THE TORONTO AND REGION CONSERVATION AUTHORITY

Watershed Management Advisory Board Meeting #1/04

Chair:	**Dave Ryan**
Vice Chair:	**Nancy Stewart**
Members:	**Gay Cowbourne**
	Frank Dale
	Cliff Jenkins
	Shelley Petrie
	Michael Thompson
	Dick O'Brien - Chair, Authority

February 13, 2004
10:30 A.M.
SOUTH THEATRE, BLACK CREEK PIONEER VILLAGE

AGENDA

1. MINUTES OF MEETING #5/03
(Enclosed herewith on Blue)

2. BUSINESS ARISING FROM THE MINUTES

3. DISCLOSURE OF PECUNIARY INTEREST AND THE GENERAL NATURE THEREOF

4. DELEGATIONS

5. PRESENTATIONS

5.1 A 15 minute presentation by Mike Price, General Manager, Water and Wastewater Service, City of Toronto, in regards to the City of Toronto's Wet Weather Flow Management Master Plan.

5.2 A presentation by Patricia Shortt-Galle, Regional Manager, Green Space Project, Transport Canada, in regards to item 7.2 - Transport Canada's Green Space Master Plan.

5.3 A presentation by Scott Jarvie, Coordinator Watershed Monitoring Program, TRCA, in regards to item 7.3 - Update on the Web-based Map Data Server - "Juturna" Project.

6. CORRESPONDENCE

7. SECTION I - ITEMS FOR AUTHORITY ACTION

7.1 CITY OF TORONTO WET WEATHER FLOW MANAGEMENT MASTER PLAN (WWFMMP) FINAL REPORT 3-5

7.2 TRANSPORT CANADA'S GREEN SPACE MASTER PLAN 6-8

7.3 UPDATE ON THE WEB-BASED MAP DATA SERVER - "JUTURNA" PROJECT 9-12

7.4 UXVILLE PROPERTIES LTD. ONTARIO MUNICIPAL BOARD HEARING
Township of Uxbridge, Regional Municipality of Durham 13-14

7.5 ASIAN LONGHORNED BEETLE (ALHB) 15-17

7.6 MEANDER BELT WIDTH DELINEATION PROCEDURES 18-20

7.7 AMENDMENT TO TERMS OF REFERENCE
Humber Watershed Alliance: 2004 - 2006 and Don Watershed Regeneration Council: 2004 - 2006 21-22

7.8 ENVIRONMENTAL ASSESSMENT FOR THE NATURALIZATION AND FLOOD PROTECTION OF THE LOWER DON RIVER
Report to Follow

8. NEW BUSINESS

NEXT MEETING OF THE WATERSHED MANAGEMENT ADVISORY COMMITTEE #2/04
APRIL 16, 2004, IN THE SOUTH THEATRE, BLACK CREEK PIONEER VILLAGE

Brian Denney,
Chief Administrative Officer

/ks

TO: Chair and Members of the Watershed Management Advisory Board
Meeting #1/04, February 13, 2004

FROM: Adele Freeman, Acting Director, Watershed Management Division

RE: **CITY OF TORONTO WET WEATHER FLOW MANAGEMENT MASTER PLAN (WWFMMP) FINAL REPORT**

KEY ISSUE

TRCA comments on the Wet Weather Flow Management Master Plan, Wet Weather Flow Policy, and opportunities for Toronto and Region Conservation (TRCA) to assist the City of Toronto in the plan's implementation.

RECOMMENDATION

WHEREAS the City of Toronto's Wet Weather Flow Management Master Plan provides detailed recommendations for addressing stormwater, combined sewer overflow, and infiltration/inflow problems, which have been identified by the Toronto and Region Remedial Action Plan (Clean Waters Clear Choices, 1994) and local watershed management strategies (Forty Steps to a New Don -1994, Legacy - A Strategy for a Healthy Humber -1997; and Greening Our Watersheds - Revitalization Strategies for Etobicoke and Mimico Creeks, 2002) as representing the most significant sources of impairment to Toronto's watersheds and waterfront;

WHEREAS the City's WWFMMP study followed an innovative, comprehensive approach;

THEREFORE LET IT BE RESOLVED THAT THE BOARD RECOMMENDS TO THE AUTHORITY THAT the Chair of the Authority send a letter of congratulations to the City of Toronto on the completion of the Wet Weather Flow Management Master Plan and express TRCA's intent to assist the City of Toronto with the plan's implementation;

THAT the TRCA promote a consistent approach to wet weather flow management among all municipalities throughout the Toronto watersheds through inter-regional workshops and joint projects;

THAT TRCA staff assist in WWFMMP implementation by incorporating specific actions within work programs including: watershed planning studies, wet weather flow policy, Regional Watershed Monitoring Network, ongoing education, outreach, stewardship and regeneration programs, and stormwater management technology performance evaluations;

AND FURTHER THAT staff continue to meet regularly and work with City of Toronto staff on the completion of the technical and management guidelines to support the implementation of Wet Weather Flow Policy and projects.

BACKGROUND

The Wet Weather Flow Management Master Plan was initiated by the former Metropolitan Toronto in 1997. Its goal was "to reduce, and ultimately eliminate the adverse effects of wet weather flow on the built and natural environment in a timely and sustainable manner, and to achieve a measurable improvement in ecosystem health of the watersheds." Following the Class Environmental Assessment process, the plan is being developed in four stages. Stage one, completed in 1998, involved collecting data on current environmental conditions and developing goals and objectives to guide the process. Stage two focused on developing a Wet Weather Flow Management Strategy for the City and was completed in August, 2003. Stage three and four of the planning process will focus on implementation of the master plan and monitoring the plan's effectiveness.

Development of the Wet Weather Flow Management Strategy included documentation of existing conditions, establishing targets, assessing potential wet weather flow control options, evaluation of flow management strategies and preparing a wet weather flow implementation plan. As part of this process, technical studies were prepared for each of the City of Toronto's six watershed study areas, including Mimico Creek, Etobicoke Creek, Humber River, Don River, Highland Creek, Rouge River, the combined sewer system study area and the waterfront. A wet weather flow management policy was also developed to translate technical study results and recommendations into policy form.

TRCA staff provided input to the WWFMMP throughout its 3-year development as a member of the 24 person steering committee, and through input to various sub-committees. TRCA contributed significant environmental data and Geographic Information Systems (GIS) mapping products to the study. Much of the information was drawn from previous watershed planning and reporting initiatives. Regular reports via the TRCA's watershed groups assisted in facilitating community input to the City of Toronto process.

TRCA staff conducted a review of the final draft technical documents and policy in July 2003. Comments on the master plan were discussed among staff and summarized in a letter to the City of Toronto, dated August 11, 2003. In the letter, staff commended the city on the innovative and comprehensive nature of the plan, expressed support for the overall management approach and encouraged the city to proceed with implementation. On specific matters staff recommended that the city:

- integrate modelling and evaluation of upstream stormwater management measures into further investigations regarding the potential benefits of the proposed deflector arms;
- adocate that the province develop improved stormwater management guidelines, including areas such as rates of discharge for erosion protection and erosion and sediment control during the construction phase;
- clarify the rationale for the extent of proposed restoration works, define restoration levels (e.g. limited, moderate, significant, enhanced) as they apply to each proposed site, and conduct detailed field assessments prior to proceeding with full scale planning for implementation of all proposed stream restoration works;
- locate ponds, if possible, outside the 100-year flood line, or at a minimum outside the 25-year flood line, while continuing to have consideration for other factors such as natural heritage features, public use needs and safety issues (as per TRCA's Valley and Stream Corridor Program policies); b) construct these ponds by excavation only; and c) carefully assess the cumulative hydraulic impact of all proposed ponds in valleys;

- develop stormwater policy implementation guidelines;
- continue to promote studies evaluating innovative stormwater best management practices (BMPs) and other stormwater management issues;
- continue to recognize TRCA as an important partner and make use of existing resources and programs, such as the Regional Watershed Monitoring Network, education, outreach, stewardship and regeneration programs.

Comments received by the city during the public and agency review period were considered and incorporated in the final master plan that was presented to Toronto City Council in late September, 2003. The master plan received final endorsement from City Council during its meeting held from September 22-25, 2003. As part of this resolution, the City of Toronto has agreed to delay further environmental assessment study of the proposed deflector arm at the mouth of the Humber River.

City staff are continuing to prepare *Technical and Management Guidelines* that will assist in the application of Wet Weather Flow policy and projects.

DETAILS OF WORK TO BE DONE

TRCA staff have considered opportunities to assist the city in implementation of the WWFMMP and have proposed projects within the five-year workplans and budget forecasts. Key areas include:

- modelling and evaluation of the water quality and stream flow benefits of stormwater retrofit programs and agricultural best management practices in “905" municipalities, and scenarios involving enhanced terrestrial natural heritage cover, as part of the Rouge and Humber watershed planning studies;
- cooperate with the city on a Geomorphic Systems Study for the Highland Creek watershed;
- develop expertise on the use of the city’s HSP-F models and apply them as part of watershed planning studies;
- maintain up to date hydrologic, hydraulic and floodplain mapping and other environmental databases and plans necessary to support detailed design studies associated with implementation of WWFMMP recommendations;
- performance monitoring and evaluation of innovative stormwater management technologies through the continuation of programs, such as the Stormwater Assessment Monitoring and Performance (SWAMP) Program;
- watershed and waterfront monitoring and reporting, through continuation of the Regional Watershed Monitoring Network and watershed report cards;
- education, outreach, stewardship and regeneration projects associated with specific WWFMMP recommendations through a variety of TRCA programs;
- input to the preparation of the city’s WWFMMP *Technical and Management Guidelines*

For information contact: Tim Van Seters, extension 5337 and Sonya Meek, extension 5253
For information contact: Tim Van Seters, extension 5337 and Glenn MacMillan, extension 5212
Date: February 2, 2004

TO: Chair and Members of the Watershed Management Advisory Board
Meeting #1/04, February 13, 2004

FROM: Adele Freeman, Acting Director, Watershed Management Division

RE: **TRANSPORT CANADA'S GREEN SPACE MASTER PLAN**

KEY ISSUE
Overview of the draft master plan for Transport Canada's Federal Green Space Lands and the proposed public consultation process.

RECOMMENDATION

THE BOARD RECOMMENDS TO THE AUTHORITY THAT staff review the master plan for Transport Canada's Federal Green Space Lands and prepare a follow-up report with recommendations to enable the Toronto and Region Conservation Authority (TRCA) to provide comments directly to Transport Canada;

THAT staff be directed to participate in the outlined public consultation process;

THAT the TRCA continue to work with Transport Canada to ensure that planning for Green Space Lands achieves the implementation of the A Watershed Plan for the Duffins Creek and Carruthers Creek, the Rouge North Management Plan, the Eastern Markham Strategic Review and the Oak Ridges Moraine Conservation Plan;

AND FURTHER THAT staff prepare a report on the outcomes of the public consultation process, proposed governance models for the Green Space Lands and future partnership opportunities with Transport Canada.

BACKGROUND
At Sustainable Communities Board meeting #3/03, held on October 3, 2003, a progress report on the Federal Government Green Space Lands Study outlined the approach taken to prepare a master plan for Green Space Lands that Transport Canada announced in March, 2001. In total, the Green Space Lands encompass approximately 3,051 hectares of land (2,251 on the Oak Ridges Moraine and 800 hectares in the Rouge watershed) on the Pickering lands site. The progress report also provided background on potential issues in developing this master plan and the unique opportunities that exist for Transport Canada to demonstrate their support for implementation of A Watershed Plan for the Duffins Creek and Carruthers Creek, the Rouge North Management Plan, the Eastern Markham Strategic Review and the Oak Ridges Moraine Conservation Plan.

A Green Space Stewardship Advisory Committee (GSSAC) was formed in the fall of 2002. Mr. Craig Mather was appointed by the Authority to this committee. Other representatives include: Green Door Alliance, Rouge Park Alliance, tenant representative, Oak Ridges Moraine Land Trust, Town of Markham, Township of Uxbridge, City of Pickering, York Region and Durham Region.

A group of consultants led by EDA Collaborative and SENES Consultants Ltd. were retained by Transport Canada to prepare the draft master plan which was completed in November, 2003.

The Green Space Master Plan was developed after six months of consultation with the Green Space Stewardship Advisory Committee (GSSAC). Draft copies of the plan were received on January 29, 2004, and staff are currently in the process of reviewing.

TRCA staff have not completed its review of this master plan. However, it appears that the majority of the issues described in the October 3rd Sustainable Communities Board report were investigated by GSSAC and the consulting team. One of the most important outcomes was the sustainability vision for the Green Space Lands which states:

> *The Green Space Lands will showcase Canada's leadership in sustainable green space management. The lands will provide compatible ecological, agricultural, recreational, educational and economic functions while respecting cultural heritage, the existing residential community and countryside within a management framework that can adapt to change. Stewardship principles and best management practices will guide the long term management of the Green Space Lands.*

Goal
The goal of the Green Space Lands is to establish a sustainable balance among the physical, social and economic environments that protect the countryside landscape and its ability to support human health for future generations.

Objectives
The objectives for protecting the countryside landscape and ensuring sustainability include:

Ecological Function
Agricultural Function
Cultural Heritage
Airport Function
Community and Social Sustainability
Public Use
Transportation
Financial Viability
Landscape Protection

Proposed Management Areas
The draft master plan identifies three management areas for the Green Space Lands: Ecological, Countryside and Community.

Ecological Management Area
The draft master plan adopted the management concepts of an enhanced terrestrial heritage system, introduced in the Duffins Creek and Carruthers Creek watershed plans, as an integral element of function. In addition, the targeted natural heritage system developed through TRCA's Regional Terrestrial Natural Heritage Program, was employed as the ultimate natural ecological management area for the Green Space Lands. This ecological management area represents approximately 60% of the lands within the Green Space Lands.

Countryside Management Area
The countryside area protects and enhances agricultural uses and associated countryside landscapes. Recreational use in the countryside areas will respect this intended use.

Community Area
The master plan recognizes an opportunity to revitalize the Village of Altona. Potential uses for this hamlet will be investigated.

Special Study Areas
Two Special Study Areas within the Rouge watershed have been identified. The draft master plan recognizes that these areas warrant future study in terms of their role within the natural corridor of the Rouge and Little Rouge.

Implementation
A number of projects were identified to implement the draft master plan. The TRCA clearly has an implementation role in each of these projects.

1. Governance and Management

- Governance Model
- Property Management Model
- Partnership Strategy
- Marketing Strategy

2. Planning and Integration and Strategies

- Integrated Pickering Lands Site Draft Master Plan
- Special Study Areas
- Green Space Transportation Strategy
- Agricultural Management Plan
- Airport Mitigation Plan

3. Detailed Planning and Design

- Public Use Trails and Recreational Facilities
- Ecological Monitoring Plan
- Local Heritage Structures and Cultural Heritage Evaluation
- Ecological Transition Study

Public Consultation Process
At the time this report was prepared, details on the proposed public consultation process were unavailable. It is anticipated that these details will be included in the presentation by Transport Canada. It is understood that TRCA staff will participate in the consultation process and offer Transport Canada and the GSSAC any assistance they need in preparing for the consultation meetings.

Report prepared by: Gary Bowen, extension 5385
Date: January 27, 2004

TO: Chair and Members of the Watershed Management Advisory Board
Meeting #1/04, February 13, 2004

FROM: Adele Freeman, Acting Director, Watershed Management Division

RE: **UPDATE ON THE WEB-BASED MAP DATA SERVER - "JUTURNA" PROJECT**

KEY ISSUE
Report on the project close for JUTURNA (a pilot web-based data management and Geographic Information System) under the Toronto and Region Conservation Authority's (TRCA) Regional Watershed Monitoring Program in the Humber watershed.

RECOMMENDATION

THE BOARD RECOMMENDS TO THE AUTHORITY THAT staff be directed to review the options for the expansion of this web-based map/data system to report on additional monitoring indicators in the Humber, other watersheds and the waterfront within the TRCA jurisdiction.

BACKGROUND
In 2001, the TRCA initiated a Regional Watershed Monitoring Program in order to provide a comprehensive, integrated and coordinated approach to environmental monitoring in the Greater Toronto Area. The program includes the establishment of a monitoring network that will endeavour to bring together a group of like-minded, cooperative agencies and organizations to collect, store, distribute and report on environmental monitoring data that furthers the interests of all involved parties. This monitoring network builds upon the existing local and project-specific monitoring efforts of its partners.

PROJECT OBJECTIVES
- To develop a program that provides the necessary information to assess the health of the watersheds, subwatersheds, waterfront ecosystems and Remedial Action Plan (RAP) area, spatially and temporally.
- To identify a set of indicators that reflect ecosystem condition, integrate the monitoring requirements of the RAP with report cards for individual watersheds, and are compatible with municipal state of the environment reporting and other broad programs like State of the Lakes Ecosystem Conference (SOLEC), for the Great Lakes basin, and the provincial policy performance indicators.
- To develop an efficient program that builds upon existing monitoring activities, avoids duplication between agencies, municipalities, and organizations, is cost effective in allocating the best use of resources and informs management decisions.
- To identify ways to engage and involve the public, interest and school groups in meaningful monitoring activities.
- To develop and obtain agreement from stakeholders on a set of monitoring protocols for the collection, analysis, storage and distribution of data on the indicators that are identified.

The JUTURNA project focuses on the development a web-based data assessment and reporting system to support the TRCA's Regional Watershed Monitoring Program. The project evolved out of a partnership initiated in 2001 between TRCA, York University and Citizens' Environment Watch, an environmental non-government organization housed at the University of Toronto. At that time, a similar but smaller scale data system called MapReflections was developed primarily for community monitoring data. The success of this initial project demonstrated the value of the partnership and the potential for expanding the work to more closely meet the objectives of the Regional Watershed Monitoring Program.

As a pilot project, its purpose is to demonstrate how biological monitoring and abiotic data can be presented in a geographic context to facilitate the sharing of watershed monitoring data with civic, scientific and political stakeholders.

This will allow for a better appreciation of potential physical factors in catchment areas that may influence findings from in-stream monitoring activities. The geographic scope for this pilot project is the Humber watershed.

For this pilot project, four indicators of stream quality are provided, namely the Fish Index of Biotic Integrity, Benthic Invertebrate Aggregate Assessment, Thermal Stability and Basic Water Chemistry. All indicators use data collected under the Regional Watershed Monitoring Program, with the first three using established TRCA data analysis and interpretation procedures. By using these data procedures, monitoring data can be "rolled-up" to provide a stream condition that can be readily understood. For example, the Benthic Invertebrate Aggregate Assessment uses a series of 10 common indices (e.g. Diversity, Hilsenhoff Biotic Index) with regionally-specific criteria in terms of the level of stream impairment. By comparing the criteria for each index (based on an unimpacted stream site) with the values from a stream site of interest, an aggregate assessment can be performed over all 10 indices with the designation of an appropriate stream condition. Sites can be designated as either impaired or potentially impaired under this procedure. While the results are not specific to the types of possible impacts, trends in the data may raise "red-flags", and prompt more intensive investigation. Data provided through this website is also available in a raw format where users can conduct their own analyses.

Beyond data analysis and interpretation functions, the project also provides the opportunity for community stakeholders to become engaged in more meaningful ways when watershed monitoring information is being disseminated. Stakeholders will have the option of searching and visualizing watershed monitoring information with greater ease, but also to connect with existing community-based environmental organizations (e.g. Citizens' Environment Watch - CEW) to consider participating in data collection, assessment and sharing information. A key step towards better community engagement which this project provides, is for users to be able to input their own data and generate analyzed reports for their monitoring sites. This provision is key to positioning TRCA as a leader in the support of community-based monitoring activities.

The embodied energy of shared interests, identity and trust - what has been called "social capital" - is harnessed and focused to support the stewardship of the region's environment. This project represents a small but important step toward integrating and reinforcing programs.

The pilot project is presently set to close February, 2004. It was presented and well received at the 10th A.D. Latornell Conservation Symposium in November, 2003. A presentation to key TRCA staff members was also made in December, 2003 for information, discussion and future opportunity purposes. It has undergone a two week user-acceptance-testing period involving a group of TRCA staff members and external partners (e.g. CEW). This resulted in the identification of technical and layout issues which are currently being addressed.

RATIONALE

One of the key elements of the Regional Watershed Monitoring Program is the data collected for each of the indicators included in the program. The ability to analyze, interpret and report on the data to the program stakeholders, including provincial agencies, municipal partners and the general public, is critical to the overall success and effectiveness of the monitoring program. Web-based reporting is yet another opportunity to make data available and understandable in a watershed context.

The partnership with York University will not only facilitate the development of the web-based application required for the data analysis and reporting/sharing, but will provide the Web/GIS platform from which the application can be operated. This platform (ARCIMS) and the infrastructure required to operate it are currently beyond the TRCA's IT and Web infrastructure capabilities. Further, this partnership and work with York University also provides another opportunity to further develop the monitoring "network" that has been identified under the Regional Watershed Monitoring Program.

DETAILS OF WORK TO BE DONE

Once the work identified during the user-acceptance-testing period has been completed, the project will be made available to the public through the TRCA website. Arrangements will be made to present the completed pilot project to York, Peel, Durham and Toronto municipalities. In addition, the results of the project will be shared in written venues such as EMAN's Monitor publication.

Next steps for the project will include the evaluation of adding additional features within the context of the Humber watershed, or to expand existing features to other watersheds. During this process, funding to support this intensification or expansion of the project will be determined. Funding is likely to come primarily from the Regional Watershed Monitoring Program, in addition to new funding partners.

The website will continue to be hosted by York University as part of the Regional Monitoring Network, or until such a time as the TRCA GIS and web infrastructure could facilitate it.

FINANCIAL DETAILS

For the work completed to date, TRCA has provided support at a total cost of $35,000, with an additional $12,000 provided by Environment Canada. York University has contributed approximately $22,500 of in-kind contributions to the project related to software costs and the provision of graduate assistants. In addition, York University will contribute (in-kind) approximately $2,000/year related to the platform hosting costs as long as the infrastructure remains at York.

The further development of the application to intensify or expand this project will be considered following completion. Funding opportunities to support this additional work will be reviewed at that time.

Report prepared by: Jeff Borisko, extension 5333
For Information contact: Scott Jarvie, extension 5312
Date: October 10, 2003

TO: Chair and Members of the Watershed Management Advisory Board
Meeting #1/04, February 13, 2004

FROM: Adele Freeman, Acting Director, Watershed Management Division

RE: **UXVILLE PROPERTIES LTD. ONTARIO MUNICIPAL BOARD HEARING**
Township of Uxbridge, Regional Municipality of Durham

KEY ISSUE
Authorization for party status before the Ontario Municipal Board (OMB) on referrals related to a draft plan of subdivision and zoning by-law amendment to permit an industrial subdivision on the Oak Ridges Moraine.

RECOMMENDATION
THE BOARD RECOMMENDS TO THE AUTHORITY THAT party status before the Ontario Municipal Board regarding approval of a draft plan of subdivision and zoning by-law amendment which are not in conformity with the Oak Ridges Moraine Conservation Act and Plan, be authorized;

THAT staff continue to work cooperatively with our municipal partners, provincial agencies and appellants by ensuring that the requirements of the Oak Ridges Moraine Conservation Act and Plan are upheld;

THAT staff be authorized to retain legal counsel to pursue this appeal before the Ontario Municipal Board;

AND FURTHER THAT the Ontario Municipal Board and all parties and participants to the hearing be so advised.

BACKGROUND
The appeal of the Township of Uxbridge Zoning By-law 2003-064 by the Durham Conservation Association (DCA) and the Save The Oak Ridges Moraine (STORM) Coalition relate to a parcel of land approximately 37 ha (90 acres) in size and located north of Highway 47, west of the 2nd Concession and east of Regional Road 30, in the Township of Uxbridge. The subject lands and the adjacent partly built-out phase 1 industrial subdivision are located in the Countryside Area designation of the Oak Ridges Moraine Conservation (ORMC) Plan . All parties and participants now agree that the subdivision and zoning applications fall under the "transitional" provisions of the ORMC Act, and so must be in conformity with the "prescribed provisions" of the ORMC Plan. Sections 22 (2) and 26 (2) of the ORMC Plan, which prohibit development and site alteration within Key Natural Heritage Features (KNHF) and Hydrologically Sensitive Features (HSF) and their Minimum Vegetation Protection Zone (MVPZ), are two of the prescribed provisions with which decisions made under the Planning Act must be in conformity. A small wetland on the property has been identified on the provincial Oak Ridges Moraine mapping, which the proponent intends to fill in. Toronto and Region Conservation Authority (TRCA) staff previously requested the proponent to provide detailed, site-specific data to demonstrate what ecological attributes and functions were associated with this wetland, to determine if it met the provincial (draft) criteria to be considered a KNHF/HSF. Insufficient information was provided by the proponent in their submission in the fall of 2003 to make this determination.

RATIONALE
A pre-hearing on this matter was convened by the Ontario Municipal Board (OMB) on January 6, 2004, prior to staff being able to bring a report forward to the Watershed Management Advisory Board. TRCA staff attended the pre-hearing to request party status at the hearing and were granted party status by the OMB. The decision/order issued by the OMB after the pre-hearing identified that the principal issue for the hearing was whether an area of the proposed subdivision is to be a KNHF as a wetland and not developed. The OMB has scheduled a seven day hearing on the matter, commencing March 23, 2004.

DETAILS OF WORK TO BE DONE
Staff is requesting the authorization of the Authority to retain legal counsel to argue that the commencement of the OMB hearing is premature until the appropriate studies to address the ecological issues have been completed and reviewed. Staff and retained legal counsel will continue to work with the parties and participants to the hearing to resolve the outstanding issues and will continue to represent the interests of the TRCA before the OMB.

Report prepared by: David Burnett, extension 5361
For Information contact: David Burnett, extension 5361
Date: February 02, 2004

TO: Chair and Members of the Watershed Management Advisory Board
Meeting #1/04, February 13, 2004

FROM: Adele Freeman, Acting Director, Watershed Management Division

RE: **ASIAN LONGHORNED BEETLE (ALHB)**

KEY ISSUE
Status report on the survey and eradication efforts and Toronto and Region Conservation Authority (TRCA) expenditures in regard to ALHB

RECOMMENDATION

THE BOARD RECOMMEDS TO THE AUTHORITY THAT the Toronto and Region Conservation Authority continue to provide staff to assist in with field survey requirements at a total estimated cost of $365,000, to be reimbursed by the Canadian Food Inspection Agency (CFIA), to the end of 2004;

THAT staff continue to assist in the development and implementation of ALHB survey, data collection and eradication protocols, on a cost recovery basis;

THAT staff be directed to identify potential TRCA properties that may be suitable for temporary wood collection and disposal operations in advance of the Ministerial Order;

THAT staff be authorized to engage certified arboricultural contractor(s) to support the timely completion of the host tree removal program as requested by CFIA, subject to the conditions of TRCA's Purchasing Policy;

AND FURTHER THAT staff report back on progress made towards a tree replacement program and implications for the TRCA.

BACKGROUND
In September, 2003, the Canadian Food Inspection Agency positively identified the first ALHB infestation in Canada in the Steeles Avenue West and Weston Road industrial area of Toronto and Vaughan. Subsequent to the identification, CFIA enlisted the aid of the TRCA, along with other partners including the City of Toronto, City of Vaughan, the Regional Municipality of York, the Canadian Forest Service (CFS) and the Ontario Ministry of Natural Resources (OMNR). Immediately, the CFIA implemented a program of ground and aerial surveys to delimit the extent of the infestation. These survey efforts further revealed four satellite infestations which are found in the Thistletown residential area in the City of Toronto, the Ansley Grove and Russet Way areas in Woodbridge, and the Beechwood Cemetery in Concord. To date, no infestation has been found on TRCA properties.

The ALHB is a pest native to Asia (China, Korea and Japan) and has no known natural predators or controls in North America. Infestations in New York (1996), Chicago (1998) and New Jersey (2002) have resulted in the removal of thousands of infected trees and the expenditure of more than $100 million dollars by the United States Department of Agriculture to combat the ALHB outbreaks. The survey and control programs in these American cities are ongoing.

The ALHB feeds on many broadleaf tree species common to the urban landscape and forests found throughout Ontario. Known host species include maple (*Acer*), birch (*Betula*), elm (*Ulmus*), willow (*Salix*), horsechestnut (*Aesculus*), poplar (*Populus*), hackberry (*Celtis*) and mountain ash (*Sorbus*). Recent surveys of the infestation zones indicate that these species represent approximately 55% of all species on both public and privately-owned lands.

The eradication plan calls for a variety of actions within four zones: primary, secondary, tertiary and protection. All host trees within the primary zone (infested) are to be removed and chipped during the winter months. The secondary zone - defined as a 400 metre swath surrounding the primary zone - is to be treated in the same manner. The tertiary zone - a further 400 metre swath beyond the secondary zone - calls for the treatment or removal and chipping of all known host trees. Treatment is defined as four years of successive annual application of the chemical imidacloprid, together with ongoing annual surveys of all treated trees to look for signs of ALHB activity (oviposition sites and/or exit holes). Treatment with imidacloprid is not yet approved as the chemical is not registered for this use in Canada. An application is currently before the Pesticide Management Review Agency (PMRA) seeking an emergency registration. The protection zone is a further 800-metre band surrounding the tertiary zone in which survey of host species for signs of ALHB will be ongoing.

As a further measure to control the spread of ALHB, the CFIA may issue a Ministerial Order placing a quarantine on affected woody materials in an area approximately 48 km^2 with boundaries as yet to be advised.

DETAILS OF WORK TO BE DONE

The TRCA continues to support the CFIA-led initiative with staffing to assist in the delimitation and data collection surveys. Together with other partners and stakeholders, staff also represent TRCA interests on the Operational and Communications Subcommittees. TRCA staff, drawn from all sections of the TRCA, have been participating since September, 2003, and have collectively expended more than 5,300 hours of staff time as of the end of 2003.

The federal government has acknowledged to its partners that it will reimburse all costs associated with survey, removal and disposal of trees in full. Recently, the TRCA submitted its 2003 invoice to the CFIA for reimbursement of expenditures incurred in the survey effort, totaling $105,953. For the period of January 01 to March 31, 2004, the CFIA has requested that TRCA submit monthly invoices for reimbursement. Staff are seeking commitment from the CFIA to be able to better quantify its committment for support of the survey, data collection and removal programs and to be able to effectively and efficiently deploy staff resources to service this and other TRCA programs and initiatives.

The CFIA eradication protocol calls for the removal of all known host species within the primary and secondary zones of the main infestation area representing some 11,000 trees. These trees are scheduled to be removed by spring 2004 in an effort to halt the spread and eradicate the ALHB population. TRCA may be called upon to assist in the removal program to meet the target timelines. As such, it may be necessary for staff to engage arboricultural contractor(s) to aid in the timely completion of the required removals. Such expenditures would be eligible for complete reimbursement by the federal government.

Should the Ministerial Order come into effect, there will be a need for temporary sites to be established to deal with the quarantined wood generated from commercial arboricultural practices, residential landscaping and homeowner yard waste from pruning. The partners are now looking to identify potential sites that may serve as local collection points for the various communities to properly dispose of quarantined materials, subject to whatever restrictions would be placed on such activities by the Ministry of Environment under its solid waste management mandate. TRCA may be requested to provide temporary collection sites in support of the Order.

The CFIA has stated that the replacement and replanting of trees is not a mandated activity under the Plant Protection Act, and as such, there is no funding available from the agency to support tree replacement. The TRCA and its municipal and regional partners have initiated discussions on the mechanisms and potential funding sources available to provide for a replanting program. A meeting, hosted by TRCA, has been set for February 9, 2004, to begin to explore partnership possibilities that may lead to positive results in this regard.

FUNDING DETAILS

All expenditures related to the TRCA's costs of involvement in the ALHB survey and control program are tracked in account 116-77. Regular invoices are prepared for reimbursement by CFIA. The status of funding for the 2004 federal fiscal year is as yet under review.

Report prepared by: Dave Rogalsky, extension 5378
For Information contact: Adele Freeman, extension 5238
Dena Lewis, extension 5225
Dave Rogalsky, extension 5378
Date: February 03, 2004

TO: Chair and Members of the Watershed Management Advisory Board
Meeting #1/04, February 13, 2004

FROM: Adele Freeman, Acting Director, Watershed Management Division

RE: **MEANDER BELT WIDTH DELINEATION PROCEDURES**

KEY ISSUE
To adopt a standard Toronto and Region Conservation Authority (TRCA) protocol for meander belt width delineation.

RECOMMENDATION

THE BOARD RECOMMENDS TO THE AUTHORITY THAT the report entitled "Belt Width Delineation Procedures", prepared by Parish Geomorphic Limited, be adopted as the standard protocol for delineating the meander belt width of watercourses within the jurisdiction of the Toronto and Region Conservation Authority;

AND FURTHER THAT TRCA staff be directed to undertake the preparation of a guidance document for the application of meander belt width delineation principles, as well as other guidelines and objectives of the TRCA and its partner agencies, in the design of watercourse crossings.

BACKGROUND
The development of the Belt Width Delineation Procedures document was initiated by the TRCA in 1999. The purpose of the project was to develop a standard protocol for the delineation of meander belt width for watercourses within the TRCA jurisdiction. The development of a standard, defensible methodology for determining meander belt width was required to support the TRCA Valley and Stream Corridor Management Program, which uses meander belt width in defining stream corridors and in determining limits of development adjacent to valley systems. The meander belt is defined as the area within which a watercourse may be expected to migrate and change, as a result of fluvial processes. As such, the meander belt width is a useful tool for planning purposes to predict the area that the watercourse will likely occupy in the foreseeable future, thereby minimizing risk to safety, property and infrastructure.

Parish Geomorphic Limited (PGL) was retained by the TRCA to develop a protocol, based on principles of fluvial geomorphology, for delineating meander belt width. PGL conducted an extensive literature review to assess the current state of scientific knowledge regarding watercourse channel migration and meander belt development. Based on the results, PGL developed technical procedures that allow delineation of the meander belt for a variety of scenarios that would be encountered in the jurisdiction of the TRCA. These were circulated for review to a number of notable academics and fluvial geomorphology consultants, as well as TRCA staff, and the resulting feedback was integrated into final Belt Width Delineation Procedures document.

The final Belt Width Delineation Procedures document prepared by PGL contains the following:

- Introduction to the purpose of delineating meander belts and their context for use in the Valley and Stream Corridor Management Program

- Overview of fluvial processes and watercourse movement, including a definition of the meander belt and a summary of the processes of meander formation and migration.

- Summary of materials, general methods and preparatory work required prior to undertaking a meander belt delineation.

- Procedure for delineating meander belt width for general planning studies, such as subwatershed studies, to represent the general area that the meander belt occupies within a study area.

- Procedures for accurate meander belt delineation as a component of detailed planning studies, to assist in establishing limits for development or determining appropriate configuration of watercourse crossing structures. Sub-procedures which address the conditions of altered hydrologic regime and channel alteration that are found in the GTA are included.

RATIONALE

A primary application of meander belt width delineation is in the design of watercourse crossing structures. The TRCA Valley and Stream Corridor Management Program requires that structural abutments for crossing structures be located outside the meander belt width or the 100-erosion limit of a watercourse. There are also criteria imposed by the TRCA and other agencies related to hydraulics, terrestrial ecology, fish passage and navigability that affect the design of crossing structures. However, a comprehensive list of these requirements is not available. As a result, it is often unclear which criteria apply to a particular crossing, which has led to extensive debate between the TRCA and proponents during the permitting process.

It is proposed that a Stream Crossing Design Guide be developed that will provide proponents with a set of consistent, clearly defined criteria for the design of crossing structures within the jurisdiction of the TRCA. The development of the document will be guided by a technical steering committee consisting of representatives from the TRCA, Fisheries and Oceans Canada, Ontario Ministry of Natural Resources, Ontario Ministry of Transportation, regional and local municipalities, and the Urban Development Institute.

DETAILS OF WORK TO BE DONE

The final Belt Width Delineation Procedures report is complete and the document is ready for circulation upon approval. Copies of the report are available to Authority members upon request.

The development of the Stream Crossing Design Guide will include the following tasks:

- Establish a technical steering committee to guide document development.
- Prepare a detailed Terms of Reference for the project with input from TRCA staff and the technical steering committee.
- Retain a consultant to undertake the literature review and preparation of the document.
- Develop and publish the document with review and input from the technical steering committee.

FINANCIAL DETAILS
A request for $25,000 in funding from Fisheries and Oceans Canada for the development for the Stream Crossing Design Guide has been made and final approval is pending.

Report prepared by: Ryan Ness, extension 5615
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Date: February 02, 2004

TO: Chair and Members of the Watershed Management Advisory Board
Meeting #1/04, February 13, 2004

FROM: Adele Freeman, Acting Director, Watershed Management Division

RE: **AMENDMENT TO TERMS OF REFERENCE**
Humber Watershed Alliance: 2004 - 2006 and Don Watershed Regeneration Council: 2004 - 2006

KEY ISSUE
Amendments to Section 3 of the Terms of Reference for the Humber Watershed Alliance and Don Watershed Regeneration Council: 2004-2006

RECOMMENDATION

THE BOARD RECOMMENDS TO THE AUTHORITY THAT the following amendments be made to Section 3.0 of the Terms of Reference for the Humber Watershed Alliance: 2004 - 2006 and the Don Watershed Regeneration Council: 2004 - 2006:

i) the membership from the Toronto and Region Conservation Authority (TRCA) outlined in Section 3.1 be amended to read: "the Chair is Ex-officio"; and

ii) the subsection reference to 3.1.3 in the second paragraph of Section 3.6 be amended to 3.3, such that the paragraph read: "Resignations may be filled based on the recommendation of the selection committee as described in Item 3.3 above.".

BACKGROUND
The Terms of Reference for the Humber Watershed Alliance: 2004 - 2006 and the Don Watershed Regeneration Council: 2004 - 2006, were approved through Resolution A289/03 and A290/03, respectively, at Authority Meeting #10/03, held on January 9, 2004. Interviews will be conducted on March 29th and 30th, 2004, for positions on both watershed committees. Authority members interested in participating in the interview process are asked to advise staff.

RATIONALE
It was determined after approval of the Terms of Reference documents that there existed an incorrect reference to subsection 3.1.3, rather than 3.3, within Section 3.6. In terms of meeting quorum requirements, it was also advised that having the Chair of the Authority as Ex-officio on TRCA's watershed committees would be prudent. Given that the membership for the Humber and Don committees has yet to be finalized, staff are recommending the amendments to the membership section of the Terms of Reference for these two watershed committees be made at this time.

The Terms of Reference for the Etobicoke-Mimico Watersheds Coalition expires at the end of 2004, therefore staff are suggesting the change in membership be considered when drafting the new Terms of Reference. The Duffins and Carruthers Creek Watershed Task Forces have completed their mandates and as such are not functioning watershed committees at this time. The staff recommendations contained in this report will be considered in any future committees established for these watersheds.

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Date: January 28, 2004