



Operations

TO: Community Development & Environmental Services Committee

DATE: 2007/10/22

SUBJECT: Strategic Urban Forest Management Plan - Framework

RECOMMENDATION:

THAT the Executive Summary of the report Framework for the Strategic Urban Forest Management Plan (September 2007) by Urban Forest Innovations Inc. and Dougan & Associates, as presented in the Environmental Services, Community Services & Operations Committee report Strategic Urban Forest Management Plan - Framework of November 9th, 2007 be received;

AND THAT the recommendations contained in the report Framework for the Strategic Urban Forest Management Plan (September 2007) by Urban Forest Innovations Inc. and Dougan & Associates be adopted as the policy framework for the development of the City's Forestry Management Plan.

BACKGROUND:

The City's urban forest contributes to environmental sustainability, economic development, personal health, community character and the overall quality of life for the residents of this community. Concerns regarding the absence of a strategic plan to sustain the urban forest led to a Request for Proposal (RFP) being issued to obtain professional guidance in the formation of one. The firms Urban Forest Innovations Inc. and Dougan & Associates consulted with a technical focus group consisting of cross-departmental staff, Trees for Guelph, Grand River Conservation Area, Dr. Andy Kenney, Dr. John Ambrose (representing Guelph Urban Forest Friends) and Glynnis Logue of Guelph Environmental Leadership during the development of their report Framework for the Strategic Urban Forest Management Plan – September 2007.

REPORT:

Attached is the Executive Summary of the consultant's report.

The recommendations contained therein provide a framework for the development of a long-term strategy to sustain and enhance the City's urban forest.

The framework for the Strategic Urban Forest Management Plan sets a 20-year period (2008-2028) and suggests the development and implementation of a series of four – 5 year Urban Forest Management Plans. Components of the overall strategy include direction and specific recommendations for:

- Technical support and community consultation/education/stewardship
- Tree inventory (including GIS and asset management)
- Forest management (including tree risk assessment, tree establishment plan, tree pruning and plant health care)
- Landscape connectivity (including opportunities for reforestation and targets for forest cover)
- Urban forest sustainability (including tree protection and hazard abatement)

Key challenges in the years to come will be to: (1) develop a municipal tree inventory to gain a better understanding of the green infrastructure, (2) manage the hazards realized as the forest ages, (3) accelerate replacement plantings to compensate for a less than desirable reinvestment into the urban forest in the past, (4) ensure that new plantings are placed in conditions that maximize their potential lifespan, and (5) effectively protect and manage the remaining forested areas as the City's population continues to grow.

Upon acceptance of the recommendations, staff will finalize the four 5 year plans for presentation to City Council in the first quarter of 2008 in addition to detailed plans of action for the first 5 year period. Of note, the plans to be tabled will take into account the desire to participate by many community stakeholders. Finally, any immediate resource requirements will be identified and submitted for the consideration of Council during deliberations on the 2008 Budget.

CORPORATE STRATEGIC PLAN:

Supports our **Mission** to achieve excellence through Leadership, Innovation, Partnerships and Community Engagement

Natural Environment---a leader in conservation and resource protection/enhancement. With our local agricultural heritage and opportunities for comment from academia there is an expectation the urban forest will be proactively managed

Urban Design and Sustainable Growth---An attractive, well-functioning and sustainable city. The City's curb appeal contributes to a sense of community and identity and-the urban forest provides significant first impressions of a distinctive community.

Personal and Community Well-Being---A healthy and safe community where life can be lived to the fullest.

The urban forest contributes to a healthy community and provides natural retreats, and enhances both public and private open space

Economic Opportunity---A diverse and prosperous local economy.

Corporately, Operations is valued for the services provided to manage its built and green infrastructure, especially during times of emergencies--> opening roads, support to Hydro for work around energized power conductors.

Further, Forestry supports special events city-wide including working with local service clubs and enhances opportunities for local tourism.

Culture and Heritage---significant heritage trees to be recognized.

Heritage trees are socially and culturally important. Our heritage buildings and heritage trees recognized as periodic artifacts---community antiques to be cherished.

Government and Community Involvement---a community-focused, responsive and accountable government.

Directly supported through timely and effective service delivery

FINANCIAL IMPLICATIONS:

TBD

DEPARTMENTAL CONSULTATION:

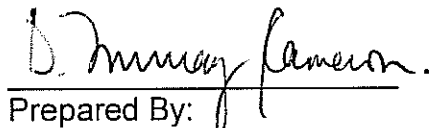
Community Design and Environmental Services

COMMUNICATIONS:

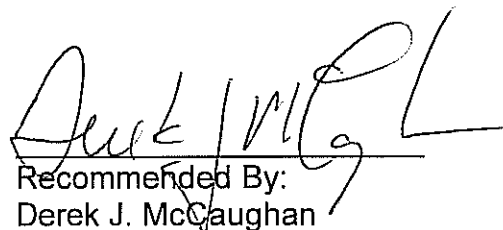
N/A

ATTACHMENTS:

2008 Executive Summary Report---Framework for the Strategic Urban Forest Management Plan, City of Guelph: 2008-2028.



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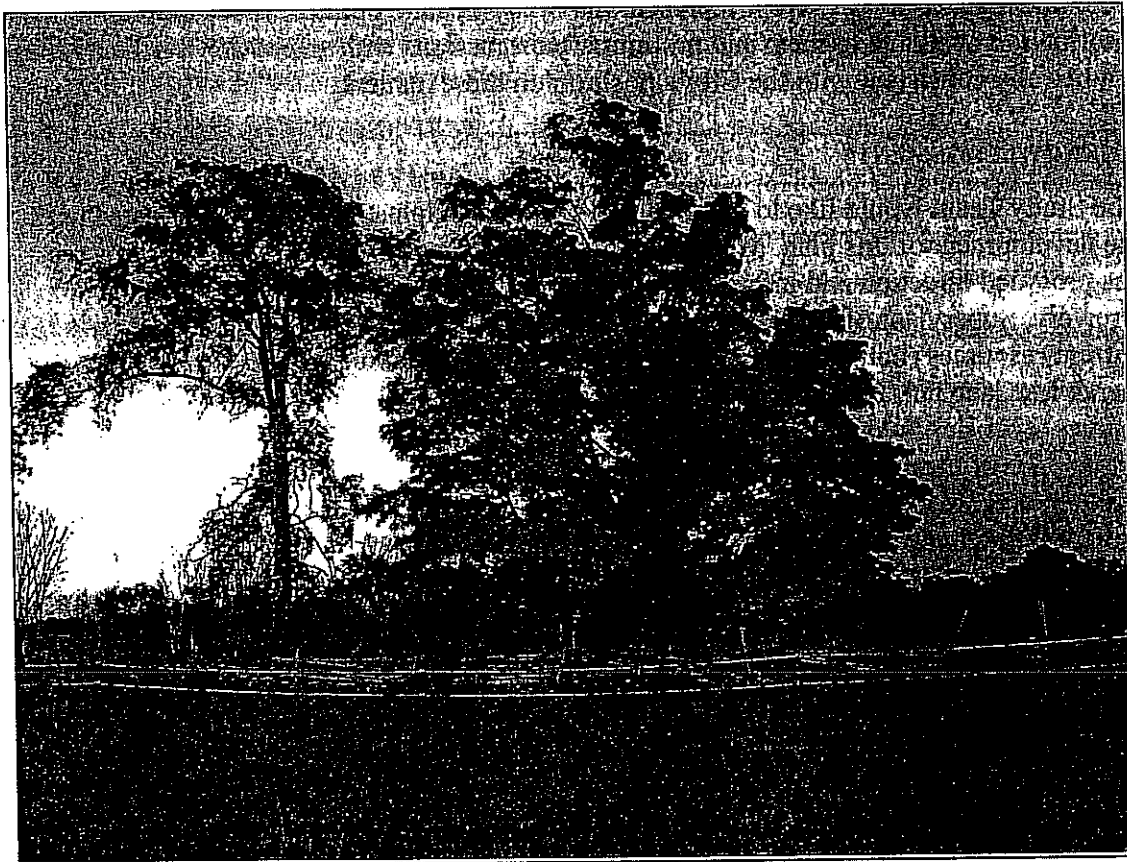


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**FRAMEWORK FOR THE
STRATEGIC URBAN FOREST MANAGEMENT PLAN**

CITY OF GUELPH: 2008 - 2028

**FINAL REPORT
SEPTEMBER 2007**



**Prepared for
Operation Department City of Guelph**

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EXECUTIVE SUMMARY

The City of Guelph's urban forest has been recognized as a visual amenity, and for its environmental benefits, for many years. However, with the mounting pressures of population growth and climate change (locally and globally) trees in cities must be recognized as more than just an amenity. The urban forest needs to be identified specifically as "green infrastructure", considered a vital component of a municipality's infrastructure, and allocated adequate resources in both the short and long term to ensure that it is maintained to maximize its current and future benefits.

The purpose of this report is to review the current status and management of the City's urban forest, and to provide a long-term (i.e., 20+ year) framework that will allow the City to gradually shift from its current responsive management mode to a more proactive and adaptive management mode. This plan will provide the City with the tools to move forward in a practical and progressive manner, but will require political support, broad community and stakeholder buy-in, and ongoing municipal support (both in terms of human and financial resources) to be implemented.

Guelph is a city that has experienced an accelerated rate of growth over the past two decades, and is expected to continue to grow rapidly over the next two decades. Despite this growth, the City has maintained a reasonably good level of urban forest canopy cover (estimated at more than 30%)¹. The City's urban forest includes: (a) wooded areas found in the City's natural areas, parks and ravines, and (b) individual trees growing along roadsides, in residential and school yards, and on commercial, institutional or industrial properties. However, even though the City's current forest cover is good, many of the standing trees are older and in need of pruning or removal, and not enough young trees have been planted over the years to replace aging trees as they die out and/or need to be removed. Key challenges in the years to come will be to: (1) Develop a municipal inventory to gain a better understanding of the green infrastructure, (2) try and manage the hazards presented by an aging urban forest, (3) accelerate replacement plantings to compensate for inadequate reinvestment into the urban forest in the past, (4) ensure that new plantings are placed in conditions that maximize their potential lifespan, and (5) effectively protect and manage the remaining forested areas as the City's population continues to grow.

This Framework for a Strategic Urban Forest Management Plan [SUFMP] sets a 20-year period (2008 to 2028) to develop and implement a series of four 5-year Urban Forest Management Plans. Assuming this framework is adopted, the first step will be to develop a Guelph-specific vision and the next step will be to develop the first 5-year plan in the context of a Guelph-specific strategy. This framework provides the background and direction for these next steps, and also identifies data and/or resources gaps that need to be filled to move forward.

¹ Canopy Cover is an estimate of the cover provided by all trees in the City in both natural and built-up areas when the leaves are out. This estimate was generated in GIS by the Study Team for this project based on a synthesis of existing desktop data from the Ontario Ministry of Natural Resources (1983) and the Guelph Natural Heritage Strategy (2006) with additional air photo interpretation conducted for this study.

Context, general direction and specific recommendations are provided for the following components of the overall strategy:

- technical support & community consultation / education / stewardship
- tree inventory (including GIS and asset management)
- forest management (including tree risk assessment, tree establishment plan, tree pruning and plant health care)
- landscape connectivity (including opportunities for reforestation and targets for forest cover)
- urban forest sustainability (including tree protection and hazard abatement)

This framework also provides strategic direction by prioritizing the various recommendations, as listed below, providing guidance for six key elements for a future plan, and identifying mechanisms for regular plan review and updates.

Summary of Recommendations

The approach taken by this plan was to provide a comprehensive list of best practice, and practical recommendations without specific regard for budgetary limitations. These recommendations have been divided into “high” (1), “medium” (2) and “low” (3) priority categories to facilitate the decision-making process. However, it is understood that the implementation of a SUFMP will be a gradual process, that many of the recommendations are interdependent and require the successful implementation of one before another can be accomplished, and that the extent to which components can be implemented will depend on a variety of factors. Key requirements for the successful implementation of a SUFMP include the sustained commitment of resources (both human and capital) from the City, effective direction and monitoring of the plan from the City, and the ability of the City to engage and coordinate its volunteer groups and the broader community in hands-on activities.

At present, in the City of Guelph, there appears to be both the desire to move forward with a SUFMP and a number of active community groups anxious to get involved. This report provides the framework and direction to facilitate the next steps. A summary of the recommendations from this report, with relative priority assigned, is summarized below.

Summary of recommendations for the Strategic Urban Forest Management Plan for the City of Guelph organized by priority.

Priority	Reference Sections	Recommendation
POLICY & GUIDELINE RECOMMENDATIONS (SECTION 3)		
1	3,7	1. The City should ensure that all policy revisions and updates define the urban forest, identify it as a high priority for protection, and describe it as “green infrastructure” which needs to be actively managed.
1	3,7	2. The City should develop comprehensive City-wide policies and guidelines for tree preservation, replacement and enhancement (see Section 7).
2	3,8	3. The City should commit to protecting and, where feasible, enhancing the natural linkages within the City and to the County identified through the City’s Natural Heritage Strategy (see Section 8).
3	3,5	4. The City’s tree by-law should be reviewed and updated to be consistent with the Municipal Act.
3	3,7	5. The City should evaluate if existing staffing is adequate to review and enforce tree protection on development sites once more comprehensive policies are put in place. Should a new Tree Preservation By-law be passed, additional staffing (e.g., an arborist also trained in by-law enforcement) may also need to be considered.
STRATEGIC PLANNING RECOMMENDATIONS (SECTION 4)		
1	4	6. The City should develop at Strategic Urban Forest Management Plan and adopt a 20-year strategic planning approach with 5-year management plans and annual operating plans nested within the 20-year plan.
1	4	7. The City should adopt the principle of adaptive management to ensure that management approaches and priorities can be adjusted as new information is obtained.
1	4	8. The City should develop and use a series of criteria and indicators to track progress towards short and long-term objectives.
COMMUNICATION RECOMMENDATIONS (SECTION 5)		
1	5,4	9. The City should host workshops or public meetings to get community input into the vision and goals for the Strategic Urban Forest Management Plan (SUFMP).
1	5,4,3	10. The City should explore options for providing support and coordination of ongoing and potential volunteer activities related to tree planting in the City.
2	5,4	11. The City should support, and provide the resources for, the creation of an Urban Forestry Management Plan Technical Steering Committee to review and evaluate the status of the SUFMP.
2	5,3	12. The City should explore mechanisms for more inter-departmental coordination regarding proper protection and management of the City’s green infrastructure (i.e., its trees) and educate about tree protection guidelines, policies and best practices.

Priority	Reference Sections	Recommendation
1	5,3	13. The City should expand its public education initiatives by (a) updating and enhancing its on-line urban forestry resources, (b) consider offering urban forestry workshops for residents, and (c) exploring other educational opportunities with other partners (e.g., the University of Guelph).
INVENTORY RECOMMENDATIONS (SECTION 6)		
1	6,4	14. The City should determine specific goals for a tree inventory and develop a system of data collection and asset management in the SUFMP.
1	6	15. The City should complete a tree inventory for all trees on City lands outside of natural areas as part of the first 5-year management plan (refer to Section 4).
2	6,7,3	16. The City should collect the tree inventory based on SYNERGEN and use the UTC GIS Toolbox to monitor overall tree canopy cover in the City, and help identify potential planting locations.
2	6	17. The City should explore options for administering and maintaining their forestry asset management system (e.g., tree inventory software, database, etc.) as it develops.
3	6,3	18. The City should complete a tree inventory for all municipal woodlands based on accepted forest stand inventory protocols as part of the second 5-year management plan (refer to Section 3).
URBAN FOREST STRATEGY & SUSTAINABILITY RECOMMENDATIONS (SECTION 7)		
1	7,3,4	19. Comprehensive specifications for tree preservation that can be consistently applied to all projects across the City should be developed and implemented. These should include: (1) requirements for newly planted trees that maximize their growth and lifespan potential, (2) requirements for protecting existing trees, and (3) progressive tree cabling practices, integrated with an inspection cycle, to support the preservation of large canopied trees.
1	7,6	20. The City should coordinate an inventory of City trees with a risk assessment of this resource, and commit to implementing corrective measures for identified high risk or hazard trees as a high priority item.
2	7	21. The City should establish a pruning cycle and a grid pruning program for street and park trees to shift from a reactive to a proactive maintenance mode.
2	7,6	22. Once a preliminary City-wide risk assessment has been conducted, the City should implement an inspection protocol for trees that have been identified as having some level of risk possibly in conjunction with pruning activities.
1	7,6	23. The City should hire additional qualified staff members to support current operations activities, or consider sub-contracting out to (1) catch up on the back-log of tree pruning / maintenance work, (2) undertake an assessment of risk trees on all City lands and, where required, undertake mitigative measures or removals, and (3) increase the tree replacement ratio.

Priority	Reference Sections	Recommendation
3	7,3,6	24. The City should develop a strategy for the monitoring and control of alien invasive species. Where appropriate the City should coordinate its efforts with agencies such as the Canadian Food Inspection Agency, the Canadian Forest Service, the Ontario Ministry of Natural Resources, Grand River Conservation Authority and other area municipalities.
LANDSCAPE CONNECTIVITY RECOMMENDATIONS (SECTION 8)		
3	8,6	25. Once a municipal tree inventory has been undertaken, the City should conduct a study (using GIS) to identify opportunities for reforestation within the City's urban matrix, and work with the County of Wellington and the GRCA to support linkages to natural areas extending outside the City.