



**CITY OF HAMILTON**  
**PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT**  
**Planning Division**

<b>TO:</b>	Chair and Members Planning Committee
<b>COMMITTEE DATE:</b>	February 14, 2017
<b>SUBJECT/REPORT NO:</b>	Hamilton Urban Forest Strategy Work Plan (PD02229(g)) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
<b>PREPARED BY:</b>	Catherine Plosz (905) 546-2424 Ext. 1231
<b>SUBMITTED BY:</b>	Steve Robichaud Director of Planning and Chief Planner Planning and Economic Development Department
<b>SIGNATURE:</b>	

**RECOMMENDATIONS**

- (a) That the work plan to prepare a City of Hamilton Urban Forest Strategy, attached as Appendix “A” to Report PD02229(g), be received for information; and,
- (b) That staff be directed and authorized to prepare a Request for Proposal (RFP) to retain a consultant to prepare the Urban Forest Strategy (UFS).

**EXECUTIVE SUMMARY**

When the Urban Hamilton Woodland Conservation By-law was approved in August 2014, Council directed staff to prepare a Woodland Protection Strategy for Hamilton. While the Conservation By-law provides the regulatory tools to preserve existing trees other non-regulatory methods to preserve and increase the City’s tree cover are also needed. Examples include programs to increase public education and awareness, and tree planting programs.

The Urban Forest Strategy (UFS) (renamed from Woodland Protection Strategy) will be a community-developed vision and plan that outlines the necessary steps that must be taken to protect, enhance, maintain and monitor the trees and forests in the urban area of Hamilton over the next 20 years and beyond.

The UFS will include:

- a vision for the desired future state of the urban forest;

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- background research on existing policies, by-laws, programs, and activities;
- identification of challenges and opportunities; and,
- programs, policies and implementation tools to better manage tree planting, maintenance, protection, public education and awareness, and monitoring.

Staff recommend that a Strategy for the Urban Area of Hamilton be prepared first, because urban stresses on trees are more urgent than in the rural area. After the UFS is completed, a Strategy for the rural area will be initiated at a later date.

A consultant will be required to prepare the UFS, at a cost of approximately \$150,000. A Natural Heritage Planner from the Development Planning, Heritage, and Design Section will oversee the project, and City staff from other Sections (Forestry, Parks Planning and Operations and Maintenance, Planning, Risk Management, and Public Health) will also participate. It is anticipated that the Strategy will be completed in two years (2017 to 2019). A capital budget of \$150,000 for the Urban Forest Strategy was approved by Council on December 14, 2016.

In preparing the UFS, there will be an extensive public engagement process, so that the UFS reflects the concerns and values of Hamilton's citizens, as well as a shared responsibility for its implementation.

The recommended UFS Work Plan is attached as Appendix "A" to Report PD02229(g).

***Alternatives for Consideration – See Page 10***

**FINANCIAL – STAFFING – LEGAL IMPLICATIONS**

Financial: Capital budget funding of \$150,000 was approved by Council on December 14, 2016. This funding will be used to hire a consultant to prepare the UFS, as well as project costs for room rental, open house and meeting expenses, printing maps and materials.

General Budget for Urban Forest Strategy:

<b>Budget Item</b>	<b>Cost (2017 to 2019)</b>
<u>Consultant staff costs</u>	<u>\$140,000</u>
<u>Meetings (facilities and materials)</u> <u>Estimate based on 6 UFS Team meetings, and 20 Focus</u> <u>Group meetings, and 1 Open House.</u>	<u>\$2,000</u>
<u>Facilitator for 1 Open House</u>	<u>\$8,000</u>
<b><u>Total/year</u></b>	<b><u>\$150,000</u></b>

Staffing: A Natural Heritage Planner from the Development Planning, Heritage, and Design Section will be the Project Co-ordinator and will oversee the daily

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operation of the project. The UFS will require City staff time from various Sections (including Forestry, Parks Planning and Operations and Maintenance, Planning, Risk Management, and Public Health) to provide data and expertise, participate on the UFS Team, assist with meetings, open houses, and Focus Groups, and review drafts of the Strategy. The Project Co-ordinator will work closely with Forestry Section staff, because of their specific expertise and experience.

Legal: There are no legal implications to this Report.

## **HISTORICAL BACKGROUND**

City of Hamilton Tree Cutting By-laws and Tree Protection Guidelines:

- 2004 Planning and Economic Development Department staff prepared Report PD02229(a), which outlined the options for developing a Tree Cutting By-law for private property in Hamilton. Council directed staff to prepare a comprehensive By-law which regulates trees and forests in the Urban Area and forests in the Rural Area.
- June 2008 A draft Tree Cutting By-law was presented to the Economic Development and Planning Committee in Report PD02229(b). Staff were directed to revise the By-law to address concerns raised from the rural community.
- October 2009 A revised Tree Cutting By-law was presented to Council (Report PD02229(c)). This By-law was not approved, and instead, Council directed staff to prepare Tree Protection Guidelines for Development Sites.
- October 2010 Tree Protection Guidelines were approved by Council. The Guidelines outline a process for identifying trees to be preserved and removed as part of a development application.
- Between 2011 and 2013 Five woodlands in the urban area were cut down in Wards 7, 8, 11, and 15. To address this situation, in January 2013, GIC approved a Motion that staff prepare an urban By-law for woodlands on privately-owned land, however, individual trees would not be regulated in the By-law.

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August 2014 An Urban Woodland Conservation By-law that regulates private woodlands 0.2 ha. (0.5 acres) or more in size in the urban area (Report PD02229(d)) was approved.

May 2015 An updated Public Tree By-law (No. 15-125) to regulate trees and woodlands on public lands was approved.

This Report is in response to previous 2014 Council direction. When the Urban Woodland Conservation By-law was approved on August 20, 2014, Council directed that staff:

“...be directed to prepare a work plan and report back to Planning Committee on a Woodland Protection Strategy which supplements the new By-law, to implement non-regulatory tools that protect and enhance trees and woodlands in the Urban and Rural Areas of Hamilton.”

The intention is to explore other methods, in addition to regulatory methods (i.e. tree cutting By-laws), to preserve and enhance tree cover across Hamilton. The City recognizes that there are many “non-regulatory” ways (e.g. education and awareness programs, tree maintenance planning, tree inventories) to improve tree cover in Hamilton. A comprehensive UFS for private and public lands will give clear direction on how to achieve our vision.

## **POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS**

### Our Future Hamilton Vision:

The proposed UFS aligns with the Vision for Our Future Hamilton, which includes advancing environmental sustainability and stewardship. The public input gathered for the Future Vision, included concern about current tree-cutting practices and reduction in plant diversity. It was revealed that a top priority for Hamilton residents is to enhance the City tree canopy by replacing trees that are removed as a result of development, weather damage, or pests. Increasing and protecting plant diversity is an important component of building a resilient ecosystem that can adapt to a changing climate (“Our Future Hamilton: Communities in Conversation”, Appendix “A” to Report CM15001(a) / CES15010(a)). An UFS would guide the community efforts to meet this aspect of the Vision.

### Provincial Policy Statement (PPS 2014):

The Provincial Policy Statement contains the following policies which support tree and forest protection for the values they provide to all:

- Policy 1.6.2 Planning authorities should promote green infrastructure to complement infrastructure; and,
- Policy 3.1.3 Planning authorities shall consider the potential impacts of climate change that may increase the risk associated with natural hazards.

Ontario Climate Change Action Plan:

In June 2016, Ontario's Climate Change Action Plan (OCCAP) was approved and provides a five-year plan that will help Ontario fight climate change over the long term. The OCCAP includes actions to increase tree planting (50 million trees across the province by 2025). It recognizes the important role that trees play in carbon storage, and pledges to work with First Nations and Metis communities to better understand and monitor natural systems that play an important role in carbon storage.

Proposed Greenbelt Plan (2016):

The Province of Ontario is currently revising the Greenbelt Plan. References to the OCCAP are included throughout the proposed Greenbelt Plan, reaffirming the government's commitment to reduce greenhouse gas emissions. The proposed Greenbelt Plan recognizes that greenhouse gas emissions can be offset by "carbon sinks" found in natural areas such as the Greenbelt that also includes agricultural lands, green infrastructure and other greenspaces.

Hamilton Urban and Rural Official Plans:

The Urban (UHOP) and Rural (RHOP) Hamilton Official Plans contain policies (C.2.11 in UHOP and C.2.10.4 in RHOP) on Tree and Woodland Protection. These policies state that:

"A Woodland Protection Strategy to protect tree cover on new development sites within urban and rural settlement areas and provides technical direction and practices to protect trees and other vegetation during construction shall be prepared to minimize the impacts on trees and woodlands to be retained."

The UFS implements the Provincial Policy Statement, the Ontario Climate Change Action Plan, the proposed Greenbelt Plan, and Hamilton Official Plan policies.

**RELEVANT CONSULTATION**

In September and November 2014, the Hamilton Naturalists' Club held two workshops with staff from the City of Hamilton, the Conservation Authorities, the Royal Botanical Gardens, the Ontario Ministry of Natural Resources and Forestry, non-government organizations (e.g. Environment Hamilton, Hamilton Naturalists' Club, Trees for

Hamilton, Green Venture, Dundas Tree Keepers), and residents to discuss how to initiate an UFS.

During the summer and fall of 2015, Natural Heritage Planning staff met with City staff, agencies, and community stakeholders to gather additional input. During these discussions, it became clear that there was strong interest, energy and external resources in the City that could be utilized in preparing and implementing the Strategy. A draft Work Plan has been prepared (attached as Appendix “A” to Report PD02229(g)) based on this input, and in consultation with other City staff (Forestry, Risk Management, Development Planning, Heritage and Design, Landscape Architectural Services, Parks and Cemeteries, and Public Health).

## **ANALYSIS AND RATIONALE FOR RECOMMENDATION**

### What is an Urban Forest?

The urban forest includes all trees and their habitat within the City of Hamilton’s Urban Area boundaries. This includes trees along city streets; in parks, ravines and natural areas; trees in private property; and trees in landscaped open spaces associated with health care facilities, academic institutions, golf courses, cemeteries and local businesses. It is a shared resource that benefits the entire community.

### What is an Urban Forest Strategy?

An UFS is a community-developed vision and plan that outlines the necessary steps to protect, enhance, and monitor the trees and forests in the Urban Area of Hamilton over the next 20 years.

Hamilton is fortunate to have significant natural features (Cootes Paradise, Dundas Valley, Hamilton Harbour, and the Niagara Escarpment) which contribute to a beautiful and healthy environment. Trees enhance Hamilton’s streets, parks, and residential areas, and include planted and naturally-occurring trees, native and non-native, young and mature trees. All of these trees contribute to the health of the community and the beauty of the neighbourhoods in urban and rural parts of Hamilton.

The UFS will provide the strategic direction for long-term education, planning, planting, protection, and maintenance of trees and woodlands in the City. It will focus on understanding and improving the management of Hamilton’s trees and forests to ensure that planning, budgeting, and operations achieve its long-term vision. The UFS will identify the resources required to implement the recommendations and monitor progress. Targets and performance indicators (e.g. canopy cover, species and age distribution, and general public awareness of trees) will be identified to measure whether implementation is successfully meeting the vision.

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Trees are vitally important to our quality of life. The benefits of trees are numerous:

- Trees reduce air pollution by absorbing gases (ozone, nitrogen dioxides, and sulfur dioxide), while at the same time producing oxygen. Trees also intercept fine particulate pollutants on their leaves;
- Trees remove atmospheric carbon and store it in their tissues (called carbon sequestration). By removing carbon from the environment, trees reduce the impacts of climate change;
- Tree canopies and roots intercept and absorb rainfall and reduce storm water flows and flooding;
- Trees provide habitat for wildlife, contributing significantly to local biodiversity;
- Trees moderate temperatures by providing shade and by releasing water vapour (through transpiration), which reduces temperature;
- Trees lower energy costs by providing shade and shelter from wind;
- Trees enhance communities by providing shade and beauty, which encourages people to walk in their neighbourhood. Increased outdoor activity contributes to our physical and mental health;
- In studies, trees and green spaces have been shown to have positive effects on depression and well-being;
- Trees increase property values. A well-developed urban forest improves neighbourhood aesthetics and attracts more home buyers; and,
- Trees planted in business areas have been shown to attract more shoppers and foster civic pride.

The economic value of trees in Hamilton is significant, which many people do not realize. For example, using a model developed by the USDA Forest Service, (iTree), the City recently determined that, in its lifetime, a Sugar Maple tree in Gage Park contributed \$21,950 of ecological benefits (air quality improvement, energy conservation, storm water control) to the community.

However, pressures on trees are increasing, especially in the urban area, including:

- The spread of invasive non-native tree species which outcompete native trees and reduce biodiversity;
- Pests and diseases (e.g. Emerald Ash Borer, Gypsy Moth, Butternut canker, Oak wilt, Dutch Elm Disease);
- Impacts of climate change (drought, flooding, storm damage) which stress trees, making them more susceptible to insects and diseases;
- Difficult growing conditions in the urban area (poor soil, soil compaction, road salt, and limited space to plant);
- Development pressures from intensification which reduces the space available for trees and increases the potential conflicts with other infrastructure; and,

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- Population growth will continue to place stress on trees within recreational areas.

There are competing values and objectives related to trees. The UFS will be based on extensive consultation with residents, agencies, non-government agencies, and stakeholders. It will provide a clear and balanced approach to protecting and expanding the urban forest and will reflect local priorities and values.

The UFS will bring City staff together with other agencies, groups, and residents who can contribute resources. There are many tree protection and planting programs and activities taking place in Hamilton currently, but more coordination is needed. If these groups can talk and work together toward a common vision, limited resources can be used more efficiently.

Climate change refers to the long-term change in average weather patterns resulting from the release of greenhouse gases such as carbon dioxide, methane and nitrous oxide into the atmosphere. Climate Change Action Plans have been prepared at the provincial and municipal levels and recognize the importance of planting, maintaining, and monitoring trees as a means to reduce the impacts of climate change. In Hamilton, the Community Climate Change Action Plan has identified actions and opportunities that both encourage reductions in greenhouse gas emissions in our community and outline ways to adapt to expected changes from climate change (Report BOH15025). The Action Plan recognizes that preserving and enhancing tree cover will reduce energy requirements, moderate temperatures, lessen impacts of floods, and help to offset local CO<sub>2</sub> emissions. If the UFS can achieve its vision, it will be a significant contribution to reducing the impacts of climate change locally.

Many other municipalities in southern Ontario have completed UFSs in recent years, including the Cities of Burlington, Guelph, London, Toronto, Mississauga, and Oakville. The Strategy will bring together the data, resources, recommendations, and priorities in one comprehensive document for staff and stakeholders to use.

In the midst of competing demands (e.g. road, water, and sewer infrastructure, development, recreation, and resource needs), City trees and forests are often overlooked. Trees are long-lived, and require an organized plan to ensure their long-term health. There is a need for a more strategic, coordinated, and comprehensive approach to tree and forest management, to ensure healthy trees for future generations. The UFS will provide a guiding document that City staff and the community can use over the next 20 years.

### Consultant-Prepared Strategy

Staff is recommending hiring a consulting firm to research, gather and analyse forest cover data, consult with residents, draft the Strategy and present the results to Council. Based on feedback from staff in other municipalities, the cost to prepare these

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Strategies ranges from \$120,000 to \$150,000, depending on the scope. It is estimated that the consultant costs for the Hamilton UFS, including the public engagement plan, will be approximately \$150,000 and will take 2 years to complete.

A consulting firm will provide a new perspective, as experts with experience working with other municipalities in preparing Forest Strategies will advise and guide the City's process. Their knowledge and experience will streamline and improve Hamilton's process, as they are expert technical advisors who have learned from past experience. For these reasons, staff recommends that the capital budget funds approved for the UFS be used to hire a consultant to prepare the UFS.

### Public Engagement

Public engagement will be an important part of developing the UFS. Effective public engagement will ensure information exchange, discussion, ownership, and successful implementation. To prepare the UFS, staff will consult with residents, stakeholders, agencies, and City staff through the UFS Team, Focus Groups, and other methods outlined below.

### Urban Forest Strategy Team (UFST)

The Strategy will be initiated by recruiting City staff, stakeholders, NGOs, and interested residents to form the Urban Forest Strategy Team (UFST) which will guide and shape the UFS. The purpose of the UFST will be to provide data, guidance, and technical expertise throughout the project. They will meet regularly throughout the project (likely six times) to review drafts, provide resources, and guide the UFS. The UFST will consist of 20 to 25 members. Members of the UFST will bring different resources and perspectives which are important to hear and balance.

The UFST will include staff from Planning, Forestry, Parks Planning, Parks Operations and Maintenance, Risk Management, and Public Health. External members could include: Business Improvement Associations (BIAs), NGOs, youth / students, Conservation Authorities, Hamilton Naturalists' Club, Cootes to Escarpment Ecopark, Royal Botanical Gardens, McMaster University and Mohawk College, Hamilton-Halton Homebuilders' Association (HHHBA), Environment Hamilton, Clean Air Hamilton, and Trees for Hamilton. Refer to the Work Plan (Appendix "A" to Report PD02229(g)) for a tentative list of stakeholders who may wish to participate on the UFST.

It will also be useful to identify potential UFS champions (current or former elected officials and community leaders) to be members of the UFST. Staff will prepare a Terms of Reference, which outlines the roles and responsibilities of the group.

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### Focus Groups

The Focus Groups will consist of interested residents and stakeholders who will examine specific theme areas. The following themes could be explored:

- Protecting Existing Trees (policies, guidelines, by-laws, targets for forest cover);
- Planting More and Suitable Trees (enhance the Natural Heritage System, native trees, the right tree in the right place, priority planting areas);
- Maintaining and Monitoring (caring for trees, data collection); and,
- Increasing Public Awareness and Engagement.

Their recommendations (about future actions, projects, partnerships and resources) will be presented to the UFST, and will be included in the final UFS report.

### Other Public Engagement Methods

In addition to the UFST and Focus Groups, other methods will be used to gather input to the Strategy, including:

- Open houses and public meetings;
- Setting up a table at other community events to gather input;
- Photo visioning - residents could submit photos, video, or drawings which illustrate their vision of Hamilton's future urban forest. This would provide different perspectives on how residents view trees and woodlands in Hamilton, and what is important to the community;
- Tree stories – the City could ask people to submit short stories (video or written) describing their relationship with trees in their neighbourhood, and their perceptions of changes in their parks, streets, and the overall environment. These “tree stories” will assist in visioning, by identifying what people like now and what they want for the future; and,
- Comprehensive, easy to use web page for project updates and events, on-line surveys, and using Facebook, Twitter, and Instagram to provide a platform for people to voice their opinions.

Using a variety of methods to engage the community will result in better participation and shared responsibility for implementing the UFS.

## **ALTERNATIVES FOR CONSIDERATION**

The options presented below provide alternative financial and staffing implications.

Do Nothing

An UFS will not be prepared. This option is not recommended because the City of Hamilton will not experience the benefits of an UFS (e.g. no public education, no expansion of programs to support tree planting in the city, lost opportunities for cost sharing, continued decline of forest cover, etc.) and it does not implement the Council direction to prepare the Strategy.

Combined Urban and Rural Forest Strategy

This option involves preparing a Strategy for both the urban and rural areas of the City. It would allow the City to take advantage of the combined effect of the public engagement process for the entire City. The disadvantage would be that this option would be more expensive and take longer to complete. It also may be difficult to combine urban and rural areas, since the values and issues may differ. This option is not recommended.

**ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN**

**Community Engagement & Participation**

*Hamilton has an open, transparent and accessible approach to City government that engages with and empowers all citizens to be involved in their community.*

**Healthy and Safe Communities**

*Hamilton is a safe and supportive city where people are active, healthy, and have a high quality of life.*

**Clean and Green**

*Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.*

**APPENDICES AND SCHEDULES ATTACHED**

- Appendix “A”: Urban Forest Strategy Draft Work Plan

CP/mo