appendix XX - Aboriginal Contact List. A number of groups requested additional information and consultation regarding the project. As a result, a meeting with interested Aboriginal groups and TRCA staff was held in June 2012.

Those Aboriginal groups initially contacted were also sent an update package in January 2013. The information sent included an update on completed plan components and an updated progress schedule.

1.4 Site Description

The lands that encompass the EDH located within the headwaters of the Duffins Creek watershed on the southern slope of the Oak Ridge Moraine. All the properties are with the Regional Municipality of Durham. Five of the seven holdings are located completely within the Township of Uxbridge. A small portion at the south end of the Glen Major Resource
Management Tract is located in the Town of Pickering as well as both the Purcell Properties (Figure 1.1).

The following holdings are included in the East Duffins Headwaters (EDH). The entire planning area is approximately 1460 ha in area. The individual holding areas are as follows:

- North Walker Woods Tract: 163.3 hectares
- Walker Woods Tract: 311.4 hectares
- Glen Major Resource Management Tract: 439.4 hectares
- Brock Tract: 207.1 hectares
- Wilder Forest and Wildlife Area: 102.3 hectares
- TRCA Pleasure Valley Forest: 48.3 hectares
- Dagmar Forest: 127.7 hectares
- TRCA Skyloft Tract: 40.5 hectares
- Purcell: 20.3 hectares

Historically, lands within the EDH have been used primarily for agriculture, reforestation and some aggregate extraction. Currently, these lands are used for a variety of purposes including conservation, education, recreation, forest management, and agriculture. The following chapters describe in detail the lands, the management zones and management recommendations for the ongoing stewardship of the properties.