

**Report to
Rapport au:**

**Environment and Climate Protection Committee
Comité de l'environnement et de la protection climatique
20 June 2017 / 20 juin 2017**

**and Council
et au Conseil
28 June 2017 / 28 juin 2017**

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**Submitted by
Soumis par:**

John Smit, Director/ Directeur

**Economic Development and Long Range Planning / Développement économique
et Planification à long terme / Planning, Infrastructure and Economic
Development / Direction général de la planification, de l'infrastructure et du
développement économique
and / et**

Laila Gibbons,

**Director / Directrice, Parks, Forestry and Stormwater Services / Services parc,
forestiers et eaux pluviales, Public Works and Environmental Services / Travaux
publics et services environnementaux**

Contact Person

Personne ressource:

**Martha Copestake, Forester – Planning / Expert-forestier – Planification
Planning, Infrastructure and Economic Development / Direction général de la
planification, de l'infrastructure et du développement économique
(613) 580-2424, 17922, Martha.Copestake@ottawa.ca**

Ward: CITY WIDE / À L'ÉCHELLE DE LA VILLE File Number: ACS2017-PIE-EDP-0012

SUBJECT: Urban Forest Management Plan

OBJET: Plan de gestion de la forêt urbaine

REPORT RECOMMENDATIONS

That the Environment and Climate Protection Committee recommend Council:

- 1. Approve the Urban Forest Management Plan attached as Document 1;**
- 2. Direct staff to initiate the first year of the 2018-2021 work plan as described in this report and summarized in Document 3;**
- 3. Direct staff to report back to Committee and Council on the implementation of the Urban Forest Management Plan and recommended next steps by Q1 2019; and**
- 4. Confirm approval of the Urban Forest Management Plan as adoption of a City policy in accordance with subsection 270 (1) 7. of the *Municipal Act, 2001*, when Subsection 32 of Bill 68 is proclaimed in force, as outlined in this report.**

RECOMMANDATIONS DU RAPPORT

Que le Comité de l'environnement et de la protection climatique recommande au Conseil :

- 1. d'approuver le Plan de gestion de la forêt urbaine, ci-joint en tant que document 1;**
- 2. de charger le personnel d'entamer la première année d'application du plan de travail 2018-2021, décrit dans le présent rapport et résumé dans le document 3;**
- 3. de charger le personnel de rendre compte au Comité et au Conseil sur la mise en œuvre du Plan de gestion de la forêt urbaine et sur les prochaines étapes recommandées d'ici au 1^{er} trimestre de 2019;**
- 4. de confirmer l'approbation du Plan de gestion de la forêt urbaine, en tant que politique de la Ville adoptée aux termes du paragraphe 270 (1) 7 de la *Loi de 2001 sur les municipalités*, une fois entré en vigueur le paragraphe 32 du projet de loi 68, comme le stipule le présent rapport.**

EXECUTIVE SUMMARY

Assumption and Analysis

The community and many stakeholders have been calling for a more strategic approach to urban forest management in Ottawa for several years. The concept of the development of such a strategy is embedded within the City's Official Plan (Section 2.4.5 Greenspaces) and referenced throughout the Greenspace Master Plan.

Council recognized the value of the urban forest and the importance of a strategic approach to urban trees by including the development of an Urban Forest Management Plan (UFMP) for the City of Ottawa as a Strategic Initiative (SI #24 under ES1) within its' Term of Council Strategic Priorities.

In addition, the Province's Bill 68, which has received Third Reading and Royal Assent, includes an amendment to the *Municipal Act* related to the protection and enhancement of tree canopy in municipalities. Once subsection 32 of Bill 68 is proclaimed in force (time to be announced), subsection 270 (1) 7. of the *Municipal Act* will require the municipality to "adopt and maintain policies with respect to.....The manner in which the municipality will protect and enhance the tree canopy and natural vegetation in the municipality". Formal adoption of the UFMP will meet the proposed new requirements and staff recommend that the UFMP be formally adopted to meet the requirements of subsection 270 (1) 7.

A strategic UFMP for Ottawa will provide a structured approach to protecting and enhancing the environmental, social, and economical services provided by the urban forest and ensure that it is healthy and robust into the future. It will also guide the work-planning process for Parks, Forestry and Stormwater Services, and Natural Systems and Environmental Protection.

The Plan will enable the City to protect and manage existing trees more effectively, achieve greater success in tree establishment, increase the urban tree canopy, and engage the community in support of urban forest sustainability. Key work that will come out of the UFMP's first management period includes:

- A review and update of the Urban Tree Conservation By-law;
- A comprehensive urban forest canopy study (underway) and a tree planting prioritization tool;
- The establishment of external and internal urban forestry working groups;

- The full integration of Ottawa’s urban forest into the City’s Comprehensive Asset Management Program (underway); and
- The identification of formal incentives to encourage tree retention and protection.

Financial Implications

The first year of the 2018-2021 work plan can be accommodated within existing resources. Recommendations with respect to the resourcing of the next phases of the Urban Forest Management Plan will be brought forward to the 2018-2022 Council as part of its term of Council priority-setting and budget exercises.

Public Consultation/Input

The public and stakeholders helped to identify the need for an UFMP in Ottawa and played a key role in developing the Plan. The project was managed in two phases. The Phase 1 consultations for the Plan were held in November 2015 and provided the public with an opportunity to discuss key issues, challenges, and opportunities facing the city’s urban forest and to provide input into the vision and direction for Ottawa’s UFMP. A draft UFMP was developed, reflecting the input gathered through the Phase 1 consultations. The Phase 2 consultations were held in November 2016 and provided an opportunity for the public and stakeholders to provide input to the draft UFMP. The final UFMP was developed and it reflects public and stakeholder feedback on the draft Plan, gathered through the Phase 2 consultations. The public response to the project and the consultation process has been overwhelmingly positive.

RÉSUMÉ

Hypothèse et analyse

Les membres de la collectivité et de nombreuses parties intéressées réclament depuis plusieurs années l’adoption d’une approche plus stratégique de gestion de la forêt urbaine à Ottawa. Le concept d’élaboration d’une telle stratégie est intégré dans le Plan officiel de la Ville (section 2.4.5 Espaces verts) et cité tout au long du Plan directeur des espaces verts.

Le Conseil a reconnu la valeur de la forêt urbaine et l’importance d’une approche stratégique vis-à-vis des arbres urbains, en intégrant l’élaboration d’un Plan de gestion de la forêt urbaine (PGFU) pour la Ville d’Ottawa en tant qu’initiative stratégique (initiative stratégique n° 24 sous ES1) figurant parmi les priorités stratégiques prévues dans le mandat du Conseil.

Par ailleurs, le projet de loi 68 du gouvernement provincial, qui a fait l'objet d'une troisième lecture et de la sanction royale, comprend une modification à la *Loi sur les municipalités* portant sur la protection et la mise en valeur du couvert forestier dans les municipalités. Une fois le paragraphe 32 du projet de loi 68 entré en vigueur (date à préciser), le paragraphe 270 (1) 7 de la *Loi sur les municipalité* obligera les municipalités à adopter et à mettre en oeuvre des politiques sur « la manière dont elle protégera et renforcera le couvert forestier et la végétation naturelle dans la municipalité ». Le PGFU permettra de satisfaire aux nouvelles exigences proposées, et le personnel recommande son adoption officielle afin de respecter les exigences du paragraphe 270 (1) 7.

Un PGFU stratégique pour Ottawa permettra d'adopter une approche structurée dans la protection et la mise en valeur des services environnementaux, sociaux et économiques qu'offre la forêt urbaine, et permettra de s'assurer qu'elle restera saine et vigoureuse pour les années à venir. Ce PGFU orientera par ailleurs le processus de planification des tâches des Services des parcs, de la foresterie et des eaux pluviales, et de Systèmes naturels et Protection de l'environnement.

Le PGFU permettra à la Ville de protéger et de gérer plus efficacement les arbres existants, de mieux réussir ses plantations, d'accroître le couvert forestier urbain et de faire participer les résidents à l'amélioration de la durabilité de la forêt urbaine. La première période de gestion du PGFU donnera lieu à l'exécution des tâches clés suivantes :

- Examen et mise à jour du Règlement sur la conservation des arbres urbains;
- Étude détaillée du couvert forestier urbain (en cours) et outil de priorisation pour la plantation d'arbres;
- Constitution de groupes de travail externes et internes sur la foresterie urbaine;
- Intégration complète de la forêt urbaine d'Ottawa dans le Programme de gestion intégrale des actifs de la Ville (en cours);
- Désignation de mesures officielles d'incitation à la conservation et à la protection des arbres.

Répercussions financières

Pour sa première année d'application, le plan de travail 2018-2021 peut être mis en oeuvre avec les ressources existantes. Des recommandations relatives à l'affectation de

ressources pour les étapes suivantes du Plan de gestion de la forêt urbaine seront soumises au Conseil au cours de la période 2018-2022, dans le cadre de l'établissement des priorités et des exercices budgétaires de son mandat.

Consultation publique et commentaires

Les membres du public et les parties intéressées ont contribué à établir la nécessité d'un PGFU à Ottawa, et ont joué un rôle clé dans son élaboration. Le projet a été mené en deux phases. Les consultations de la Phase 1, tenues en novembre 2015, ont permis aux résidents de discuter des principaux enjeux, des défis et des possibilités entourant la forêt urbaine d'Ottawa, et de faire part de leurs commentaires quant à la vision d'avenir et aux orientations relatives au PGFU d'Ottawa. Une version provisoire du PGFU a été élaborée, compte tenu des commentaires recueillis lors des consultations de la Phase 1. Les consultations de la Phase 2 ont eu lieu en novembre 2016 et ont permis aux membres du public et aux parties intéressées de donner leur point de vue sur la version provisoire du PGFU. La version définitive du PGFU tient compte des commentaires des résidents et des parties intéressées émis dans la version provisoire et recueillis lors des consultations de la Phase 2. La réaction du public au projet et au processus de consultation a été extrêmement positive.

BACKGROUND

Discussions around the importance of developing a forest strategy for Ottawa have been ongoing for many years. The community and many stakeholders have been calling for a more strategic approach to urban forest management in Ottawa for several years. The concept of the development of such a strategy is also embedded within the City's Official Plan (Section 2.4.5 Greenspaces) and referenced throughout the Greenspace Master Plan. Recently, in many wards in urban Ottawa, there has been a lot of focus on the importance of urban trees; retaining and protecting the existing urban tree canopy, adequately replacing urban trees as they reach maturity, and maintaining and caring for newly planted urban trees adequately.

This Council recognized the value of the urban forest and the importance of a strategic approach to urban trees by including the development of an Urban Forest Management Plan (UFMP) for the City of Ottawa as Strategic Initiative #24 under ES1 - support an environmentally sustainable Ottawa, within its' Term of Council Strategic Priorities.

In addition, the Province's Bill 68, which has received Third Reading and Royal Assent, includes an amendment to the *Municipal Act* related to the protection and enhancement of tree canopy in municipalities. Once subsection 32 of Bill 68 is proclaimed in force

(time to be announced), subsection 270 (1) 7. of the *Municipal Act* will require the municipality to “adopt and maintain policies with respect to.....The manner in which the municipality will protect and enhance the tree canopy and natural vegetation in the municipality”. Formal adoption of the UFMP will meet the proposed new requirements and staff recommend that the UFMP be formally adopted to meet the requirements of subsection 270 (1) 7.

The UFMP project was launched in September 2015. A consulting team lead by Urban Forest Innovations (UFI) was hired to complete the Plan. Based out of Mississauga, UFI is a global leader in urban forestry and arboricultural consulting. Members of the consulting team have been involved in developing approximately a dozen strategic municipal urban forest management plans across Canada.

The public and stakeholders helped to identify the need for an UFMP in Ottawa and they played a key role in developing the Plan. The project was managed in two phases. The Phase 1 consultations for the Plan were held in November 2015 and provided the public with an opportunity to discuss key issues, challenges, and opportunities facing the city’s urban forest and to provide input into the vision and direction for Ottawa’s UFMP. A draft UFMP was developed for Ottawa reflecting the input gathered through the Phase 1 consultations. The Phase 2 consultations were held in November 2016 and provided an opportunity for the public and stakeholders to provide input to the draft UFMP. The final UFMP was developed and reflects the public and stakeholder feedback on the draft Plan, gathered through the Phase 2 consultations. The Consultation section of this report describes the consultation process in more detail.

A strategic UFMP for Ottawa will provide a structured approach to protecting and enhancing the environmental, social, and economical services provided by the urban forest and ensure that it is healthy and robust into the future. With this Plan, Ottawa has the opportunity to be recognized as a leader in urban forest management.

DISCUSSION

Putting Down Roots for the Future is a 20-year Urban Forest Management Plan (UFMP) for the City of Ottawa, from 2018 to 2037, that recognizes the value and importance of the city’s urban forest and supports the community’s commitment to the continued and improved stewardship of this valuable asset. The implementation of the UFMP will see the City of Ottawa communicating more regularly with stakeholders on the urban forest, collecting good data to monitor the urban forest over time and to help inform tree planting and other management decisions, updating tree by-laws to better conserve and

protect trees, and, over time increasing the urban tree canopy cover in Ottawa. The UMFP can be found in Document 1.

Putting Down Roots for the Future includes 26 Recommendations and is meant to be used as a resource by City of Ottawa staff and Council, members of the community, and numerous other internal and external stakeholders. The Plan is intended to help all users better understand the range of policies, practices and standards which directly and indirectly influence Ottawa's urban forest. It is also intended, through implementation of the Plan's recommendations, to guide the City and its partners in working towards achieving the vision, principles, objectives, and targets established for the urban forest.

Ottawa's urban forest includes all of the trees, and their growing environments, within the City's urban boundary and urban expansion areas. The urban forest includes trees in parks and natural areas, along streets, and near waterways. The urban forest crosses property and jurisdictional boundaries, and includes trees on private and institutional properties and lands managed by various public agencies, including the City of Ottawa, National Capital Commission (NCC), Federal and Provincial Governments, and Conservation Authorities.

The map in Figure 1 of the UFMP (Document 1) shows the Study Area for this Plan and important jurisdictional boundaries. This Plan considers the urban forest within Ottawa's urban boundary, as defined by the City's Official Plan, and the six urban expansion areas. The City of Ottawa has direct jurisdiction over only City-owned land, but has policies and programs in place to address urban forest opportunities and challenges on privately owned land as well. The City does not have jurisdiction over the NCC and Federal Urban Lands and the NCC Greenbelt (shown on the map in Figure 1). However, the NCC and the City continuously work together on shared goals and objectives for urban forest management in Ottawa; the NCC has been a key stakeholder in the development of Ottawa's UFMP.

Vision

The vision statement for Putting Down Roots for the Future represents an ideal description or image of the urban forest as it will appear in twenty years, following implementation of the strategies, practices and action items recommended in this Plan. It was developed in collaboration with stakeholders at an Interim Consultation in 2016.

The Vision for Ottawa's Urban Forest:

Ottawa's urban forest is healthy, diverse, resilient, and always growing. It sustains vibrant, livable and unique neighbourhoods and promotes health and well-being equitably for all of the city's residents and visitors.

Guiding Principles and Objectives

Based on feedback from the Phase 1 consultations, the project consultants developed eight guiding principles that set the direction of the Plan. Contained within the UFMP, the guiding principles should be considered whenever actions and decisions related to the urban forest are made.

Guiding Principles:

1. The urban forest must be recognized and managed as a valuable infrastructure asset and a positive investment.
2. The City and its partners should be bold and innovative in urban forest management.
3. Urban forest management is a shared responsibility, and working together is the key to achieving success.
4. Urban forest management encompasses a wide range of actions.
5. Urban forest management must be flexible, adaptive, and information-based.
6. All of Ottawa's residents deserve equitable access to the benefits provided by the urban forest.
7. All trees are valuable and large trees require special considerations.
8. Increasing diversity builds resilience against climate change and other stressors.

The vision of the UFMP will be realized through the implementation of the 26 recommendations, which are designed to achieve eight strategic objectives. The objectives were also developed based on the feedback received in the consultations.

Strategic Objectives:

1. Work towards achieving urban forest sustainability.
2. Enhance urban forest protection and establishment.

3. Improve knowledge of the urban forest and its management.
4. Expand community engagement and stewardship in the urban forest.
5. Foster a resilient, diverse and functional urban forest.
6. Minimize risk related to the urban forest.
7. Manage the urban forest more proactively and provide resources to urban forest management.

Plan Structure

Ottawa's UFMP is based on a 20 year planning horizon (2018-2037), broken down to a three-tiered strategic planning framework. Structured from high level to more detailed actions, the framework includes:

1. A 20-year Strategic Plan – Outlines the long term vision, guiding principles, objectives, and targets to be realized over the planning horizon.
2. A series of five four-year Management Plans – Facilitates ongoing UFMP implementation, review and adaptive management; the status of the UFMP will be reviewed in the development of these medium term plans at the end of each four year management period. The first four-year management period runs from 2018 to 2021. The plan for the first management period can be found in Document 3. This four year plan stems directly from the detailed recommendations in the UFMP.
3. Annual Operating Plans – Yearly, staff will develop work plans for internal use to facilitate the implementation of the 4 year management plans.

The Plan is based on the concept of adaptive management. There will be formal review at the end of each four year management period when the status of the implementation of the Plan's recommendations is evaluated and the outcome will be incorporated into the management plan for the forthcoming period. This ensures that any new or ongoing challenges or opportunities related to the urban forest that present over time will be incorporated into the UFMP.

The UFMP includes a target setting and performance assessment framework in the form of 30 Criteria and Indicators (C&I) intended to allow urban forest managers to identify where specific goals or targets have been met and when adaptation to management approaches may be necessary. A baseline assessment of the urban forest

management program in Ottawa was done using the C&I framework at the outset of the development of the UFMP to establish the current status of the City's urban forest and to identify areas for improvement. The C&I assessment will be re-run at the end of each management period to assess the implementation of the UFMP and to feed into planning for the subsequent management period. The C&I baseline assessment for Ottawa is outlined in Appendix 2 of the UFMP - Document 1.

The implementation of an UFMP for Ottawa aligns with best practices being advanced by several major and smaller municipalities in Ontario, in Canada, and beyond that have developed, and are implementing, urban forest management plans or strategies.

Current Practices and Opportunities

The UFMP provides an overview of the City of Ottawa's current practices related to the urban forest and its management, organized into four topic areas:

1. Urban forest management program structure and administration
2. Planning for the urban forest
3. Maintaining and growing the urban forest
4. Urban forest outreach, education, stewardship and partnerships

By topic area, the Plan summarizes opportunities for improving aspects of urban forestry in Ottawa. The opportunities are identified based on consideration of:

- Ottawa's unique physical, land use and socio-political context;
- Input from city staff, a range of stakeholders and the public;
- Current practices; and
- Best practices and precedents from other jurisdictions.

Opportunities that are reflected in the Plan's 26 Recommendations include:

- Improving awareness and engagement, broadly, about the value of the urban forest;
- Building internal and external partnerships;
- Proactive urban forest maintenance and health management; and

- A commitment to tree retention, protection, and establishment.

By assessing current practices in conjunction with existing opportunities, such as those listed above, recommendations to improve and/or enhance urban forest management in Ottawa were developed. The overview of current practices and the summary of opportunities can be found in Section 4 of the UFMP – Document 1 and are synthesized into the Plan recommendations in Section 5 of the UFMP – Document 1.

Implementation

The UFMP provides 26 recommendations for implementation over the Plan's 20 year horizon organized by the Plan's four topic areas. Each recommendation is allocated to the Plan's first or second four-year management period, as included in the UFMP Recommendation Summary Table in Document 2. The recommendations were developed with consideration of existing conditions in Ottawa's urban forest and the City's urban forest management program. It included an assessment of available resources, relevant best practices and precedents in the scientific and technical literature and other jurisdictions, and input from consultations with City staff, internal and external stakeholders, and members of the general public as informed by Section 4 of the Plan, described in detail in Section 5, and summarized in Appendix 5 of the UFMP.

The UFMP will be implemented jointly by the Natural Systems and Environmental Planning (NSEP) Unit of Planning, Infrastructure and Economic Development (PIED) and the Forest Management Unit (FMU) of Public Works and Environmental Services (PWES), with the input and assistance from many other internal and external partners and stakeholders. Generally, NSEP will implement the strategic / policy related recommendations and FMU will implement the operational recommendations. For each recommendation the lead unit is identified and the management period for implementation is indicated in Document 2.

The UFMP's 26 recommendations include many new projects and initiatives for City staff to implement. Of the 26 recommendations, it is anticipated that 18 of these recommendations can be completed using existing staff resources. Examples of the important work that will come out of the implementation of these 18 recommendations in the first management period include:

- A review and update of the City's Urban Tree Conservation By-law;
- A comprehensive urban forest canopy study (currently underway) and a tree planting prioritization tool;

- The establishment of external and internal urban forestry working groups;
- The full integration of Ottawa's urban forest into the City's Comprehensive Asset Management Program (underway); and
- The identification of formal incentives to encourage tree retention and protection.
- Staff will report back to Committee by Q1 2019 to offer an update on the implementation of the Plan. Budget requests that may be required to fulfil the requirements of the first 4-year management period will be brought forward to the 2018-2022 Council as a part of its term of Council priority-setting and budget exercises, in line with what is outlined in this report and within the Four Year Plan for the First Management Period – Document 3.

Through the implementation of the recommendations of the UFMP, Ottawa's urban forest will be healthier, more diverse and resilient. The Plan will enable the City to protect and manage existing trees more effectively, achieve greater success in tree establishment, increase the urban tree canopy, and engage the community in support of urban forest sustainability. Over time, the Plan will enable the City of Ottawa to achieve urban forest sustainability.

RURAL IMPLICATIONS

There are no rural implications associated with this report.

CONSULTATION

Putting Down Roots for the Future has been developed in consultation with a broad cross-section of interested stakeholders. These include members of the general public, staff from many City departments directly and indirectly involved in urban forest management, and external stakeholders such as local community associations, environmental groups, the development community and others.

In September 2015, a public event was held at Lansdowne Park to celebrate National Tree Day and launch the UFMP initiative. The event attracted over 200 participants and the associated Tree Expo showcased 17 environmental organizations with a strong link to Ottawa's urban forest, demonstrating a high level of public interest in urban forest issues in Ottawa.

From the early stages of the urban forest management planning process, organizations such as the Ottawa Stewardship Council, Ecology Ottawa, Hidden Harvest Ottawa, the Greenspace Alliance, Big Trees of Kitchissippi, Ottawa Public Health, the Federation of

Citizens' Associations of Ottawa, the Champlain Park Community Association, and many other Community Associations have engaged in and supported the development of this Plan and promoted it through their networks and social media outlets. In addition, a number of neighbourhood and community newspapers and e-newsletters have drawn attention to the Plan, particularly with respect to the public consultation meetings.

Over the last two years Ecology Ottawa has circulated a petition calling on "... the City of Ottawa to release a strong, updated and publically available Forest Management Strategy in order to ensure that Ottawa emerges from the Emerald Ash Borer crisis with an even stronger and healthier urban tree canopy." Over 10,000 signatures have been obtained to date.

Individuals, groups and agencies within the Ottawa area recognize the need for an UFMP to help guide the future direction for the forest in the City's urban area.

Stakeholder consultation

Consultation for the UFMP was divided into two phases.

Phase 1 consultations were held at Ottawa City Hall in November 2015 to obtain preliminary input to the vision and direction for the UFMP, build an understanding of local and current issues related to Ottawa's urban forest, and explore potential actions to address these issues. The Phase 1 consultations consisted of an external stakeholder session, a public consultation session, and an internal stakeholder meeting. The external stakeholder group includes representatives from a variety of organizations with an interest in Ottawa's urban forest, including; conservation authorities, the National Capital Commission, community organizations, the development community, and environmental organizations (a full list of participating organizations can be found in the UFMP Acknowledgements in Document 1). These sessions provided an opportunity to inform members of the public and stakeholders about the UFMP project and to discuss key issues, challenges and opportunities related to Ottawa's urban forest. The consultations also solicited input into the overarching long-term vision for the Plan. Approximately 200 participants attended the Phase 1 consultation sessions.

In addition to participating in the consultation sessions, all stakeholders were invited to complete a five-question survey to provide their input to the UFMP. The survey was made available online and in hard copy format to members of the public who could not attend the consultation sessions in person. The survey questions sought information about the most important aspects of the urban forest, challenges facing the urban forest, opportunities to support the urban forest, and ways the City and residents or

stakeholder groups could assist each other with various aspects of urban forest management. More than 120 responses to the Phase 1 survey were received.

Members of the public were also invited to provide individual input via email, telephone or fax, and several community associations and environmental groups supported their consultation input with opinion letters.

The input received through the Phase 1 consultations was used to develop the draft UFMP and can be found in Document 4.

After the Phase 1 consultations, the external stakeholder group asked for an interim consultation as a check in on the draft Plan between the Phase 1 and Phase 2 consultations. City staff held the interim consultation in May 2016. The session was used to present the draft framework for the UFMP, the concept of adaptive management and the Criteria and Indicators framework, to review the draft table of contents and the draft principles and objectives of the Plan, and to hold an exercise on crafting the vision statement for the Plan.

Phase 2 consultations were held at Ottawa City Hall in November 2016 to obtain input on the objectives and recommendations of the draft Urban Forest Management Plan. Phase 2 included three public consultation sessions over two days, two sessions with the external stakeholder group (one on the Criteria and Indicators baseline assessment and one on the full draft UFMP), a session with City staff, and an online survey. Over 200 people participated in the Phase 2 consultations; just over 120 people attended the sessions and close to 100 people completed the online survey or sent their feedback via email. Additionally, several interest groups made formal submissions on the draft Plan.

The draft UFMP was well received by the public, the external stakeholder group and City staff. The stakeholders and the public have been highly engaged in this process and the discussions throughout all phases of consultation were constructive and valuable.

The input received on the draft Plan through the Phase 2 consultations was carefully considered and incorporated into the development of the final UFMP and can be found in Document 5.

COMMENTS BY THE WARD COUNCILLORS

This is a City-wide report – not applicable.

ADVISORY COMMITTEE COMMENTS

In November 2015 and November 2016, City staff attended meetings of the City's Environmental Stewardship Advisory Committee (ESAC) to discuss the UFMP project and consultations (Phase 1 and 2, respectively). A member of ESAC was a part of the UFMP External Stakeholder group and participated in several of the stakeholder sessions during the consultations.

LEGAL IMPLICATIONS

There are no legal impediments associated with Committee and City Council's approval of this report and its recommendations.

RISK MANAGEMENT IMPLICATIONS

There are no risk management implications associated with this report.

ASSET MANAGEMENT IMPLICATIONS

The information documented in this report is consistent with the [City's Comprehensive Asset Management \(CAM\) Program](#) objectives. The Urban Forest Management Plan (UFMP) outlines key actions to improve the management of the City's urban forest resource, resulting in timely decisions that can minimize life cycle costs and ensure the long-term affordability of forest assets and the benefits they provide. The adaptive management basis for the UFMP enables the City to better respond to future challenges and opportunities as they arise, taking innovative approaches. The UFMP is a strategic, long term plan that helps the City take a holistic and systematic approach to urban forest management.

FINANCIAL IMPLICATIONS

The first year of the 2018-2021 work plan can be accommodated within existing resources. Recommendations with respect to the resourcing of the next phases of the Urban Forest Management Plan will be brought forward to the 2018-2022 Council as part of its term of Council priority-setting and budget exercises.

ACCESSIBILITY IMPACTS

There are no accessibility impacts associated with this report.

ENVIRONMENTAL IMPLICATIONS

The UFMP is intended to provide the strategic and technical guidance required to achieve urban forest sustainability in Ottawa over the coming decades.

The urban forest is a vital part of the City's green infrastructure that provides wide-ranging benefits and services to the city's residents which make Ottawa a healthy, vibrant, safe and prosperous place to live. This range of benefits and services makes the urban forest an invaluable community investment. For example, a TD Economics special report (2014) about Toronto's urban forest confirmed that investments in tree maintenance can return more than \$3 worth of benefits for every \$1 spent, with only environmental benefits being accounted for. Returns in Ottawa would be expected to be comparable, or greater.

Responding to Climate Change: The urban forest helps Ottawa mitigate and adapt to climate change. In addition to sequestering and storing atmospheric carbon (mitigation), trees also reduce demand for energy, remove air pollution, protect against UV radiation, control flooding, mitigate urban heat islands, and provide a range of other climate change adaptation services.

Health and Social Benefits: Documented benefits of treed areas and greenspaces include supporting physical health and well-being, improving mental health and cognitive functioning, and increasing social cohesion and strengthening communities (Appendix 3 of the UFMP – Document 1 has more details on these benefits, provided by Ottawa Public Health).

Economic Benefits: Trees in urban areas have also been shown to increase property values, boost local economic activity, reduce residential energy use demand and costs, reduce healthcare costs (through prevention and quicker recovery times), and reduce infrastructure maintenance costs.

Environmental Benefits and Services: Beyond responding to climate change, trees and wooded natural areas reduce air pollution and improve air quality, cool the air and reduce the urban heat island effect, reduce flooding and improve water quality, and provide a range of habitats for plants and wildlife.

TERM OF COUNCIL PRIORITIES

This project addresses the following Term of Council Priorities:

- Strategic Priority: Sustainable Environmental Services (ES)

- Strategic Objective: ES1 Support an environmentally sustainable Ottawa
 - Strategic Initiative 24: Complete the Urban Forest Management Plan
- Strategic Priority: Healthy and Caring Communities
- Strategic Priority: Service Excellence
- Strategic Priority: Governance, Planning and Decision-Making

SUPPORTING DOCUMENTATION

Document 1 Putting Down Roots for the Future: City of Ottawa Urban Forest Management Plan 2018-2037

Document 2 UFMP Summary of Recommendations

Document 3 Four-year Management Plan for First UFMP Management Period

Document 4 Phase 1 Stakeholder Consultation Report

Document 5 Phase 2 Stakeholder Consultation Report

DISPOSITION

Following approval by Council, staff in the Planning, Infrastructure and Economic Development and the Public Works and Environmental Services Departments will carry out the recommendations of this report, as appropriate.

Document 2 – UFMP Summary of Recommendations

Note: In the “Lead” column, NSEP is the Natural Systems and Environmental Protection Unit of Planning, Infrastructure and Economic Development and FMU is the Forest Management Unit of Public Works and Environmental Services. Recommendations to be completed within the first management period are shaded in grey.

#	Description of Recommendation	Lead	Mgt. Period	Resources
Urban forest management program structure and administration				
1	Adaptive management	NSEP	All	Existing staff
2	Internal and External Working groups	NSEP	1	Existing staff
3	Urban Forest Inventory Collection and Maintenance	FMU	1	Additional resources are required (consulting and staffing) to enhance existing information and address gaps.
4	Urban Forest Canopy Study	NSEP	1	Underway - Secured through 2017 Budget
5	Asset Management	NSEP/ FMU	All	Underway - existing resources to be used initially. Additional resources may be required over time.
Planning for the urban forest				
6	Improve policy implementation through internal outreach and engagement	NSEP	All	Existing staff
7	Significant Woodlands	NSEP	1	Under way - existing staff

#	Description of Recommendation	Lead	Mgt. Period	Resources
8	Review of Tree By-laws: a. Municipal Tree By-law b. Urban Tree Conservation By-law c. Heritage Tree By-law	FMU NSEP NSEP	1	Existing staff to undertake review. Resources will be reviewed within the context of any proposed policy changes.
9	Tree Planting and Establishment Guidelines: a. Greenfield Areas (Street Tree Manual) b. Existing Conditions c. Urban Hardscapes	NSEP FMU FMU	1	Additional resources may be required (staffing or consultant). These will be identified annual work plans and budget submissions.
10	Outreach, enforcement, and monitoring of policies and by-laws	NSEP/ FMU	2	Additional resources may be required in future years pending the outcome of #8.
Maintaining and growing the urban forest				
11	Assumption of trees in new developments	FMU	1	Existing staff
12	Forested Areas Maintenance Strategy	FMU	1	Underway - existing staff to develop strategy. Additional resources may be required for implementation.
13	Review City tree planting programs	FMU	1	Resources to be reviewed.
14	Tree Compensation Guidelines	NSEP	1	Existing staff

#	Description of Recommendation	Lead	Mgt. Period	Resources
15	Review lifecycle maintenance program	FMU	2	Existing to staff to undertake review. Additional resources may be required to implement any enhancements to any maintenance standards.
16	Assess maintenance for newly planted trees	FMU	2	Additional resources may be required (staffing)
17	Urban tree waste utilization strategy	FMU	2	Existing staff
18	Assess tree risk management – City trees	FMU	2	Additional resources may be required (staffing)
19	Pest and Disease management strategy	NSEP/ FMU	2	Existing resources to develop the strategy. Additional resources may be required for implementation.
20	Neighbourhood planting plans	FMU	2	Existing staff to develop planting plans. Additional resources may be required for planting site inventory.
21	Tree nursery stock growing contracts	FMU	2	Existing staff
Urban forest outreach, education, stewardship and partnerships				
22	Expand Community Engagement, public education	FMU	1	Additional resources required (i.e. staff, public education materials, and support to partners).
23	Outreach and engagement strategy	FMU	1	Dependant on resources required for #22.
24	Incentives for tree conservation	NSEP	1	Existing staff

#	Description of Recommendation	Lead	Mgt. Period	Resources
25	Neighbourhood stewardship plans	FMU	2	Dependant on resources required for #22.
26	Outreach to tree care, landscaping, private and institutional landowners	FMU	2	Existing staff

**Document 3 – 2018-2021: Four-year Management Plan for the First UFMP
Management Period**

Note: In the “Lead” column, NSEP is the Natural Systems and Environmental Protection Unit of Planning, Infrastructure and Economic Development and FMU is the Forest Management Unit of Public Works and Environmental Services.

#	Description of Recommendation	Lead
1	Adaptive management	NSEP
2	Internal and External Working groups	NSEP
3	Urban Forest Inventory Collection and Maintenance	FMU
4	Urban Forest Canopy Study	NSEP
5	Asset Management	NSEP/FMU
6	Improve policy implementation through internal outreach and engagement	NSEP
7	Significant Woodlands	NSEP
8	Review of Tree By-laws: a. Municipal Tree By-law b. Urban Tree Conservation By-law c. Heritage Tree By-law	FMU NSEP NSEP
14	Tree Compensation Guidelines	NSEP
24	Incentives for tree conservation	NSEP
9	Tree Planting and Establishment Guidelines: a. Greenfield Areas (Street Tree Manual) b. Existing Conditions c. Urban Hardscapes	NSEP FMU FMU
13	Review City tree planting programs	FMU
11	Assumption of trees in new developments	FMU

#	Description of Recommendation	Lead
12	Forested Areas Maintenance Strategy	FMU
22	Expand Community Engagement, public education	FMU
23	Outreach and engagement strategy	FMU

Within this management period, the timing of implementing these recommendations will be based on staff capacity and annual budget allocations.