



THE TORONTO AND REGION CONSERVATION AUTHORITY

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# WATERSHED MANAGEMENT ADVISORY BOARD MEETING #2/04

**Friday, April 16, 2004**

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THE TORONTO AND REGION CONSERVATION AUTHORITY

MEETING OF THE WATERSHED MANAGEMENT ADVISORY BOARD #2/04  
April 16, 2004

The Watershed Management Advisory Board Meeting #2/04, was held in the South Theatre, Black Creek Pioneer Village, on Friday, April 16, 2004. The Chair Dave Ryan, called the meeting to order at 11:35 a.m.

**PRESENT**

Frank Dale	Member
Dick O'Brien	Chair, Authority
Shelley Petrie	Member
Dave Ryan	Chair
Nancy Stewart	Vice Chair

**REGRETS**

Gay Cowbourne	Member
Cliff Jenkins	Member
Michael Thompson	Member

**RES.#D11/04 - MINUTES**

Moved by:	Frank Dale
Seconded by:	Nancy Stewart

**THAT the Minutes of Meeting #1/04, held on February 13, 2004, be approved.** **CARRIED**

**RES.#D12/04 - DELEGATIONS**

Moved by:	Frank Dale
Seconded by:	Shelley Petrie

**THAT a delegation by Sandy Agnew, Member, Black Creek Project, be added to the agenda.** **CARRIED**

**DELEGATIONS**

- (a) Sandy Agnew, Member, Black Creek Project, speaking in regards to item 7.6 - Groundwater Needs for Golf Courses in Toronto and Region Conservation Authority's Jurisdiction.

**RES.#D13/04 - DELEGATIONS**

Moved by: Frank Dale  
Seconded by: Nancy Stewart

**THAT above-noted delegation (a) be heard and received.**

**CARRIED**

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**PRESENTATIONS**

- (a) A presentation by Juli Abouchar, Solicitor, Willms & Shier Environmental Lawyers, in regards to the Nutrient Management Act and source protection.
- (b) A presentation by Dena Lewis, Planning Ecologist, TRCA, in regards to item 7.1 - Terrestrial Natural Heritage Strategy.

**RES.#D14/04 - PRESENTATIONS**

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THAT above-noted presentations (a) and (b) be heard and received.**

**CARRIED**

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**CORRESPONDENCE**

- (a) A letter dated March 4, 2004 from John W. Campbell, President and CEO, Toronto Waterfront Revitalization Corporation, in regards to the Toronto Waterfront Aquatic Habitat Restoration Strategy.
- (b) An email dated April 15, 2004, from Madeleine McDowell, Chair, Humber Heritage Committee, in regards to item 7.9 - York Peel Durham Toronto / Conservation Authorities Moraine Coalition Groundwater Study.

**RES.#D15/04 - CORRESPONDENCE**

Moved by: Frank Dale  
Seconded by: Nancy Stewart

**THAT above-noted correspondence (a) and (b) be received.**

**CARRIED**

CORRESPONDENCE (A)



TORONTO WATERFRONT  
REVITALIZATION CORPORATION



March 4, 2004

Mr. Brian Denney, P.Eng.  
Chief Administrative Officer  
Toronto and Region Conservation Authority  
5 Shoreham Drive  
Downsview, Ontario  
M3N 1S4

Dear Brian:

**Re: Toronto Waterfront Aquatic Habitat Restoration Strategy**

Thank you for sending us a copy of the Toronto Waterfront Aquatic Habitat Restoration Strategy, and a copy of your Board's resolution A195/03 requesting endorsement.

The Toronto Waterfront Revitalization Corporation has been pleased to be a participant in the process to develop this strategy. The TWRC sees the benefits to the strategy and its potential to contribute to an improved waterfront, and a streamlined approach to dealing with fisheries issues (including approvals).

This strategy is supportive of the TWRC's initiatives to transform the waterfront.

I would like to convey our endorsement of the strategy, and our commitment to continue working with you and the other stakeholders to realize its implementation.

Yours truly,

A handwritten signature in black ink, appearing to read "John W. Campbell".

John W. Campbell  
President and CEO

JWC/al

## CORRESPONDENCE (B)



"Madeleine McDowell" <m.mcdowell@sympatico.ca> on 04/15/2004 12:34:02 PM

Please respond to "Madeleine McDowell" <m.mcdowell@sympatico.ca>

To: Kathy Stranks/MTRCA@MTRCA  
cc:

Subject: Watershed Mgmt Adv.Board Agenda item 7.9

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The Chair and Members of the Board, April 15th, 2004.  
Watershed Management Advisory Board,  
Toronto and Region Conservation Authority,  
5 Shoreham Drive,  
Downsview, Ontario, M3N 1S4

re: agenda item 7.9

Dear Chairman Ryan:

The paths of the glacial River from the Kirkfield period and of the Laurentian River are referred to in Guidebook # 4 of the Geological Survey, Department of Mines, Ottawa, 1913.

The principal of their continued subterranean flow differs little from that of any spring, except in volume. Their role in the water table and groundwater movement in the area between Georgian Bay and Lake Ontario is overwhelming.

Their recent documentation through bore holes and seismic surveys is important. The flows of these Rivers were equivalent to, or greater than that of the St. Clair River. Their continued existence is a piece of hydrogeology that excites the imagination, recreating eons old geography, prior to the sculpting of the Earth's surface by the last Glaciers. The groundwater flows of these aquifers do not follow the surface watershed geography, but relates to Mother Earth's bedrock.

Tampering with these flows must be viewed with great alarm. The reference in the YPDT Conservation Authorities Moraine Coalition groundwater study status update, to the possibility or probability of the Laurentian flow becoming an additional municipal groundwater resource for Caledon East is most disturbing.

Engineered meddling with groundwater flows is a dangerous practice, which can express its self in the water table, already stressed by development and urbanization.

Dry wells in the Lake Wilcox area have been a phenomenon for the last decade.

The interrelationship of surface watersheds and subterranean ones is a worthy study, only just commencing. It relates closely to the dangers of the transport of water from one watershed to another, which seems to be o direction under pursuit. The importance of the YDPT groundwater study cannot be over estimated and, as I have written previously, my Committee is overjoyed by the project and its support at many levels.

But the concept of the tap of modern plumbing attached to an ancient artesian source is infinitely alarming to us. It should also be viewed in the context of the 100 year plan of the excellent Natural Terrestrial Heritage Strategy.

Would you please ask staff to address this issue?

Thank you for your kind attention.

Yours sincerely,

Madeleine McDowell,  
Chair, Humber Heritage Committee.

## SECTION I - ITEMS FOR AUTHORITY ACTION

### RES.#D16/04 -

#### **TERRESTRIAL NATURAL HERITAGE STRATEGY**

Presentation of the draft Terrestrial Natural Heritage System Strategy for review and comment by municipalities and other key stakeholders.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT the draft Terrestrial Natural Heritage System Strategy (April 2004) be circulated to its member and local municipalities, the Ministry of Natural Resources, the Ministry of Municipal Affairs, Conservation Ontario, South-central Ontario Conservation Authorities Natural Heritage Discussion Group (SCOCA NHDG), non-government organizations, the Urban Development Institute, the Aggregate Producers Association of Ontario, watershed councils and task forces, and interested professionals for comment;**

**THAT the draft strategy be provided to the Greenbelt Advisory Panel and the Smart Growth Secretariat for consideration;**

**THAT staff be directed to implement a consultation process to facilitate the review of the draft strategy document;**

**AND FURTHER THAT staff report back to the Authority on the comments received regarding the proposed strategy to enable finalization and adoption.**

**CARRIED**

#### **BACKGROUND**

As part of The Living City Vision, the Toronto and Region Conservation Authority (TRCA) has established objectives for Healthy Rivers and Shorelines, Regional Biodiversity, Sustainable Communities and Business Excellence. The Terrestrial Natural Heritage System Strategy (herein "Strategy") is the main vehicle for achieving the objective for Regional Biodiversity. The Living City objective for regional biodiversity is to protect and restore a regional system of natural areas that provide habitat for plants and animal species, improve air quality and provide opportunities for the enjoyment of nature.

The Strategy is designed to enhance biodiversity and the quality of life for the residents of the TRCA watersheds by seeking to increase the amount and quality of forest and wetland habitats. It uses a science-based analytical tool, based on ecological criteria, to identify an expanded and targeted land base for inclusion in the terrestrial natural heritage system. It incorporates the current thinking on terrestrial natural heritage protection and restoration principles to identify quantity, quality and distribution targets for a terrestrial natural heritage system. In addition, comprehensive data on the terrestrial natural heritage assets of TRCA's jurisdiction were used to develop the Strategy.

Map 3 (included in the agenda package) in the Strategy shows the target Terrestrial Natural Heritage System (TNHS), which is comprised of existing natural cover and potential natural cover.

At Authority Meeting #5/01, held on June 22, 2001, Resolution #A105/01 in regards to the Terrestrial Natural Heritage System Strategy was approved as follows:

*THAT the development of the Terrestrial Natural Heritage Strategy for the TRCA jurisdiction be endorsed;*

*THAT staff from the Authority proceed with the workplan and continue to work on this program in partnership with the Regions of York, Peel and Durham, and the City of Toronto, and in consultation with stakeholders;*

*THAT staff use the tools and methodologies in Authority activities and comments in its plan input and review, and permitting roles;*

*AND FURTHER THAT staff report back to the Authority with a status update on Strategy development and stakeholder consultation (late fall 2001 or early winter 2002).*

The Authority Meeting #4/02, held on April 26, 2002, amended Resolution #A91/02 in regards to the Terrestrial Natural Heritage System Strategy was approved as follows:

*THAT the State of the Terrestrial Ecosystem draft report be endorsed, and the final plan be brought to the Authority in the fall of 2002;*

*THAT staff use the report findings to assist in the development of the Terrestrial Natural Heritage Strategy;*

*AND FURTHER THAT the report be provided to various provincial, municipal, and public stakeholders.*

Staff has continued to move forward in the development of the Terrestrial Natural Heritage System Strategy as outlined below:

- The State of the Terrestrial Ecosystem Report has been finalized to be used as the basis for the strategy document.
- Geographic Information System (GIS) based models and analytical tools have been developed, tested and peer reviewed.
- The GIS tools were used to develop the recommended target Terrestrial Natural Heritage System for the TRCA jurisdiction described in the strategy document.
- The target setting methodology was peer reviewed.
- The first draft of the TNHS Strategy, in particular the development of the land use planning policies, was prepared with the assistance of a planning consultant.
- The first draft was revised in response to comments from internal circulation and external peer review by planning experts.

## **RATIONALE**

Despite the increase in awareness of conservation issues and concerns for decreasing biodiversity, there continues to be incremental losses of habitat and the quality of remaining habitat continues to decline. These trends have been highlighted by the biological inventory work undertaken over the last decade by TRCA. For example, many species are no longer found in the urban portions of the watersheds even where there are suitable remnant habitat patches. More and more species are becoming of concern due to declining numbers or restricted (limited) distribution. As urbanization expands within the watersheds, these negative trends will continue unless a different approach is taken.

Traditional approaches of protecting only the most unique, rare or best example habitats are not enough. This "islands of green" approach has the unintended effect of allowing species to become threatened or rare before they are considered significant, leading to perpetual crisis management. It is expensive, and the outcomes are uncertain and often disregard other more common habitats and species which contribute to the biodiversity and ecosystem functions of the region. Natural processes such as vegetation community succession, pollination and species dispersal can only be maintained if there is substantial natural cover, well distributed across the landscape. Without these processes, natural succession and native biodiversity will continue to decline. The terrestrial natural heritage system modelling shows that even if all the existing habitats were protected, they would continue to decline in quality and biodiversity if the existing approach to natural heritage protection and managing land use changes is used.

The Terrestrial Natural Heritage System Strategy addresses the past and continuing decline in biodiversity in two ways:

- by applying a systems approach that emphasizes the importance of the terrestrial natural heritage system as a single functional unit, rather than as separate natural areas; and
- by determining targets for the quality, distribution and quantity of terrestrial natural heritage needed in the landscape, in order to promote biodiversity and a sustainable city/region.

To ensure that the Terrestrial Natural Heritage System continues to support native biodiversity there needs to be more land set aside for the system.

A major benefit of an expanded natural land base is its contribution to maintaining and/or returning a more natural hydrologic regime. This has been dramatically demonstrated through the recent completion of *A Watershed Plan for Duffins Creek and Carruthers Creek* (TRCA, 2003). In this work it has been shown that increasing natural cover within the Duffins Creek watershed from 37% (existing) to 49% resulted in a number of the subcatchments having peak flow decreases up to 25% over the existing flows for the 100 year event.

## **Vision**

TRCA's vision for the Terrestrial Natural Heritage System is a sustainable system that is accessible to and valued by the region's residents as the foundation for the health and ecological integrity of the Toronto region, making it "The Living City".

## **Goal**

To work with all stakeholders to protect the land base shown as the Target Terrestrial Natural Heritage System and fully restore the system by 2100.

## **Objectives**

TRCA's objectives for the Toronto region Terrestrial Natural Heritage System are to:

- Increase natural cover to target system levels, the quantity and quality of forests, wetlands and other terrestrial natural heritage communities across the region.
- Optimize the location and distribution of forests, wetlands and other terrestrial natural heritage communities across the region to ensure a sustainable and robust natural heritage system.
- Ensure that biodiversity of species, habitats and communities of conservation concern can recover, evolve and flourish throughout the region as development and intensification continues.
- Contribute to the Toronto region's sense of place by defining, differentiating and sustaining the landscape characteristics of the region's human communities.
- Provide opportunities throughout the Toronto region for natural heritage enjoyment through appropriate outdoor recreation that is sustainable for a growing population.

For the purpose of better reflecting the diversity within TRCA's jurisdiction, the Strategy divides the region into four natural heritage planning zones. Each zone has its own combination of physical, land use and development characteristics. From north to south the four zones are:

- Oak Ridges Moraine/Niagara Escarpment zone;
- Rural zone;
- Urbanizing zone;
- Urban zone.

## **STRATEGIC PRINCIPLES FOR A TERRESTRIAL NATURAL HERITAGE SYSTEM**

Protecting terrestrial natural heritage requires a comprehensive approach that deals with ecosystem structure, form and function, and species populations across the whole landscape.

Ecological systems and processes are complex and uncertain. It is usually easier to prevent environmental damage than to repair it later.

A terrestrial natural heritage system can be designed for an area as small as a neighbourhood or as large as a continent. Compatibility between scales is important.

## **SYSTEM DESIGN PRINCIPLES**

Seven design principles have guided the development of the target Terrestrial Natural Heritage System and the proposed programs and draft policies for implementation.

### **Quantity**

More natural cover is better. The higher the percentage of natural cover in any area, the more likely that the area will have a greater degree of ecological integrity.

### **Distribution**

More evenly distributed natural cover is better. The more evenly natural cover is distributed across an area, the more effectively ecological functions can operate across the whole landscape, bringing the area closer to ecological integrity.

### **Size**

Larger habitat patches are better for promoting biodiversity because they provide more niches and resources to support more species; more vegetation age classes and community types; and larger populations of species.

### **Native Biodiversity**

The more that a habitat patch or ecosystem is dominated by native species, the closer it will be to ecological integrity.

### **Shape**

In developed or fragmented landscapes, habitat patches that are more compact and consolidated have the least amount of edge, and are therefore less vulnerable to adverse external effects.

### **Matrix Influence (Surrounding Land Use)**

Generally, the proximity of other natural cover within the matrix is beneficial. While agricultural uses within the matrix have some negative effects, the greatest adverse effects are associated with urban development.

### **Connectivity**

The more connected (through direct linkage or proximity) that habitat patches are to each other, the more effectively ecological functions operate across the whole landscape, and the better the opportunities to support viable populations of species of conservation concern.

## **SETTING TARGETS**

Map 3 shows the recommended target Terrestrial Natural Heritage System. It represents a "quantity" target of 30% forest and wetland cover, with a "quality" target so that, on average, the habitat patches could ultimately support species of conservation concern, and a "distribution" target that strives to reduce the northward loss of habitat, recognizing that a truly even distribution is not achievable due to the long history of settlement and development in the TRCA's jurisdiction.

The results of the analyses done for the *State of the Terrestrial Ecosystem* (TRCA, 2002) report are shown in the distribution of existing natural cover (forest and wetlands) by each of the four zones in the first two columns of the table below. Achieving the recommended target Terrestrial Natural Heritage System requires that additional lands be secured for natural heritage protection. The amount above existing cover for each of the zones is shown in the last two columns. The second table shows the distribution of existing natural cover and the increases needed to achieve the target Terrestrial Natural Heritage System by watershed.

**Quantity of Natural Cover by Zone for Existing and Target Conditions  
(Table 2 from the Strategy document)**

Zone	Existing Natural Cover		Target Natural Cover	
	Hectares	% of Zone	Hectares	% of Zone
Urban	7,934	7%	15464	13
Urbanizing	5,926	18%	9830	29
Rural	9,743	18%	17629	33
Moraine/Escarpment	17,898	39%	29446	63
<b>Total, Region</b>	<b>41,502</b>	<b>17%</b>	<b>72,369</b>	<b>30%</b>

**Quantity of Natural Cover by Watershed for Existing and Target Conditions  
(Table 3 from the Strategy document)**

Watershed	Existing Natural Cover		Target Natural Cover	
	Hectares	% of Watershed	Hectares	% of Watershed
Carruthers Creek	665	17	1,252	33
Don River	3,116	9	5,772	16
Duffins Creek	8,190	29	12,866	45
Etobicoke Creek	1,207	6	2,500	12
Frenchman's Bay	353	13	658	24
Highland Creek	608	6	1,307	13
Humber River	19,841	22	34,800	38
Mimico Creek	208	3	635	8
Petticoat Creek	491	18	856	32
Rouge River	4,930	15	10,735	32
Lake Ontario Waterfront	734	6	1,404	12

Implementation of the Terrestrial Natural Heritage System Strategy depends on securing, protecting and ultimately restoring the land base identified on the map of the target system. The Strategy document contains strategic directions to protect the system including nine proposed policies for land use and infrastructure planning that could be used by our partner municipalities. The Strategy also provides strategic direction for land management, stewardship and outreach, as well as monitoring of the ecological integrity of the natural heritage system over time. A summary of the strategic directions and implementation actions is appended to this report.

As noted earlier, the improvement of the terrestrial natural heritage system has multiple benefits for the watersheds, particularly in maintaining the hydrological function and aquatic habitats of the watersheds. The exploration of these benefits will be part of the preparation of watershed plans.

#### **DETAILS OF WORK TO BE DONE**

Consultation with municipalities and other stakeholders will begin once direction from the Authority is received. The consultation will include circulation of the draft document as well as a facilitated workshop. The workshop would take place this summer. Staff will revise the draft Strategy and bring it back to the Authority for adoption in the fall.

**Report prepared by: Dena Lewis, extension 5225**

**For Information contact: Dena Lewis, extension 5225, Natalie Iwanycki, extension 5298**

**Date: April 1, 2004**

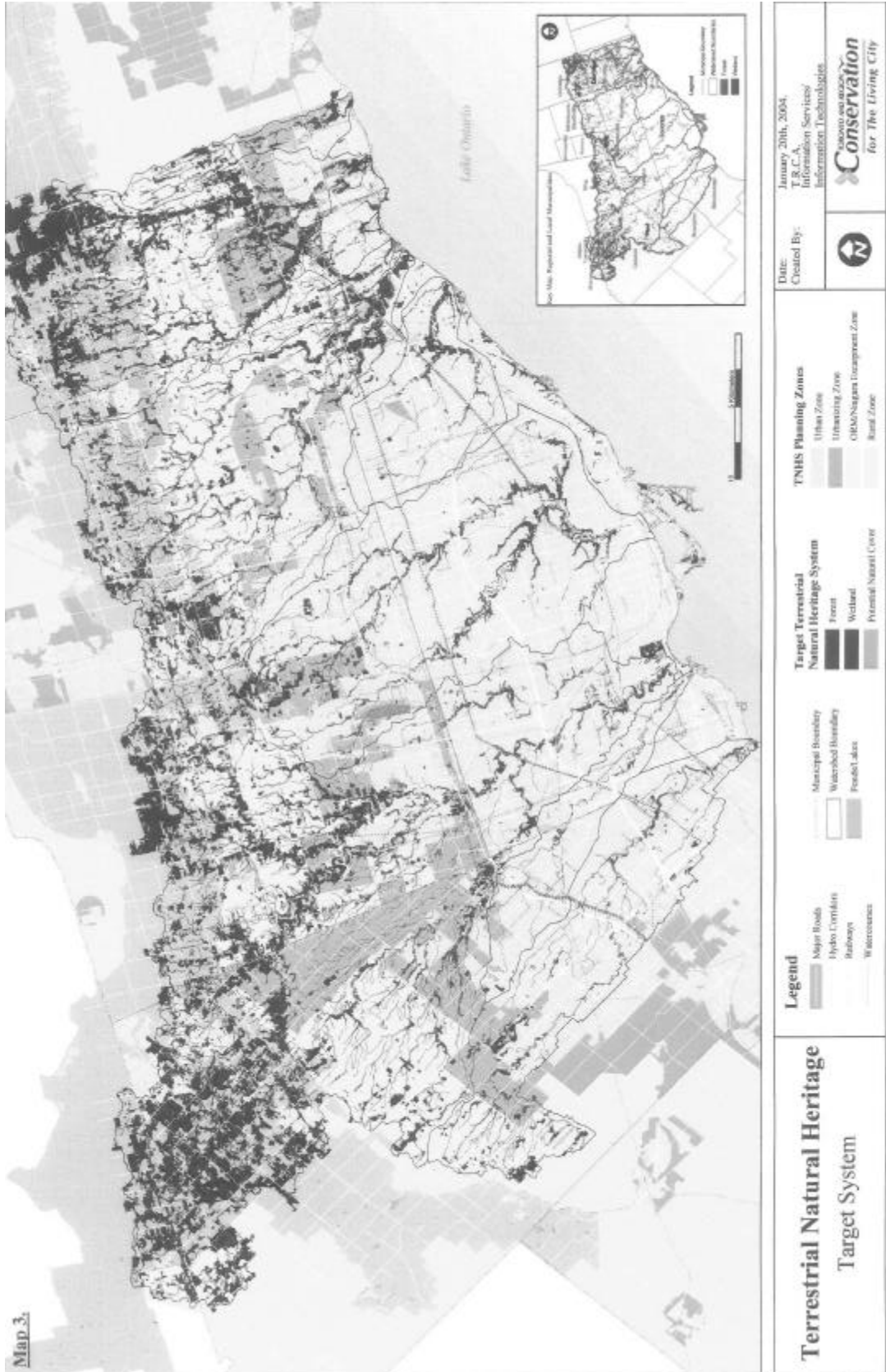
**Attachments: 2**

**Attachment 1**  
**Means of Implementation for the Strategic Directions of the Terrestrial**  
**Natural Heritage System Strategy**

STRATEGIC DIRECTIONS	IMPLEMENTATION METHODS
<b>THE TARGET SYSTEM</b>	
Secure and protect the target Terrestrial Natural Heritage System (TNHS) and use these lands to protect and enhance regional biodiversity.	<ul style="list-style-type: none"> <li>• Policy 1</li> <li>• Incorporation into regional and municipal OPs</li> <li>• Update municipal plan review agreements to include TNHS</li> <li>• Through PPS review and Greenbelt legislation</li> </ul>
Integrate land use policies into municipal planning documents and sustainable community design.	<ul style="list-style-type: none"> <li>• TRCA involvement in new OPs and OP reviews</li> <li>• Cooperation with municipal partners to advance policy beyond requirements of the PPS</li> <li>• Update plan review agreements</li> </ul>
Advocate firm urban growth boundaries that will preserve the rural zone in perpetuity to enhance matrix values in headwater areas.	<ul style="list-style-type: none"> <li>• Participation in development/review of provincial government policies influencing growth.</li> <li>• Assist municipalities with growth management studies, strategic directions, and ecological implications of growth through science of watershed studies</li> </ul>
Ensure that new and expanded transportation, infrastructure, and utility corridors minimize intrusion into the TNHS.	<ul style="list-style-type: none"> <li>• Policy 9</li> <li>• Development must be justified through an EA that has regard for all policies and principles in the Strategy</li> </ul>
Continue to support and implement the protection/restoration policies of the ORMCP and NEP.	<ul style="list-style-type: none"> <li>• Work with ORM Stewardship Partnership Alliance to coordinate and increase stewardship activities</li> <li>• As agency in development review process</li> <li>• Policy 2d (key natural heritage features and MVPZ cannot be removed from the system)</li> <li>• Policy 3 (development and site alteration not permitted within minimum areas of influence or MVPZ described in ORMCP if this distance is greater than that determined by Natural Heritage Study (NHS))</li> </ul>
Integrate the TNHS Strategy into current and future land acquisition and securement programs.	<ul style="list-style-type: none"> <li>• The TNHS Strategy will be included in the Natural Heritage Lands Protection and Acquisition Project when updated in 2006</li> </ul>
<b>LAND MANAGEMENT AND STEWARDSHIP</b>	
Restore lands within the target TNHS using techniques outlined within the Natural Heritage Restoration Plan Guidelines (NHRPG).	<ul style="list-style-type: none"> <li>• Policy 5 - removal of lands from the System subject to NHS and NHRP</li> <li>• Encourage land owners to naturalize/restore portions of their property based on the guidelines in the NHRP</li> </ul>
Integrate the TNHS into current private land stewardship programs and develop new programs.	<ul style="list-style-type: none"> <li>• In cooperation with partners, develop seminars and/or guides for realtors, developers, and residents living/working in the target system, ORM, NE</li> <li>• Work with ORM Stewardship Partnership Alliance to coordinate stewardship activities</li> </ul>

Complete management plans for all TRCA-owned lands within the target system.	<ul style="list-style-type: none"> <li>• Develop environmental management plans for municipally managed TRCA property within the target TNHS</li> <li>• Consider relocation of intensive recreation/municipal activities outside the System and develop restoration plan</li> </ul>
Promote restoration and land use modifications on other publicly owned lands in accordance with the NHRPG.	<ul style="list-style-type: none"> <li>• On municipally managed TRCA property, review management agreements with respect to Strategy</li> <li>• Determine how existing/new municipal by-laws could be used to better protect/manage lands within the System</li> </ul>
Limit future recreational uses in the TNHS to only those activities permitted in accordance with the proposed land use policies.	<ul style="list-style-type: none"> <li>• Intensive recreation activities should be considered for relocation outside the System</li> <li>• Policy 8g (low intensity recreation activities that are permitted in the System)</li> </ul>
Develop emergency response committee and protocol to deal with biological and non-biological threats.	<ul style="list-style-type: none"> <li>• Begin discussions with Federal, Provincial, and Municipal partners</li> </ul>
<b>OUTREACH</b>	
Strengthen current and develop new partnerships.	<ul style="list-style-type: none"> <li>• As lands are secured, explore partnership opportunities to ensure the long-term protection and benefits to the System</li> <li>• Improve agreements for municipally managed property</li> <li>• Encourage municipalities, other public authorities, and volunteers to participate in monitoring of conditions and collection of data</li> </ul>
Integrate the TNHS into existing educational programs and develop new ones.	<ul style="list-style-type: none"> <li>• Educate realtors, developers, and residents on the TNHS Strategy and its importance to the Region</li> <li>• Update current school programs to educate students on landscape ecology and conservation biology issues with respect to the Strategy</li> <li>• Incorporate the key messages of the Strategy into the Living City curriculum being developed by TRCA</li> </ul>
Promote the TNHS approach to federal and provincial agencies and NGOs.	<ul style="list-style-type: none"> <li>• Advocate more effective protection of natural heritage in provincial legislation and policies</li> <li>• Engage watershed advocacy groups to lobby governments to adopt the policies and fund the programs outlined in this Strategy</li> <li>• Involvement of the federal and provincial governments through the EA process for transportation, infrastructure, and utility developments</li> </ul>
<b>FUTURE WORK</b>	
Continue to conduct biological inventories through watershed studies and other programs.	<ul style="list-style-type: none"> <li>• Use TRCA staff and volunteers to collect detailed site data</li> <li>• Encourage public and private landowners to support data collection through monetary support or studies of their own</li> <li>• Use current science to improve data collection and reporting</li> </ul>

Use the TNHS Strategy to formulate recovery plans for species and vegetation communities at risk.	<ul style="list-style-type: none"> <li>•Steps of the NHRP Guidelines aid the recovery of species and veg. communities at risk</li> <li>•Policy 7a,e, and f (permits flora and fauna management within the target System)</li> </ul>
Integrate aquatic and hydrologic systems through the watershed planning process for a complete Natural Heritage System.	<ul style="list-style-type: none"> <li>•The watershed response model allows the evaluation of different land use scenarios and recommendation of a preferred alternative based on specific environmental indicators</li> </ul>
Regular monitoring and reporting on the condition of the target System using the 2002 SOTE as baseline data.	<ul style="list-style-type: none"> <li>•Conduct 5 year reviews to assess progress towards TNHS</li> </ul>
Monitor the evolving science and development of other natural heritage programs to adapt current and develop new indicators of the ecological integrity of terrestrial natural heritage systems.	<ul style="list-style-type: none"> <li>•Continue to form partnerships with universities to share data, expertise, and research results to refine natural heritage planning methodologies in the TRCA</li> <li>•Through SCOCA and other CA natural heritage discussion groups</li> <li>•Monitor Natural Heritage planning conducted by other agencies - locally, nationally, and internationally</li> </ul>
Use the science behind the Strategy to develop or improve best management practices for human activities in the System.	<ul style="list-style-type: none"> <li>•Promote the development of environmental farm plans for farms within the System</li> <li>•Develop guides that teach residents good environmental stewardship and the importance of a systems approach</li> <li>•Promote green roof technology in urban and urbanizing zones</li> <li>• Such as use of 3<sup>rd</sup> pipe infiltration systems</li> </ul>
Continued cooperation with partners to ensure the effective implementation of the TNHS Strategy.	<ul style="list-style-type: none"> <li>•Maintain current and develop new partnerships with public agencies, the academic community, watershed advocacy groups, public action groups, and NGOs</li> </ul>



**RES.#D17/04** -

**PROVINCIAL POLICY FOR SECONDARY USES IN HYDRO CORRIDORS**

Report on Toronto and Region Conservation Authority's (TRCA) participation in the Provincial Secondary Land Use Program for Hydro Corridors and application of TRCA's Terrestrial Natural Heritage System Strategy (TNHSS) to identify priority hydro corridor lands for their potential for biodiversity conservation and contribution to the Terrestrial Natural Heritage System.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT WHEREAS the Toronto and Region Conservation Authority (TRCA) has developed watershed management strategies for the Don River, Humber River, Duffins Creek and Etobicoke and Mimico Creeks watersheds, including recommendations for the protection and restoration of greenspace throughout TRCA's jurisdiction;**

**WHEREAS the TRCA has developed the Terrestrial Natural Heritage System Strategy (TNHSS) that provides for an improved terrestrial natural heritage system for the TRCA jurisdiction;**

**WHEREAS the TRCA supports and recognizes that hydro corridors are important public assets used for transit facilities, trails, parks, wetlands and stormwater ponds, and provide an excellent opportunity for achieving the natural cover targets identified in the TRCA's TNHSS;**

**THEREFORE LET IT BE RESOLVED THAT the TRCA advise the Minister of Municipal Affairs (MMA) that TRCA supports, in principle, the province's agreement with Hydro One to acquire hydro lands for public uses;**

**THAT the protection and restoration of the target Terrestrial Natural Heritage System, as identified by the TRCA's TNHSS be recognized by the province as an important secondary use for hydro corridor lands, and that this use be considered compatible with the hierarchy of priorities established under the Provincial Secondary Land Use Program (PSLUP);**

**THAT staff present the TNHSS to the Provincial Working Group, Greater Toronto Area (GTA) hydro corridors working group and municipal working committees;**

**THAT surplus hydro lands be evaluated under the TRCA's Terrestrial Natural Heritage Approach for their potential for biodiversity conservation and contribution to the Terrestrial Natural Heritage System;**

**THAT the provincial government be requested to transfer to TRCA, surplus lands considered priority for their potential contribution to biodiversity conservation as determined by the TRCA TNHSS;**

**THAT staff be authorized to assist the Regional Municipalities of York, Peel, Durham and the City of Toronto, as they develop secondary use plans for priority public uses for hydro corridor lands within their jurisdictions;**

**THAT the Don Watershed Regeneration Council, Humber Watershed Alliance, Etobicoke-Mimico Watersheds Coalition, Rouge Park Alliance and Duffins and Carruthers Creek Watersheds Task Forces be notified and given the opportunity to provide input to the municipal secondary use plans via TRCA representatives on the working groups and committees;**

**AND FURTHER THAT the Ministry of Municipal Affairs (MMA), Ontario Realty Corporation (ORC), Association of Municipalities of Ontario, Hydro One and the Regional Municipalities of York, Peel, Durham and the City of Toronto be so advised.**

**CARRIED**

### **BACKGROUND**

The province enacted Bill 58, *Reliable Energy and the Consumer Protection Act*, into law on June 27, 2002. On December 31, 2002 the province proclaimed that Section 23 of the Act come into force and, as such, resulted in the transfer of ownership of approximately 50,000 acres of hydro corridor lands owned by Hydro One Networks Inc ('Hydro One') to the province. The purpose of this transfer was to protect corridor lands so that they remained available for uses that benefit the public. Hydro One retains the primary right to use the corridor lands for electricity transmission and distribution purposes in the form of a statutory easement, as well as the ownership of buildings and structures on the corridor land. However, the ORC has been designated to act on behalf of the province to carry out real estate activities associated with the ongoing management and administration of these lands.

One of these activities is the establishment of acceptable secondary uses. These uses must be compatible with the hydro corridor's primary use of electricity transmission and distribution. The PSLUP establishes a hierarchy of priority secondary uses for hydro corridors, and it is the responsibility of the ORC to implement the PSLUP by working with municipalities (through the Association of Municipalities of Ontario) to review proposals for secondary uses of hydro corridors. While the primary purpose of the hydro corridors is for transmitting electricity, the province will continue to allow access for secondary uses including parks and trails, road crossings, water and sewer pipelines and parking lots for transit and commercial facilities which do not interfere with the corridors' primary use. The provincial policy gives public uses priority over private uses in corridor lands and public uses that are linear and rely on contiguous land will have priority over those that are not linear or in need of contiguous land.

The PLSUP applies only to those lands previously owned by Hydro One and used for the transmission of electricity. This program does not apply to other provincially-owned lands or private lands over which Hydro One has an easement to run transmission lines.

ORC will manage the sale of surplus corridor lands on behalf of the province. Surplus corridor lands will now be disposed of in the same manner as other provincial surplus properties.

The province is providing a two-year planning period for municipalities to identify potential linear municipal uses on contiguous corridor lands and to ensure that appropriate official plan and zoning designations are in place. New private uses will be permitted in hydro corridors during the two-year planning period, but the province will require provincial and municipal approval for such permissions to ensure that private uses do not preclude potential municipal uses.

Ministry of Municipal Affairs, with participation from a lead group of ministries and other stakeholders, including the ORC, the Ministry's of Transportation (MTO), Food and Agriculture, Mines, Culture and Heritage, Infrastructure, Environment and Energy and Natural Resources (MNR), and the Smart Growth Secretariat, is coordinating provincial interest. The province plans to develop a 20-year plan for secondary use of hydro corridors based on municipal secondary use plans that are currently being developed by the Regional Municipalities of York, Peel, Durham and the City of Toronto. Representatives of these municipalities are also participating on a GTA Hydro Corridors Working Group led by the Regional Municipality of Peel. TRCA currently participates on the City of Toronto's Hydro Corridors Working Group.

## **RATIONALE**

In the Greater Toronto Area, the greatest value of hydro corridors for biodiversity is probably their capacity to support populations of native meadow (vegetative communities of concern) and associated fauna species of concern. The same is true for wetland habitats within hydro corridors and the flora and fauna species of concern that depend on them.

Maintenance and access issues impose restrictions that may limit the conservation potential in some hydro corridors. However, where appropriate, corridors could support natural areas such as old field and successional habitats, tallgrass prairies and sand barrens, wet meadows, marshes and thicket swamps.

Natural areas provide important services that should be considered along with other secondary uses, and should not be considered as excluding other secondary uses. Similarly, conservation of biodiversity through restoration of hydro corridor lands is not warranted in all areas. Instead, it may be more beneficial for the goal of biodiversity conservation to relocate a use from within a primarily natural area to under a hydro corridor, to allow for the restoration of higher priority habitat areas occupied by an existing use.

Any secondary use for hydro corridors, especially when adjacent to high quality natural habitat patches must consider potential management options to deal with potential negative impacts that the use might have on high quality natural habitat.

In urban areas of the TRCA jurisdiction, hydro corridor lands are one of the last opportunities to work towards achieving the targeted Terrestrial Natural Heritage System. How this is achieved requires detailed area specific investigation and analysis. This could be accomplished through dissemination of information and technology, and direct participation of TRCA staff in the secondary use review process mandated by the province.

## **FINANCIAL DETAILS**

Staff participation in this program is covered by existing TRCA budgets.

**DETAILS OF WORK TO BE DONE**

- Circulate TRCA board recommendations to provincial ministries, municipalities and agencies identified in this report.
- Present TRCA's TNHS to the City of Toronto Hydro Corridor's Working Group.
- Meet with GTA Hydro Corridor's Working Group and assist the Regional Municipalities of Peel, York and Durham as required.
- Meet with the Provincial Working Committee and assist as required.

**Report prepared by: Chandra Sharma, extension 5237**  
**For Information contact: Chandra Sharma, extension 5237**  
**Date: April 6, 2004**

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**RES.#D18/04 -**

**AJAX WATERFRONT TRAIL**

Assessment of Priority Waterfront Development Initiatives, Region of Durham. To report on the request by the Town of Ajax for financial assistance with the proposed completion of the waterfront trail to the Ajax-Whitby border.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT the Town of Ajax's proposal to extend the waterfront trail to the Ajax-Whitby border be supported as a priority waterfront initiative as outlined in the Ajax Waterfront Management Plan;**

**THAT the Toronto and Region Conservation Authority (TRCA) provide in-kind regeneration components and/or a direct contribution if appropriate, at a cost not to exceed \$40,000, subject to final approval of the Durham Waterfront Capital Budget by the Regional Municipality of Durham;**

**THAT TRCA explore funding opportunities in 2005/2006 fiscal years to support the Town of Ajax's request for in the order of 25% funding participation in the waterfront trail proposal;**

**AND FURTHER THAT the Regional Municipality of Durham and the Town of Ajax be so advised.**

**CARRIED**

**BACKGROUND**

On August 25, 1995, the Authority endorsed the new strategic direction and vision outlined in the Ajax Waterfront Management Plan.

The waterfront vision is illustrated in the master plan design which:

1. elaborates on the waterfront trail link, education centre / wildlife station and boat launch ramp in the Duffins Creek node;
2. included the Harwood Point node with a public building; open space and gardens; and
3. provides for public use and wetlands protection within the Carruther's Creek waterfront.

This plan highlighted:

1. waterfront trail linkages (i.e. diversity of trail experience - Pickering Beach);
2. land acquisition (i.e. few remaining private properties in 4.0 km of waterfront);
3. terrestrial / aquatic habitat regeneration (i.e. Duffins/Carruthers Creek Marsh and Pickering Beach); and
4. public use opportunities (i.e. integration of Paradise Park with beach front)

On December 11, 2003, the Town of Ajax requested support for and involvement in the completion of the Waterfront Trail to their eastern boundary. In this regard, at Authority Meeting #10/03, held on January 9, 2004, Resolution #A279/03 was approved in part as follows:

*...AND FURTHER THAT staff be directed to report on the types of assistance that the Toronto and Region Conservation Authority can provide to the Town of Ajax on this important initiative, including assessment of the priority of waterfront development initiatives in the Region of Durham, relative to the availability of funding from the region and other potential sources for waterfront projects.*

The Town of Ajax has set a priority on completion of the waterfront and waterfront trail between Pickering Beach Road and the Ajax-Whitby border (Attachment 1). This series of projects includes the completion of the waterfront trail, the installation of interpretive signage discussing Great Lakes and Coastal Marsh Ecology, landscape works for environmental rehabilitation and the installation of observation platforms.

## **RATIONALE**

The Town of Ajax sector of the Durham waterfront is strategically located within the Lake Ontario Greenway, along the Lake Ontario waterfront trail, which spans 740 km from Niagara-on-the-Lake to Brockville.

The waterfront revitalization initiatives in Durham Region, and more specifically over 30 years on the Ajax waterfront, have contributed to a strong economy and communities in addition to a clean and healthy environment.

The opportunity exists to realize the Ajax Waterfront vision of over 30 years ago with this priority initiative from Pickering Beach Road to the Ajax-Whitby border. The other priority for Ajax is the continuation of the marsh rehabilitation project in Duffin's Creek.

The area of Pickering Beach and Carruthers Creek has experienced significant residential development in recent years. Improvements to the waterfront are critical and integral to the evolution of Ajax and their neighbourhoods.

These works will also complete another link in the Lake Ontario Greenway promoted by the Waterfront Regeneration Trust. This waterfront trail work will provide an opportunity to celebrate the town's 50th anniversary in 2005, and the tradition of partnership (i.e. TRCA) in building an outstanding waterfront. These works can be balanced with the Pickering waterfront priorities for Rotary Frenchman's Bay West, Frenchman's Bay restoration initiatives and the Rouge Gateway Trail improvements.

#### **DETAILS OF WORK TO BE DONE**

To work with Ajax staff on the details, designs and phasing for this project. There is significant opportunity to undertake most of the environmental regeneration, plantings and other projects through the TRCA.

#### **FINANCIAL DETAILS**

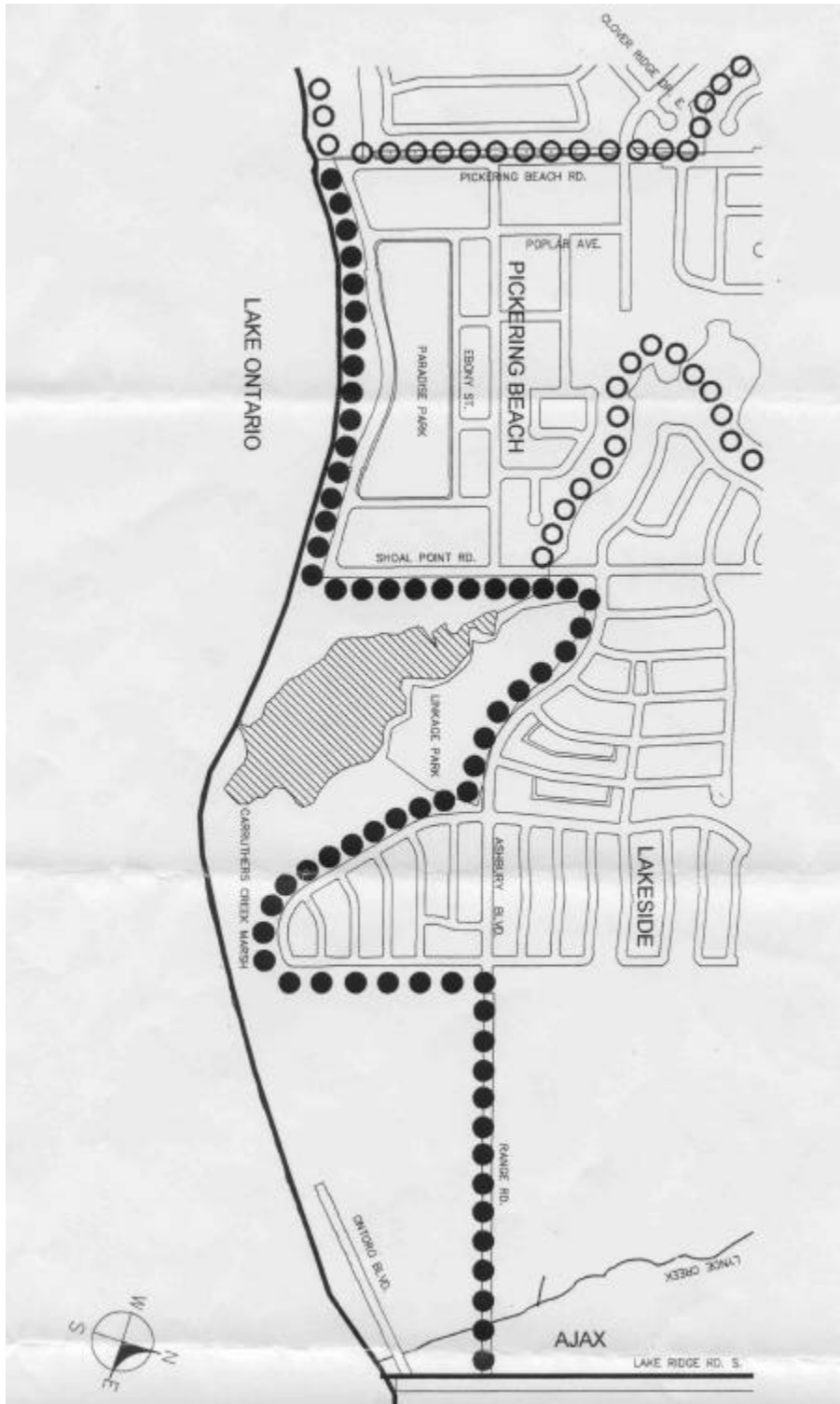
The Town of Ajax has estimated the capital works at \$834,700. In partnership with the Waterfront Regeneration Trust, a successful application was made for Provincial Public Infrastructure Funding (formerly Super Build Funding) for 30% of the capital costs.

Ajax has requested a TRCA partnership contribution in the order of 25%. It is the staff recommendation that we support a total contribution of \$150,000 - \$200,000. It is our opinion that through TRCA in-kind contributions, that the value of the partnership would exceed the above contribution range.

Subject to approval of the 2004 Durham Waterfront Capital Budget by the Region of Durham, up to \$40,000 will be made available for the project. Subsequent contributions in 2005 and 2006 will be explored by TRCA. To meet the partnership request, the Ajax component will be incorporated into the future Durham waterfront multi-year project.

**Report prepared by: Larry Field, extension 5243**  
**For Information contact: Larry Field, extension 5243**  
**Date: February 23, 2004**  
**Attachments: 1**

Attachment 1



**RES.#D19/04 -**

**RECEIPT OF A REQUEST FOR LAMPRICIDE APPLICATION ON TORONTO AND REGION CONSERVATION AUTHORITY PROPERTY BY FISHERIES AND OCEANS CANADA**

Receipt of a request from Fisheries and Oceans Canada for application of lampricide to control sea lamprey on Toronto and Region Conservation Authority property in the Rouge River and Duffins Creek watersheds.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT WHEREAS the Toronto and Region Conservation Authority (TRCA) is in receipt of a request from Fisheries and Oceans Canada (DFO) for the application of lampricide to control sea lamprey on TRCA property within the Rouge River and Duffins Creek watersheds;**

**WHEREAS it is in the best interest of the TRCA in furthering its fishery management objectives to cooperate with DFO in this instance;**

**THEREFORE LET IT BE RESOLVED THAT the TRCA enter into a license agreement with DFO for the application of lampricide on TRCA properties in the Rouge River and Duffins Creek watersheds;**

**THAT the Rouge Park Alliance be advised and requested to provide input into the agreement;**

**AND FURTHER THAT the appropriate TRCA officials be authorized and directed to take whatever action may be required to give effect thereto, including the execution of any documents.**

**CARRIED**

**BACKGROUND**

Fisheries and Oceans Canada and the United States Fish and Wildlife Service (USFWS), as agents to the Great Lakes Fishery Commission, currently conduct a program of integrated pest management in the Great Lakes to control sea lampreys. Sea lamprey control is a critical fishery management action delivered to support the Fish Community Objectives developed by the Lake Committees as part of the Strategic Plan for Great Lakes Fishery Management. Control activities include application of the selective lampricides 3-trifluormethyl-4-nitrophenol (TFM) and Bayluscide to tributary streams, operation of low-head barrier dams, trapping of spawning adult sea lampreys and release of sterile male sea lampreys.

Treatment of streams with the selective lampricide TFM commenced in 1958 on Lake Superior. It has been successful in suppressing lamprey populations in the Great Lakes and remains the primary means by which sea lamprey are controlled. In the past decade, the USFWS and FOC have reduced the dependency on TFM through the development and implementation of alternative controls, refinement of assessment procedures and improvement of application techniques to more efficiently treat tributaries.

Lampricide treatments are systematically scheduled for tributaries harbouring sea lamprey larvae to eliminate or reduce the populations of larvae before they recruit to the lake as parasitic adults. Treatments have been conducted on Lake Ontario tributaries since 1971 and approximately 20 streams in Ontario waters are currently treated on a 3-5 year cycle.

Lampricide can be applied at a concentration that will selectively kill larval sea lampreys while having little or no effect on stream dwelling bony fishes. The maximum concentration of lampricide applied is normally no greater than 1.5 times the concentration required to kill larval sea lamprey. For most fish species this provides an adequate safety margin, however some fish species are more sensitive to TFM and some mortality may occur immediately below application sites where lampricide concentrations are higher. The more susceptible species tend to be smaller warm water fishes and include the stonecat, logperch, trout perch and some minnow species. Fish that are stressed by spawning and other environmental factors are occasionally affected.

Given the fact that one adult sea lamprey can destroy up to 20 kg of fish during the parasitic phase of approximately 18 months, the benefits of treatment far exceed any negative impact of incidental fish mortality during lampricide applications.

Lampricides, as all pesticides sold or distributed in the United States and Canada, must be registered by the U.S. Environmental Protection Agency (EPA) and Health Canada Pest Management Regulatory Agency. Because of advances in scientific knowledge, the law requires that pesticides undergo review to assure that they meet today's more stringent requirements. Registration is based on scientific studies that show they can be used with minimal risk to people or the environment. Since 1988, \$6 million has been spent by the governments of the United States and Canada to investigate the risk posed by lampricides to the environment and human health.

The EPA and Health Canada have reviewed human health and environmental safety data for lampricides, and in 2003 concluded that lampricides pose no unreasonable risk to the general population and the environment. Further detailed information is available at the EPA's web site: <http://www.epa.gov.REDS/3082red.pdf>

The following statements summarize the risk associated with exposures to lampricide-treated water. The public should consider this information when determining whether or not to use water from, or recreate in, treated streams.

**Water Use:**

- irrigation – agricultural irrigators must turn off irrigation systems for 24 hrs during and following treatment. Exposure to lampricides may slow growth of some broad-leaf plants.
- livestock and pets – there is no restriction for exposure of animals to lampricide. In laboratory studies animals exposed to 500 times typical treatment concentrations for extended periods of time showed no adverse effects.
- domestic use – there is no restriction for domestic use of water containing lampricides. Studies have estimated that a person would have to drink greater than 360 gallons of water at one time to exhibit harmful effects. However, as with any pesticide, the public is advised to use discretion and minimize unnecessary exposure.

- recreational use – there is no restriction for recreational use of waters containing lampricide. Studies have shown that no adverse effects result from contact with lampricides at greater than 15,000 times typical treatment concentrations. Again, the public is advised to use discretion and minimize unnecessary exposure.

**Fish Consumption:**

- there is no restriction for consumption of fish caught from treated waters.
- lampricides do not bioaccumulate and are readily eliminated from fish tissue.
- persons concerned about exposure should consider catch-and-release during treatment times and for 24 hours after.

Sea lamprey control activities in TRCA's jurisdiction have historically included lampricide treatments of the Rouge River, Duffins Creek and Carruthers Creek; and trapping of spawning adult sea lampreys on the Humber River and Duffins Creek. Since 1971, 11 lampricide treatments have been conducted on Duffins Creek, 8 on the Rouge River and 1 on Carruthers Creek. Currently, the Rouge River and Duffins Creek are on a regular treatment cycle. The need for treatment on individual streams is determined by surveys designed to assess larval sea lamprey growth rates, abundance and distribution between treatment cycles. A population estimate conducted in 2003 suggests that the Rouge River currently contains approximately 37,000 larval sea lamprey, 4,400 of which are expected to migrate to Lake Ontario as parasites in the fall of 2004. The amount (stretch) of stream requiring treatment tends to be quite variable and prior to treatment start-up, information on physical, chemical and biological stream characteristics must be gathered to develop a treatment strategy and establish lampricide application parameters.

Pretreatment activities include the following:

- Set-up of a mobile laboratory to measure water chemistries and lampricide concentrations.
- Stream water chemistry is measured at a range of sites throughout the watershed to determine toxicity levels to lampreys and non-target fish.
- Discharge measurements are conducted at critical sites to assist in calculation of lampricide application rates.
- Flow timing is examined (historical records or application of tracer dyes) to determine start-up times for lampricide applications and a schedule for monitoring lampricide.
- Application sites are inspected to determine access routes and set up procedures for application equipment.
- Sampling sites to monitor lampricide concentrations are established and access routes determined.
- Notification of riparian landowners where access is required.

Treatment activities include:

- Lampricide application for approximately 12-14 hours to provide adequate exposure to larval lampreys. Lampricide is applied and regulated by variable speed peristaltic pumps.

- Monitoring lampricide concentrations hourly (measured to within 0.1mg/l) at predetermined sites and subsequent adjustment of application rates to maintain desired lampricide concentrations. The mobile lab operators are constantly in contact with application operators so that appropriate adjustment of application rates can be made.
- On-stream monitoring of the effects of lampricide on larval sea lampreys and non-target organisms includes collection of larval lampreys and non-targets.

### **RATIONALE**

TRCA has worked closely with DFO in the past to control sea lamprey. Under a license agreement DFO constructed, maintains and operates a physical barrier and lamprey trap on the lower Duffins Creek. DFO also maintains and operates a sea lamprey trap on the lower Humber River weir. However, there is no such agreement for access to TRCA property for lampricide application. Given the need for regular lampricide treatments in the Rouge River and Duffins Creek watersheds, staff are recommending a formal agreement for lampricide application on TRCA's property be executed.

Duffins Creek was treated in 2003. In 2004, the Rouge River is scheduled for lampricide application. This is to occur between June 9-11, 2004 (alternatively May 18-20, 2004) at Steeles Avenue and at Meadowvale Avenue on the Main Rouge River and at Twyn Rivers Drive on the Little Rouge Creek. Monitoring sites will be established at Steeles Avenue, Sewells Road, Meadowvale Avenue, Twyn Rivers Drive and Highway 2. The anticipated lampricide concentration range is 6 - 7mg/L.

### **DETAILS OF WORK TO BE DONE**

As part of this agreement, TRCA will request formal notification by DFO for proposed lampricide treatments on TRCA lands. As part of the overall notification process, DFO will send information regarding the application to the Ontario Ministry of Natural Resources, the Rouge Park and the City of Toronto. DFO will also obtain a permit to perform a water extermination from the Ontario Ministry of the Environment. Furthermore, the public will be notified of the application through an advertisement in the local media and signage at application and public access sites. A similar notification process will be followed for applications in the Duffins Creek watershed. The agreement will also include our standard save harmless and indemnification clauses.

### **FUTURE BENEFITS / PROBLEMS**

Sea lamprey management in the Great Lakes is a binational program. Reductions in control may impact fish populations on the Canadian and United States sides of Lake Ontario.

**Report prepared by: Jon Clayton, extension 5353, Ron Dewell extension 5245**  
**For Information contact: Jon Clayton, extension 5353,**  
**Date: March 12, 2004**

**RES.#D20/04 -**

**ROUGE WATERSHED TASK FORCE FORMATION**

Formation of the Rouge Watershed Task Force and status of watershed planning work.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT staff be directed to continue working with the Rouge Watershed Task Force and other watershed partners on the preparation of a watershed plan for the Rouge River watershed;**

**AND FURTHER THAT the Rouge Watershed Task Force report back to the Authority in fall 2004 on its progress.**

**CARRIED**

**BACKGROUND**

At Authority Meeting #5/03, held on June 27, 2003, Resolution #A129/03 was approved as follows:

*THAT the Rouge River Watershed Planning Study be initiated and undertaken in three phases according to the general work program outlined in this report;*

*THAT in 2003 public/stakeholder input to the work program be obtained via reports to the Rouge Park Alliance, meetings with municipal staff, and a community open house in the fall and that the public/stakeholder involvement program for the remainder of the study be confirmed at the end of Phase 1 (February 2004);*

*AND FURTHER THAT staff report back in fall, 2003 with a detailed work program and on Phase 1 progress.*

**Rouge Watershed Task Force**

At Authority Meeting #8/03, held on October 31, 2003, the Authority passed Resolution #A223/03, which directed TRCA staff, in cooperation with Rouge Park staff, to proceed with the formation of a Rouge Watershed Task Force, according to the membership and mandate outlined in a Terms of Reference included with the staff report. The goal in establishing this task force, as with similar advisory groups established in other Toronto and Region Conservation Authority (TRCA) watersheds, is to provide a venue for all stakeholder groups to work together in directing and having input to the development of the watershed plan.

As per the Authority's direction, letters were sent out in December, 2003 to watershed municipalities and groups, inviting them to appoint a member and alternate to the task force. A citizen application and selection process, as set out in the task force Terms of Reference, was followed and completed in early March 2004. The resulting membership of the Rouge Watershed Task Force to date is presented below:

## Rouge Watershed Task Force Members and Alternates

### Affiliation

Town of Markham  
 Town of Whitchurch-Stouffville  
 Town of Richmond Hill  
 City of Pickering  
 York Region  
 City of Toronto  
 Durham Region

Toronto Zoo  
 Oak Ridges Moraine Foundation  
 Aboriginal Community  
 Waterfront Regeneration Trust Corp.  
 Save the Rouge Valley System  
 Friends of the Rouge Watershed  
 Richmond Hill Naturalists  
 Rouge Valley Foundation  
 Milne Park Conservation Association

Agricultural Sector  
 Urban Development Institute  
 Golf Courses

Aggregate Producers Association of Ontario  
 Ontario Archaeological Society  
 Greater Toronto Airports Authority

Transport Canada  
 Environment Canada  
 Dept. of Fisheries and Oceans  
 Ministry of Agriculture & Food  
 Ministry of Culture  
 Ministry of Tourism and Recreation  
 Ministry of the Environment  
 Ministry of Municipal Affairs  
 Ministry of Natural Resources  
 Ministry of Transportation  
 Ontario Realty Corporation

### **Watershed Residents:**

Markham  
 Pickering  
 Richmond Hill  
 Toronto  
 Whitchurch-Stouffville

### Member/ Alternate Member

Frank Scarpitti/ George McKelvey  
 Clyde Smith/ Sue Sherban  
 Audrey Hollasch  
 Rick Johnson/ Tom Melymuk  
 Frank Scarpitti/ Jack Heath  
 Gay Cowbourne  
 David Ryan/ Alex Georgieff

Paul Harpley/ Cynthia Lee  
 Michael Scott  
*to be confirmed*  
 Pauline Browes/Keith Laushway  
 André Flys  
 Jim Robb/ Tammy Chung  
 Natalie Helferty  
 Murray Johnston/ Del Fisher  
 Tupper Wheatley/ Michael Price

Terry O'Connor  
 David Charlton  
 Wendy Burgess/Jake Riekstins/Tim  
 Clarridge  
 \*Peter White  
*to be confirmed*  
*to be confirmed*

Patricia Short-Galle  
 Rimi Kalinauskas  
 \*Karen Ralph  
 Ray Valaitis  
 Chris Anderson  
 \*Bob Far  
 Ellen Schmarje  
 Victor Doyle  
 Judi Orendorff/ John Pisapio  
 John Van Voorst/ April Marton  
 Gary Pringle

Lorne Smith  
 Bryan Buttigieg  
 David Tuley  
 Virginia Jones  
 Lionel Purcell

Rouge Park Alliance  
TRCA

Chair Ron Christie  
Chair Dick O'Brien

\*Declined to participate fully as a task force member but will provide advice on specific issues through a designated staff liaison.

The first meeting of the task force will take place on April 7, 2004, at which time a schedule of meetings will be developed in consultation with the members. Efforts will be taken to avoid conflicts with Rouge Park Alliance and TRCA meetings and to minimize the number of meetings, while ensuring adequate and appropriate opportunities for meaningful engagement of all partners.

At such time as TRCA establishes a Source Protection Planning Committee (SPPC), which is expected to be a requirement of the anticipated source protection planning legislation, the relationship between the SPPC and the Rouge Watershed Task Force will be clarified and the task force Terms of Reference amended, as necessary.

### **Rouge Watershed Planning Process**

The watershed planning process is divided into three phases, extending from March 2003 to December 2005:

Phase 1 - Scoping and Characterization (March 2003 - May 2004)

Phase 2 - Analysis and Evaluation (March 2004 - December 2004)

Phase 3 - Plan Development (September 2004 - December 2005)

The scoping activities in Phase 1 are largely complete, and have resulted in the preparation of a more detailed workplan that will be presented to the task force at their first meeting in April, 2004. The characterization studies will be reported in the form of a draft State of the Watershed Report, which will be provided to the task force in May 2004 and circulated to municipal staff for comment. In an effort to provide early, useable products from this study, the State of the Watershed Report will incorporate a set of proposed watershed management goals, objectives and associated targets. A rating of current watershed conditions will form a "report card" of watershed health.

Modelling tools and data are in preparation to support the analysis of future anticipated stresses on the watershed and potential management approaches. This work will take place over the remainder of 2004.

Additional consultation with stakeholder and peer review groups on findings of the State of the Watershed will take place in late spring 2004.

**FINANCIAL DETAILS**

Funding for the Rouge watershed planning studies in 2004 has been approved as part of the York Region and City of Toronto capital budgets.

Report prepared by: Sonya Meek, extension 5253  
For Information contact: Sonya Meek, extension 5253  
Date: March 26, 2004

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**RES.#D21/04 - GROUNDWATER NEEDS FOR GOLF COURSES IN TORONTO AND REGION CONSERVATION AUTHORITY'S JURISDICTION**  
Water Sources for Golf Course Irrigation.

Moved by: Frank Dale  
Seconded by: Nancy Stewart

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT WHEREAS** there are an estimated one hundred and five golf courses in the Toronto and Region Conservation Authority's (TRCA) jurisdiction, of which, forty-four courses are currently using groundwater and another twenty courses are considering the use of groundwater in the future;

**WHEREAS** new golf courses are entering into the planning process every year;

**WHEREAS** the current informal protocol between TRCA and the Ontario Ministry of the Environment (MOE) for reviewing Permits to Take Water is inefficient;

**THEREFORE LET IT BE RESOLVED THAT** staff continue to work with the MOE to develop a formal protocol for water management at golf courses within the TRCA jurisdiction.

**AMENDMENT**  
**RES.#D22/04**

Moved by: Frank Dale  
Seconded by: Nancy Stewart

**THAT** the last paragraph of the main motion be amended to read:

**THEREFORE LET IT BE RESOLVED THAT** staff continue to work with the MOE to develop a formal protocol, including provision for public input, for water management at golf courses within the TRCA jurisdiction.

**THE AMENDMENT WAS** **CARRIED**

**THE MAIN MOTION, AS AMENDED, WAS** **CARRIED**

## **BACKGROUND**

At Authority Meeting #10/03 held on January 9, 2003, Resolution #A278/03 was approved, in part, as follows:

*... AND FURTHER THAT staff report back on the possible number of golf courses within Toronto and Region Conservation Authority jurisdiction which will be exploring the use of groundwater to meet their future water needs.*

Over the past year, TRCA staff have surveyed eighty-two of the estimated one hundred and five golf courses currently operating in our jurisdiction. Based on extrapolation of the survey data, combined with our existing Permit to Take Water (PTTW) files and discussions with golf course planning consultants, we estimate that of the known courses in our jurisdiction:

- 55 are using surface water;
- 30 are using groundwater;
- 14 are using a combination of both surface water and groundwater, and
- 6 are using municipal water.

TRCA staff, together with the MOE, are involved in discussions with six golf courses which are currently considering the use of groundwater. TRCA staff have also confirmed that another ten to fifteen golf courses are considering use of groundwater in their future plans. These numbers do not include new golf courses currently in the planning process.

## **RATIONALE**

Staff anticipate that, over time, golf courses that are not using groundwater already will at least consider the use of groundwater in the future. These changes may reduce the overall impacts to surface water, but may add stress to the groundwater system. In addition, the complexity of recent submissions has led to a very laborious review process. However, if TRCA and the MOE were to develop a common protocol, and communicate this protocol with the golf courses, the quality of submissions should increase, reviews will be more effective and efficient, and the overall water resources will be better protected.

Although the TRCA and the MOE have been cooperating for several years regarding the assessment of water takings for golf courses, we have not fully developed a formal protocol for assessing such issues such as multi-sourcing of water supply, volume of water required, intake methodology, low water response, irrigation system optimization (i.e., ability to water only critical areas during periods of low water availability), and ongoing monitoring requirements. TRCA staff recently presented the need for a formal protocol to the MOE, who are in favour of working with TRCA to improve the process and are investigating potential funding mechanisms.

**Report prepared by: Donald Ford, extension 5369**  
**For Information contact: Donald Ford, extension 5369**  
**Date: March 24, 2004**

**RES.#D23/04** -

**IMPLEMENTATION FRAMEWORK - A WATERSHED PLAN FOR  
DUFFINS CREEK AND CARRUTHERS CREEK**

Approval to proceed with the implementation of A Watershed Plan for Duffins Creek and Carruthers Creek.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT one member of the Watershed Management Advisory Board and one member of the Sustainable Communities Board be appointed to the Duffins Carruthers Watershed Resource Group (DCWRG) to represent the Toronto and Region Conservation Authority (TRCA);**

**THAT TRCA staff work closely with municipal staff to assist in preparing their staff reports to council in support of the implementation framework;**

**THAT other watershed residents and stewards be asked to consider opportunities to implement the watershed plan, as part of, or in addition to, their existing programs;**

**THAT staff continue to consult with federal and provincial agencies, local and regional municipalities and watershed residents to assign individuals to the DCWRG as outlined in the implementation model;**

**THAT staff work closely with municipal and regional councils and staff to build capacity within the local areas for the implementation of the watershed plan and to assist with the recruitment of local residents and organizations for involvement;**

**THAT staff work with currently active local watershed residents and organizations to create opportunities for further involvement and for consideration of opportunities to implement the watershed plan, as part of, or in addition to, their existing activities and programs;**

**THAT a report be submitted to the Authority identifying the proposed membership, including the TRCA representation for formal approval;**

**THAT as defined by their Terms of Reference, the DCWRG report back twice a year to the Watershed Management Advisory Board regarding the progress of implementing the watershed plan;**

**AND FURTHER THAT the municipal clerks within the study area be so advised for the information of their council.**

**CARRIED**

**BACKGROUND**

At Authority Meeting #5/03, held on June 27, 2003, the Authority received *A Watershed Plan for Duffins Creek and Carruthers Creek* and adopted the plan as part of their plan input and review process. At that time, staff requested the opportunity to consult with the watershed municipalities to finalize a Terms of Reference for an "Implementation Team" and report back.

Unlike other watersheds in the TRCA's jurisdiction, a significant portion of the lands within these two watersheds are in public ownership, are considered "healthy" as defined by the Remedial Action Plan (RAP) Area of Concern (AOC) and other standards, and have identifiable local efforts underway in the various reaches. Based on these unique attributes, it was determined that a new implementation model may be warranted.

In moving forward to implement the plan, TRCA retained Sue Cumming of Cumming and Company to carry out independent stakeholder interviews to discuss various ways to put in place an effective implementation strategy. Through the discussions a number of potential scenarios were developed, and through over thirty stakeholder interviews and a full day workshop session, the DCWRG model was developed.

The DCWRG is a strategic group of community-based watershed partners who will work with TRCA towards resourcing the plan implementation through priority setting, advocacy, stewardship and outreach, applied research and experimental management, and education and science transfer. Membership of the DCWRG is intended to be representative of many stakeholders and partners at the government and non-government levels, with opportunities for residents and organizations to be involved in leading a particular function or in participating through a project or ongoing activity. The DCWRG will work with local and regional municipalities and watershed residents and organizations to build community capacity through the creation of linkages with local initiatives and the recruitment of individuals and organizations to assist with the implementation of the watershed plan.

In February 2004, the provincial government released a White Paper on Watershed Based Source Protection Planning which includes the proposed actions to protect the quality of Ontario's drinking water supplies. TRCA, through Conservation Ontario, has been actively advocating a watershed-based approach to drinking water source protection. Mr. Justice Dennis O'Connor led the Walkerton Commission of Inquiry. In the Part 2 report of this inquiry, released May 2002, Justice O'Connor recommended that a watershed resource-based source protection program be established as a part of a multi-barrier approach to drinking water safety.

The province, in consultation with Conservation Ontario, is establishing "Watershed Regions" for the purposes of timely and efficient delivery of source water protection plans. Although discussions are ongoing, it appears that the Credit Valley, Toronto and Region and Central Lake Ontario Conservation Authority's will be included as one Watershed Region for administrative purposes. With this Watershed Region, source water protection plans will be developed on a watershed basis.

The DCWRG will be requested to serve as an advisory group to TRCA in the development of a source protection plan for the Duffins Creek and Carruthers Creek watersheds.

The term of the DCWRG will coincide with the municipal council term, and as such will commence in spring, 2004 and continue to November, 2006.

The DCWRG is comprised of a group of individuals from the federal and provincial governments, local and regional municipalities, local watershed residents and organizations who will collaborate on the following 6 key functions:

Advocacy and Networking

To build profile, advocate for, and seek commitment for, the implementation of the watershed plan.

Funding and Resources

To facilitate ways and means of funding and resourcing the plan implementation.

Communication and Interface

To build awareness and keep all people informed about progress in Watershed Plan implementation.

Stewardship and Outreach

To build capacity for implementation.

Education & Science Transfer

To educate and interpret scientific content of Watershed Management.

Applied Research / Experimental Research

To advance and promote the use of scientific knowledge of the watersheds and monitor results.

**DETAILS OF WORK TO BE DONE**

Watershed municipalities will be taking reports forward to councils for appointments to the Duffins Carruthers Watershed Resource Group. Functional team members will be established in consultation with watershed municipalities.

**FINANCIAL DETAILS**

Provisions for these activities are provided through annual budget allocations.

**Report prepared by: Gary Bowen, extension 5385**  
**For Information contact: Gary Bowen, extension 5385**  
**Date: April 7, 2004**  
**Attachments: 1**

**DUFFINS CREEK AND CARRUTHERS CREEK  
WATERSHED RESOURCE GROUP  
2004 - 2006**

**Goals, Membership, Organization and  
Terms of Reference**

Toronto and Region Conservation Authority  
April 2004

**DUFFINS AND CARRUTHERS**  
**WATERSHED RESOURCE GROUP**

**TERMS OF REFERENCE, GOALS, MEMBERSHIP AND ORGANIZATION**

**1.0 AUTHORITY DIRECTION**

In October 2000, Toronto and Region Conservation (TRCA) launched a new vision -- The Living City, a new kind of community where human settlement can flourish forever as part of nature's beauty and diversity. The Living City is a broad vision that can be achieved with the help of our partners and the community. The aim is to build a foundation of healthy rivers and shorelines, regional biodiversity and sustainable communities.

In support of The Living City vision and building upon the experience gained from previous watershed planning initiatives, TRCA advanced its community-based process and technical approaches in the development of *A Watershed Plan for Duffins Creek and Carruthers Creek*.

At Authority Meeting #5/03, held on June 27, 2003, the Authority received *A Watershed Plan for Duffins Creek and Carruthers Creek* and adopted the plan as part of TRCA's plan input and review process. At that time, staff requested the opportunity to go back out and consult with the watershed municipalities and key stakeholders to finalize a Terms of Reference for an "Implementation Team" and report back to the Authority. The Duffins Carruthers Watershed Resource Group (DCWRG), as defined in this Terms of Reference, is a result of that consultation.

**2.0 GOAL**

The goal of the Duffins Carruthers Watershed Resource Group is to work towards advocacy and networking, funding and resources, communication and interface, stewardship and outreach, education and science transfer and applied research/experimental design towards the implementation of *A Watershed Plan for Duffins Creek and Carruthers Creek*. The DCWRG will work with local and regional municipalities and watershed residents and organizations to build community capacity through support, direction and two-way communication with existing local driven initiatives, and through the recruitment of other individuals and organizations to assist with the implementation of the watershed plan.

**3.0 MEMBERSHIP**

Membership on the DCWRG is intended to be representative of the many stakeholders and partners at the government and non-government levels, with opportunities for residents and organizations to be involved in leading a particular function or in participating through a project or ongoing activity.

The composition of the group includes the following representation and consist of approximately 20 members under the following two headings:

### Functional Team Members

Advocacy and Networking  
Funding and Resources  
Stewardship and Outreach  
Communication and Interface  
Education and Science Transfer  
Applied Research

### Partner Representatives

- TRCA - Chair of the Authority, Ex Officio
- A member of the Sustainability Communities Board
  - A member of the Watershed Management Advisory Board
  - The Duffins and Carruthers Creek Watershed Specialist
- 
- Regional Municipality of York
  - Town of Whitchurch-Stouffville
  - Town of Markham
  - Regional Municipality of Durham
  - Township of Uxbridge
  - City of Pickering
  - Town of Ajax
- 
- Federal Government
  - Provincial Government
  - Golf Course Industry
  - Aggregate Producers

#### 3.1 Locally Driven Initiatives

Many local initiatives are recognized within the study area and the individuals leading these groups have been consulted regarding the structure of the DCWRG. Rather than ask these group members to redirect their energy and resources towards the DCWRG, they will continue with their work plans and be supported in their efforts through the Functional Team Roles as outlined above. TRCA staff and DCWRG will coordinate watershed actions with locally driven initiatives to create opportunities for further involvement for mutual benefit.

The DCWRG will work with local and regional municipalities and watershed residents and organizations to build community capacity through the creation of linkages with local initiatives and the recruitment of individuals and organizations to assist with the implementation of the watershed plan.

#### 3.2 Appointment of Representatives

TRCA staff will request representation for the Authority members. Through the ongoing consultative process, individuals have, and will continue to be, approached regarding their roles as part of the Functional Team or Partner representation.

3.2.1. Regional and Local Municipal Representatives

The regional and local municipalities will be requested by the TRCA to confirm the participation of a council member to the Duffins Carruthers Watershed Resource Group. A municipality may appoint a current Authority member. The appointed member should represent an electoral ward within the Duffins or Carruthers watersheds.

3.2.2. Federal and Provincial Representatives

Letters of invitation will be sent to the federal government (Environment Canada, Fisheries and Oceans Canada, Transport Canada) and the provincial government (Ministries of Environment, Natural Resources and Agricultural and Rural Affairs) requesting appointment of representatives.

3.2.3 Aggregate Producers

TRCA will request the Aggregate Producers Association of Ontario to appoint a representative to the Duffins Carruthers Watershed Resource Group.

3.2.4. Golf Course Industry

TRCA will request the golf course industry to appoint a representative to the Duffins Carruthers Watershed Resource Group.

3.2.5. Watershed Residents and Non Government Agencies

TRCA, in consultation with member municipalities, will identify candidates for the functional team members to be ratified by the Authority.

3.3 Term of Appointment

The Duffins Carruthers Watershed Resource Group roles, responsibilities and representation will be reviewed on an ongoing basis. A formal review will take place after a two-year term in 2006.

3.4 Selection of Chair and Vice Chair

The Chair and/or Vice-Chair will be elected by the Duffins Carruthers Watershed Resource Group members. The Authority may appoint an interim chair until such time that an election can be held. The TRCA staff representative on the DCWRG will not be eligible to be Chair or Vice Chair.

3.5 Reporting Relationship

A DCWRG representative will report, at least on a semi-annual basis, on projects and progress to the Watershed Management Advisory Board of TRCA.

**4.0 RESOURCES AVAILABLE**

4.1 TRCA Support

The TRCA will provide administrative and technical staff support for the DCWRG as determined by the Duffins and Carruthers Creek Watershed Specialist and budgets approved by the Authority.

4.2 Other Resources

Funding may be available for projects and activities based on available TRCA funding. Watershed municipalities and partners will be encouraged to secure other resources and partnerships for watershed projects and activities whenever possible. In-kind or other support for projects and activities will be welcome from businesses, industries, other government agencies, private foundations, educational institutions and others in accordance with TRCA policies. In-kind or other support will be coordinated with the assistance of The Conservation Foundation of Greater Toronto, where appropriate.

**5.0 COMPENSATION**

DCWRG members will be eligible for travel expenses in accordance to the TRCA Travel Expenses policy.

**6.0 RULES OF CONDUCT**

The DCWRG will adhere to the TRCA's Rules of Conduct.

**7.0 RESPONSIBILITIES**

7.1 Functional Areas

The DCWRG is a strategic group of watershed partners who work towards implementing the watershed plan. They are the driving force in the model and are comprised of partner representatives and six Functional Team Members under the following headings:

7.1.1 Advocacy and Networking

Key Function: To build profile, advocate for, and seek commitment for, the implementation of the watershed plan.

Sample Activities: Keep the long term view and big picture at the forefront;  
Keep it a priority;  
Seek full endorsement and support politically;  
Develop a Marketing Strategy.

7.1.2 Funding and Resources

Key Function: To facilitate ways and means of funding and resourcing the plan implementation.

Sample Activities: Explore opportunities to facilitate grants;  
Where desirable coordinate applications for funding;  
Identify and overcome barriers to resources;  
Develop and implement a resource plan;

7.1.3                    Communication and Interface  
Key Function:        To build awareness and keep all people informed about progress in watershed plan implementation.

Sample Activities:    Link people to activities and projects;  
Coordinate who's doing what, where (web, map, or directory);  
Develop and implement a communications plan.

7.1.4                    Stewardship and Outreach

Key Function:        To build capacity for implementation.

Sample Activities:    Cultivate and acknowledge local champions;  
Engage potential new players;  
Outreach to environmental advisory committees.

7.1.5                    Education and Science Transfer

Key Function:        To educate and interpret scientific content of watershed management.

Sample Activities:    Transfer latest knowledge about how watersheds work;  
Move information between municipalities and stakeholders;  
Elevate scientific knowledge through seminars and workshops.

7.1.6                    Applied Research / Experimental Research

Key Function:        To advance and promote the use of scientific knowledge of the watersheds and monitor results.

Sample Activities:    Identify demonstration projects;  
Monitor results;  
Encourage senior governments, universities and colleges to study the watersheds.

7.2    Ensure that the implementation of A Watershed Plan for Duffins Creek and Carruthers Creek meets the requirements of the Oak Ridges Moraine Conservation Plan;

7.3    Serve as required as an advisory group to TRCA in the development of a source protection plan for the Duffins Creek and Carruthers Creek;

- 7.4 Work with the Town of Ajax and the TRCA to develop the planning area known locally as A9 in accordance with the integrated resource management directions outlined in the watershed plan;
- 7.5 Continue to work with the City of Pickering to apply A Watershed Plan for Duffins Creek and Carruthers Creek in its municipal planning activities;
- 7.6 Continue to seek opportunities for Official Plan Amendments in support of the policy changes required for full endorsement of the watershed plan;
- 7.7 Continue ongoing discussions with Transport Canada staff at the Pickering Lands Site to ensure implementation is in line with the Green Space Master Plan;
- 7.8 Advise the Greater Toronto Airport Authority (GTAA) and Transport Canada on the directions in the watershed plan studies relating to the proposed airport in the Pickering lands;
- 7.9 Work with the Province of Ontario on planning for future development of the Seaton Lands to ensure that the watershed plan goals, objectives and recommendations are considered;
- 7.10 Support The Conservation Foundation of Greater Toronto and their delivery of The Living City Campaign including healthy rivers and shorelines, regional biodiversity, business excellence and sustainable communities;
- 7.11 Act as a united voice for addressing issues relevant to the municipal, provincial and federal governments;
- 7.12 Provide a framework for meaningful community involvement in watershed management;
- 7.13 Build capacity within the general community to deliver watershed management products and services.

**RES.#D24/04 -**

**LOWER DON RIVER WEST REMEDIAL FLOOD PROTECTION PROJECT AND DON MOUTH NATURALIZATION AND PORT LANDS FLOOD PROTECTION PROJECT**

Project Updates - Fiscal Year 2003-04.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT staff continue with the development of both the Lower Don River West Remedial Flood Protection Project (LDRW) and the Don Mouth Naturalization and Port Lands Flood Protection Project (DMNP), in concert with Toronto Waterfront Revitalization Corporation (TWRC) activities and funding availability.**

**CARRIED**

**BACKGROUND**

Four priority projects were identified by the Toronto Waterfront Revitalization Corporation to jumpstart the transformation of Toronto's unattractive and underdeveloped central waterfront into a vibrant economic centre. This vision for a revitalized waterfront consists of prominent cultural institutions, attractive parks and open spaces, and diverse and dynamic commercial and residential communities. One of these priority projects identified that an environmental assessment would be conducted to develop the best option to re-naturalize the mouth of the Don River and to provide flood protection for the city's downtown core.

Flood protection for the lower Don River is a key component of Toronto's waterfront revitalization. What's more, Toronto and Region Conservation has identified the lower Don River as our number one priority for flood protection since 1980, due to the large population and extensive infrastructure currently at risk to flooding.

TRCA is carrying out this priority project on behalf of the TWRC. Two undertakings, each requiring a separate environmental assessment process, will be conducted to meet the objectives for the Don Mouth Priority Project.

**Lower Don River West Remedial Flood Protection Project**

The LDRW Project will serve to remove approximately 210 hectares of land west of the Don River from the regulatory flood plain. The natural, cultural, social and economic conditions of the study area will be taken into account in eliminating the risk of flooding to this area.

The study for this project has been underway since May 2003 and will be completed by October 15, 2004, the 50th anniversary of Hurricane Hazel. Between March 2003 and March 2004, the Notice of Intent was issued, the Technical Advisory Committee (TAC) was established, and after extensive review, proceeded to signing the delivery agreement with Dillon Consulting for the LDRW Project.

## ***Progress on the LDRW Project Environmental Assessment Process***

### ***Preliminary Studies***

Three preliminary studies were initiated by the TRCA in March 2003. These studies will provide background information for both the LDRW and the DMNP Projects. These projects include the Lower Don River Environmental Assessment Aquatic Investigations, the Cultural Heritage Study for the Lower Don River, and the Terrestrial Natural Heritage Study for the Lower Don River.

Both the Terrestrial Natural Heritage and the Cultural Heritage Studies were completed in January 2004 and are undergoing a review by members of the TAC and the Community Liaison Committee (CLC).

The Aquatic Investigations Report was completed in March, 2004 and is currently undergoing internal review by TRCA staff prior to distribution to the TAC and CLC.

### ***Soils and Groundwater Characterization Study***

The Ontario Realty Corporation (ORC) was identified by the TWRC as the recipient agency to conduct the soils and groundwater characterization study for the West Don Lands area, and to provide comprehensive recommendations to address contaminated soils and groundwater issues. ORC was originally scheduled to complete the review of past studies of the existing conditions by mid-March and to initiate field operations to collect information where data gaps in these past reports exist. Unfortunately, ORC and the TWRC have yet to sign a delivery agreement as such Dillon was requested to conduct the gap analysis. A draft report has been completed by Dillon and has recently undergone review by TRCA staff. ORC is currently developing a Request for Proposal (RFP) to conduct field data collection operations for this area.

### ***Hydraulic Modelling Study***

Given Marshal Macklin Monaghan's (MMM) long involvement in hydraulic modeling activities in the Lower Don, TRCA staff recommended that MMM should continue to provide this service for both Lower Don projects as a cost savings measure. At Executive Meeting #8/03, held on September 5, 2003, Resolution #B126/03 was approved allowing TRCA staff to retain MMM to provide hydraulic modeling services for the LDRW Project at an upset cost of \$20,000.00 excluding GST. MMM personnel have initiated their hydraulic studies by confirming the existing baseline conditions and have started preliminary model runs of potential flood protection measures.

### ***Study Components being Conducted by Dillon Consulting***

- **Railway Corridor Study**: A draft report of the existing railway operations and management plans has been completed and TRCA staff have commented. The report will be submitted to the TAC membership shortly for comment.
- **Socioeconomic Study**: Activities have been initiated. A report is anticipated by the end of spring, 2004.
- **West Nile Virus Study**: This will be conducted in coordination with the evaluation of alternatives.
- **Developing Long-list of Alternatives**: Completed. Undergoing preliminary evaluation of alternatives to weed out options that cannot meet project objectives.

- Developing Evaluation Criteria: Draft criteria established. Still receiving comment for refinement from TAC, CLC and public.
- Developing Short-list of Alternatives: Will be completed by mid-April, 2004.

#### Public Consultation

- Community Liaison Committee: At Authority Meeting #7/03, held on September 26, 2003, Resolution #A198/03 was approved calling for the establishment of a Community Liaison Committee. On November 26, 2003, CLC Meeting #1 was held to introduce the LDRW Project to the committee members. CLC Meeting #2 was held on January 5, 2004, to receive input from the CLC membership on the draft project newsletter, and to comment on the proposed long-list of alternatives, the draft evaluation criteria, and the format of the first Open House and Public Workshop that was scheduled for January 19, 2004. Members of the CLC have received draft copies of the Terrestrial Natural Heritage System Strategy and the Cultural Heritage Study for review. The next CLC meeting is anticipated for April 20, 2004.
- Open House and Public Workshop Meetings: The first public meeting was held on January 19, 2004 at Metro Hall. More than 100 members of the public and agency staff attended this meeting. The Open House component provided an opportunity for the public to read about the LDRW Project and speak with TRCA staff and consultants on a one-to-one basis, prior to the formal presentation. The formal presentation introduced the public to the LDRW Project, provided a summary of the long-list of alternatives and evaluation criteria being considered for the EA process, and invited the public to submit their own thoughts on what should be done for the area. A meeting summary was compiled and will be placed on the TRCA website shortly. The next Open House and Public Workshop Meeting is scheduled for April 29, 2004.
- TRCA Environmental Assessment Website: A website has been placed online for the LDRW Project. A link to this website is found at:  
[www.trca.on.ca/water\\_protection/lower\\_don\\_ea.htm](http://www.trca.on.ca/water_protection/lower_don_ea.htm).
- Lower Don River West News: A project newsletter has been developed for the LDRW Project. Edition One was distributed in January, 2004. Edition Two will be sent out shortly.
- West Don Lands Precinct Plans: The West Don Lands Precinct Planning Process is a TWRC study that is moving in concert with the LDRW Project. TRCA staff and consultants have been working closely with TWRC staff and the consultants for the West Don Lands Precinct Plan to ensure that our EA and the planning process are coordinated to minimize conflicting results, and to maximize improvements to the environment, minimize costs and integrate land use opportunities.

Summary

The LDRW Project is scheduled for completion with the submission of the Class EA and Canadian Environmental Assessment Act (CEAA) Environmental Screening Report on October 15, 2004, which is the 50th anniversary of Hurricane Hazel. Federal funding to the TWRC has been a concern. However, the TWRC recognizes that this EA is a crucial component for waterfront revitalization and has directed us to move forward cautiously with our project activities until we receive more information on the status of long-term funding from the federal government.

**Don Mouth Naturalization and Port Lands Flood Protection Project**

The DMNP Project will require detailed land-use planning and environmental studies to devise the best solution to re-establish a natural, functioning wetland at the mouth of the Don River, while providing flood protection to approximately 230 hectares of land south and east of the existing Keating Channel. The consultant team selection process for this project began in August, 2003, resulting the hiring of Gartner Lee Limited at Authority Meeting #2/04, held on February 27, 2004. TRCA and Gartner Lee Limited are anticipated to sign a delivery agreement for the DMNP Project later this spring (2004).

Summary

Upon signing of the Contribution Agreement between the TWRC and various levels of government, Gartner Lee Limited will be authorized to commence with Stage 1 activities. Upon a positive response to increase the Contribution Agreement from \$2 million to \$3 million, and the receipt of provincial approval of the Individual EA Terms of Reference, Gartner Lee Limited will be authorized to commence with Stage 2 activities of the Delivery Agreement.

Currently, the only other activities progressing with regards to the DMNP Project are the drafting of the Delivery Agreement between Gartner Lee and TRCA, the DMNP Project website, and meetings between TRCA staff and agencies involved in projects that will influence the outcome of the DMNP Project (ie. East Bayfront Precinct Plan, Commissioners Park, Gardiner Expressway, etc).

**Report prepared by: Ken Dion, extension 5230**  
**For Information contact: Ken Dion, extension 5230**  
**Date: March 25, 2004**

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**RES.#D25/04 -**

**YORK PEEL DURHAM TORONTO/ CONSERVATION AUTHORITIES  
MORAINÉ COALITION GROUNDWATER STUDY**

Status Update and 2004 Program. Update on status of tri-regional, York Peel Durham Toronto (YPDT) and Conservation Authorities Moraine Coalition (CAMC) groundwater initiatives and approval of initial YPDT 2004 budget components.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT Conservation Authorities Moraine Coalition (CAMC) staff be directed to implement the components of the 2004 work plan of the York-Peel-Durham-Toronto (YPDT) Groundwater Management Strategy Study;**

**THAT an agreement be established with the Geological Survey of Canada (GSC) to provide ongoing geoscience services in 2004;**

**THAT an agreement be established with Earthfx Incorporated to continue to provide ongoing modeling, database and website management services to the partner agencies;**

**AND FURTHER THAT staff extend an offer to the Planning and Public Works Committees at the Regions of York, Peel, Durham and the City of Toronto, as well as the boards of the partner conservation authorities, to make a formal presentation of the study progress.**

**CARRIED**

### **BACKGROUND**

The YPDT Groundwater Management Strategy Study was initiated in 2000 as a partnership between the Regions of York, Peel and Durham, the City of Toronto and the associated six conservation authorities (Credit Valley, Toronto Region, Lake Simcoe Region, Kawartha Region, Ganaraska Region, and Central Lake Ontario) with a view to arriving at consistency in groundwater management both from a technical, analytical perspective as well as from a policy and management perspective. With similar goals and objectives, staff, acting on behalf of CAMC, are also directing groundwater work across the entire Oak Ridges Moraine.

The joint YPDT/CAMC groundwater team referred to in this staff report is currently comprised of three full time contract staff members, the hydrogeological and planning staff members from the various partner agencies, as well as a core team of consultants from Earthfx Inc. and Gerber Geosciences Inc. Project initiatives that are tied more closely to the interests of the four municipal partners are part of the YPDT study and are approved through the TRCA, while projects tied more closely to the overall moraine study are approved through Central Lake Ontario Conservation Authority.

The YPDT/CAMC groundwater initiative continues to contribute insightful and practical deliverables to the partner agencies. The key focus areas of the groundwater program continue to be data management, geological understanding, numerical groundwater modeling and policy development. A large part of the program's success has been the delivery of data and tools at a practical level to partner agency staff and their consultants who are charged with understanding the groundwater system for a variety of day to day issues.

The purpose of this report is to provide a brief update on the accomplishments of the groundwater program in 2003 and to obtain support for the planned 2004 initiatives that the YPDT Steering Committee has recommended at its December, 2003 and March, 2004 meetings. The YPDT Steering Committee is comprised of hydrogeological and planning staff from the City of Toronto, Peel, Durham and York regions as well as the six associated conservation authorities.

## 2003 ACCOMPLISHMENTS

2003 was a busy year for the YPDT and Conservation Authorities Moraine Coalition groundwater study programs. An annotated list of 2003 accomplishments is presented below:

- **Conestoga Rovers Associates (CRA) baseflow report** – this report summarizes the baseflow measurement work that was approved by the TRCA in February, 2002 at meeting #2/02). The study consisted of the measurement and analysis of about 300 low streamflow measurements across York, Peel, Durham and Toronto. The YPDT committee reviewed the draft report and had CRA finalize the report in late 2003. Final copies have been distributed to the partner agencies.
- **Modeling** – the groundwater modeling studies progressed tremendously in 2003 with the team making significant contributions to York Region, specifically for critical projects such as the York Region deep trunk sewer project. The modeling effort has taken slightly longer than expected partially due to several site specific projects that have distracted the modeling team from completing the project and partially due to the complexities of undertaking such a large-scale regional modeling project. The draft report is in circulation with the staff and will be distributed to partner agencies in April, 2004.
- **Website launch** – in 2003 the YPDT pass-word protected website was set up for use by the partner agencies. The website allows staff from the partner agencies to quickly retrieve and analyze hydrological data from across the Oak Ridges Moraine area. The website directly links to the extensive YPDT database. The website provides access to data in table, graph and map format as well as access to a suite of over 2,000 scanned hydrogeological reports.
- **Beatty & Associates well record update study** – this study was also approved by TRCA in February 2002 at meeting #2/02 and consisted of the geographical locating and recording of coordinates for nearly 6,000 water wells, which were then input to the database.
- **Caledon Seismic study** – with support from the Ontario Geological Survey (OGS) and the GSC, the YPDT study undertook a seismic study in the Town of Caledon. The study was designed to investigate a buried valley system that was first delineated in a borehole drilled in 2002 by the Credit Valley Conservation Authority (and supported financially through the YPDT study). The seismic survey was successful in tracing the bedrock valley from Heart Lake Road in the west through to Humber Station Road just west of Bolton. The valley system is significant in that it conducts groundwater from the Credit River watershed into the Humber River watershed and will have an influence on future water balance studies. The valley is also significant in that it has a high likelihood of being able to supply additional municipal groundwater resources to the community of Caledon East in Peel Region.

- **High Park Borehole** – with assistance from the City of Toronto, the YPDT study oversaw the drilling of a strategic borehole in High Park in Toronto. The borehole was drilled as part of the rehabilitation of two stormwater management ponds in the park. Based on the well record for an old well drilled in the area, it was determined that a deep borehole in the area would very likely intersect bedrock at a considerable depth allowing the sediment in the bottom of the Laurentian Valley. The Laurentian Valley is thought to be a broad pre-glacial channel that formerly connected Georgian Bay with Lake Ontario and which may have a significant effect on both the local and regional groundwater systems. For example, it may be transmitting significant quantities of groundwater from areas on the Oak Ridges Moraine towards Lake Ontario. The borehole turned out to have tremendous artesian pressures and initially flowed at an estimated rate of 2,000 to 4,000 litres per minute when the confined aquifer was intersected at a depth of 40 m. The well had to be decommissioned and was important in providing YPDT staff with a first glimpse of the hydrogeological setting in this broad buried valley system.
  
- **Rice Lake Borehole** – with financial assistance from the OGS, the YPDT team oversaw the drilling of another key strategic borehole in the vicinity of Centreton just south of Rice Lake. The borehole location enabled the collection of key geological information in the east part of the Oak Ridges Moraine where very little had previously existed. The well has also been brought into the Provincial Monitoring Network as one of the Lower Trent Conservation Authority’s monitoring wells.
  
- **Oak Ridges Moraine Fieldtrip** – in cooperation with the GSC, the YPDT/CAMC team led a successful field trip for staff from the partner agencies. The field trip allowed staff to visit a number of geological/hydrogeological sites and gain an appreciation for the types of groundwater flow systems that are operating on the moraine.
  
- **Professional presentations/seminars** – YPDT/CAMC team provided professional talks to a variety of conferences during 2003:
  - A.D. Latornell Conference (2 presentations);
  - Joint Conference of the International Association of Hydrogeologists/Canadian Geotechnical Society (4 presentations);
  - MOE Threats Assessment Working Group (TAWG) as part of the province’s source water protection initiative;
  - MOE Environmental Monitoring and Reporting Branch;
  - LOROPON – Regional Long Range Planners of Ontario;
  - Great Lakes Water Use Group.
  
- **Schomberg seismic study** – in cooperation with the OGS, the GSC and York Region, the YPDT/CAMC team undertook a seismic survey in the vicinity of Schomberg to evaluate the subsurface conditions in the Laurentian Valley. The data is currently being analysed, however preliminary observations indicate that the survey was successful in delineating an upper channel cut through the Newmarket Till aquitard as well as the deeper Laurentian Channel.

- **Summer student initiative** – in cooperation with the Ministry of Natural Resources and the OGS, three summer students were retained under the joint supervision of YPDT/CAMC staff to undertake office and field work with the goal of beginning to understand the groundwater flow systems in Lower Trent Region, Nottawasaga Valley, and Ganaraska Region Conservation Authority's. The data collected will prove valuable in the on-going calibration of the numerical groundwater model.

#### **DETAILS OF WORK TO BE DONE**

Over the past few months the YPDT/CAMC team has been assessing the progress of both the modeling study and the database project, both being undertaken by Earthfx Inc. Over 2003, the modeling project has received accolades from a number of key internationally known groundwater researchers including Dr. Frank Schwartz from the University of Ohio and Dr. Alfonso Rivera from the Geological Survey of Canada. The database project is also progressing well. The Regions of Peel and York have made extensive use of the database and Earthfx staff continues to build on the framework that was assembled in 2003. Given the successes that the partner agencies are having with these projects, staff recommends that the modeling and the linked database project both be funded through 2004 to build on the successes that have been achieved to date. Key aspects of the 2004 work include:

- a move to create a public component of the website where the public will be able to obtain background material on the project;
- expansion of the "core" (100x100 metre grid) model eastward to include watersheds up to the Ganaraska River, thereby incorporating all of Durham Region into the model;
- expansion of the model westward to incorporate the Credit River watershed, thereby incorporating all of Peel Region into the model;
- the incorporation of a soil moisture water budgeting routine into the groundwater modeling environment so that the estimates of groundwater recharge can be improved;
- the "cookie cutting" of specific watersheds out of the regional model so that agency staff will have the ability to run various land use and climate change scenarios through the model to evaluate impacts on stream flow and the overall groundwater flow system.

From 2001 through 2003 the YPDT/CAMC team has fostered and established a close working partnership with the GSC. The GSC is nearing completion of their work on the Oak Ridges Moraine; however Dr. Dave Sharpe and his colleagues from the GSC continue to meet with the YPDT/CAMC team to provide their expertise pertaining to the geological and hydrogeological setting in the Oak Ridges Moraine area. There continues to be internal pressure within the GSC for having their staff focus on other areas across Canada, however in 2004 they remain willing to make some of Dr. Sharpe's time available to the YPDT/CAMC team provided there is some level of financial support. The YPDT steering committee has determined that this is a priority for the study during 2004 and recommends that \$50,000 be reserved and directed to the GSC once an agreement is reached.

## **SUMMARY**

The-York-Peel-Durham Toronto Groundwater Management Strategy study is an example of a successful partnership initiative between the federal government, the province, municipalities and conservation authorities. Through the initiative, the partner agencies have managed to capitalize on the economies of scale to each agency's benefit by undertaking collective initiatives only once rather than taking different approaches at each agency. The Oak Ridges Moraine provides a common physiographic link to all of the partner agencies.

## **FINANCIAL DETAILS**

The initiatives described above can be implemented within the current 2004 budget for YPDT study. No agreements will be signed with consultants or partner agencies until the finances coming from the City of Toronto and York, Peel and Durham Regions are in place and the appropriate approvals have been obtained from the Executive Committee.

**Report prepared by: Steve Holysh, 905-336-1158, extension 246**  
**For Information contact: Steve Holysh, 905-336-1158, extension 246**  
**Don Ford, extension 5369**

**Date: April 06, 2004**

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### **RES.#D26/04 - THE CITY OF TORONTO VALLEY AND SHORELINE REGENERATION PROJECT**

Fishleigh Drive Erosion Control Project, City of Toronto. To implement shoreline improvements for the Fishleigh Drive sector of the Scarborough Bluffs, City of Toronto

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT staff be directed to proceed with the 2004 construction program for the Fishleigh Drive Erosion Control Projects, at a cost not to exceed \$410,000 including GST.**

**CARRIED**

## **BACKGROUND**

The Fishleigh Drive Erosion Control Project was approved under the Class Environmental Assessment process in 1988. Construction of shoreline protection works commenced in 1990 and continued through to 1998. 375 metres of armour stone revetment was constructed protecting 28 residential homes from erosion within this sector.

During 2001 W.F. Baird & Associates, Coastal Engineers, were retained to complete the final design for 350 metres of shoreline at the west end of the sector. The final design received includes the construction of four rock mound groynes and an armour stone revetment.

During 2003, staff obtained all necessary approvals for the construction of this phase of the project. In 2003, three rock mound groynes were constructed along with approximately 60% of the armour stone revetment. Negotiations with Fisheries and Oceans Canada (DFO) are ongoing to complete the fisheries compensation plan to be incorporated into the project.

#### **DETAILS OF WORK TO BE DONE**

During 2004 it is proposed to construct the fourth groyne and complete the armour stone revetment as per W.F. Baird & Associates, Coastal Engineers final design. We will also construct fisheries compensation structures as required by the DFO. As part of the project, the creation of cobble beaches between the groyne fields will also be constructed. Construction and supervision will be carried out by Toronto and Region Conservation Authority (TRCA) field staff utilizing the annual heavy equipment supply contractor. Environmental monitoring will include fisheries and benthos surveys and substrate analysis to document any changes to the aquatic environment. Monitoring of bluffs erosion and lakefill quality will be ongoing.

#### **FINANCIAL DETAILS**

The total cost of this project is \$410,000 including GST, and funds are available in City of Toronto capital budget, Valley and Shoreline Regeneration Project 2002-2006.

**Report prepared by: Joe Delle Fave, 416-392-9724**

**For Information contact: Joe Delle Fave, 416-392-9724**

**Date: April 01, 2004**

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**RES.#D27/04** -

#### **COATSWORTH CUT EMERGENCY MAINTENANCE DREDGING**

Implementation of emergency maintenance dredging at Coatsworth Cut, City of Toronto.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT staff be directed to proceed with emergency maintenance dredging of Coatsworth Cut at Ashbridge's Bay, City of Toronto, at a cost not to exceed \$150,000, including GST.**

**CARRIED**

#### **BACKGROUND**

Coatsworth Cut is located in a sediment deposition zone. On-going maintenance dredging is required on a regular basis to maintain a safe and navigable channel for use by the public, local boating clubs and to provide for emergency access, as required. Toronto and Region Conservation Authority staff are continuing to investigate options for a long term solution to address this problem.

Maintenance channel dredging was undertaken in 2002 by the Toronto Port Authority with the removal of approximately 3,500 cubic metres of the proposed 6000 cubic metres of materials to be dredged. The balance of the work was not completed due to scheduling conflicts and equipment breakdown. Dredging was undertaken again in 2003 to complete the removal of the outstanding balance of material from 2002 and additional deposition, which occurred in 2002/2003. The total in-situ volume of material dredged in 2003 was approximately 9,000 cubic metres. Due to the volume of siltation within this area on an annual basis, staff recommend undertaking additional dredging of approximately 3,000 to 4,000 cubic metres in 2004 to maintain continued navigation for the upcoming season.

#### **DETAILS OF WORK TO BE DONE**

Maintenance dredging of approximately 3,000 to 4,000 cubic metres from the navigation channel using a water base operation will be conducted. The dredged material will be loaded onto flat deck barges and off-loaded on shore for final disposal off site. Dredging operations are tentatively scheduled to start in July 2004 with an expected duration of one month to complete the work.

#### **FINANCIAL DETAILS**

The total estimated cost for this work is \$150,000, including GST. Funds for this project are available in the proposed 2004 capital budget.

**Report prepared by: Mark Preston, 416-392-9722**

**For Information contact: Mark Preston, 416-392-9722**

**Date: April 01, 2004**

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**RES.#D28/04 - 55 VAN DUSEN BOULEVARD BANK STABILIZATION PROJECT**  
Implementation of stream bank stabilization works at 55 Van Dusen Boulevard, City of Toronto.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT staff be directed to proceed with the completion of the proposed stream bank stabilization project at 55 Van Dusen Boulevard, at a cost not to exceed \$68,000 including GST.**

**CARRIED**

#### **BACKGROUND**

Staff were contacted by the resident at 55 Van Dusen Boulevard to inspect an on-going stream bank erosion problem in the Mimico Creek adjacent to this property and immediately south of Van Dusen Boulevard, in the City of Toronto. Based on site inspections staff recommended that erosion protection work be undertaken only along the east bank of the Mimico Creek.

Subsequent to discussions with the owner of 55 Van Dusen Boulevard, Toronto and Region Conservation Authority (TRCA) Property and Asset Management staff prepared an agreement to undertake the remedial works. The agreement entails the transfer of ownership of a portion of the property to the TRCA which includes the newly constructed erosion protection, in return for the implementation of the stream bank protection along the east bank (west property limit) of the Mimico Creek.

#### **DETAILS OF WORK TO BE DONE**

The erosion protection will consist of a stepped two-metre high armour stone wall. Additional work will include: the placement of fieldstone at the toe of the wall to enhance fish habitat; the installation of residential fencing at the top of bank; and final site restoration and planting. Construction is to be completed by the end of April 2004.

#### **FINANCIAL DETAILS**

The total estimated cost for this work is \$68,000 including GST. Funds are available for this project from a grant from the Ontario Ministry of Natural Resources and special funding from the City of Toronto.

**Report prepared by: Mark Preston, 416-392-9722**

**For Information contact: Mark Preston, 416-392-91722**

**Date: April 01, 2004**

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#### **RES.#D29/04 -**

#### **HUMBER WATERSHED ALLIANCE**

Appointment of Members. The formal appointment of watershed residents, municipal and public agency representatives, representatives from community groups, business and business organizations and academic institutions.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT the Humber Watershed Alliance appointments, as set out in the staff report, be approved.**

**CARRIED**

#### **BACKGROUND**

The Terms of Reference for the Humber Watershed Alliance, dated December, 2003, were approved through Resolution #A289/03 at Authority meeting #10/03, held on January 9, 2004. The term of appointment for the members follow the approved Terms of Reference, as stated below:

### *"3.6 Term of Appointment*

*Municipalities and other public agencies will be requested to appoint their representatives for the three-year period coincident with the three-year term of municipal councillors. All other members will be appointed for a two-year period with the provision for a one-year renewal without reapplication. Membership will be reviewed on an annual basis. Members unable to fulfill their commitments will be replaced normally at that time by the TRCA based on the nominees recommended by Authority members, other Humber Watershed Alliance members and TRCA senior staff."*

The opportunity for membership on the Humber Watershed Alliance was advertised throughout the Humber watershed in community newspapers and posted on various websites. As well, letters were sent to regional and local municipalities, the City of Toronto, public agencies, community groups, businesses and business organizations, and academic institutions requesting that they appoint delegates to the Humber Watershed Alliance. Two public information sessions were held in strategic locations within the watershed.

Fourteen applications were received from new resident members, and sixteen came from past resident members of the Humber Watershed Alliance wishing to re-apply. After careful consideration, 26 applicants were chosen to serve as resident members of the Humber Watershed Alliance. The Selection Committee consisted of Nancy Stewart, member of the Watershed Management Advisory Board and Authority; Adele Freeman, Acting Director, Watershed Management Division; and Gary Wilkins, Humber Watershed Specialist.

To date, the following individuals are recommended for appointment to the Humber Watershed Alliance. Additional appointments will be brought to the attention of the Authority members for approval once they are confirmed by their respective councils, business associations, agencies and groups.

### **HUMBER WATERSHED ALLIANCE MEMBERSHIP 2004-2006**

<b>TRCA</b>	
Member	Dick O'Brien, Chair of the Authority, ex-officio
<b>MUNICIPAL AND REGIONAL STAFF</b>	
<i>Township of Adjala-Tosorontio</i>	
Member	Councillor Bill Boston
Alternate	Bill Fox
<i>City of Brampton</i>	
Member	Councillor John Sprovieri
<i>Town of Caledon</i>	
Member	Councillor Garry Moore
<i>Township of King</i>	
Member	Mayor Margaret Black
Member	Councillor Jane Underhill
Alternate	Gaspare Ritacca
<i>Town of Mono</i>	
Member	Councillor Brenda Fowler
<i>Regional Municipality of Peel</i>	
Member	Councillor Nancy Stewart

Alternate	Andrea Warren
<i>Town of Richmond Hill</i>	
Member	Councillor Vito Spatafora
Alternate	Dan Olding
Alternate	Tracy Steele
Alternate	Audrey Hollasch
Alternate	Kelvin Kwan
Alternate	David Collinson
<i>City of Toronto</i>	
Member - Toronto N.	To be confirmed
Member - Toronto S.	To be confirmed
Member - Toronto W.	To be confirmed
<i>City of Vaughan</i>	
Member	Councillor Tony Carella
Alternate	Councillor Bernie DiVona
<i>Regional Municipality of York</i>	
Member	Councillor Linda Jackson
Alternate	Barbara Jeffrey
<i>Environment Canada</i>	
Member	To be confirmed
<i>Ontario Ministry of Culture</i>	
Member	To be confirmed
<i>Ontario Ministry of Tourism and Recreation</i>	
Member	To be confirmed
<i>Ontario Ministry of Natural Resources</i>	
Member	To be confirmed
<i>Ontario Ministry of Agriculture and Food</i>	
Member	Ray Valaitis (associate)
<i>Ontario Ministry of Environment</i>	
Member	Ellen Schmarje (associate)
<b>BUSINESS ORGANIZATIONS</b>	
Member	Randall Reid, Etobicoke Chamber of Commerce
<b>ACADEMIC INSTITUTIONS</b>	
Member	Bob Giza, Chaminade College School
Member	Richard McKnight, St. Basil the Great College School
Member	Brendan O'Hara, Don Bosco College Secondary School
Member	Anyika Tafari, Umoja Learning Circle
Member	Judith Limkilde, Seneca College, King Campus
Member	Lynn Short, Toronto District School Board
<b>COMMUNITY GROUPS</b>	
<i>Action to Restore a Clean Humber</i>	
Member	Luciano Martin
<i>Black Creek Project</i>	
Member	Sandy Agnew
Alternate	Steve Joudrey
<i>Friends of Claireville</i>	

Member	John Willetts
<i>Jane Goodall Institute - Roots and Shoots</i>	
Member	Michael Galli
Alternate	Michele Martin
<i>Humber Arboretum</i>	
Member	Carol Ray
<i>Humber Heritage Committee</i>	
Member	Mary Louise Ashbourne
Alternate	Joan Miles
<i>Ontario Streams</i>	
Member	Horst Truttenbach
<i>Richmond Hill Naturalists</i>	
Member	George Ivanoff
<i>Save the Oak Ridges Moraine</i>	
Member	To be confirmed
<i>Trout Unlimited</i>	
Member	Len Yust
<i>York Soil &amp; Crop Improvement Association</i>	
Member	Hugh Mitchell
<b>CITIZEN MEMBERS</b>	
Richard Whitehead	Town of Caledon
Bill Wilson	Town of Caledon
Harry Baker	Town of Mono
Joanne Nonnekes	City of Vaughan
Deb Schulte	City of Vaughan
Ian Gray	City of Vaughan
Iain Craig	City of Vaughan
Peter Telford	City of Toronto
Elaine Heaton	City of Toronto
Royce Fu	City of Toronto
Alyson Hazlett	City of Toronto
Lois Griffin	City of Toronto
Krisann Graf	City of Toronto
Arthur Mittermaier	City of Toronto
Miriam Mittermaier	City of Toronto
David Hutcheon	City of Toronto
Fernando Rouaux	City of Toronto
Madeleine McDowell	City of Toronto
Ron Hingston	Township of King
Lynda Rogers	Township of King
Yamile Rijo	Township of King
Aaron Fox	City of Brampton
Dianne Douglas	City of Mississauga
Yvette Fournier	City of Mississauga
Sharon Bradley	Town of Richmond Hill
Jim Bradley	Town of Richmond Hill
Kathrine Mabley	Town of Richmond Hill

## DETAILS OF WORK TO BE DONE

- Confirm the remaining members of the Humber Watershed Alliance;
- Schedule and host the first meeting in May, 2004;
- Schedule an orientation bus tour of the watershed, in June 2004, for interested members.

**Report prepared by: Lia Lappano, extension 5292**  
**For Information contact: Gary Wilkins, extension 5211**  
**Date: March 31, 2004**

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**RES.#D30/04 - DON WATERSHED REGENERATION COUNCIL 2004-2006**  
Appointment of Members. The formal appointment of watershed residents, municipal and public agency representatives, representatives from community groups, business and business organizations and academic institutions.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT the Don Watershed Regeneration Council appointments, as set out in the staff report be approved.**

**CARRIED**

## BACKGROUND

The Terms of Reference for the Don Watershed Regeneration Council: 2004-2006 were approved through Resolution #A290/03 at Authority Meeting #10/03 held on January 9, 2004. The Term of Appointment for the members follow the approved Terms of Reference, as stated below:

### *"3.6 Term of Appointment*

*Municipalities and other public agencies will be requested to appoint their representatives for the three-year period coincident with the three-year term of municipal councillors. All other members will be appointed for a two-year period with the provision for a one-year renewal without reapplication. Membership will be reviewed on an annual basis. Members unable to fulfill their commitments will be replaced normally at that time by the TRCA based on the nominees recommended by Authority members, other Don Watershed Council members and TRCA senior staff."*

The opportunity for membership on the Don Watershed Regeneration Council was advertised throughout the Don watershed in community newspapers, through the Sustainability Network and H2Inf0 - The Water Information Network's electronic newsletters, on the Toronto and Region Conservation (TRCA) website, through the release of a Public Service Announcement and through letters advising Don Watershed Regeneration Council members and others that applications were being sought. A public meeting was held to provide potential applicants with an introduction to the TRCA and the work of the Don Watershed Regeneration Council.

Fourteen applications were received from new members and thirteen applications came from past members of the Don Watershed Regeneration Council wishing to re-apply. After careful consideration, 19 applicants were chosen to serve as citizen members of the Don Watershed Regeneration Council. The Selection Committee consisted of Councillor Nancy Stewart, member of the Watershed Management Advisory Board and Authority; Adele Freeman, Acting Director, Watershed Management Division; and Gary Wilkins, Humber Watershed Specialist.

The TRCA was contacted by Mr. Eli Garrett on behalf of Trout Unlimited Canada. He expressed his interest in starting a Don chapter of Trout Unlimited. Mr. Garrett has been added to the Don Watershed Regeneration Council as a representative of Trout Unlimited Canada under the Community Groups category. Additionally, the TRCA has added Mr. Glen Abuja as a representative of Mountain Equipment Co-op under the Don Watershed Business/Business Organization category and Dr. Carmela Canzonieri, Professor, Environmental Planning & Design, York University under the Academic Institutions category.

To date, the following individuals are recommended for appointment to the Don Watershed Regeneration Council. Additional appointments will be brought to the attention of the Authority members for approval once they are confirmed by their respective councils, business associations, agencies and groups.

#### **DON WATERSHED REGENERATION COUNCIL MEMBERSHIP**

<b>TRCA</b>	
Member	Dick O'Brien, Chair of the Authority, ex-officio
<b>MUNICIPAL &amp; REGIONAL STAFF</b>	
<i>City of Toronto</i>	
Member - Toronto N.	To Be Confirmed - April 15, 2004
Member - Toronto S.	To Be Confirmed- April 15, 2004
Member - Toronto E.	To Be Confirmed - April 15, 2004
Liaison	To Be Confirmed - April 15, 2004
<i>Region of York</i>	
Member	Brenda Hogg, Regional Councillor
Liaison	Barbara Jeffrey, Planning and Development Services Department
<i>Town of Markham</i>	
Member	Erin Shapero, Councillor
Liaison	To Be Confirmed
<i>Town of Richmond Hill</i>	
Member	Brenda Hogg, Regional & Local Councillor
Liaison	Jeff Walters, Engineering & Public Works Department
Liaison	Tracey Steele, Parks, Recreation & Culture Department
Alternate	Audrey Hollasch, Parks, Recreation & Culture Department
Liaison	Kelvin Kwan, Planning & Development Department
Alternate	David Collinson, Planning & Development Department
<i>City of Vaughan</i>	
Member	Sandra Yeung Racco, Councillor
Alternate	Peter Meffe, Councillor
Liaison	Marlon Kallideen, Commissioner, Community Services

<i>Environment Canada</i>	
Member	Carolyn O'Neill, Restoration Programs Division
Alternate	Rimi Kalinauskas, Restoration Programs Division
<i>Ministry of the Environment</i>	
Member (Corresponding)	Ellen Schmarje, Water Resources Unit
<i>Ministry of Natural Resources</i>	
Member	To Be Confirmed
<b>BUSINESS ORGANIZATIONS</b>	
Member	Glenn Abuja, Mountain Equipment Co-op
<b>ACADEMIC INSTITUTIONS</b>	
Member	Carmela Canzonieri, Professor, Env. Planning & Design, York Univ.
<b>COMMUNITY GROUPS</b>	
<i>Friends of the Don East</i>	
Member	James McArthur
Alternate	Andrew McCammon, Chair
<i>North Toronto Green Community</i>	
Member	Helen Mills
<i>Richmond Hill Naturalists</i>	
Member	Tom Waechter
<i>Task Force to Bring Back the Don</i>	
Member	Janice Palmer
Alternate	John Wilson, Chair
<i>Trout Unlimited Canada</i>	
Member	Eli Garrett, President, Toronto Chapter
<b>CITIZEN MEMBERS</b>	
Barb Anderson	Town of Richmond Hill
Margaret Buchinger	City of Toronto
Cassandra Bach	City of Toronto
Stephen Cockle	Town of Richmond Hill
Don Cross	City of Toronto
Laurian Farrell	Town of Markham (Business Location)
Phil Goodwin	City of Toronto
Peter Heinz	City of Toronto
Moyra Haney	City of Toronto
Brenda Lucas	City of Toronto
Deborah Martin-Downs	Town of Markham
Roslyn Moore	City of Toronto
Douglas Obright	City of Toronto
Nancy Penny	City of Toronto
Mel Plewes	City of Toronto
Ron Shimizu	City of Toronto
Beverley Thorpe	City of Toronto
Catherine Wood	City of Toronto
Miao Zhou	City of Toronto

## **DETAILS OF WORK TO BE DONE**

- Confirm the remaining members of the Don Watershed Regeneration Council;

One other interested applicant was unavailable at the time interviews were held. This individual will be interviewed for a position on the Don Watershed Regeneration Council in the near future. One space remains under the citizen members category for an additional representative. Any additional members to the Don Watershed Regeneration Council will be submitted to the Authority when finalized.

- Host an orientation bus tour of the watershed for interested members, confirmed for Saturday, April 24, 2004; and
- Host the first meeting, confirmed for Thursday, May 20, 2004.

**Report prepared by: Alex Blasko, extension 5280**

**For Information contact: Adele Freeman, extension 5238**

**Date: April 5, 2004**

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### **RES.#D31/04 -**

#### **DON WATERSHED REGENERATION COUNCIL**

Minutes of Meeting #9/03 and Meeting #10/03. The Minutes of Meeting #9/03 held on November 20, 2003 and Meeting #10/03 held on December 11, 2003.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THAT the Minutes of the Don Watershed Regeneration Council Meeting #9/03 and Meeting #10/03, as appended, be received.**

**CARRIED**

### **BACKGROUND**

Copies of the minutes of the Don Watershed Regeneration Council are forwarded to the Authority through the Watershed Management Advisory Board. These minutes constitute the formal record of the work of the Don Watershed Regeneration Council, and serve to keep the Authority members informed of the steps being undertaken to implement the Don Watershed Task Force's report "*Forty Steps to a New Don*" and to regenerate the watershed.

**Report prepared by: Kathy Stranks, extension 5264**

**For Information contact: Alex Blasko, extension 5280**

**Date: April 07, 2004**

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**RES.#D32/04 -**

**NUTRIENT MANAGEMENT ACT**

Update on Municipal Bylaws. Update on Municipal By-laws in support of the Nutrient Management Act.

Moved by: Frank Dale  
Seconded by: Shelley Petrie

**THE BOARD RECOMMENDS TO THE AUTHORITY THAT staff continue to monitor the implementation of the Nutrient Management Act and opportunities to utilize its provision in conjunction with the implementation of integrated watershed management plans;**

**AND FURTHER THAT the staff of the Toronto and Region Conservation Authority (TRCA), in the course of reviewing regional and local municipal official plans and other planning documents, advocate at the provincial and municipal level for the use of all available powers to manage potential threats to human health and protect sources of drinking and surface waters, including those tributary to Lake Ontario with respect to high risk activities and land uses until source protection plans are approved and implemented.**

**CARRIED**

**BACKGROUND**

At Watershed Management Advisory Board Meeting #7/02, held on February 14, 2003, TRCA staff reported on the status of Bill 81, the Nutrient Management Act (NMA) and TRCA's involvement in Conservation Ontario's consultation process to submit a collaborative report for the Ontario Ministry of Agriculture and Food (OMAF). In the interim, staff have been in receipt of regular OMAF updates and attended information sessions to maintain their understanding of the NMA and its implications to our partners and stakeholders.

The intent of Ontario's Nutrient Management Act, legislated through parliament in June 2003, is to better protect water quality resources in our communities through the development of individual Nutrient Management Plans in compliance with the NMA. This new legislation sets standards for nutrient management on lands producing or receiving organic or synthetic nutrients. Requirements for nutrient management are currently managed by municipalities through the Planning Act using zoning, site plan controls and by-laws. Nutrient Management Plan requirements are usually triggered through the issuance of building permits for new and expanding livestock operations.

A number of rural municipalities have established Nutrient Management By-laws in an attempt to provide a high standard of environmental practice in compliance with the mandatory requirements of the NMA. The principals of municipal bylaws typically focus on Minimum Separation Distance (MSD) criteria for separating new and existing land uses to ensure they are compatible, thereby reducing the potential for conflict between neighbours. An estimated 85 municipal Nutrient Management By-laws have been adopted in Ontario. In the TRCA jurisdiction, the Township of Uxbridge is the only municipality with a Nutrient Management By-law.

A report detailing the status of municipal regulations in Ontario titled, "Managing the Transition Between Municipal and Provincial Governance as Required by the Regulations Under the Nutrient Management Act" was prepared for the Ministry of Agriculture and Food by Wayne J. Caldwell in June, 2003. This report provides more details and analysis on the status, content and variances between the 85 existing Nutrient Management By-laws. In this report, Mr. Caldwell describes the Nutrient Management By-laws at best, as a "patchwork" with inconsistent levels of content and trigger mechanisms across Ontario. The variety of categories within the by-laws included Nutrient Management Plan development, approval and renewal, Expanding Operations, Minimum and Maximum Separation Distance, Landownership, Wellhead Protection Areas, New Barn Construction, Site Plan Control, Spreading of Biosolids and Manure Storage and Disposal. While the various Nutrient Management By-laws reflect the diversity of the rural communities in which they were designed to serve, there is a need to create more consistency within the categories as they relate to farming practices in all municipalities.

Juli Abouchar, Solicitor with the environmental law firm Willms & Shier, will address the members of the Watershed Management Advisory Board on legal aspects of Nutrient Management. Ms. Abouchar served as commission counsel to Justice O'Connor during the Walkerton Inquiry into contaminated drinking water and was recently (December, 2003) appointed to the Source Water Protection Implementation Committee by Environment Minister Dombrowsky. Ms. Abouchar's presentation is timely as TRCA staff proceed in the development of integrated watershed management plans, and the role of conservation authorities in the development of source protection plans.

The advisory committee report on Watershed-Based Source Protection Planning, titled "Protecting Ontario's Drinking Water: Toward a Watershed Based Source Protection Planning Framework," April 2003, recommended that:

17. *The province, municipalities and conservation authorities use their available powers to manage potential threats to human health and protect sources of drinking water by taking action with respect to high risk activities and land uses until source protection plans are approved and implemented.*

The report identified that these powers include provisions under the Planning Act for new land uses and the power of the Director of the Ministry of the Environment to manage risk in key locations.

Further discussions with Ontario Ministry of Agriculture and Food Nutrient Management Act representatives indicate that municipalities face many challenges in developing a Nutrient Management By-law, from a thorough understanding of the NMA and associated political pressures, to the urgency of addressing local and regional water quality issues.

#### **DETAILS OF WORK TO BE DONE**

TRCA staff through the development of integrated water management plans currently being undertaken, groundwater studies, source protection planning and the review of development permits will work within the powers available to the TRCA to continue to address the protection of surface and subsurface water quality. TRCA staff, through its stewardship programs, will continue to advocate and implement projects that assist in protecting water quality.

**FINANCIAL DETAILS**

Not applicable at this time.

**Report prepared by: Patricia Lowe, 5365**

**For Information contact: Patricia Lowe, 5365**

**Date: March 30, 2004**

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**TERMINATION**

ON MOTION, the meeting terminated at 11:35 a.m., on Friday, April 16, 2004.

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Dave Ryan  
Chair

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Brian Denney  
Secretary-Treasurer

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