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FIVE-YEAR WORK PLAN FOR WATERSHED PLANNING STUDIES OAK RIDGES MORAINÉ CONSERVATION PLAN

The Planning and Economic Development Committee recommends the following:

- 1. The presentation by Mike Walters, Director of Environmental Services, Lake Simcoe Region Conservation Authority, be received; and**
- 2. The recommendations contained in the following report, January 22, 2004, from the Commissioner of Planning and Development Services and the Commissioner of Transportation and Works, be adopted:**

1. RECOMMENDATIONS

It is recommended that:

1. The five-year work program for completion of Watershed Planning studies to fulfill requirements of the Oak Ridges Moraine Conservation Plan (ORMCP), submitted by the Lake Simcoe Region Conservation Authority (LSRCA), and the Toronto and Region Conservation Authority (TRCA), and as outlined in this report, be received for information and endorsed subject to yearly budget discussions and allocations.
2. The Toronto and Region Conservation Authority and Lake Simcoe Region Conservation Authority be requested to provide twice yearly progress reports to Planning and Economic Development Committee on this Watershed Planning process
3. Regional staff continue to work with staff of the Conservation Authorities to ensure the timely and cost efficient delivery of these watershed components in keeping with our requirements under the ORMCP.

2. PURPOSE

The purpose of this report is to advise Committee and Council of the 2003 accomplishments and the 2004 work program to be undertaken by the LSRCA and TRCA to assist the Region in satisfying the watershed planning requirements of the ORMCP and to provide Committee with the first of the semi-annual Authority updates on progress.

3. BACKGROUND

The Province filed the ORMCP on April 22, 2002. The Plan required York Region and local municipalities to bring their Official Plans and zoning bylaws (in the case of local municipalities) into conformity with the ORMCP by April 22, 2003 and October 22, 2003 respectively. This conformity date was achieved by the Region and has largely been achieved by the area municipalities.

The Moraine Plan also contains several other critical target dates relating to the completion of Watershed Planning.

Section 24 (1) of the ORMCP requires that: “Every upper-tier municipality and single-tier municipality, shall, on or before April 22, 2003, begin preparing a watershed plan in accordance with subsection (3) for every watershed whose streams originate within the municipality’s area of jurisdiction.” Subsection (3) outlines the basic minimum requirements that are expected to be included in a “Watershed Plan”.

If these watershed plans are not completed by April 23, 2007, then “Major Development” (development greater than 4 lots or greater than 500 m²) within the Oak Ridges Moraine portion of watersheds will be restricted.

Further, Section 24(7) of the ORMCP specifies that a water budget and conservation plan as per Section 24(4)(c) must be provided with “every application that is commenced on or after April 22, 2004 and relates to the part of The Regional Municipality of York (on the Oak Ridges Moraine) that is served by the Yonge Street Aquifer”.

LSRCA and TRCA have been actively working to develop and maintain watershed plans in York Region for many years. Subsequent to the introduction of the ORMCP, Regional staff and staff of the conservation authorities (CAs) have worked together to develop a multi-year work plan to ensure that the ORMCP requirements in York Region are met. This workplan is described in Section 4 of this report and is included as *Attachment 1* to this report

Regional Council, at its meeting of June 26, 2003, endorsed Clause 24 of Report 6 of the Transportation and Works Committee which:

- Described the requirements necessary to complete watershed planning to comply with the ORMCP.
- Demonstrated to the Ministry of Municipal Affairs that the Region had commenced the Watershed Planning Studies by April 22, 2003.
- Requested a one-year extension for delivery of the water budget and water conservation plan for the area served by the Yonge Street Aquifer from the time all relevant Technical Guidelines relating to the preparation of these elements of the Moraine Plan were delivered.

4. ANALYSIS AND OPTIONS

Staff of LSRCA, TRCA, and the Region have co-operatively developed a five-year work plan that will meet the watershed plan requirements of the ORMCP. The first year of this work program was 2003 and budget allocations were included in the approved 2003 budget for the programs. A comprehensive work plan and budget estimate for the remaining four years has been prepared by the CAs. (*Attachment 1*).

The work plan will produce the supporting technical information and watershed plans to satisfy requirements of the ORMCP. The watershed plans produced through this effort will enable the Region and local municipalities to include the appropriate objectives and principles of watershed plans into their planning documents in accordance with the ORMCP.

The work plan proposed by the CAs is based on the methodology applied to the Duffins Creek and Carruthers Creek Watershed Plan prepared by TRCA in 2003. It is generally accepted that this watershed plan represents the evolution of watershed planning and the best example of a Plan that will meet the intent of the ORMCP. Further, this Plan has been referenced by the Ontario Ministry of the Environment in the draft ORM technical guidance documents currently in preparation. It is therefore considered to be an appropriate standard for developing consistent watershed plans across York Region and the Oak Ridges Moraine.

The watershed plan requirements of the ORMCP encompass a wide number of disciplines and the resultant watershed plans are expected to have a profound influence on the planning and development initiatives in York Region and beyond. Given this significance, it is reasonable to request that TRCA and LSRCA provide updates for Planning and Economic Development Committee twice per year. The first of these updates is included in this report. In addition, Authority staff will be required to provide an itemized listing of deliverables in each year of the program along with their estimated budget costs and the actual costs on completion.

4.1 Highlights of the 2003 Watershed Planning Budget Year

As previously indicated, work to meet the watershed planning requirements of the ORMCP was initiated in 2003. This work included:

- development of the workplan and approach
- detailed project planning
- technical studies

The key 2003 accomplishments by Conservation Authority are outlined below.

4.1.1 2003 - Lake Simcoe Region Conservation Authority

The East Holland River, West Holland River and Maskinonge River subwatersheds are considered to overlie the Yonge Street Aquifer and work in these areas was prioritized to enable completion of the water budget and conservation plan requirements by April 22, 2004.

Work to update the subwatershed plans for the Black River, East Holland River, and Maskinonge River subwatersheds were also initiated in 2003. Work in the West Holland River subwatershed involved assessing watershed health and production of the State of the Watershed Health report.

Other work completed in 2003 includes:

- aquatic management inventories
- Terrestrial natural heritage mapping
- water quality and quantity inventories (including base flow estimates)
- compilation mapping
- predictive nutrient model selection
- stormwater management facility updates
- Water budget and water balance process definition.

4.1.2 2003 - Toronto and Region Conservation Authority

Watershed planning work in the TRCA watersheds in 2003 focussed on the Rouge River, Humber River and Don River subwatersheds. The final report for the watershed plan for Duffins Creek and Carruthers Creek was prepared. This work will be revisited before 2007 to ensure that it meets the expectations of the ORMCP.

The Rouge River subwatershed received the greatest attention in 2003. Work initiated includes:

- project management workplan preparation
- water budget data collection and modelling study initiation
- water use assessment
- groundwater quality and quantity study
- surface water quality study
- aquatic resource data collection and analysis
- Terrestrial data collection and analysis.

Work in the Humber River and Don River subwatersheds focussed on data collection for water budget and modelling analysis.

4.2 Workplan for the 2004 Watershed Planning Year

Substantial effort is proposed by LSRCA and TRCA in 2004. This work will continue to take the form of technical studies on which the watershed plans will be based. The 2004 program is outlined below by Conservation Authority.

4.2.1 Lake Simcoe Region Conservation Authority

The planned activities for LSRCA subwatersheds in 2004 include the following initiatives:

- Improving understanding of surface flow characteristics through monitoring and modelling.
- Improving understanding of water use within the watersheds through monitoring, detailed inventories, mapping, and modelling analysis.
- Developing detailed water budgets using historical data, water use data, and available modelling tools.
- Improving understanding of aquatic ecosystem and habitat through data collection, predictive modelling and analysis.

- Improving understanding of terrestrial natural heritage through detailed mapping, modelling, and analysis.
- Improving understanding of geomorphologic features and the relationships to watershed health.
- Managing the project objectives, communicating findings and initiating the public process.

This work will be distributed uniformly through the subwatersheds that drain to Lake Simcoe (Holland River (East and West tributaries), Black River, Maskinonge River and Pefferlaw Brook).

Other components focussing on surface water quality and reporting will be activated in 2005.

4.2.2 Toronto and Region Conservation Authority

The planned activities for TRCA's Rouge River and Humber River subwatersheds in 2004 include the following initiatives:

- Improving understanding of water use within the watersheds through monitoring, detailed inventories, mapping, and modelling analysis.
- Developing detailed water budgets using historical data, water use data, and available modelling tools.
- Improving understanding of aquatic ecosystem and habitat through data collection, predictive modelling and analysis.
- Improving understanding of terrestrial natural heritage through detailed mapping, modelling, and analysis.
- Improving understanding of geomorphologic features and the relationships to watershed health.
- Managing the project objectives, communicating findings and initiating the public process.

This work will focus on filling data gaps to establish the current watershed conditions and on development of management targets in cooperation with a multi-stakeholder committee. Work in the Don River subwatershed in 2004 will focus on workplan preparation. Watershed planning work in the Duffins Creek subwatershed will involve the development of model policy to guide the implementation of the completed watershed plan. This model policy is intended to provide common ground for incorporation of watershed plans into municipal planning instruments and will include input from multiple CA, regional municipal, and local municipal partners.

4.3 Water Conservation Plan Component of the ORMCP

Section 24 of the ORMCP requires that the Region prepare water conservation plans as part of watershed planning efforts.

At the time the ORMCP was filed, the Region was in year five of the award winning *Water for Tomorrow* program, which is currently estimated to save over 20 million litres of water per day across the Region.

In an extension of their role in overseeing the *Water for Tomorrow* program, United Utilities Canada Limited (UUCL) will be working with LSRCA and TRCA and York Region to develop watershed-specific water conservation programs to meet the water conservation requirements of the ORMCP. The first deliverable from this effort is anticipated in 2004 to address the requirements for producing a conservation plan for the area served by the Yonge Street Aquifer.

5. FINANCIAL IMPLICATIONS

Watershed Planning is a normal part of CA budget allocations. However, the time frames for watershed plan completion imposed by the ORMCP require that this work be prioritized and undertaken in a shorter period of time and at a higher cost than could be achieved through routine funding allocations. Moreover, the Region has a statutory obligation to complete watershed plans by April 22, 2004 in the case of the Yonge Street aquifer and April 22, 2007 for the balance of watersheds in the Moraine.

These increased costs for watershed planning on the ORM were introduced in the 2003 York Region Transportation and Works Department budget. Table 1 provides an estimate of the expected costs of watershed planning over the next 4 years as well as the allocated budget from 2003. The budget estimates for 2004 shown in Table 1 have been included in the 2004 budget and the multi-year Capital Plan prepared by the Transportation and Works Department. These annual estimates will be subject to normal yearly budget discussions and allocations to the CAs, however, this project is funded from Regional water rates as opposed to the Region's tax levy.

Table 1
Five -year Watershed Planning Budget Estimates

Conservation Authority	2003	2004	2005	2006	2007	Total Work Plan Length 2003-2007
LSRCA	\$300,000	\$600,000	\$360,000	\$260,000	\$250,000	\$1,760,000
TRCA	\$330,000	\$600,000	\$500,000	\$400,000	\$200,000	\$2,030,000
Total	\$630,000	\$1,200,000	\$860,000	\$660,000	\$450,000	\$3,790,000

Figures 1 and 2 below illustrate the Conservation Authorities 2004 Budget requests and their funding source. Regional staff will continue to work for Conservation Authority staff to improve the relationship between budget allocations and specific deliverables.

Figure1

LSRCA 2004 Budget Request Funding Sources

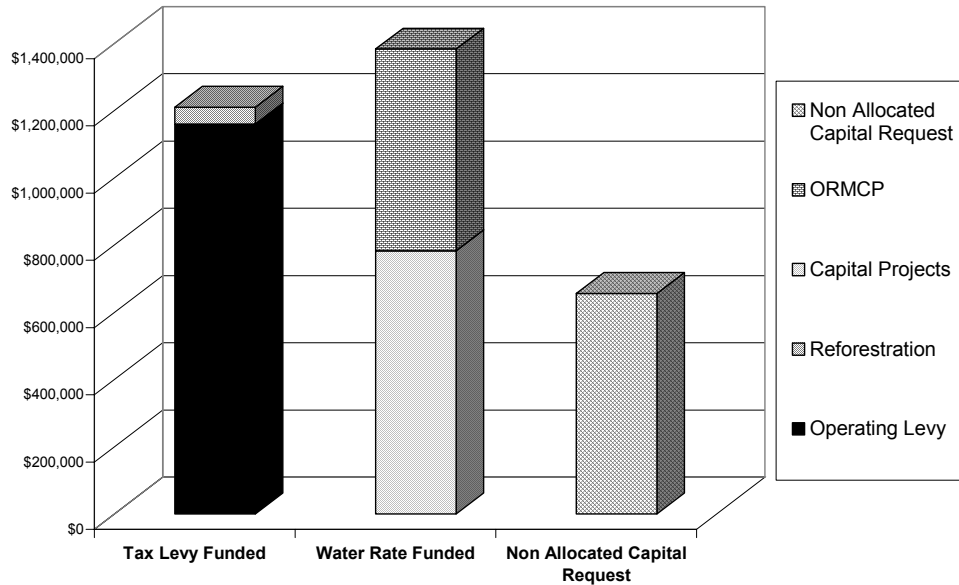
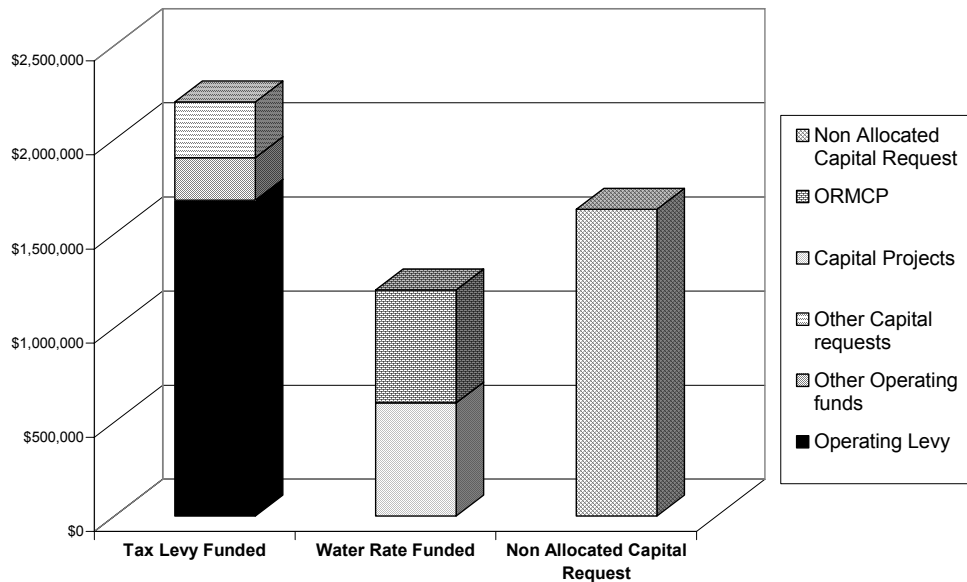


Figure 2

TRCA 2004 Budget Request Funding Sources



6. LOCAL MUNICIPAL IMPACT

Local municipalities will be encouraged to actively participate in the watershed planning process through advisory committees and during policy formulation. Ultimately, implementation of the objectives and principles of watershed plans may be implemented through amendments to Regional and/or local planning documents.

7. CONCLUSION

The ORMCP requires that watershed plans be completed by April 22, 2007 for all streams with headwaters on the Moraine and that water budget and conservation plan components be completed by April 22, 2004 for areas in York Region on the Oak Ridges Moraine served by the Yonge Street Aquifer. Watershed planning work is well advanced in the Region and the CAs have prepared a detailed workplan to outline the work and funding required over the next four years to fulfill the requirements of the ORMCP. Regional staff is confident that the target dates for completion of watershed plans required by the ORMCP can be met.

In order to ensure that efforts remain on track, the Conservation Authorities are requested to provide semi-annual updates to Committee on the workplan elements.

Funds for the 2004 budget year have been included in the 2004 Transportation and Works budget currently under discussion. Funding requests for watershed planning in subsequent years will proceed through the normal CA budget allocation and approval process, however, this project is funded from Regional water rates as opposed to the Region's tax levy. Regional staff will continue to work for Conservation Authority staff to improve the relationship between budget allocations and specific deliverables

The Senior Management Group has reviewed this report.

(A copy of the attachment referred to in the foregoing report is included with this report and is also on file in the Office of the Regional Clerk.)