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OAK RIDGES MORaine CONSERVATION PLAN WATERSHED PLANNING STUDIES LSRCA AND TRCA PROGRESS REPORT TO DECEMBER 31, 2005

The Planning and Economic Development Committee recommends the following:

- 1. The presentation by Gary Wilkins, Humber Specialist, Watershed Management, Toronto and Region Conservation Authority, be received; and**
- 2. The recommendations contained in the following report January 13, 2006, from the Commissioner of Planning and Development Services and the Commissioner of Transportation and Works, be adopted:**

1. RECOMMENDATIONS

It is recommended that:

1. Council approve the semi-annual progress report on 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).
2. Regional staff continue to work with Conservation Authority staff to ensure the timely and cost efficient delivery of these watershed planning components required under the ORMCP.
3. The Regional Clerk circulate this report to area municipalities for information.

2. PURPOSE

This report is an to update Committee and Regional Council on the accomplishments of the LSRCA and TRCA for year-end 2005 on Watershed Planning studies on the Oak Ridges Moraine. Ongoing updates were requested by Regional Council at its meeting of February 19, 2004.

3. BACKGROUND

The *Oak Ridges Moraine Conservation Act, 2001* required that York Region and local municipalities 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 been achieved by area municipalities in the Region.

The ORMCP also contains several other critical target dates for the completion of Watershed Planning, including commencement of watershed planning for each watershed originating on the Moraine by April 22, 2003 (Section 24(1)); and completion of watershed plans by April 23, 2007. The section also contains the minimum elements that a watershed plan ought to include.

LSRCA and TRCA have been active in developing and maintaining watershed plans in York Region for many years. With the introduction of the ORMCP, Regional staff and staff of the conservation authorities (CAs) together developed a comprehensive five year work plan to fulfill the ORMCP watershed planning requirements.

This workplan was adopted by Regional Council on February 19, 2004 with the request that the TRCA and the LSRCA provide semi-annual watershed planning progress reports to Committee and Council to ensure that significant progress is being made towards fulfilling the requirements of the ORMCP according to schedule and budget requirements.

The 2005 mid-year progress report for the authorities was considered by Planning and Economic Development Committee in September 2005.

4. ANALYSIS AND OPTIONS

The watershed plan requirements of the ORMCP encompass a wide number of disciplines and the required watershed plans are expected to influence planning and development initiatives in and beyond York Region.

The update to the 5-year work plan is summarized below, with a more detailed listing of deliverables along with estimated and actual budget and expenditures to date in *Attachments 1 and 2*.

4.1 Highlights of the Year End 2005 Watershed Planning Budget Year

4.1.1 Year End 2005 - Toronto and Region Conservation Authority

The four TRCA watersheds draining from the Oak Ridges Moraine in York Region include: Humber River Watershed, Don River Watershed, Rouge River Watershed, and Duffins Creek Watershed (See Map *Attachment 4*).

A watershed plan was completed for the Duffins Creek in 2003 and an Implementation Task Force was formed to coordinate the local delivery of the Plan. Updated plans are being prepared for the remaining three watersheds as per the approved workplan.

Highlights of the progress as of mid year 2005 are as follows (See *Attachment 2* for details:

Rouge River Watershed

- Modelling and analysis of eight future land use and management scenarios has been delayed to January 2006 due to complications in calibrating and linking surface and ground water models.
- Terrestrial natural heritage and aquatic systems modelling and analysis is well underway. Scenarios address various urban growth forms, stormwater retrofits, enhanced natural cover, and climate change.
- Convened multi-stakeholder workshops to discuss management directions for key issues. A “water budget/water issues” workshop is planned, pending the availability of modelling results.
- Prepared draft watershed plan outline, including a set of management strategies and implementation actions addressing all watershed objectives. Results of the modelling studies will be used to prioritize management directions, and the necessary criteria for implementation.
- Began applying the generic model policy, prepared by the YPDT/CAMC initiative earlier in 2005, to produce recommended Rouge watershed policies for consultation with key partners.
- Convened six Task Force meetings and a one day workshop to guide the study.

Humber River Watershed

- Ten of eleven current conditions reports are complete, with the remaining groundwater report underway.
- Surface and ground water modelling has been delayed for the same calibration issues as the Rouge study, results expected by April 2006.
- Began joint stakeholder Humber-Rouge workshops on key management issues.
- Completed second consultation with municipal partners on scenario assumptions.

Don River Watershed

- Workplan finalized focusing on filling data gaps and setting regeneration priorities.
- Wet weather water quality monitoring and supplemental temperature, fish and benthos monitoring is complete; fisheries data, riparian and barrier assessments are complete.
- Current conditions reports for low flow, water use and aquatic systems are complete.
- Further analysis for limited scenario modelling and the development and application of an approach for identifying integrated regeneration priorities has been deferred to 2006-2007.

4.1.2 Year End 2005 - Lake Simcoe Region Conservation Authority

The LSRCA has been undertaking work concurrently in all four of its watersheds that originate on the Oak Ridges Moraine to ensure compliance with ORMCP. The four LSRCA watersheds originating on the Moraine in York Region are the East and West Holland Rivers, Maskinonge River and the Black River.

The key projects completed in 2005 included:

- Detailed water budgets for the East and West Holland, Maskinonge, and Black River subwatersheds. Supporting technical reports have been provided to the Region.
- Hydrologic and Hydraulic Modelling of the East and West Holland and Maskinonge Rivers has been completed including detailed flood line mapping. Supporting technical reports have been provided to the Region along with digital layers for future reference.
- Updated Natural Heritage and Ecological Land Classification Mapping including detailed wetland updates have been completed. Supporting technical reports have been provided to the Region.
- Environmental Monitoring Report for 2004, which includes York Region ORMCP Subwatershed Planning data and mapping, was completed. Collection of water quantity and quality data, benthic invertebrates and fishery data for 2005 was also completed.
- Detailed analysis of stream baseflow condition as part of ongoing water use and related projects was completed.
- Modelling and analysis of eight future land use and management scenarios is underway. The CANWET Model is calibrated. A future land use layer has been approved by the Region for use in the modelling exercise. Modelling of all eight scenarios will be completed by March of 2006.

The work undertaken in 2005 completes the characterization of the four subwatersheds in compliance with the level of detail, scope and understanding required by the ORMCP. The focus in 2006 will examine the integration and analysis of the data, subsequent to the initiation of the development of formalized ORMCP watershed plans.

4.2 Status of Overall Program

4.2.1 Toronto and Region Conservation Authority

During 2006, work will focus on:

Rouge Watershed Plan

- Complete modelling and analysis of future land use and management scenarios and develop preferred management strategies and draft plan by March 2006.
- Conduct consultation, formal peer review and ongoing plan refinement during April-May 2006.
- Finalize watershed plan by June 2006.

Humber Watershed Plan

- Complete scenario modelling by April 2006 and development of preferred management strategy and draft plan by September 2006;

- Conduct consultation and formal peer review in October-November, although attempts will be made to coordinate analysis to the extent possible during joint meetings with the Rouge watershed study;
- Final plan by December 2006

Don Watershed Plan

- Completion of the full Watershed Regeneration Plan update is being delayed to 2007, to accommodate a deferral of partnership funding and allow focus on ORMP development-related management issues in this and neighbouring watersheds.
- A preliminary plan for the two subwatersheds draining the ORM portion of the Don Watershed will be completed by June 2006, thus fulfilling York Region's requirements under the ORMCP and taking advantage of any opportunity that may remain to guide ongoing land use planning decisions which in that area are well advanced in the planning process.
- A regeneration priority setting methodology will be developed and analysis initiated. The resulting recommendations will identify key actions towards achieving watershed sustainability, and thus contribute to York's Greening Strategy and sustainability initiative.

4.2.2 Lake Simcoe Region Conservation Authority

The 2005 program was undertaken as scheduled and on budget. During 2006, work will focus on:

- Completion of the water quality modelling and analysis of eight future land use and management scenarios including recommendations for future action including a draft rehabilitation strategy.
- Completion of the detailed geomorphic assessment analysis for each of the watersheds and recommendations for further action.
- Development and completion of an approach to evaluate proposed water takings.
- Completion of the terrestrial natural heritage modelling\analysis including a draft rehabilitation strategy.
- Initiation of the public consultation process (Spring 2006) to review results, develop resource targets and obtain feedback on proposed rehabilitation strategies.
- Development of a micro-website, distribution of a newsletter as part of public involvement/engagement process and public open houses.
- Initiate the consolidation of all technical information and development of report formats, map standards.
- Drafting of the preliminary watershed plans for distribution to stakeholders, academic institutes, and municipal, provincial and federal agencies for peer review.

The watershed plans will identify key actions towards achieving watershed sustainability, and thus contribute to York's Greening Strategy and sustainability initiative. The watershed plans will also contain specific recommendations for rehabilitation projects, policy initiatives, and continued environmental monitoring.

4.3 Outlook for the Remaining Watershed Planning Program to 2007

4.3.1 Toronto and Region Conservation Authority

The watershed plans are still expected to be completed before the 2007 deadline and within the originally forecasted budget. Final delivery of the Rouge Watershed Plan is expected by June 2006 and the Humber Watershed Plan by December 2006. As noted, under Section 4.2.1 of this report, a preliminary report fulfilling the Region's ORMCP requirements will be completed for the Don watershed by June 2006, while the full regeneration-oriented watershed planning study will be extended and completed at year-end 2007.

4.3.2 Lake Simcoe Region Conservation Authority

The watershed plans will be completed before the 2007 deadline and within the originally forecasted budget. Deliveries of the finalized Watershed Plans are expected by or before March 1, 2007. Activities in 2007 will involve the incorporation of comments on the draft reports, a presentation to the Region regarding the final results and specific recommendations for future monitoring and implementation for 2007-2008.

4.3.3. Water Budget Analysis and Conservation Plan Component of the ORMCP – Section 25 of the Moraine Plan

Sections 24 and 25 of the ORMCP require that the Region prepare watershed plans as well as water conservation and water budgets.

Section 24(7) of the ORMCP relates specifically to that portion of the Moraine served by the Yonge Street Aquifer. This section prohibits *major development* from occurring in these areas after April 22, 2004 if water budgets and water conservation plans have not been completed to demonstrate that the water supply required is sustainable.

Watershed Plans are well underway and anticipated to be completed on time and within budget as described elsewhere in this report.

A draft of the Yonge Street Aquifer water budget is being finalized for use as input to the Watershed Planning efforts on the East Holland River. Regional Council at its meeting of December 15, 2005, adopted Clause 1 of Report No. 10 of the Regional Planning and Economic Development Committee, which proposed a new policy and mapping reference to govern development in the area served by the Yonge Street Aquifer until such times as the Watershed plan is completed in 2007. This policy modification has been submitted to the Ministry of Municipal Affairs and Housing for approval as part of the ROP to demonstrate the region's compliance with the ORMCP.

The Water Conservation Plan is also in preparation. York Region has contracted United Utilities Canada Limited (UUCL) in an extension of their role in overseeing the *Water for Tomorrow* Program and will result in the development of watershed-specific water conservation programs to meet the water conservation requirements of the ORMCP.

5. FINANCIAL IMPLICATIONS

The 2005 watershed planning allocations to the Conservation Authorities were approved by Regional Council as part of the 2005 budget. Both Authorities are to provide twice yearly progress reports to Planning and Economic Development Committee and Regional Council on the watershed planning process required under the ORMCP. In addition, Authority staff were requested to provide an itemized list of deliverables for each year of the program along with their estimated updated budgets and the incurred costs. This itemized list is provided in *Attachments 1 and 2*.

Table 1 shows the 5 year budget and the expected costs of watershed planning between now and the 2007 study completion year. Approximately \$1,235,000 remains to be spent before 2007.

The TRCA budget for 2005 was under spent in the amount of \$125,000 due to the calibration issues with the modelling in the Rouge and Humber watersheds. These funds have been accrued from the 2005 into the 2006 budget to permit the completion of this modeling work in the first half of 2006.

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

These annual budget estimates will be confirmed each year during yearly budget discussions and allocations to the CAs. For the period from 2003 to 2007 funds these projects are funded as special Capital Projects from Regional water rates. After 2007, funding for watershed planning will solely be funded under normal operating allowance to the Conservation Authorities from the Region's tax levy.

6. LOCAL MUNICIPAL IMPACT

Local municipalities have been invited 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

Watershed planning work is well advanced in the Region and the CA's work plans are also well underway with no significant issues or delays expected at this time.

While Regional staff is confident that the target dates for completion will be met, it should be noted that the Province has not yet provided the anticipated technical guidelines in a final form that will indicate the specific technical requirements under the ORMCP including water budget requirements. Regional staff is in contact with our Provincial counterparts to finalize these elements.

Funds for the 2005 budget year were included in the 2005 Transportation and Works budget and funds to 2007 are included in the 10 year Capital Plan. Funding for watershed planning activities after 2007 will proceed through the normal Regional/CA budget allocation and approval process.

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

The Senior Management Group has reviewed this report.

(The attachments referred to in this clause are attached to this report.)