



May 14, 2010

Mr. Denis Kelly
Regional Clerk
The Regional Municipality of York
17250 Yonge St.
Newmarket, ON L3Y 6Z1

REGION OF YORK
CLERK'S OFFICE

FILE No. - 842

**RE: DON RIVER WATERSHED PLAN
AND IMPLEMENTATION GUIDE (10.0)**

Dear Mr. Kelly:

This will confirm that at a meeting held on May 11, 2010, Council of the Town of Markham adopted the following resolution:

- "1) That the staff report entitled Don River Watershed Plan and Implementation Guide be received; and,
- 2) That this staff report be forwarded to the Toronto Region Conservation Authority (TRCA), and the Region of York as the Town's response to the Don River Watershed Plan and Implementation Guide; and,
- 3) That the Town endorse in principle the Don River Watershed Plan objectives while continuing to work with the TRCA and other stakeholders to practically and feasibly meet the overall objectives of the Implementation Guide in the context of respective roles, responsibilities and funding capabilities; and,
- 4) That the TRCA and Town staff report back regarding future capital and operational costs associated with these guidelines (including potential funding sources); and,
- 5) That the proposed 10 year work plans of implementation projects in Markham, as outlined in the Implementation Guideline, be subject to funding commitment by the Province, other stakeholders and further Council approval; and,

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- 6) That staff be directed to work with the Toronto and Region Conservation Authority (TRCA) in identifying Sustainable Neighbourhood Retrofit Action Plan (SNAP) projects within the Thornhill area; and,
- 7) That a Don Watershed Task Force be established to implement the 10 year plan for the watershed and that staff report back to the Development Services Committee with the Terms of Reference; and further,
- 8) That Staff be authorized and directed to do all things necessary to give effect to this resolution." (Item 3 of Report No. 26)

If you have any questions, please contact Abdullah Hossain, Environmental Engineer, at 905-477-7000 ext. 2628.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Kimberley Kitteringham', with a long horizontal line extending to the right.

Kimberley Kitteringham
Town Clerk

mbp:kk

Report to: Development Services Committee

Date: May 4, 2010

SUBJECT: Don River Watershed Plan and Implementation Guide
PREPARED BY: Learie Miller, Senior Environmental Policy Planner, Ext 6922
Abdullah Hossain, Environmental Engineer, Ext 2628

RECOMMENDATION:

- 1) That the staff report entitled Don River Watershed Plan and Implementation Guide be received;
- 2) And That this staff report be forwarded to the Toronto Region Conservation Authority (TRCA), and the Region of York as the Town's response to the Don River Watershed Plan and Implementation Guide;
- 3) And That the Town endorse in principle the Don River Watershed Plan objectives while continuing to work with the TRCA and other stakeholders to practically and feasibly meet the overall objectives of the Implementation Guide in the context of respective roles, responsibilities and funding capabilities;
- 4) And That the TRCA and Town staff report back regarding future capital and operational costs associated with these guidelines (including potential funding sources);
- 5) And that the proposed 10 year work plans of implementation projects in Markham, as outlined in the Implementation Guideline, be subject to funding commitment by the Province, other stakeholders and further Council approval;
- 6) And that Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

The purpose of this report is to provide Council with an overview of the Don River Watershed Plan and Implementation Guide, which has been circulated to municipalities within the Don River watershed by the TRCA. The TRCA is seeking municipalities' adoption of the plan and commitment to working with the TRCA to implement the recommendations appropriate to their municipality. This report also provides staff comment on the watershed plan and the next steps in addressing the actions proposed for the Don River Watershed.

BACKGROUND:

The Don River Watershed Plan was prepared by TRCA staff and consultants with advice from two groups, the Don Watershed Regeneration Council and a Municipal Technical Advisory Committee, both of which had Town of Markham representatives. The Plan updates the publication Forty Steps to a New Don (1994), by building on existing information and addressing identified data gaps, particularly with respect to the groundwater system, water budget, water use and terrestrial natural heritage system.

The Don River Watershed is 360 sq km in size covering portions of the City of Toronto and the City of Vaughan, Town of Markham and the Town of Richmond Hill in the Regional Municipality of York (Figure 1). The watershed drains southward from the Oak Ridges Moraine in the north towards Lake Ontario to the south. The watershed constitutes a small 25.3 sq km (approximately 11.9%) area of the Town of Markham

primarily in the community of Thornhill (Figure 2). Almost half of the watershed is devoted to housing and a fifth to industrial, institutional or commercial development. There is little undeveloped land left in the watershed which has approximately 1.2 million residents living within its boundaries. With the build out of the watershed nearly complete, the Don has been transformed into an almost fully urbanized river system. The focus is now shifting from greenfield development towards redevelopment, intensification, infilling and infrastructure renewal to accommodate the anticipated growth of the GTA and neighbouring regions.

The extent of historical urbanization has significantly increased the amount of impervious or hard cover in the watershed. This has reduced the interception and infiltration of precipitation into groundwater aquifers and generated more surface runoff. This, in turn, results in higher and more frequent flows in rivers and streams, greater rates of erosion, increased direct discharges from storms and combined sewers and a greater risk of flooding in certain areas. The focus of the Don Watershed plan is to address sustainability in the context of the urbanized watershed.

The Watershed Plan provides detailed information on regeneration plans on a sub watershed basis (7 subwatersheds were identified of which only two, (German Mills Creek Subwatershed and Upper East Don Subwatershed contained lands in Markham, see Appendix B). These subwatershed scale maps are intended to identify ways to integrate and coordinate local undertakings to ensure that regeneration activities are complementary, rather than conflicting.

The plan has a strong technical foundation with modeling of future scenarios being an integral component. In addition, meetings were held with agencies, other watershed partners and the public to review issues and seek feedback on the plan's recommendations.

OPTIONS/ DISCUSSION:

Don River Watershed Plan

The Don River Watershed Plan is intended to inform and guide municipalities, the Provincial and Federal governments, TRCA, non-government organizations and private landowners as they update their policies and practices for environmental stewardship. The pathway to a regenerated Don River builds on three guiding principles. These are:

1. Protect and sustain what is healthy;
2. Regenerate what is degraded, and,
3. Take responsibility for the Don.

The recommendations of the Don River watershed plan direct new approaches towards future stormwater source, conveyance and end-of-pipe controls to reduce flooding, improve water quality, stabilize baseflow levels, increase infiltration and improve groundwater recharge rates. The overall benefit of these initiatives will be reduced erosion and risk to infrastructure and terrestrial and aquatic habitat and greater flexibility to adapt to climate change.

In addition to providing detailed information on regeneration plans on a sub watershed basis, the Watershed Plan proposes a number of site planning exercises designed to engage local participants in the watershed study and promote innovative approaches. Five concept site plans are presented in the watershed plan and these provide practical representations of how key watershed recommendations could be applied on a local or neighbourhood basis.

Don River Watershed Plan Implementation Guide

The Don River Watershed Plan Implementation Guide identifies the actions and projects needed to achieve the paramount strategies identified in the Watershed Plan. Appendix 'A' attached hereto, is an Executive Summary of the Don River Watershed Plan and Introduction to the Implementation Guide. The Implementation Guide identifies a 10 year work plan of proposed implementation projects addressing all recommendations of the watershed plan, and organized according to primary implementation mechanisms listed below:

- Policy;
- Regeneration;
- Land Securement;
- Stewardship and Education;
- Operations and Maintenance;
- Enforcement; and,
- Monitoring.

The stated purpose of the Implementation Guide is to facilitate implementation of the recommendations contained in the Don River Watershed Plan. The Watershed Plan has sought to evaluate possible futures under different environmental management scenarios and has sought to detail regeneration plans and concept site plans at a subwatershed level. This approach is beneficial from a municipal planning perspective because it allows more detailed focus on the areas of the watershed (German Mills Creek Subwatershed and Upper East Don Subwatershed) that fall within the Town of Markham's jurisdiction.

Town staff generally support the objectives of the Don River Watershed Plan and Council has funded and supported numerous projects consistent with the Watershed Plan including Pomona Mills Creek Erosion Restoration and Habitat Enhancement Study, Don Mills Ditch Capacity Remediation Study, Markham Stream Erosion Rehabilitation Implementation Plan and Stormwater Management Pond Retrofit projects.

However, notwithstanding the alignment of numerous TRCA and Town projects, staff from engineering, planning, urban design, and operations have concern with some of the projects proposed in the Don River Watershed Plan relative to the ambitious timelines proposed, and most importantly the ongoing funding commitments that would be required. The capital and maintenance costs associated with the plan, while not qualified in the Guide would be significant. Specifically, costs related to stormwater infrastructure, flood risk reduction and erosion retrofits, which are required for this plan to be successfully implemented,.

The TRCA and Town need to prioritize these capital projects and establish funding commitments through a process which examines and weighs all other municipal priorities and needs. Therefore, the implementation of the proposed 10 year work plan for the recommended projects, as outlined in the Don River Watershed Plan Implementation Guideline, is not recommended by Town staff for, specific approval by Council at this time.

Staff recommends that the Town endorse in principle the Don River Watershed Plan objectives while continuing to work with the TRCA with respect to how best to meet the overall objectives of the Implementation Guide in the context of actions that are considered to be practical and feasible to Markham. Staff will report back to Council on the capital and operating costs, and funding sources associated with these guidelines, in the context of municipal priorities and needs.

FINANCIAL CONSIDERATIONS

Although the Implementation Guide does not contain cost estimates, it is anticipated that future funding for projects will be expected from municipalities and possibly the Province. However, there are no specific requests for funding at this time. The implementation of the Don River Watershed Plan will have long term cost (capital and operating) implications for the Town, and will affect a number of Departments including Engineering, Operations and Planning.

HUMAN RESOURCES CONSIDERATIONS

Not Applicable

ALIGNMENT WITH STRATEGIC PRIORITIES:

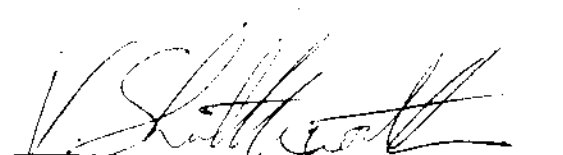
A significant amount of the proposed implementation activity is consistent with the Building Markham's Future Together strategic priority on the Environment as it focuses on sustainable development practices in the context of the overall Don River Watershed Plan.

BUSINESS UNITS CONSULTED AND AFFECTED:

The Don River Watershed Plan and Implementation Guide was circulated internally to the Policy Planning, Engineering, Heritage, Operations and Parks and Open Space departments and their comments where provided, have been incorporated in this report.

RECOMMENDED BY:


Alan Brown, C.E.T
Director of Engineering


Valerie Shuttleworth M.C.I.P., R.P.P
Director of Planning and Urban Design


Jim Baird M.C.I.P., R.P.P
Commissioner of Development Services

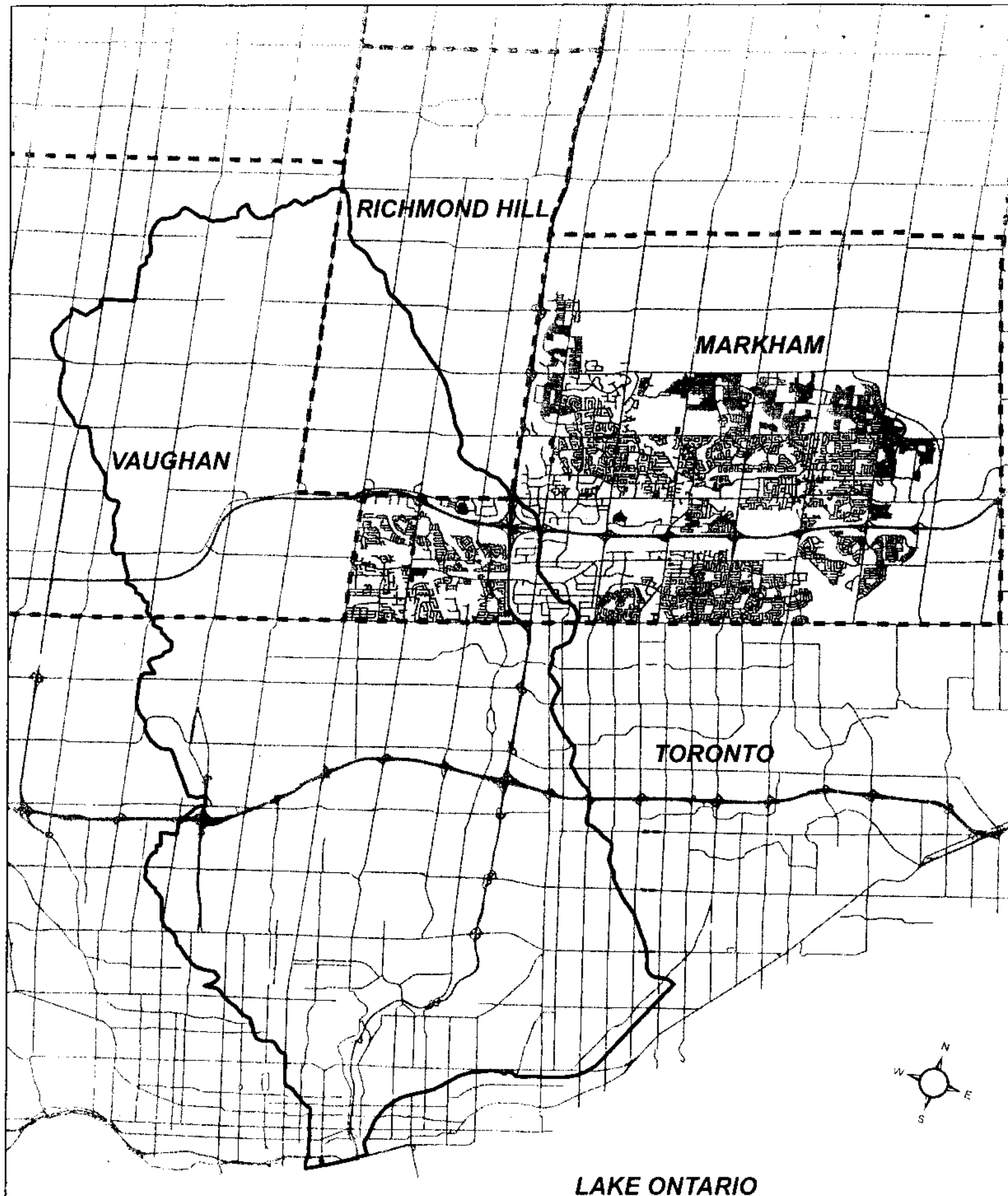
ATTACHMENTS:

Figure 1: Map showing Don River Watershed Plan Boundary

Figure 2: Map showing Don River Watershed in Markham

Appendix 'A': Don River Watershed Plan Executive Summary and Introduction to the Implementation Guide

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LAKE ONTARIO

 Don River Watershed

FIGURE 2

