



Report to: General Committee

Date Report Authored: March 18, 2013

SUBJECT: Status Update on Capital and Sustainable Neighbourhood Retrofit Action Plan (SNAP) projects in the Don River Watershed

PREPARED BY: Abdullah Hossain, Sr. Environmental Engineer, Ext 2628
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RECOMMENDATION:

- 1) THAT the staff report entitled “Status Update on Capital and Sustainable Neighbourhood Retrofit Action Plan (SNAP) projects in the Don River Watershed” be received;
- 2) AND THAT Council approve elimination of Item # 7 from the May 11, 2010 Council resolution and direct staff to continue working with the TRCA and other relevant stakeholders to meet the overall objectives of the Don River Watershed Implementation Guide;
- 3) AND THAT Staff be authorized and directed to do all things necessary to give effect to this resolution.

EXECUTIVE SUMMARY:

Not Applicable.

PURPOSE:

The purpose of this report is to:

- Provide the Council with an update on the status of the capital and SNAP projects in the Markham area of the Don River Watershed,
- Eliminate the item # 7 from the May 11, 2010 Council resolution regarding the establishment of the Don Watershed Task Force; and instead continue working with the TRCA and other relevant stakeholders to meet the overall objectives of the Implementation Guide.

BACKGROUND:

In early 2010, the Toronto and Region Conservation Authority (TRCA) provided all relevant municipalities within the Don River Watershed including Markham (refer to Attachment “A”) with the Don River Watershed Plan (referred herein as the “Watershed Plan”) and the Don River Watershed Plan Implementation Guide (referred herein as the “Implementation Guide”) for adoption. The Implementation Guide included a 10 year work plan for environmental projects within the context of existing programs and listed relevant municipalities as the lead implementing partners.

Staff from the Planning and Engineering Departments reviewed the Watershed Plan and the Implementation Guide and provided a staff report with certain recommendations to the Development Services Committee (DSC) on May 4, 2010. The Watershed Plan and the Implementation Guide were endorsed in principle by Council on May 11, 2010 (Refer to Attachment “B” for Council resolution).

The Council directed staff to:

- Work with TRCA to identify SNAP projects within the Thornhill area (Item # 6),
- Report back to Council on future capital and operational costs associated with these guidelines including potential funding sources (Item # 4); and
- Establish a Don Watershed Task Force with its Terms of Reference to implement the 10 year plan (Item # 7).

Staff from the Asset Management, Sustainability Office, Environmental Services and the TRCA have been working collaboratively to establish a list of capital and SNAP projects within the Markham area of the Don River Watershed. To date, a number of these projects are either completed or on-going. A comprehensive list of completed, on-going and future projects is provided in Attachment “C”.

OPTIONS/ DISCUSSION:

Don River Watershed Plan & Implementation Guideline

To achieve the paramount strategies of the Don River Watershed Plan (i.e. protect and sustain what is healthy; regenerate what is degraded; and take responsibility for the Don), the TRCA listed the 10 years capital projects based on the following categories:

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

The following six key priority action areas from the Implementation Guide have been identified for implementation in the Markham area of the Don River Watershed:

1. Incorporate sustainable community design principles and other watershed management directions into the Langstaff Gateway Secondary Planning initiative (Policy and Planning),
2. Undertake flood risk reduction plans, flood remediation and flood emergency planning for the Don Mills Channel area, Thornhill area and other flood vulnerable areas, and incorporate up to date floodline information into the Official Plan and Zoning By-laws (Policy and Regeneration),
3. Undertake a coordinated, collaborative approach to sustainable community retrofits in existing urban areas to address watershed and municipal infrastructures retrofit priorities (Regeneration),

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4. Remediate erosion in ravines and priority erosion sites, such as Pomona Creek, German Mills Creek, as identified in Markham Erosion Restoration Studies (Regeneration)
 5. Secure valley corridor linkages to enable trail access and to allow stream corridors to evolve naturally without impacting property or infrastructure (Securement)
 6. Undertake maintenance programs for stormwater ponds, storm sewer, oil grit separators and other stormwater infrastructures (Operation and Maintenance).

As shown above, the nature of the implementation projects identified in the plan are widely varied from planning, operation and maintenance, asset management and policy.

Sustainable Neighbourhood Retrofit Action Plan (SNAP)

Don River Watershed Plan Implementation Guide recommended to develop Sustainable Neighbourhood Retrofit Action Plans (SNAPs) using an integrated approach including residential social marketing, naturalization, urban forest enhancement, stormwater management, infiltration, energy and effective monitoring. As recommended in Implementation Guide, Council directed staff to work with the TRCA in identifying SNAP projects within the Thornhill area (item # 6 of attached Council Resolution).

SNAP is an innovative pilot program led by the TRCA in collaboration with regional, municipal and community partners. This program seeks to develop action plans to improve the local environment on the neighbourhood scale and build resiliency against climate change by greening local infrastructure and encouraging positive behavior changes among residents. Based on existing conditions of each neighbourhood, projects are set at neighbourhood-level targets to identify key action items on private and public property to address environmental objectives in the context of social and economic considerations for each neighbourhood. Each plan builds the business case for implementation by measuring individual and community benefits and cost savings.

As per Council direction, staff from the Sustainability Office and the TRCA worked collaboratively to identify SNAP projects in Thornhill area. To date, one SNAP project at the Bayview Glen community area, located at Bayview Avenue and Steeles Avenue, has been identified for implementation. In partnership with York Region and local residents and business, this action-oriented plan will build on Markham's Greenprint initiatives and help to prepare the neighbourhood for climate change and assist them to become more environmentally friendly. This neighbourhood was chosen because of opportunities arising from the upcoming flood remediation work that the Asset Management is currently undertaking in response to the West Thornhill Stormwater Flood Remediation Class Environmental Assessment Study. The Bayview Glen SNAP will find the best ways to:

- Address rain water and waste water servicing issues to reduce flooding risk and protect the East Don River,
- Keep the local urban forest healthy, and improve the biodiversity of plants and animals native to this area,

- Conserve energy to reduce carbon footprint and green house gas emissions, and
- Conserve potable water to reduce pressure on the current water system and preserve this vital resource for the years to come.

Bayview Glen SNAP project will be implemented in four phases:

- Phase- 1: Identify scope, baseline issues and opportunities
- Phase- 2: Detail analysis of potential retrofits and community engagement
- Phase-3: Develop an implementation plan with funding recommendation
- Phase- 4: Implementation of the plan in the neighbourhood.

The estimated cost for phase-1 is \$50, 000 equally cost shared by Markham and Region of York. Under phase-1, the community consultation has been completed. All technical workshops including Renovator's workshop are completed and synthesis report are drafted for phase-1. The estimated cost for phase-2 and 3 is \$350,000 with \$100,000 contribution from Region of York. The phase 2 and 3 are scheduled for 2013-2014 subject to funding commitment from Federation of Canadian Municipalities (FCM), TRCA and other stakeholders and subject to Council approval. Once the phase-1 is completed, staff from Sustainability Office will provide a full report to Council with funding recommendation. At this stage, staff are not recommending any funding for this SNAP project.

Capital Projects

To date, Council have supported and funded numerous capital projects and programs within the Don Watershed area of Markham consistent with the six key priority areas identified by the TRCA. To date West Thornhill Flood Remediation Class EA, Pomona Mills Creek Rehabilitation Class EA and nine erosion restoration sites have been completed in Thornhill area. Other projects such as the West Thornhill Flood Remediation Implementation, Stormwater Management Pond Retrofit study and the Don Mills Channel Class EA are currently underway. Most of the Policy and Planning related recommendations identified in the Implementation Guide (non-capital projects) are currently being implemented by various City departments through a number of key initiatives including: the Official Plan update, Langstaff Gateway Planning District (Secondary Plan OPA 183), Growth Management Strategy, Sewer by-law update, Stormwater Management Guideline Update etc. This report is focused on updating Council on the capital and SNAP projects only.

Since late 2012, staff from the City and the TRCA have met several times to discuss the overall progress of the implementation of projects in the Don River Watershed. A list of completed, on-going and future capital and SNAP projects and their status, associated costs and funding/potential funding sources is provided in Attachment "C". Estimated costs for projects to be implemented in the future will be determined during the planning stage of each project and will be subject to Council and budget approvals.

Don Watershed Task Force

As per item # 7 of the May 11, 2010 Council's Resolution, staff are required to prepare the Terms of Reference for establishing the Don Watershed Task Force to implement the 10 year plan. City staff and the TRCA do not see much benefit from establishing the Don Watershed Task Force to guide the development/implementation of 10 years capital projects since much of the implementation work is technical in nature and since City staff and the TRCA are currently working collaboratively and efficiently in managing the implementation of the 10 year capital projects. In addition, there is already a committee formed called the "Don Watershed Regeneration Council" to which staff update annually on the current and on-going projects. This committee has representative members from TRCA, municipalities, ward Councilors, watershed residents, business owners and community group representatives. City staff and TRCA have in the past provided updates to the Don Watershed Regeneration Council on the capital projects.

Considering the above, City staff and TRCA do not see much benefit from establishing another Task Force to manage the implementation of the 10 year capital projects.

FINANCIAL CONSIDERATIONS AND TEMPLATE: (external link)

Although the 10 years capital projects identified in Attachment "C" provides cost estimate and potential funding sources; there are no specific requests for funding at this time through this report. Funding requests for future capital projects will be managed through individual projects by relevant departments through annual budget requests. Long term capital and operation costs for various capital projects have been included in the Life Cycle Reserve study.

HUMAN RESOURCES CONSIDERATIONS

Not Applicable.

ALIGNMENT WITH STRATEGIC PRIORITIES:

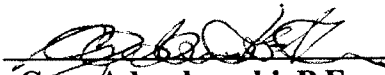
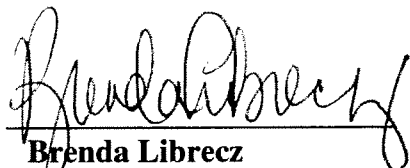
A significant amount of the proposed capital projects are consistent with Council's goal of environmental focus as it relates to the protection and management of Markham's natural environment. SNAP projects are focused on sustainable neighborhood development practices in the context of the overall Don River Watershed Plan which is consistent with Markham Greenprint strategy.

BUSINESS UNITS CONSULTED AND AFFECTED:

This report was circulated to Environmental Services Department and the Sustainability Office and their comments have been incorporated.

RECOMMENDED

BY:


Gary Adamkowski, P.Eng.
Director, Asset Management
Brenda Librecz
Commissioner, Community & Fire Services

ATTACHMENTS:

Attachment A: Don River Watershed Boundary.

Attachment B: Council Resolution on the Don Watershed Plan and Implementation
Guideline -May 11, 2010.

Attachment C: Summary of Capital and SNAP Projects in Markham area of the Don
River Watershed