





### URBAN FOREST MANAGEMENT STRATEGY

City of Beaumont Project No, 211-06600-00 Version 1.0 January 2023



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# EXECUTIVE SUMMARY





### **1.EXECUTIVE SUMMARY**

This Urban Forest Management Strategy (UFMS) was developed collaboratively, with input from the public and stakeholders through workshops, focus group meetings, and an online survey, as well as informal consultations with City staff. The UFMS is essentially an action plan that provides organizations valuable information, recommendations, and resources needed to effectively manage the highly valuable Tree Canopy asset in the City. Although shrubs are not particularly focused on with this strategy, there are applications identified in this document that are applicable to shrub and vegetation strategies. It was agreed early in the process with the City, that the primary focus of this document is the Tree Canopy. It also ensures the continued development of an urban forest that provides environmental, social, culture and economic benefits as the community grows.

The key to a successful UFMS is to first identify common challenges, opportunities, and priorities related to the current management of the City's urban forest and to create measurable and achievable targets to grow and enhance the urban forest. Solutions to identified challenges are then developed. The strategy is continually monitored and adjusted as needed.

### The plan consists of five guiding principles:





In keeping with those principles, four objectives were developed through public and stakeholder consultation that guide our work to ensure a diverse and sustainable urban forest for years to come.



A comprehensive UFMS is needed to ensure that Beaumont's urban forest is protected, maintained, and enhanced for generations to come. This Strategy provides a 20-year roadmap for the City of Beaumont's urban forest management that recognizes the value and significance of the urban forest and encourages the community to take stewardship over this asset. Regular check-ins or revaluations should occur every 3 to 5 years to ensure the plan remains relevant. The recommendations outlined in this Plan will provide the City with the tools and resources needed to preserve existing urban trees, achieve greater success in tree establishment, increase the urban tree canopy, increase species diversity, and enhance public awareness and community involvement.





# INTRODUCTION & BACKGROUND



### 2. INTRODUCTION AND BACKGROUND

### 2.1 WHAT IS AN URBAN FOREST?



Urban forests include trees and other vegetation that naturally occur or are planted on publicly and privately owned land across a range of urban land uses including parks, residential neighbourhoods, public streets, commercial and industrial areas.



### **2.2** WHY DOES BEAUMONT NEED AN URBAN FOREST MANAGEMENT STRATEGY?

With the rising number of unpredictable weather events due to global climate change, climbing urban populations, and the spread of invasive species and pests, urban forests are increasingly at risk. To address these challenges and support an urban forest that is both healthy and sustainable, an urban forest management strategy that is proactive, rather than reactive, is vital.

A comprehensive UFMS provides Beaumont with an action plan complete with the information and recommendations needed to sustainably manage the City's urban forest. Without a strategy, trees and vegetation within the City may go unmanaged resulting in loss of money, time, resources, as well as the loss of potential benefits offered by a healthy urban forest. The clear solution is an urban forest management plan that is long-range, strategic, and collaborative in nature. Establishing goals, objectives and developing strategies will help in developing funding forecasts and levels of investment needed in the future to reliably deliver on the City's vision.



### **2.3** CITY OF BEAUMONT'S ROLE IN MANAGING THE URBAN FOREST

The City of Beaumont's staff is responsible for managing the municipally owned portions of the urban forest. Where legislation and policies allow, City staff also have the ability to influence urban forest management on privately-owned lands. However, it is recognized that community members, private landowners, and other stakeholders have the primary responsibility for stewardship of the urban forest on such lands.

### **Parks and Open Spaces**

Within the City's overall inventory of more than 9,900 trees, a large portion of the trees are within parks and open spaces in the urban environment. Trees in parks and green spaces are an important part of the urban forest and provide valuable environmental benefits to park users, such as shade, and to wildlife, such as shelter.





#### **Street Trees**

Street trees include trees growing in municipal right-of-ways, including trees in paved areas in the urban core, trees in boulevards, and trees along roadways throughout the city. Street trees are a massive investment in terms of their cost to acquire, plant and maintain over their life cycle. These trees are of high value in terms of their benefits that they create for residents and the city as a whole. Proactive management is required to help build the resilience of street trees in high-stress environments such as this. Public education is another key piece to ensuring the longevity of this tree type.



#### **Privately-Owned Lands**

Trees on private lands are generally out of municipal management limits and are made up of residential, industrial, and commercial properties. However, they do add to the overall benefits and therefore can contribute to the goals and objectives of the City. Since private landowners are largely responsible for trees on residential property, these trees often face challenges related to removal, damage, disease, and/or neglect. New and infill development also threatens trees on private lands. With exception of tree removal bylaws, the City's ability to manage privately-owned trees is generally limited to educational pursuits.





# INVENTORY & ANALYSIS



### **3.INVENTORY AND ANALYSIS**

### **3.1** REGIONAL CONTEXT

The City of Beaumont is a member municipality of the Edmonton Metropolitan Region. Covering an area of 24.7 km<sup>2</sup>, it is situated less than 30 km southeast of downtown Edmonton and 15 km northeast of the Edmonton International Airport. During the past decade, Beaumont has been the fastest growing community in the metro region, growing by 20% from 17,457 in 2016 to 20,888 in 2021 (Census 2021). Due to this rapid growth, conflicts between development and retention of the community's urban forest have arisen.

### **Climate Change Mitigation and Adaptation**

Extreme weather events are increasing in frequency and intensity throughout Canada. Droughts, storms, forest fires, and flooding pose a threat to many communities in the country. Climate change actively affects Alberta's forests. The extreme weather events, that cause frequent temperature changes, lack of precipitation, and new diseases and invasive species, can damage or kill trees.

Climate change, while posing significant challenges to communities, can also provide **unique opportunities**.

Urban forests can be used as a **resource to help communities** adapt and mitigate the effects of climate change.



Trees can sequester the emission of greenhouse gasses by removing carbon dioxide from the atmosphere, reduce energy consumption through means of cooling in summer and insulating from cold winds in winter, and remove air pollutants by trapping particulate matter in their foliage. Trees also provide services to community members by providing respite from direct sun exposure and reducing the heat-island effect.



In 2015, the Government of Canada adopted the Paris Agreement to limit global warming below two degrees Celsius. Further to this, Canada's federal, provincial, and territorial governments advanced the 2020 Biodiversity Goals and Targets for Canada, supporting progressive land use planning and focused conservation efforts.

### **3.2** STRATEGIC ALIGNMENT IN BEAUMONT

Several plans and strategies are relevant to the management of Beaumont's urban forest. The City has advanced numerous strategic plans to move forward to a more sustainable future, which are aligned with this management strategy, including:

- Building Our Tomorrow, Today: Council Strategic Plan (2022-2026),
- Our Complete Community Municipal Development Plan (2019),
- Our Inclusivity Social Master Plan (2019),
- Our Connectivity Transportation Master Plan (2020),
- Age Friendly Strategy (2021), and
- Environmental Master Plan; Our Environmental Management (EMP) (2021-2026).
- Winter City Strategy (2022)



Trees are essential for life. They are a crucial factor to our existence not only because they provide us with the materials for tools and shelter, but because **they play a vital role in the carbon cycle**.

They give us **clean air**, **reduce the concentration of greenhouse gases in the atmosphere**, act as **natural air conditioners**, and provide **important habitats for the world's wildlife**.

### 3.3 LAND USE AND POLICY CONTEXT

In addition to the plans listed above, there are several land use related bylaws, policies, and guidelines that are relevant to this Strategy.

### **Municipal Development Plan**

The City's Municipal Development Plan (MDP), adopted in 2019, sets out high level policy for the City. It provides direction on streetscape, parks, and environmentally sensitive areas, including the desire to include trees within neighbourhood designs. The concept of Complete Streets is also outlined in the document, providing policy direction to incorporate street trees when implementing new streets



or improving existing ones. Furthermore, the MDP provides policy guidance on protecting the community's urban forest and encouraging sustainable development and construction practices that ensure the retention of trees and tree stands. It also provides direction to create an urban forest/tree program.

### Land Use Bylaw

The Land Use Bylaw (LUB) is the regulatory document that implements the policy direction set forth in the Municipal Development Plan. It is the document which regulates and controls the use and development of land and buildings in the community. The LUB also sets out landscaping and screening standards for tree planting, such as the number and type of trees species to be planted in various areas of the city.

Currently within the Land Use Bylaw, it indicates that a specific number of trees is required to be planted in private front-yards by a builder based on the type and size of their front yard. Planting these trees on private property is a condition tied to the permit to build. Currently there is no development inspection process to confirm that trees are planted on private property

### **General Design Standards**

The General Design Standards (GDS) document outlines the procedures and minimum requirements of the City of Beaumont and provides direction and guidelines for the design of local improvements, such as boulevards, parks, medians, walkways, etc. applicable to redevelopment. The GDS has specific tree quantities required for park spaces, collector roads, and home frontages. It also specifies tree removal, landscaping, and planting requirements for the City. As there are opportunities for the GDS to be updated, these updates would present opportunities to revisit tree planting requirements to help bolster canopy cover.

Of the City's 143 Hectares of open park space, 6.44%, or 9 Hectares, are covered by **existing tree canopy**.

This leaves a remaining 134 Hectares of open space some of which is not availabe for planting (for example sports fields) in parks.





### **3.4** CANOPY COVER

Beaumont's current tree canopy was determined using LIDAR technology to calculate the area of total coverage within the city limits, both on public and private land. This does not include the 2017 annexed lands (see figure 1 below). There are currently over 9,900 trees in the city's public tree inventory. These trees were planted and are growing on public land in Beaumont and this number is continuously growing. However, Beaumont's existing tree canopy is currently lacking when compared to similar municipalities. Out of Beaumont's total land area of 2,508 Hectares, 1,048 Hectares are considered primarily developed at this time, as highlighted in Figure 1 below. Of this area, approximately 55 Hectares are covered by tree canopy, which equals 5.26%. The future development area (shown in orange on Figure 1 below) is currently covered by approximately 40.3 hectares of canopy cover, or 2.8%. Many municipalities in western Canada have tree canopy ratios exceeding 10%, with many of them setting goals of increasing their canopy to over 20%. These percentages are typically calculated in the same way, using LIDAR technology. With the initiatives put in place through the UFMS, the ratio will improve at a more significant pace.

\* While there is 134 hectares of open space in parks, not all space is available for planting. (i.e.: sports playing surfaces, hardscapes, playground structure or major underground infrastructure).

The City of Beaumont's tree canopy is primarily made up of deciduous trees with over 72% of existing trees being deciduous. Of that, 44% are either Elm or Ash. Coniferous trees make up 28% of the canopy. Species diversification is a must in order to lessen the City's vulnerability to disease impact. The Shannon Diversity Index is a great tool for determining the diversity of species within a community. It considers both the number of species in a given environment, and their relative abundance. This information is relayed using a Diversity Index number which interprets the number of species living in an environment, and an Evenness number which determines the abundance of each species. As Beaumont begins to implement the actions laid out in this strategy, the Shannon Diversity Index is a great tool to help track and achieve some of the tree diversity targets.

Parks are good spaces for testing new species varieties to see which species are able to handle the local climatic conditions. Due to pedestrian and vehicular conflicts around boulevards however, the City is limited to planting trees with upright forms and as such, Beaumont will need to continue to seek tree varieties with upright forms that are tolerant to the environmental conditions in boulevards.

As the City continues to grow, opportunities to expand the urban forest will also grow, as will the ability to expand the tree canopy species.



**CITY OF BEAUMONT** 

URBAN FOREST MANAGEMENT STRATEGY



Figure 1: Beaumont Tree Canopy Cover, 2022



### **CITY OF BEAUMONT TREE SPECIES COUNTS**



Figure 2 Tree Species Counts

### 3.5 VALUE: QUANTIFYING THE BENEFITS

### **Municipal Services Provided by Trees**

Urban forests are increasingly recognized for providing environmental, social, aesthetic, functional and economic benefits. In recent years, studies have recognized the ability of trees in the urban environment to perform a number of valuable services such as:



**Wet weather control** - The canopy and root systems of urban trees help to reduce strain on city infrastructure by absorbing precipitation, reducing the pollutants entering city water systems, and reducing erosion.



**Heating/cooling costs** – Trees that are located near homes and other structures help to reduce energy bills. Tree canopies provide shade to buildings in the summer, reducing cooling costs; while in the winter, their structures reduce the cooling effect of winds, helping to lower heating bills. Furthermore, trees provide cooling benefits to areas susceptible to heat-island effect, such as parking lots and urban cores.



**Additional tax revenues** - Trees have been shown to improve property values for both residential and commercial buildings. Increased assessed values can be used to provide additional tax revenue for the City.





**Carbon sequestration** - In addition to removing air pollution, trees also capture and store carbon as they grow, keeping it out of the atmosphere, which helps to mitigate costs associated with negative climate effects.



**Green infrastructure -** In general, planting and maintaining trees can result in enhanced environmental performance while at the same time reducing development costs when compared to traditional storm water management approaches. While there will always be a need for traditional/grey infrastructure, green infrastructure can complement traditional methods to help reduce energy costs and create more livable cities for the future.

Trees serve as green infrastructure in urban areas by intercepting rainfall via canopy capture, transpiration, improved infiltration, deeper percolation along root channels and water tables, thereby reducing pressure on grey infrastructure.

### Where Do These Services Get Realized?



On public streets, where trees improve attractiveness, manage water runoff, and provide shade.



In parks, where trees provide nesting areas and refuge for small animals and preserve important wildlife corridors. In the warmer months, trees in parks create a pleasant, comfortable environment for outdoor activities, recreation, picnic areas and bird watching. Planting in park spaces is a great opportunity to diversify tree species.



In business parks, where trees can act as noise buffers from street traffic, greatly improve aesthetics, provide natural barriers or act as separators between businesses, and decrease temperatures caused by heat-island effect in heavily paved areas such as roadways, Public Utility Lots (PULs), and parking lots.

DID YOU KNOW?

100 healthy trees remove 53 tons of carbon dioxide and 430 pounds of other air pollutants from the air every year!

In fact, one tree can absorb the same amount of carbon in a year as a car produces while driving 26,000 miles.



# PLANNING PROCESS & STAKEHOLDER CONSULTATION



### 4. PLANNING PROCESS & STAKEHOLDER CONSULTATION

### 4.1 INTERNAL STAKEHOLDER SESSIONS (3 TOTAL)

WSP hosted three separate virtual workshops with City staff:

- Workshop #1: Public Land, August 26, 2021
- Workshop #2: Private Land, August 31, 2021
- Workshop #3: Vision and Principles, March 31, 2022

Each workshop began with a presentation and was followed by a facilitated discussion and question and answer period. Below you will find a summary of common themes which emerged from each of the workshops. For a detailed list of opportunities and issues identified by internal stakeholders in these workshops, please refer to Section 5 of this document.

### Workshop #1: Public Land

During the breakout discussions, some of the common themes included challenges around increasing tree canopy/planting trees in boulevards, enforcement, cost and replacement of trees in new developments, tree maintenance, disease and keeping trees alive, and undesirable tree species and naturalized areas/storm ponds. The group also discussed opportunities for increasing the City's trees and maintaining tree health which included, volunteer programs, tree planting training for school aged children, trail enhancements and tree dedication programs, and City run tree planting events.

### Workshop #2: Private Land

During the breakout discussions, some of the common themes included challenges around weak MDP policies, water drainage issues/flooding in new developments due to improper drainage, lack of tree planting in parks, the City's limited control/enforcement over trees in new commercial developments/private property, and pest management. The group also discussed opportunities for maintaining tree health and public education, which included using the Homeowners Guide to educate residents on tree care, maintenance basics and managing pets and disease, increasing species diversity, exploring urban agriculture – edible landscape, and increasing trees through school/community group events.

### Workshop #3: Vision and Principles

The final staff workshop was conducted after the presentation to the Committee of the Whole of February 15<sup>th</sup>, 2022. The intent was to present the onset of the strategy development to City of Beaumont Council and staff. A draft vision statement, guiding principles, and objectives were discussed. Examples of some targets and their associated actions were presented to display how they will be broken out. The outline was well received by all parties with the largest concern being how to address tree planting on zero-lot line developments which are becoming increasingly more popular throughout Beaumont. Zero-lot line property's combined with underground utilities are shrinking the



amount of available space for street trees in new developments. It was suggested that the City of Beaumont's General Design Guidelines be reviewed to see how the current roadway standards could be revised to allow more room for trees.

### **4.2** FEEDBACK FROM COUNCIL AND PUBLIC FOLLOWING STRATEGY INTRODUCTION

On February 15, 2022, WSP presented to Council at the Committee of the Whole meeting. The intent was to provide City Council with an overview of the project, the importance of urban forest management, and to discuss opportunities for further involvement. A motion to receive the information was carried unanimously. Council provided an abundance of positive and supportive feedback on what they wanted to see addressed in an Urban Forest Management Strategy.

### Key Takeaways included:

- Community Engagement and Education
- Tree Protection Measures
- The effects of Densification and Zoning (including Zero Lot Lines)
- Asset Management

### 4.2.1 Online Public Survey: MetroQuest

MetroQuest is an innovative online survey platform that blends visual and interactive components with gamification and learning to engage the public. Results have shown that engagement using MetroQuest surveys results in higher participation rates than standard paper surveys. Participation is supported on a multitude of devices like a desktop, smartphone, or tablet. The microlearning and mini game activities are deliberately short to be more impactful and keep participants engaged to the end of the survey.

On April 21, 2022 (Earth Day), the MetroQuest survey was launched to inform residents of the project and gather community feedback on the direction for the Urban Forestry Management Strategy. The survey was launched on the City website to coincide with Earth Day and remained open until June 20, 2022, for a total of 60 days. A total of 209 participants completed the survey. A breakdown of the daily participation progression from the date of launch can be seen in Figure 2.

The survey consisted of three activities/activity screens:

- 1. Prioritization of key areas for Council to focus efforts on;
- 2. Rating activities based on the areas of prioritization chosen; and
- 3. Investing tokens into the categories of highest importance to grow the urban forest





Figure 3 Daily Participation Progression

### **MetroQuest Survey Results**

The purpose of the survey questions and activities was to better understand the preferences, priorities, opportunities, and challenges related to the management of the urban forest. Brief conclusions of key themes have been provided below, with the full survey results for all questions located within Appendix A. For respondent answers that stated "other", the specifics of these responses can be found in the full survey results.

### Demographics

The age representation in the survey is well distributed through all age groups, with exception of the 75+ years age category. The age groups most represented in the survey are 35-44 years (27%) and 20-34 years (21%). This would imply there is a growing interest among younger to middle aged residents in the management and sustainability of Beaumont's urban forest. The income levels most represented in the survey were between \$95,000-\$125,000 (22%) and \$125,000-\$250,000 (27%). The majority of survey participants have a post-secondary degree (68%) and live in Beaumont. Participants indicated the top four preferred tree traits include trees for shade, trees with leaves rather than needles, tress that have foliage all year round, and trees with obvious fall colours (see figure 3). The majority of participants (67%) are in favour of an adopt a tree program (see Figure 5).





### Figure 4 Preferred Tree Traits



Figure 5 Adopt A Tree Program Favorability





The priority ranking activity asked participants to rank their top three categories related to the enhancement of the urban forest where 1 was the highest priority and 3 was the lowest. See Figure 6 for a screenshot of the MetroQuest activity screen. The item that received the highest ranking was Connecting with Nature (50 votes for top priority), followed by Valuing Trees as an Asset (43 votes), and Environmental Stewardship (42 votes). The item with the lowest priority was Community Groups (see Figure 7).



Figure 6 Priority Ranking Screen MetroQuest View



Figure 7 Priority Ranking Breakdown

Some of the key comments/themes that arose included:

• The importance of allocating sufficient funding to adequately protect, maintain and grow the urban forest;



- Knowledge that trees add to the overall beauty and function of public and private spaces and how important trees are to the enjoyment and health of the City as a whole;
- Trees/forests provide carbon sequestration and help mitigate the negative effects of climate change;
- The importance of educating the next generation on how to protect and care for trees;
- Tree maintenance is crucial to the health of the urban forest and meeting the goal of increasing the City's urban forest;
- Desire to have more trees planted in park spaces and around local lakes and ponds (especially in groupings – not just one or two planted sporadically);
- The importance of replacing damaged and diseased trees; and
- Displeased with the cutting down of forested areas for development trees should take priority.

### Activity 2: Activity Rating

The prioritize activity 1 screen is linked to the rating activity 2 screen in MetroQuest, which means that the top three priorities chosen in the priority ranking activity above were linked to the rating activity. This allowed participants to give further and more detailed feedback on the categories that matter most to them (see Figure 8). Each category provided an image and descriptions to better inform users when rating each feature. Participants were asked to rank each feature on a scale of 1 - 5, where one was lowest priority and five was the highest.

3	Prioritise Act lease give input on at lease		i   🗩   »
ACTIVITY RATING	Connecting with Nature	Connecting with Nature How much value do you give the following activities?	
CTIVIT	0000	Nature Experiences Unique nature experiences such as forest walks, bird watching huts or viewing platforms	* * * * * 0
A	Valuing Trees As An Asset	Learning from Experts I like to learn about tree planting and care from experts such as park rangers, researchers and arborists (aka tree surgeons!)	* * * * * •
	0000	Gardening I like to get my hands dirty and connect to the earth by growing my own trees, shrubs, and fruits and vegetables	* * * * * •
	Environmental Stewardship	Volunteer Opportunities Volunteer opportunities such as tree planting, educating others, and helping out at the local nursery or park	* * * * * 9
	0000		0

Figure 8 Activity Ranking Screen MetroQuest View



The rating results of each of the categories are included below in order of prioritization (which are linked to Activity 1) along with key comments/themes. The full comment data in its raw and unaltered form can be found in Appendix A.



Figure 9 Connecting with Nature Rating Breakdown

Within connecting with nature, the highest rated activity was nature experiences, followed by gardening, and volunteer opportunities (See Figure 9).

Additional comments/themes provided for this category are paraphrased below:

- Desire for more community gardens to grow own produce and grow sense of community;
- Concern regarding the City's lack of staff to take care of trees/trees dying;
- Importance of tree stands/forests for wildlife protection and habitat; and
- Use of small, unsuitable forested area for art therapy by local resident has to leave the City to run certain therapy sessions due to lack of forested areas available.



Figure 10 Tree Value Rating Breakdown



Within the valuing trees as an asset category, the activities were ranked closely, apart from aesthetic value, which was given the highest priority. Carbon capture and infrastructure costs followed in ranking (See Figure 10).

Additional comments/themes provided for this category are paraphrased below:

- Understanding that trees aesthetic value increases the desirability of a City and has a positive effect on the overall happiness and health of its residents;
- Importance of trees in sheltering from windy conditions;
- Understanding that it is the responsibility of all residents to work together to look after/maintain the City's trees; and



• Understanding of the importance of trees for carbon capture/climate change mitigation.

#### Figure 11 Environmental Stewardship Rating Breakdown

A note about the environmental stewardship data collection – Due to a technical error in the MetroQuest program, data that was previously collected for this category was lost. In order to recover some of the responses, an additional survey was sent to respondents who had selected environmental stewardship as one of their top three priorities. The following data is therefore a small representation of those selections and comments made by the re-engaged public and not a full representation of the original responses.

Of the activities within the environmental stewardship category, City incentives and programs was ranked highest followed by community gardens and community tree planting events (see Figure 11).

Additional comments/themes provided for this category are paraphrased below:

• The model for a community garden should be explored. It would need to be led by a skilled person with a background in horticulture and community engagement. Another idea to explore is a garden sharing program where those who have a plot but are unable to commit to working a garden (seniors, working families) can share their garden space with others.





#### Figure 12 City Budget Rating Breakdown

As shown in Figure 12, participants indicated that City budget should be dedicated to parks and open space first, followed by maintenance of existing trees, and future development.

Additional comments/themes provided for this category are paraphrased below:

- Incorporating trees into new developments rather than removing;
- Educating and holding developers accountable for planting quality trees and maintaining them after warranty;
- Desire for more shade trees to be planted in park spaces;
- Expressed disappointment at trees planted in Colonial several years ago during a tree planting event dying from neglect and damage from mowers;
- Importance of planting a mixed diversity of trees to avoid disease wiping out whole stands;
- Concern around black knot spreading to tree stands; and
- Importance of proper tree maintenance and pruning to extend the life of existing trees.

A note about the community groups data collection – Due to a technical error in the MetroQuest program, data that was previously collected for this category was lost. In order to recover some of the responses, an additional survey was sent to respondents who had selected community needs as one of their top three priorities. The following data is therefore a small representation of those selections and comments made by the re-engaged public and not a full representation of the original responses.





Figure 13 Community Needs Rating Breakdown

Of the activities within the community needs category, City tree protection bylaws and regulations ranked the highest, followed by tree care education and community programs, and reduce carbon footprint (see Figure 13).

Additional comments/themes provided for this category are paraphrased below:

- Regular observation and tree health checks need to be completed by bylaw officers and tree specialists. Unhealthy and/or severely damaged trees should get replaced;
- The City should take advantage of the expertise and experience of community members and groups and form partnerships with these organizations. Urban gardening programs, community gardens, Community in Bloom groups could be approached. Genuine consultation and involvement is key; and
- Licensing and permit applications are complicated. Adding another layer of regulation adds strain to an already overloaded regulatory branch of civic government. Understaffing in these areas needs to be addressed before adding work for staff.



Figure 14 Community Groups Rating Breakdown



In the first activity, community groups were given the least priority overall (see Figure 7). Within this activity, school planting program was rated highest followed by a tie rating between nursery partnership, and tree legacy program (see Figure 14).

Additional comments/themes provided for this category are paraphrased below:

 School planting programs should also include produce gardens and flowers in addition to trees.

### **Activity 3: Spend Your Money**

In the spend your money activity, participants were given \$100 worth of virtual tokens to allocate to the categories they felt would be most effective in growing the urban forest (see Figure 15). As seen in Figure 16, responses indicate a desire to allocate City budget to planting more trees in public parks and along public trails, which received an average of 20+ tokens each. Designing roads to allow for the planting and increased diversity of street trees ranked third, receiving an average of 14.27 tokens. The category that received the least investment from participants with an average of less than 5 tokens was subsidize public education programs.



Figure 15 Spend You Money MetroQuest View



URBAN FOREST MANAGEMENT STRATEGY



#### Figure 16 Budgeting Results of Spend Your Money Activity

Due to the nature of survey data collection, contradictions between responses can sometimes occur. In the priority ranking activity, connecting to nature was ranked as the highest priority, which involves teaching community members about the factors involved in tree care, the tools and resources available to the community, and public education program opportunities. However, despite this ranking, the results of the investment priorities activity would imply that respondents do not prioritize budget allocation for subsidizing public education programs.



### 4.2.2 Tree Planting Event

In line with the Grow and Educate objectives in section 6.3, the Education targets in section 7.1, and in response to the interest in community programming highlighted in the online survey, the City of Beaumont held an interactive tree planting event on June 4th, 2022. The event took place in an area of greenspace near the Beaumont Sport and Recreation Centre, which was advertised through the City's social media pages, the local newspaper, City website, and news bulletin. The tree planting event was headlined in the local newspaper and drew over 50 community members out to take part in the fun and educational experience.

As they planted, participants learned about the **importance of the urban forest**, how to properly **care for trees**, and the **role they play** in the community.









## STAKEHOLDER FEEDBACK: ISSUES AND OPORTUNITIES



### 5.INTERNAL STAKEHOLDER FEEDBACK: ISSUES AND OPPORTUNITIES

This section summarizes feedback collected during the engagement sessions with internal stakeholders that took place in August 2021 and March 2022. During the facilitated workshops and focus group sessions, City of Beaumont staff were prompted to relay any challenges, opportunities, issues, and gaps they experience in regard to Urban Forest Management. The feedback received was used to inform and develop the Strategy (Section 6 of this document). The issues and opportunities summarized below are referenced within each of the Strategy targets under 'Related Stakeholder Criteria'.

Please note, the following issues and opportunities were abbreviated from the discussions that took place during the virtual internal stakeholder workshops and are not meant to be considered in isolation but instead factored into the context of other community input and assessment methodologies.

### **5.1 INFRASTRUCTURE AND SERVICES (PUBLIC LAND)**

### 5.1.1 Boulevards, ROW, Utility Considerations

- 5.1.1.1 Narrow boulevards restrict the types of tree species that can be planted and has a negative effect on the survival rate of Boulevard trees. However, the current standards around allowable width does not permit wider boulevards. Therefore, current standards should be updated to allow wider boulevards.
- 5.1.1.2 Snow is transported to the local snow dump area, but in the interim residents run out of storage space and pile snow around tree bases on boulevards. The salt contained in the snow damages the health of these boulevard trees.
- 5.1.1.3 Utility lines run underneath plantable space which limits the number of trees that can be planted in boulevards. Where possible utility lines should be run away from planting areas. Success can be achieved when infrastructure such as utility lines, street furniture and light poles are located in close proximity to each other, leaving space to plant in the open boulevard areas. A greater industry discussion is required, as it relates to updating utility locations in road cross sections.

### 5.1.2 Succession Planting, Species Diversity Opportunities

- 5.1.2.1 Species selection is an important factor to the overall health and longevity of the urban forest. Ensuring adequate species diversity can protect large stands of trees from being wiped out by disease.
- 5.1.2.2 Less than 10% of newly planted trees annually in the last 5 years on average occurred in park and natural green spaces. The balance of 90% of new tree



planting primarily occurred in boulevards. Planting in park areas provides an opportunity to increase species diversity and enhance green spaces for residents.

- 5.1.2.3 There is an opportunity to introduce edible landscapes with fruit trees, however consideration needs to be given to locations for these fruit trees by avoiding boulevards and adjacent hard surfaces where the fruit would fall. Open spaces in park sites or along naturalized areas are a more suitable approach, while factoring in potential wildlife interaction and attraction to fruit bearing trees (avoid locations where there is vehicle or high pedestrian traffic).
- 5.1.2.4 Boulevard trees tend to get focused attention and care over park trees because they are at the interface between public and private property and are most visible to residents on a daily basis.

### **5.2 GROWTH & DENSIFICATION (PRIVATE LAND)**

### 5.2.1 Zero lot, Multi-Family Residential, Commercial

- 5.2.1.1 Front driveway access on major collector roads is discouraged push for rear alley access to allow tree planting and easy snow removal. Updating the Land Use Bylaw and General Design Standards to promote rear alley access could help improve this situation.
- 5.2.1.2 Unauthorized driveway extensions for RVs are an issue desire to remove driveways in the frontage. Often scenarios of houses having wider driveways than initially planned for, along treed boulevards, leads to conflicts with driveway edges and proximity to boulevard trees. Measures should be put in place during the neighbourhood design, as well as home building permitting process which identifies the maximum driveway widths allowed to better accommodate tree planting on the boulevards.
- 5.2.1.3 Desire to reduce or eliminate front attached zero lot line developments. Although this is currently a very desirable development type it prevents the City from reaching tree targets. Rear attached are preferable.
- 5.2.1.4 Large variances are allowed on commercial properties allowing reduction of large quantities of trees.
- 5.2.1.5 Developers have trouble meeting requirements in higher density areas due to the proximity of lot lines and driveways. One approach may be to introduce planting of trees behind monowalk, within the road rights-of-way in place of a private tree in the front yard of the house. However, this would require commitment from the lot builder and/or developer as well as the public, to ensure the resident of the lot with a monowalk tree planting is aware this tree is not their property but be encouraged to water trees planted in this type of application.
- 5.2.1.6 A great deal of time and money is spent trying to preserve small woodlots while faced with pressure from development. MDP policies are not strong enough and


should be enhanced to support these efforts. In addition, it is recommended that overland drainage flows, pre and post development, should be accounted for and maintained into these existing stands, to ensure the best survivability.

- 5.2.1.7 There are currently no regulations to guide trees in commercial developments. The City has no control over private property so it cannot dictate what gets planted in these areas. There is an opportunity to encourage Low Impact Design (LID) elements such as soil cells, through the City's Urban Design Review Committee.
- 5.2.1.8 Large commercial/institutional developments direct funds to the building interior and do not want to deal with tree/landscaping maintenance.

### 5.2.2 Public Education for Private Property

- 5.2.2.1 FireSmart fire may be a concern when increasing the tree canopy. Need to create buffers between existing tree stands and allow emergency access. Resident education piece will be important to get the community involved in FireSmart practices.
- 5.2.2.2 Educate residents on tree care, maintenance basics and managing pests and disease.
- 5.2.2.3 Species diversity currently there is no information available to residents when selecting tree species. General Design Standards provide a tree species list for developers/public land use but does not cover private land.
- 5.2.2.4 It is important to help residents understand the benefits of trees to limit misinformation and pushback.
- 5.2.2.5 Program opportunity which provides residents with discounts on trees at a supplier of choice or the City could provide a free tree for every tree purchased.
- 5.2.2.6 Damage and tree removal by residents should have financial repercussions which would act as a deterrent.

### **5.3 ENFORCEMENT AND RESOURCES**

### 5.3.1 Budget, Staffing, Care & Maintenance

- 5.3.1.1 There is a high cost and effort associated with planting and maintaining trees. In the past, the City of Beaumont has not prioritized the tree canopy.
- 5.3.1.2 Enforcement cannot be prioritized based on existing capacity of municipal staff. The City currently has no Development Enforcement Officer. Therefore, a suitable budget is needed to support this.
- 5.3.1.3 Planting must be completed in stages because the City does not currently have the manpower to maintain. It is important that the City not plant more than what staff can effectively maintain.



- 5.3.1.4 Land use bylaw regulations are sufficient, the issue is that the City does not have the resources to see that regulations are being followed.
- 5.3.1.5 60% of the City parks employees' job is trying to keep trees alive, finding land available to plant, and fighting diseases.
- 5.3.1.6 The City does not currently have identified cycles for pruning established. Pruning is undertaken on a need-by-need basis.
- 5.3.1.7 Design standards must be updated on a continual bases to reflect changes made to the tree species list.
- 5.3.1.8 Most maintenance work is reactionary pruning, conflicts, broken branches, stump removal, clearance, removing and replacing trees.

### 5.3.2 Pest Managements, Disease Control

- 5.3.2.1 Self-propagating tree (aspen) seeds get into ditches and storm drains, grow, and can cause blockages. Some natural tree stands that have been left become landlocked by houses and are difficult to get to. Tree species need to be balanced (aspen and poplar) in order to control natural regeneration issues.
- 5.3.2.2 Certain species are problematic it is important to consider species selection and continually update tree species list.
- 5.3.2.3 Pest management plan such as nuisance weeds and weed notices could include tree pest and disease management. Currently there is no bylaw in place to have tree pests or diseases addressed through a notification to a private landowner (potentially leading to fines if there is no action).

### 5.3.3 Bylaw, Inspection Permits, Fines

- 5.3.3.1 To give the best chance of survival, trees should be planted after building construction is completed, many trees are lost and/or damaged during building.
- 5.3.3.2 Developers often take advantage of bare land areas on a site by building out into the entirety of the site leaving no room for the planting of trees after construction.
- 5.3.3.3 Development drawings submitted to the City show smaller footprints which are often expanded during construction and trees cut down to accommodate bigger builds and/or wider driveway aprons.
- 5.3.3.4 The City does not have the ability or resources to inspect all lots or enforce regulations. There is currently no tree protection plan in place.
- 5.3.3.5 The City needs standards and policies to enforce financial recourse for the replacement of trees during new builds. This could be achieved through improving the cash-in-lieu program which gives the City the option to distribute new trees according to a plan/policy.





### **5.4 WATER MANAGEMENT**

### 5.4.1 Permeable Surfaces, Overland Drainage (HNA), LID Components

- 5.4.1.1 An assessment of the impact of development on overland drainage around existing and remaining tree stands in new neighbourhoods would be beneficial. It is recommended that the City of Beaumont revisit the design standards to request a Hydrological Network Analysis (HNA) during design to determine predevelopment flows, to ensure the remaining Tree Stands are provided an overland/surface water source, for the best success of survivability for the stand.
- 5.4.1.2 Encourage the introduction of Low Impact Design (LID) elements in new development, both commercial and residential. Elements such as soil cells or rain gardens and bio-swales not only promote a high success for tree material, these elements also reduce the immediate impact on the storm water systems during a rain event, by slowing the flow of water through the soil cells and bio-swales.

### 5.4.2 Watering Schedule

The water schedule will need to continually be refined to respond to prolonged droughts that are anticipated in future. During prolonged droughts, resources become strained trying to water as many trees as possible. It is rare that water trucks are able to water park trees. During extremely dry years it is not possible to get water to all of the City's planted trees without contracting external companies with water trucks. The problem faced by many municipalities is that transpiration and evaporation rates exceed the trees ability to replace losses in moisture. Leaf scorch during periods of intense heat affects nearly all species of boulevard trees in the City.

The following table outlines the current watering schedule and approach as it exists. This table can used as a benchmark to build off of throughout the life cycle of the Strategy. The frequency and duration of watering will vary based on seasonal rainfalls and can be adjusted as required.



### **CITY OF BEAUMONT**

JRBAN FOREST MANAGEMENT STRATEGY



Watering Schedule							
Tree Type	Age	Frequency	Fertilizing Times	Responsible Party	Water Efficiency Approach		
Boulevard Trees	Newly Planted trees (0-5 years)	The first three years of a newly planted trees life will need frequent watering and maintenance to ensure its survival. Once a tree is FAC'd the City is responsible, and waters as needed and as resources are available.	It is typically not recommended to fertilize trees within the first 1 – 2 years of planting. The City may apply liquid fertilizer if an assessment indicates it's needed. Fertilizer would not be applied in dry years.	Developers are responsible for watering and maintaining trees on boulevards in their development for the first 2 – 3 years until they are FAC'd, at which point they become the responsibility of Parks.	Mulching retains the water and increase the water holding capacity. Additionally, probing or water with bags may be used.		
	Established trees (5+ years)	Drive-by assessments are conducted by Parks and watering is done where it's flagged as needed. Watering is not typically done after approximately 7 years or once tree is large.	Trees are not fertilized once they are considered to be established.	City Parks Team (Infrastructure Department).	Watering is not typically done past about 7 years. If there is an increased need for watering of drought- stressed and heat-stressed trees, probing or water bags may be used.		
Parks and Open Space Trees	Newly Planted Trees (0-5 years)	Hired contractor waters trees during their first year. New trees Are watered by Parks for the first two years and then as needed and when resources are available.	Parks will fertilize these trees as needed after year 2.	Developers in new developments and City Parks Team in Established Parks and Open Spaces	Use of water bags, probing, and mulch		
	Established Trees (5+ years)	Established trees are not currently watered in these areas and natural rainfall is relied on.	Parks would determine health of tree and fertilize as needed.	City Parks Team (Infrastructure Department).	Parks to water as needed.		

Figure 17 Watering Schedule





## 5.5 OPEN SPACES, NATURAL AREAS & BIODIVERSITY (PUBLIC LAND)

### 5.5.1 Parks, Trails, SWMF's

- 5.5.1.1 Tree planting by the City has largely been focused on replacing dead, diseased or hazardous trees on boulevards and the City is nearing completion of the backlog list of required planting of this type. The focus should now be on planting in parks, near sport fields, and along trails as very little new planting has occurred in these areas for approximately 10 years.
- 5.5.1.2 Tree planting in parks should first be focused on high use areas (such as near sports fields where shade is needed for spectators).
- 5.5.1.3 There are many bare, open stretches along trails that require shade trees.

### 5.5.2 Public Education & Information, Signage

- 5.5.2.1 The City should provide informative signage illustrating what naturalized areas are, what they look like, and the benefits of these areas so that homeowners are deterred from intruding and maintaining on their own.
- 5.5.2.2 Residents should be educated before they purchase property near a stormwater pond with a naturalized area so that they understand the function, purpose, and appearance of these areas and know that they will not/should not be manicured.
- 5.5.2.3 There is some concern from commercial owners around trees screening store signage. Selective planting or considerations for this should be accounted for.
- 5.5.2.4 To help keep up with maintenance requirements the City could encourage residents to water boulevard trees.



# STRATEGY AND IMPLEMENTATION





## **6.STRATEGY & IMPLEMENTATION**

The City of Beaumont **Urban Forest Management Strategy** (UFMS) is designed to ensure a healthy, vital, and growing urban forest for all residents of Beaumont and future generations to come. This strategy covers how best to manage an urban forest and provides this information through its vision, guiding principles, and objectives.

### 6.1 VISION

The purpose and intent for the future of Beaumont's urban forest can be encapsulated in the following vision statement:

Beaumont's urban forest is healthy, resilient, and always growing. It is a valued asset that provides services and contributes to the beauty of our growing city.

## The forest sustains our community and promotes health and well-being equitably

for our residents and visitors.

### **Urban Forest Values**

Consultation participants were asked, "*Why are trees important to the city?*" Here are some responses from the participants:

- "Environmental and social benefits: improve air and water quality and well-being. Climate change/environmental benefits – lower heating and cooling costs and filters pollution from the air and water."
- "Contributes to sense of place."
- "Trees along trails provide security and act as buffer between the roadway/traffic and trail. Act as noise and privacy buffer between neighbours."
- "Aesthetically pleasing, makes it more attractive for new residents looking for a new City to live in, Tree Canopies are a draw/appealing."



### **6.2** GUIDING PRINCIPLES

Five principles have guided the development of this UFMS. All the principles are of equal importance, though listed and discussed separately for clarity. These principles help to guide the actions of this strategy in a way that will see the urban forest grow in a direction that benefits all of Beaumont; it's current residents, visitors, and future generations.

**Guiding Principle #1:** The urban forest is a valued, inter-connected infrastructure asset and should be managed holistically across all areas of Beaumont.

The urban forest is an essential infrastructure asset, key to the well-being of the community and visitors in Beaumont. As a vital green infrastructure, the maintenance, protection and planning of the urban forest should be given the same type of priority as the care of other critical infrastructure. Strategic planning will realize significant financial returns demonstrated with improved public health outcomes, social, economic, and environmental benefits.

Guiding Principle #2: The urban forest benefits all Beaumont residents equally.

Canopy coverage is often not distributed evenly across a city, and therefore the benefits that an urban forest provides are not equally enjoyed. Efforts should be made to prioritize tree establishment and green space protection in areas with currently low canopy cover and a higher proportion of marginalized communities, while still maintaining the health of the urban canopy across the entire community. Relationships with organizations and people from equity-seeking communities should be strengthened to continually work towards removing barriers to urban forest cover.

**Guiding Principle #3:** The urban forest promotes climate resiliency and environmental stewardship through abundance and diversity.

All trees, regardless of size, help promote climate resiliency and environmental stewardship, however large trees and native and naturalized species provide the greatest impacts. Preservation of large trees is essential to achieving urban forest canopy, age, diversity of tree species and other targets. Trees that are planted today take several decades to reach maturity. Species should be selected for diversity as monocultures create more susceptibility to disease and pathogens which in turn contributes to canopy loss. Species should also be selected for climate resiliency based off climate shifting trends and appropriate selection for the site. Diversity also includes selecting diverse seed sources for tree nursery stock and having diverse age distribution of the canopy to promote succession. Invasive species should not be included in the species diversity as they harm indigenous and non-invasive plants.

**Guiding Principle #4:** The urban forest is a shared responsibility which supports the collaborative success of the community.

It is with shared responsibility and collaboration across the public and private sectors that the UFMS's vision, objectives and targets are to be realized. Local councillors, Beaumont city staff, community groups, private businesses, and individual residents play a part in the care of the urban forest and contributing skills and knowledge to the care of the urban forest. Transparency and shared responsibility are key to the success of the UFMS.



**Guiding Principle #5:** Management of the urban forest is ever evolving and must be adaptive, and data driven.

Community values and urban forestry best management practices are always changing, reflecting new environmental conditions and land use practices. The UFMS should recognise up to date data, on important factors such as species diversity analysis, tree inventories, invasive species monitoring, habitat creation and restoration opportunities, canopy coverage assessments including the use of tools to assess heat islands more accurately and efficiently through imagery, and full-cost accounting measures that include benefits like public health and economic development aspects of urban canopies.

### 6.3 OBJECTIVES

The success of the City of Beaumont's urban forest can be classified into four sections, all which address a different aspect of management, from the initial planning stages to maintenance to public education. These have been outlined below in our four main objectives for the urban forest management strategy.



**GROW** – Create a diverse and resilient urban forest through tree canopy growth and species diversity.

**PROTECT** – Ensure the success and vitality of the urban forest through thoughtful maintenance practices, succession planning, and data collection.

**MAINTAIN AND MANAGE** – Thoughtful resource allocation to ensure the best success for tree longevity.

**EDUCATE AND ENGAGE** – Inform the public on the benefits and importance of the urban forest and expand community engagement.





This Plan covers a period of 20 years, following which regular check-ins or re-evaluations should occur every 3 to 5 years to determine if the City is meeting its goals, ensure that any new issues affecting the urban forest are sufficiently addressed, and revise the Strategy as necessary to continue working towards achievement of the long-term vision. This review also provides the opportunity to adapt or adjust the program based on the evaluation and results.

Progress towards forest sustainability and success of the Plan will be evaluated and measured through a strategy implementation framework (Section 6) which includes a series of targets and actions that are aligned with the four objectives. These objectives form the foundation for achieving urban forest sustainability in the City of Beaumont. The objectives and related targets have all been tailored to the City's current challenges, opportunities, and goals. One important element of a sustainable urban forest is adequate resourcing for the required tasks. Skilled work forces and funding in both the private and public sector, technical expertise, and an effective regulatory framework are necessary.

There are 12 recommended targets outlined in this section. The targets are based upon the UFMS vision, guiding principles, objectives, input from City staff, stakeholders and members of the public, assessments of the current status of the existing urban forest, and opportunities for improvement based on best practices.

Each target contains associated actions that describe how the city will achieve the target, and each action focuses on a specific area of the City: Public Parks, Open Space & Natural Areas, Boulevards, and Private Property. The targets are also given a priority ranking, measurement of success which describes tangible ways the city will measure or keep track of the success of the actions, anticipated timeline for completion, and resourcing.



### **Targets Overview:**

Below is a summary table showing all of the objectives and their associated targets. Figure 1 on page 17 references the pre vs post 2017 annexed lands that relate to some of these targets.

	GROW
Target 1	The tree canopy covers 10% of the historic Beaumont land and the public tree inventory is increased to approximately 13,200 trees (from the current 9,975). This target will be achieved over the span of 20 years and does not include the future development areas.
Target 2	Increase tree diversity in Beaumont to strengthen urban forest resilience and to contribute to the City's overall biodiversity.
Target 3	City processes and standards are reviewed and revised to help create the conditions to facilitate healthy tree growth on public property.
Target 4	Requirements for tree planting on private property and regulations related to driveway size in urban growth areas are strengthened and enforced.

PROTECT			
Target 1	Hazardous and diseased trees are identified and removed from the urban forest and replaced with new trees on an ongoing basis.		
Target 2	Healthy existing trees and tree stands are identified and assessed in new development areas and protected where appropriate.		
Target 3	Measures are taken to help ensure the protection of existing public trees and tree stands during construction.		

MAINTAIN AND MANAGE		
Target 1	A pruning schedule is developed, followed, and updated each year	
Target 2	A watering schedule is developed, followed, and updated each year	

EDUCATE AND ENGAGE		
Target 1	Increase city-led community outreach related to the urban forest and local biodiversity.	
Target 2	Develop initiatives and provide information to community members that will encourage and support residents in their efforts to improve the overall health of trees in their neighbourhood.	
Target 3	Build on the current communication networks with industry leaders to discuss the impacts of development on the urban forest, and subsequently develop ways to reduce these impacts.	



### CITY OF BEAUMONT URBAN FOREST MANAGEMENT STRATEGY





Create a diverse and resilient urban forest through tree canopy growth and species diversity.

### **GROW TARGET #1:**

The tree canopy covers 10% of the historic Beaumont land and the public tree inventory is increased to approximately 13,200 trees (from the current 9,975). This target will be achieved over the span of 20 years and does not include the future development areas. Approximately 160 city planted and FAC'd trees will need to be brought into the public inventory annually to meet this target. Achieving this canopy cover target is also dependent on a number of other factors, including the number of trees planted on private property annually, development plans in new neighbourhoods, weather conditions, and the annual approved planting budget. See Figure 1 on page 17 for identification of the historic Beaumont land (pre-2017 annexed land) relevant for this target.

### **ACTIONS:**

### **Identify Planting Locations**

Identify all locations that have the potential for additional trees to be planted and prioritize the areas most in need of planting in Public Parks, Open Space and Natural Areas / Boulevards. Engage in stakeholder consultation to allow an understanding of resident viewpoints to ensure success. Prioritize areas with the lowest canopy cover and areas that would fit in efficiently with future maintenance plans.

### **Develop a Tree Planting Schedule**

Create a quantitative tree planting schedule for city planting of approximately 45 new trees annually in public parks, open spaces, and natural areas to contribute to an approximate increase of 0.25% in overall tree canopy annually. These 45 new annual trees in public spaces do not include city planted trees to replace dead or dying trees, or trees planted on boulevards, these include only new trees planted in public parks, open spaces, and natural areas. It is recommended that out of the annual approved tree planting budget that approximately 60% is allocated to planting new trees in public parks, open spaces, and natural areas and approximately 40% is allocated to replacement trees. Achieving this goal will be dependent on many factors including the annual approved budget, weather conditions, tree species available, development plans, and available planting space.

### Increase number of trees planted annually in Park Areas

Currently less than 10% of annual public trees planted are in parks. To reach the target canopy cover and tree inventory target it is required that more trees are planted annually in public park areas. To help to reach this goal a percentage of the parks budget should be allocated to planting in parks annually.



### Keep Public Tree Inventory Up to date

As additional public trees are acquired by the City these trees should be assessed and the public tree inventory should be updated. Public trees added to the inventory would include trees planted by the city on public property as well as trees planted by developers on public property that have passed FAC or CCC inspections.

#### **RATIONALE:**

The current tree canopy coverage in Beaumont is low at only 5.26% in the historic Beaumont land (excluding future development lands). Increasing canopy cover is not only beneficial on an environmental standpoint, but it has benefits for the mental wellbeing of residents as well. Setting a target of 10% canopy growth in the City centre over the span of 20 years is a reasonable and attainable goal for the Beaumont. Planting in park and open space areas provides an opportunity to increase species diversity and enhance green spaces for residents. Stakeholder and public feedback indicated a desire to plant more trees in public parks.

In order to ensure that increased tree canopy targets are reached for parks and open space areas, newly planted trees must be logged and assessed on a regular basis. This also ensures forest growth is monitored and any changes in size and health, positive or negative, are accounted for.

### **MEASURES OF SUCCESS:**

GIS tracking and Lidar will be used to record the growth of the City's urban tree canopy. The tree inventory will be updated on a regular basis and used to measure progress in increasing total number of public trees.

#### **CATEGORY:**

Public Parks, Open Space and Natural Areas, Boulevards

#### TIMEFRAME:

Long Term overall - 20 Years

Identify planting locations and develop a tree planting schedule - within 1-3 years (2024-2026) then ongoing and update on a regular basis.

#### **RELATED STAKEHOLDER CRITERIA:**

5.1.2.2 Planting trees in parks, 5.5.1.1 Planting in parks, 5.5.1.3 Planting along trails

### **RESOURCES FOR IMPLEMENTATION:**

Lead (all actions) - Parks

Supporting Resources – Engineering, Environment, Planning & Development, Recreation, Communications, Volunteers, Corporate Analytics & Technology (GIS), Contract Administrator, external contractors



### **GROW TARGET #2:**

Increase tree diversity in Beaumont to strengthen urban forest resilience and to contribute to the City's overall biodiversity.

### **ACTIONS:**

### **Review and Revise General Design Standards to help Increase Tree Diversity**

Review and revise the General Design Standards on an ongoing basis to ensure tree planting standards aid in increasing tree species diversity. The tree species planting list should include native species that have demonstrated urban resilience to extreme weather conditions, such as heat and drought and that this list is updated regularly to reflect changing conditions. Additional wording around requirements for diversity in the GDS related to tree species diversity should be included. Beaumont will continue to update the approved tree species list in the GDS over time to ensure they are applicable, and work with various internal departments for design standards for boulevards. The species list will be frequently updated to account for change conditions due to climate change.

Consideration should be given to recommending trees that produce edible fruits; the Urban Agriculture plan currently in development should be consulted to understand edible fruit tree recommendations.

### Ensure Tree Species and Diversity Requirements are Met During the Drawing Review Stage

During the drawing review stage developer plans should be reviewed to ensure that tree species and diversity requirements outlined in the GDS are met.

### Ensure the Plan for Additional Park Planting includes a Diversity of Species

An action item in Target #1 is to increase the number of trees planted annually in public parks in Beaumont. As planning for this increased park planting occurs steps will be taken to ensure this planting includes a diversity of tree species. Parks are an ideal space for diversity since there are not the same space restrictions as some other area types such as boulevards. Species planted will be dependent on a number of factors including available stock, weather, and location types. Consideration will be given to planting a significant number of coniferous trees in park spaces as they retain their foliage in the winter which provides a windbreak and is aesthetically pleasing. Consideration should also be given to planting trees which produce edible fruits; the Urban Agriculture plan currently in development should be consulted to understand edible fruit tree recommendations.

### **RATIONALE:**

Species diversification is a must in order to lessen the City's vulnerability to disease impact. The City of Beaumont's tree canopy is largely deciduous with over 72% of existing trees being deciduous. Of that, 44% are either Elm or Ash. Coniferous trees make up 28% of the canopy. The Shannon Diversity Index is a great tool for determining the diversity of species within a community. As a large number of new trees will be coming from land development projects led by private developers, it is essential to ensure these trees are meeting diversity requirements and continuing to balance the tree species.

Currently the Land Use Bylaw indicates that a specific number of trees is required to be planted in private front-yards by a builder based on the type and size of their front yard. It is not currently recommended to update the Land Use Bylaw to require more trees to be planted by builders as the current requirements are considered sufficient.





### **MEASURES OF SUCCESS:**

Assessment of diversity using information based on tree inventory that is added through City planting and neighbourhood development.

Improving the Shannon Index above 2.57 and an Evenness number closer to 1.0.

### **CATEGORY:**

Public Parks, Open Space and Natural Areas, Boulevards

#### TIMEFRAME:

Long term overall - 5-15 Years

Review of General Design Standards – short to mid term (1-5 years) and then ongoing.

### **RELATED STAKEHOLDER CRITERIA:**

5.3.1.7 Continually update design standards, 5.1.2.1 Tree species selection, 5.2.1.8 Developer budget priorities

### **RESOURCES FOR IMPLEMENTATION:**

Lead - Engineering, Parks

Supporting Resources – Environment, Roads Operations, Planning and Development





City processes and standards are reviewed and revised to help create the conditions to facilitate healthy tree growth on public property.

### **ACTIONS:**

### Update The Land Use Bylaw and The General Design Standards for Planting on Boulevards

Review and update the Land Use Bylaw and the General Design Standards to help facilitate healthy urban forest growth on boulevards. This may include requiring the development of wider boulevards, disallowing zero lot lines (potentially on one side of the street or on both sides), and updating the number and types of trees required to be planted on boulevards. These measures could help to ensure that trees planted on boulevards in new developments have the space to establish successfully.

### Ensure Planting Methods and Stock Regulations are Being Followed

Increased monitoring of tree planting methods used by developers on public property would aid to ensure planting is done correctly, which will increase the long-term success of the trees. Monitoring is recommended during the planting, including monitoring to ensure that the tree roots have the proper space below ground and that they are placed at a vertical angle. Spot checks are recommended to ensure the stock is adequate and to verify there is a clean plant nursery certification. These requirements are outlined in the GDS, however enforcement of these regulations would aid to ensure they are followed. Additional resources would be required to complete spot checks on planting.

#### **Review and Revise the Cash-In-Lieu System**

Currently developers can pay cash in-lieu of tree planting in some instances where they are unable to meet the tree planting requirements, with the intention of the city using the funds to plant trees in other locations. The current system of receiving and tracking cash-in-lieu should be reviewed and revised to ensure it is efficient, accurate, and that funds are directed to planting trees where appropriate.

### Assess Soil Cell Technology and Consider Adding as a Recommendation or Requirement in GDS

Assess the benefits of and the types of soil cell technology and consider adding it's use as a recommendation or requirement in the GDS. Promoting soil cell technology could be beneficial in areas with limited soil and space, such as boulevards of limited size, to help trees grow and access the resources they need. Soil cell technology could also be promoted within educational material to residents.

#### **RATIONALE:**

The small size of some boulevards is a challenge for successful tree growth. Widening boulevards increases the ability to plant diverse tree species and increases growing space, which in turn increases the chance of tree survival. This will require updates to the standards around allowable boulevard widths. As the number of trees on public property provided by developers continues to grow in new developments, it is important to ensure these trees are being adequately planted to allow for their best chances of success. When the cash-in-lieu system is used it's important that it is efficient and helps to ensure that the appropriate number of trees are planted in acceptable public spaces.

Many trees planted in tight spaces have a significantly lower success rate and maximum growth size when compared to their counterparts located in parks and naturalized areas. Soil Cell technology has



been proven to increase the size and health of tree in city boulevards. Additionally, the drainage and water quality benefits in urban areas is immense.

### **MEASURES OF SUCCESS:**

Land Use Bylaw and General Design Standards have been updated and are being followed by developers, cash-in-lieu system results in appropriate tree planting, and developments are being built as outlined in the permit conditions.

### **CATEGORY:**

Public Parks, Open Space and Natural Areas, Boulevards, Private Property

### TIMEFRAME:

Short to mid term – 1-5 Years

### **RELATED STAKEHOLDER CRITERIA:**

5.1.1.1 Boulevard width

### **RESOURCES FOR IMPLEMENTATION:**

Lead – Parks, Engineering

Supporting Resources – Planning & Development, Finance, Legal & Legislative Services, Roads & Drainage Environment





### **GROW TARGET #4:**

Requirements for tree planting on private property and regulations related to driveway size in urban growth areas are strengthened and enforced.

### **ACTIONS:**

### Update Development Inspection Process

Update current development inspection process to include a compliance inspection. Currently building codes and lot grading inspections are done but no inspection is conducted to confirm driveway sizes, or to determine if tree planting requirements in the Land Use Bylaw are being met. This new inspection would allow enforcement of the Land Use Bylaw tree planting requirements, increasing tree inventory. Additional resources, such as a staff member designated as a Development Compliance Officer, would aid in creating this new process.

### <u>Review and Revise GDS Requirements and Land Use Bylaw for Private Property in Newly</u> <u>Developed Areas</u>

Review and update the Land Use Bylaw and the General Design Standards to help promote healthy tree growth on private property in new development areas. This may include specifying the maximum allowable widths of driveways and aprons, as currently there is no maximum and requiring rear-access only for properties on zero lot lines to ensure there is more soil space for tree growth.

### **RATIONALE:**

To ensure tree planting requirements in the Land Use Bylaw are enforced and that driveway widths are controlled to acceptable limits to allow space for tree planting on private property.

### **MEASURES OF SUCCESS:**

The number of trees on private property increases.

### **CATEGORY:**

Private Property, Public Property (Environmental Reserves)

### TIMEFRAME:

Short Term – 2 Years

### **RELATED STAKEHOLDER CRITERIA:**

5.3.1.2 and 5.3.1.4 Resources, 5.3.3 Enforcement and inspections

### **RESOURCES FOR IMPLEMENTATION:**

Lead - Planning & Development, Engineering

Supporting Resources - Roads & Drainage, Legal & Legislative Services, Parks









Ensure the success and vitality of the urban forest through thoughtful maintenance practices, succession planning, and data collection.

### **PROTECT TARGET #1:**

Hazardous and diseased trees are identified and removed from the urban forest and replaced with new trees on an ongoing basis.

### **ACTIONS:**

### **Develop and Enact a Tree Pest Management and Disease Control Plan**

Develop a tree and shrub pest management and disease control plan. This plan would include the prompt removal of hazardous and diseased trees and their prompt replacement. This plan should include information on disease and pest debris storage sites and would include treatment recommendations where appropriate. This plan would continually be updated as conditions and information changes. The recommendations of the plan would be enacted and lead by the parks team.

### **Monitor Public Trees to Identify Hazards**

Monitor the health and vitality of public trees. Priority of tree monitoring will be placed on monitoring areas of the city where diseases have been identified. Annual monitoring of portions of the city will be conducted and the tree inventory updated to reflect results. When a diseased tree is identified the entire area will be prioritized for monitoring and that type of tree will be prioritized for monitoring throughout the city. Monitoring will also be used to identify trees with other hazards, such as branches encroaching on public property, to plan for their removal or maintenance.

### **Remove Hazardous Trees Promptly**

Where hazardous trees or tree conditions have been identified, the hazard will be removed promptly either by removing the tree or conducting tree maintenance work. Information regarding trees requiring removal, trees requiring maintenance work, or trees which have been removed will be tracked. The City is frequently alerted to hazardous trees by residents and will also identify hazardous trees during monitoring of public trees.

### **RATIONALE:**

To ensure that hazardous trees on public property are removed promptly. This will help reduce the spread of disease and aid in ensuring safety. Regularly monitoring the health and vitality of public trees can help identify hazards, such as disease and pests early, which would permit time for remediation before damage results in the need for removal. As disease can spread rapidly through a tree species, addressing it early and quickly is essential to protecting the urban forest.





Documenting year over year, the quantity and types of diseases impacting the trees and reviewing these quantities as this action is implemented, with intent to see a reduction of trees being lost to disease. Low presence of diseased or hazardous trees and tree stands (low = near 0). The inventory (approximate quantity) of existing and removed hazardous and diseased trees is updated annually.

### **CATEGORY:**

Public Parks, Open Space, & Natural Areas, Boulevards

#### TIMEFRAME:

Short to mid term – 1-5 years and then ongoing

#### **RELATED STAKEHOLDER CRITERIA:**

5.3.2.1 Tree propagation, 5.3.2.3 Pest management plan, 5.3.1.8 Tree maintenance, 5.2.2.2 Tree maintenance education, 5.2.2.4 Tree benefit education

#### **RESOURCES FOR IMPLEMENTATION:**

Lead: Parks

Supporting Resources: Communications, Corporate Analytics & Technology, Roads & Drainage, External Contractors, Contract Administrator, Environment, Consultants



### **PROTECT TARGET #2:**

Healthy existing trees and tree stands are identified and assessed in <u>new development areas</u> and protected where appropriate. Refer to Figure 1 on page 17 for the future development lands.

### **ACTIONS:**

## During the Development of Area Structure Plans, Existing Tree Stands are Identified, and Protection Plans are Incorporated

During the Area Structure Plan (ASP) review stage, biophysical reports are reviewed and where they have recommendations for retention of natural features, such as tree stands, steps are taken to ensure their retention where appropriate. If a biophysical report has not been completed, existing tree stands are identified through aerial imagery and/or other methods and steps are taken to ensure their protection where appropriate, and development is planned around them. Protection of existing tree stands is in new development areas is recommended where feasible as these tree stands provide economic, aesthetic, and environmental benefits.

### Enforce Requirements for Tree Stand Protection and Longevity

Develop requirements for new developments to conduct assessments and create plans to ensure that retained tree stands will have sufficient access to water following development to remain viable. Assessments would include information on pre-and-post development hydrology. Detailed design review and inspections should be conducted to enforce the development and execution of the plans.

### Review and Revise the Terms of Reference for Statutory and Non-Statutory Land Use Plans

The City of Beaumont Terms of Reference (ToR) for Statutory and Non-Statutory Land Use Plans will be reviewed and revised with the aim of adding measures to help protect existing trees and tree stands where appropriate. Currently ToR measures such as the "Biophysical Inventory and Ecological Impact Assessment" may only be required at the discretion of Planning and Development department during the preparation of an area structure plan. These studies can be used to identify existing tree stands in development areas and recommend measures for their protection where appropriate. It is recommended to review and revise the current ToR to indicate that studies such as this are required during the development of all area structure plans, or to contain specific wording on instances where there is an exception and a study such as this is not required.

### **Consider Development of a Directive regarding Biophysical Assessments**

The development of a Directive regarding Biophysical Assessments will be considered. This directive could be used to outline when biophysical assessment reports would require and how their results will be used. It could be listed that the results of a biophysical assessment should be used to help prioritize land dedicated for Environmental Reserve, Municipal Reserve, or the retention of natural biological features on the land. Alternatively, this information could simply be included in the updated ToR for Statutory and Non-Statutory Land Use Plans.

### **RATIONALE:**

During the construction of new developments, existing water flows to nearby tree stands and naturalized areas are altered. Requiring hydrological assessments from developers prior to construction will ensure



the survival of retained tree stands. In some cases, tree stands, or portions of tree stands, are removed to make room for new developments. However, as per section 4.5.5 of the Municipal Development Plan (MDP), "*Natural features including tree stands, wetlands, streams and other natural features should be incorporated into neighbourhoods*". Additionally, section 7.3.2 of the MDP states that "*The urban forest shall be protected through the incorporation of existing tree stands into the parks and open space network of new neighbourhoods where feasible and by encouraging sustainable development and construction practices that retain trees and tree stands". Using tools including biophysical reports and GIS mapping helps to identify and prioritize tree stands to recommend for protection in new development areas. Having clear directions, whether in the ToR or as a separate directive, on how to interpret and implement data received through these processes will help to set a standard moving forward. By implementing these assessment and protection measures in urban growth areas, the viability and lifespan of these stands will be increased, thus furthering contribution to the overall canopy lifespan.* 

### **MEASURES OF SUCCESS:**

The majority of healthy tree stands and trees in new urban growth areas are protected where deemed appropriate. Measurements will include GIS tracking and lidar. Assessments will be made of all tree stands appropriate for protection to ensure they can remain viable after development (including pre-and post-development flow).

### **CATEGORY:**

Private Property, Public Property (Environmental Reserves)

### TIMEFRAME:

Short to mid term – 1-5 years and then ongoing

### **RELATED STAKEHOLDER CRITERIA:**

5.3.2.1 Tree propagation, 5.3.2.3 Pest management plan, 5.3.1.8 Tree maintenance, 5.2.2.2 Tree maintenance education, 5.2.2.4 Tree benefit education

### **RESOURCES FOR IMPLEMENTATION:**

Lead: Planning & Development, Environment

Supporting Resources: Engineering, Municipal Projects, Legal & Legislative Services



### **PROTECT TARGET #3:**

Measures are taken to help ensure the protection of existing public trees and tree stands during construction.

### **ACTIONS:**

### Update the Current Development Permit Process to Include Tree Protection Plan

Currently builders receive a development permit prior to construction. It is recommended to update the permit process to require submission of a tree protection plan. Typical tree protection plans would indicate that physical protection measures would be installed around trees and their root zones during the period where work is being conducted. The General Design Standards currently includes information on tree protection but there is no requirement for builders to submit a tree protection plan following these guidelines.

### Assess Feasibility of a Bylaw to aid in Protecting Trees during Development

Assess the feasibility of a bylaw to protect public trees during development in existing developed areas and allow for fines to be issued. This bylaw could indicate that a tree protection plan is required to receive a development permit if work is being done near public trees. Fines could be introduced for encroaching on stands or damage to or removal of existing trees and requirements for thoughtful restoration of the disturbed areas adjacent to tree stands.

### <u>Review and Revise the Performance/Damage Agreement Inspection Process to include</u> <u>Public Trees and Increase the Required Damage Deposit</u>

Currently damage inspections are conducted as part of the lot grading process following construction to confirm that public assets, such as include sidewalks, streets, and gutters have not been damaged during construction and that they meet the performance/damage agreement conditions. It is recommended that the inspection process is reviewed, and if feasible updated to include the inspection of public trees and the soil around them. If it is deemed not feasible to update the performance/damage agreement inspections to include public trees, another mechanism to perform inspections of these areas should be considered.

Currently builders submit a damage deposit, which is held until the inspection of the property is completed and the inspection passes. It is recommended that the required damage deposit is increased to incentivize builders to protect public trees and other assets. If a tree is damaged the cost of a tree replacement would be deducted from the damage deposit. If a driveway apron is built larger than permitted onto public space around a tree this must be removed, or damages paid. Additional resources would be required to enforce these measures.

### **RATIONALE:**

Currently there is no bylaw or permitting process for protection of existing trees and tree stands during construction activities. By implementing appropriate measures for tree protection and suggesting appropriate protection approaches, this will improve the likelihood of the survivability of these trees while dissuading lack of care and attention during construction through a potential fine structure.





### **MEASURES OF SUCCESS:**

Damage to public trees due to construction has decreased significantly. Tree protection plans are being developed and followed and the performance/damage inspection process is updated to include public trees.

### **CATEGORY:**

Private Property, Public Property (Environmental Reserves)

### TIMEFRAME:

Short to mid term – 1-5 years

### **RELATED STAKEHOLDER CRITERIA:**

5.3.2.1 Tree propagation, 5.3.2.3 Pest management plan, 5.3.1.8 Tree maintenance, 5.2.2.2 Tree maintenance education, 5.2.2.4 Tree benefit education

### **RESOURCES FOR IMPLEMENTATION:**

Lead: Planning & Development, Engineering

Supporting Resources: Parks, Legal & Legislative Services, Protective Services, Finance, Communications, Environment







Thoughtful resource allocation to ensure the best success for tree longevity.

### **MAINTAIN AND MANAGE TARGET #1:**

A pruning schedule is developed, followed, and updated each year.

### **ACTIONS:**

### **Develop A Pruning Schedule**

The City's Parks group will lead the development and implementation of a pruning schedule. The schedule will be updated on an ongoing basis as conditions change. The goal is to create a pruning schedule based on sections of the City and certain species within the City; this will decrease the instances of hazardous trees, maintain tree health, and use resources efficiently.

### **RATIONALE:**

Currently the City takes a reactive approach towards pruning. It would be beneficial and greatly reduce efforts to be proactive. By planning and implementing a pruning schedule, this ensures tree structure is maintained, hazard limbs are removed and trees nearing the end of their lifecycle can be inventoried for future replacement.

### **MEASURES OF SUCCESS:**

The creation of a pruning schedule that is followed and updated annually or as needed.

### **CATEGORY:**

Public Parks, Open Space, Boulevards

#### TIMEFRAME:

Short to Mid term – 1-5 years and then ongoing

### **RELATED STAKEHOLDER CRITERIA:**

5.3.1.8 Tree maintenance, 5.2.2.2 Tree maintenance education, 5.2.2.4 Tree benefit education





### **RESOURCES FOR IMPLEMENTATION:**

Lead – Parks

Supporting Resources – Corporate Analytics & Technology, Roads & Drainage, Communications, Contractors





### **MAINTAIN AND MANAGE TARGET #2:**

A watering schedule is developed, followed, and updated each year.

### **ACTIONS:**

### **Develop a Watering Schedule Annually**

The City's parks group will lead the development of and implementation of a watering schedule. The watering schedule will be updated annually and on an on-going basis and will reflect the weather conditions and current tree needs. Primary focus will be placed on recently planted material as well as new tree inventory that has been taken over from development through the FAC process.

### **RATIONALE:**

The most important aspect for the success of newly planted trees is their water intake. Applying priority to the watering of recently planted and FAC'd trees provides the best likelihood for tree survivability. Traditionally, trees coming into the City's inventory have gone through a "hardened off" watering regime, meaning they have been conditioned for harsher conditions and less watering. This provides the City with anticipated lower watering requirements. However, if mortality is present, the City would engage in discussions with the contractor to ensure the material is being provided in a hardened off state.

### **MEASURES OF SUCCESS:**

Tracking the number of tree replacements required for trees (or the mortality of those trees) that have entered into the City's tree inventory over the last 1-2 years. A comparison of the ratio of mortality prior to the implantation of this Strategy as well as cycles of the subsequent years will be referenced to determine success.

### **CATEGORY:**

Public Parks & Open Space, Boulevards

### TIMEFRAME:

Short term – 1-2 years and then ongoing

### **RELATED STAKEHOLDER CRITERIA:**

5.3.1.8 Tree maintenance, 5.4.2 Watering Schedule

### **RESOURCES FOR IMPLEMENTATION:**

Lead – Parks

Supporting Resources – Roads & Drainage, Utility & Facility Operations, Corporate Analytics & Technology, Contract Administrator, Contractors







Inform the public on the benefits and importance of the urban forest and expand community engagement.

### EDUCATE AND ENGAGE TARGET #1:

Increase city-led community outreach related to the urban forest and local biodiversity.

### **ACTIONS:**

### Educate Residents on the Benefits of Naturalized Areas Around Storm Water Management Ponds

Post informational signage around storm water management ponds to educate local residents on the benefits of naturalized areas around stormwater ponds. Naturalization, including the natural growth of trees, has many benefits in these areas including water filtration, wildlife habitat, flood mitigation, and the reduction of algae formations on the ponds. Signage could include information on why these areas must be left untampered with by residents. Consideration should also be given to educational signage about various tree species at stormwater management ponds or other parks.

### Update Website with Information on Beaumont Public Trees

Update the Beaumont website with information on the public trees in Beaumont. Information may include the locations of public trees, tree species types in Beaumont, and the location of public edible fruit trees. A digital tool to showcase tree information and help residents engage with the Urban Forest Management Strategy could be placed on the website; this would also help to support the Beaumont Digital Master Plan.

### Consider Development of an "Adopt a Tree Program"

Consider development of a City-run program whereby residents or community groups may "adopt-atree". This could entail residents submitting payment and then the City plants a tree in a park area. The residents or community group could also be involved in the care of the tree, such as watering.

### Urban Forest Volunteer Opportunities

Within the Beaumont 2021 Environmental Master Plan an action item is to "Establish an Environmental Ambassadors program" which would involve developing a volunteer group to help promote environmental stewardship activities in Beaumont. Opportunities for volunteers to be involved to help grow and improve the urban forest will be developed.





Naturalized areas around storm water management facilities are low maintenance and often contain trees. Stakeholder feedback indicated that there is an issue in residential neighbourhoods containing naturalized areas of residents taking it upon themselves to groom back foliage in order to make the area look manicured. Education around this not only helps to keep naturalized areas safe but informs public on how their neighborhoods function. Additionally, Volunteer opportunities provide the public with hands on engagement directly related to the urban forest and contributes to goals set out in the Environmental Master Plan.

With Beaumont becoming a more digitally engaged City, the development of a digital tool for resident engagement of the Urban Forest Management Strategy will align with the goals of the Digital Master Plan. This will provide residents with easier access to information around the urban forest.

#### **MEASURES OF SUCCESS:**

Fewer resident complaints related to naturalization around stormwater ponds and more positive public engagement related to the urban forest.

#### **CATEGORY:**

Public Parks, Open Space, Boulevards, Private Property

#### TIMEFRAME:

Mid-term – 2-10 years and then ongoing

#### **RELATED STAKEHOLDER CRITERIA:**

5.5.2.1 Signage, 5.2.1.8 Developer budget, 5.2.2.5 Nursery partnership

#### **RESOURCES FOR IMPLEMENTATION:**

Lead – Environment, Parks

Supporting Resources – Communications, Municipal Projects, Utility & Facility Operations, Planning & Development, Corporate Analytics & Technology, Contractors, Volunteers





### **EDUCATE AND ENGAGE TARGET #2:**

Develop initiatives and provide information to community members that will encourage and support residents in their efforts to improve the overall health of trees in their neighbourhood.

### **ACTIONS:**

### **Develop Local Residential Planting Initiatives for Private Land**

Develop local residential planting initiatives to encourage citizens to help grow and preserve Beaumont's urban forest by planting a diversity of desired tree species on their private property. For example, working with local nurseries to offer residents trees at a discounted price each year or offering a free tree for every tree purchased. Assess the feasibility of a City rebate program where residents would receive a rebate from the City for planting the recommended tree species on their private land; this rebate may incentivise them to plant additional trees and would therefore help to increase canopy cover.

### Provide Information to Residents about Maintenance for Trees On Private Property

Provide localized information to the public on how to properly care for trees, including how to identify hazardous and diseased trees. Trees on private property are managed by residents; in order to help protect these trees the City should provide educational information on tree care management and maintenance including topics such as, when to prune, how to identify disease, when to fertilize, etc. An appropriate communication plan will be developed with the help of the Communications department and may include updating the Beaumont website to include information about identification of hazardous and diseased trees.

### **Education for Residents about Required Driveway Sizes**

Provide information to residents about the requirements for driveways sizes and the rationale for these requirements. In some cases, residents increase their driveway sizes without permits and encroach onto municipal green space; this is against bylaw and results in less green public space on boulevards and negatively impacts the tree health, water drainage, the environment.

### **RATIONALE:**

Beaumont's community has a stake in the health and management of the City's urban forest. This includes trees in parks, private yards, on boulevards and on streets. The benefits provided by the urban forest are realized by the community, not just the owner or person responsible for the tree. An informed and motivated community is essential to any effective urban forest strategy. Incentives and education surrounding urban forests help to maintain a cohesive effort to improve.

### **MEASURES OF SUCCESS:**

An increase of appropriate trees planted on public property and an improvement in their care resulting in less instances of pests and disease, and a decrease in non-permitted increases in driveway sizes.

### **CATEGORY:**

Private property





### TIMEFRAME:

Short to mid term – 2-5 years and then ongoing

### **RELATED STAKEHOLDER CRITERIA:**

5.2.2.2 Tree maintenance education, 5.2.2.4 Tree benefit education, 5.3.1.8 Tree maintenance, 5.1.2.1 Tree species selection, 5.3.1 Tree canopy prioritization

### **RESOURCES FOR IMPLEMENTATION:**

Lead – Parks, Communications, Planning & Development

Supporting Resources – Environment, Finance, Local Nurseries





### EDUCATE AND ENGAGE TARGET #3:

Build on the current communication networks with industry leaders to discuss the impacts of development on the urban forest, and subsequently develop ways to reduce these impacts.

### **ACTIONS:**

### **Continue Regular Meetings With Local Developers And Builders**

Currently the City has regular meetings with builders and developers in Beaumont, including with the Beaumont chapter of the Urban Development Institute. These meetings can be used as an opportunity to discuss to the GDS and LUB related to tree strategies. Discussions around protection and expansion of the urban forest will be conducted.

### **RATIONALE:**

Trees are too often removed for the sake of urbanization. Beaumont's urban areas will continue to expand to accommodate population growth and migration trends. Local developers and builders play a large part in shaping the way the City grows. Continual communication with industry leaders around the protection of the urban forest is essential to addressing the knowledge gap around tree services and encouraging developers to protect and retain trees on developable land.

### **MEASURES OF SUCCESS:**

Participation in networks and returning participants will determine the best approach.

### **CATEGORY:**

Public Parks, Open Space, Natural Areas, Boulevards, Private Property

### TIMEFRAME:

Short Term – 2 years and then ongoing

### **RELATED STAKEHOLDER CRITERIA:**

5.2.1 Tree planting on private land

#### **RESOURCES FOR IMPLEMENTATION:**

Lead – Planning & Development

Supporting Resources - Parks, Engineering, Parks, Communications, Environment, Municipal Projects





### 6.5 FUNDING & RESOURCING

Below is a list of possible personnel and funding sources for consideration to aid in implementing this strategy:

### Staffing and Support

Assemble an internal and external team to help with implementing the strategy, with a mix of paid and volunteer positions.

- City Staffing
- Contractors
- Non-profit groups
- Volunteers and Citizen Science Teams

### **Grants and Endowments**

Communicating community grant and endowments that non-profits and community partners can apply to for tree planting and care, such as grants from Tree Canada.

### Fines

Fines to developers or residents for tree damage or removal may be redirected to urban forest initiatives.

### **Wood Utilization**

When a tree is to be removed, sell the wood by-products for profit to biomass or lumber mills. Or repurpose lumber from trees for local design projects.

### **Tax Increment Financing**

Use of Tax Increment Financing to sell bonds backed by a development's future taxes, where bond money was paying for public improvements including urban forestry enhancements and care.

### 6.6 MONITORING & MEASURING SUCCESS

The vision and guiding principles of this Strategy and a roadmap for how to achieve the desired urban forestry outcome is laid out in the actions presented earlier in Section 6 of this Strategy.

Recommendations for ways to measure the success for each target are outlined in the preceding parts of Section 6; in addition to these, this section provides additional recommendations for how to measure the success this strategy.

Continuous monitoring is a key component of sustainable urban forest management. Collection and review of tree data on a routine basis provides vital information on the progress and setbacks experienced in the management plan. It also helps us to better understand tree mortality, survival rates, growth, disease, and overall health of the urban forest. While a single inventory can depict



structure, function, and ecosystem services in an urban forest, only long-term monitoring can describe change over time.

Implementation and monitoring of the recommendations set out in this Strategy will support the City in shifting from a reactive to a proactive urban forest management approach. This new approach will greatly improve operating efficiency, diversity, resilience to disease and invasive species, and will ensure the City of Beaumont reaps the benefits of a sustainable and healthy urban forest for generations to come.

Progress over time should be measured against the targets established for each objective. In general, regular "check-ups" should occur at 3–5-year intervals on average with some targets requiring annual reviews. As this is a new Strategy for Beaumont, continuous monitoring and modification of management actions will allow the City to stay progressive in its approach to urban forest management and will ensure targets are achieved.

### Evaluating planting program performance

Monitoring trees planted through a specific program can provide data about tree performance outcomes, such as growth rate, survival rate, overall health, and associated ecosystem services. For many municipalities and non-profit organizations that conduct tree monitoring, tree performance outcomes serve as metrics of program success.

## Understanding ecological and social elements that predict tree mortality, growth, and health

Studies that track factors that might be associated with tree mortality, growth, and health can improve our scientific and practical understanding of how urban tree systems change through time. Studies that incorporate long-term monitoring can also suggest potential areas for program enhancement and identify trees at higher risk for decline.



## CITY OF BEAUMONT





The annual tree survival rate is the ratio of trees that remain alive at the end of the year. The flip side to this is mortality rate, which is the ratio of trees dead, dying, or removed at the end of each year.

When monitoring trees from a planting program, **survivorship is the ratio of trees that survived from the time of planting to a chosen future date (**e.g., survivorship to 12 years after planting).

### Managing pruning cycles and risk

Urban trees require regular inspections to direct pruning and removal of aging and hazardous trees. Continual tree inventory updates can be integrated with a municipal forester's regular inspection and pruning cycle. For instance, a municipal arborist could inspect and update the inventory on trees in parks and open space on an annual basis, such that inspections and inventories are completed in a 5year cycle. This kind of systematic inventory/inspection cycle ensures that records are up to date for proactive management and allows for analysis of mortality and tree risk.

### Identifying emerging threats from pests and diseases

Monitoring for tree pests and diseases in the urban environment can provide valuable early warnings about threats to urban forest systems.



# SUMMARY


## 7.SUMMARY

#### 7.1 URBAN FOREST MANAGEMENT STRATEGY

The Urban Forest Management Strategy is a high-level document that provides its users with a framework on how to manage Beaumont's urban forest. It is vital to ensure the urban forest is able to grow and be protected, and to educate the residents on its importance.

The document includes information on how the Strategy was developed, using inventory and analysis data collected on the current state of the urban forest, and the challenges, opportunities, and priorities that were identified by stakeholders. This all helped to develop an understanding of the urban forests current state and how it is viewed by Beaumont's residents.

The Strategy is intended to be a 20-year roadmap for the City of Beaumont to guide the growth its urban forest and allow its value to be recognized and understood throughout the community. Through its guiding principles, objectives, targets, and associated actions, the Strategy directs its user towards a successful approach of caring for the urban forest.

Regular re-evaluations should be completed every 3-5 years to ensure the strategies targets are being met and are still relevant. Ultimately, this document is intended to provide the City of Beaumont with the tools and resources needed to ensure the healthy growth of the urban forest by preserving existing trees, increasing the urban tree canopy with new tree establishment and diversity, enhancing public awareness, and encouraging involvement from the community on its success.

#### 7.2 POSSIBLE NEXT STEPS: ASSET MANAGEMENT

With the completion of the Urban Forest Management Plan, the City has established a vision and strategic direction complete with goals and objectives. A possible next step is to create an Asset Management Plan. The AMP would incorporate all the inventory information along with condition data to use asset specific intervention strategies to create a long-term forecast and investment plan for the green infrastructure of the city.

Asset Management has become the dominant and accepted practice among public and private agencies including municipalities to manage infrastructure assets. It builds on the ethos of adaptive planning used in natural resource management as well as hierarchical planning where lower-level plans need to conform to higher level plans. The Urban Forest Management constitutes a higher-level plan than the AMP. AMPs typically cover a term of at least 25 years and have a planning horizon of at



least 2 lifecycles of the most dominate asset by value. A refresh or update of the AMP is done on a 4–5-year cycle.

AMPs are the basis for implementing more tactical plans which cover a shorter term such as business plan or a capital plan. Master plans also work in parallel with the AMP or as a higher-level plan that would guide the investments for betterments or expansions of the asset portfolio.





#### URBAN FOREST MANAGEMENT STRATEGY

# APPENDIX







General Comments

Trees need to be maintained to remain healthy.

Why isn't fire management / safety on this list? Check out FireSmart from the AB Government: https://wildfire.alberta.ca/firesmart/default.aspx

I think all 6 items are important, and I struggled between adding valuing trees as assets in there because I do think that is important. Living in a new neighbourhood, there is a complete disregard for trees and I have not seen any tree protection from home builders. If valuing trees as an asset does move forward, I would recommend no only fines, but tree protection being mandatory.

I have a tree that the Town planted years ago along my street and now they refuse to take responsibility for it. My neighbours down the street removed theirs before they got too big. I also have three oaks planted along the avenue boulevard that are impossible to mow around because of the uneven ground that was left.

Bylaws and enforcement should be centered around fire safety. All other concerns are subjective at best.

General Comments – V	Vhat Matters Most to You?
Allocation of City Budget	Without raising taxes, a greater proportion of the city budget should be spent on the urban forest.
	Nothing is free, if we are sincere on this topic it will require adequate allocation. We have added PLENTY of sports facilities to our community so let's give some of the other aspects some attention Use the budget wisely and save ghat can be saved and do away with what
	cannot be saved.
	Money needs to be allocated yearly for tree maintenance. They will need proper regular trimming and pruning to keep them shaped and healthy.
Community Needs	Communities need beneficial tres and plants in order for healthy environments
	I believe trees make an open space feel more complete, provide a fantastic aesthetic and provide great environmental benefits. Open spaces with limited trees aren't as appealing and don't draw people in as much as open spaces with diverse trees.
	Very important!
	Make areas the community can gather participate and contribute to continue to make the city the best we can be
	Developers need to be held to a high standard to ensure they plant well shaped healthy trees from the start. If they plant crooked, miss shaped trees they got at a discount. Those trees generally will not grow into bigger beautiful trees. They will always be miss shaped and unattractive just bigger unattractive trees.
	the commitey needs trails and more to help you connet with the outside world.
Connecting with Nature	Trees allow for habitat for our animal, bird &insect residents that are important for our ecosystem. Trees are also very important for mental health that makes living in Beaumont more disireable. You feel more refreshed



	walking on a treed boulevard vs a treeless concrete wall. Trees are a key factors on where our family chooses to live.
	Children (and adults) need to learn and enjoy the benefits of having urban forests as well as the birds and animals that are attracted by the shelters the trees provide.
	Tree/ landscape all paths. "Forest within the city"
	Planting specific species of trees in strategic locations for future opportunities. Family photos, graduations, birthdays, weddings etc
	Trees are calming and helpful for peoples mental health in general.
	we would have a cleaner air so we could live are life to the fullest
	conneting with nature is very imonport to your heath
	Beaumont needs more connected trails in the NE and throughout the city
Environmental Stewardship	Again, trees clean our air which is beneficial to community health.
	Always best to teach the community and next generations how we can better take care of the environment.
	Planting trees to help offset Albertas massive carbon footprint
	We only get one planet. We must be responsible respectful and take actions to protect what we have
	We need to do our part to keep the climate/air healthy. Trees are a great way to do this.
	having a heathy ecostum is importent because it helps you breath better
Valuing Trees As An Asset	Damaged or diseased trees should be replaced. A variety of long lived trees that less susceptible to disease should be planted: Ohio buckeye, oak, linden, starlite crabapple, and lilac trees should be planted to replace diseased Aspens, poplars, Schubert chokecherry, or Manitoba Maple.
	Need to be recognized as important and treated them as assets allows them to be better managed & respected
	We need the oxygen they release and the cleaning of the air by removing carbon dioxide.
	Ensuring trees and landscape can withstand the climate and ongoing challenges with water etc. budget and insure landscaping / trees for ongoing replacement and design.
	More trees = more CO2 scrubbed from the air and more habitates for animals
	Planting growing sustaining trees in certain locations to help with a certain old growth look or pretty look for Beaumont. Remind me why were all the beautiful pink trees cut down in the middle of Rue Montalet at 50th street?
	Please look after the trees that are already planted, thinning them and caring for them is of utmost priority, making them healthy and lasting long term.
	I would like to see more trees planted along walking trails in older parts of Beaumont. I like the idea of having the cities access for people to walk the city and appreciate what Beaumont has to offer. I currently live in a older part of Beaumont and live beside a walking trail which can get quite noisy and invades the privacy in my back yard. I live on 59 ST & 56 Ave and trees would help soften the noise level and lessen the people being able to stare at
	me in my yard. So important for people animals and the air around us





We absolutely NEED more trees, planted in our parks. Preferably, in groupings. I often see 1 tree planted, then another a significant distance away. PLEASE plant them in groupings of at least three. This way they have a presence, instead of looking hap hazard and very lonely.
The more trees the better. Need trees around the pond that is to the south of the ball diamonds which is southwest of the high school. It backs Soleil blvd, Caillou Bay & 38 Ave & 60st.

Activity Rating – Spe	ecific Comments
Future Development	You are too late
	Make tree planting a required need
	Trees are a precious commodity and should be incorporated into new developments instead of just being removed in favour of a more structured approach. Anytime a lot is advertised as backing on to a ravine, green space, etc., the value increases.
	Developers need to understand the importance of existing trees located on the land they are about to develop.
	Developers need to be held accountable for planting quality trees and maintaining them more than the one year warranty that is currently in place. The community I live in Forest Heights, has had several trees die only to be replaced by low quality smaller trees. This is an issue that needs to be addressed right up front in development agreement so clear expectations are placed on developers who make all kinds of profit then leave
	Agree. I've often wondered why new subdivisions do not leave a few a strands in different areas as an amenity
Parks & Open Space	Feel we have adequate mix today
	Need trees
	More trees are needed for shade at the parks!
	For the most part, our parks are basically fields with the occasional tree spotted here and there. I would love to see us progress to what St. Albert and Sherwood Park have achieved where pathways are thickly lined with trees so you can't see the adjacent homes and you feel like you're in the river valley, just without the river.
	I think it's important to have a diverse tree population that is sustainable and suited to their setting.
	We need the manpower to maintain our existing trees.
Private Property	Private property Not interested in public finding private landscaping projects. If the owner is sincere will find a way as are many low cost options if they want trees
	Encourage tree planting
	I think it best to focus on public area and parks that all people can enjoy or planting more trees on 50 st to block traffic noise starting at the bottom



I	
	of the hill (there are trees there however, they are all old and need young trees planted)
	If that's the only thing holding back people from improving their properties, then I fully support funds being allocated here. Beaumont should have their own greenhouse (or partner with local greenhouses) to offer discounted plantings to residents. It doesn't make much sense to have a beautiful boulevard but homes that have little care. Partof enjoying a community walk is to admire landscaping that residents have done in addition to an appealing boulevard.
	It's very sad when I see a resident cut down a beautiful tree in their yard to park a RV.
Streets & Boulevards	Past decisions to limit tree varied have made disease corridors where when one tree on a street gets sick it is easy to spread and soon all are sick (Dutch elm buffet). The selection of the mix will take educated forethought but we need more trees for longer vision. Mix of slow & fast growth
	A must and get developers and residents involved and contribute \$
	Plant trees along 50 st, including at the bottom of the hill as these trees are all mature and need young trees planted as these ones continue to age
	Streets with overarching trees are beautiful and highly coveted in Edmonton (Highlands and Strathearn neighbourhoods for example). I would love to see that in Beaumont and also the ability for us to improve our boulevards (plantings that residents would maintain, but we would also need to make sure that the snow removal people respect those improvements).
Tree maintenance on Existing trees	Existing trees, both city owned and private are overgrown onto trails and sidewalks.
	Please consider options to allow home owners to maintain there boulevard trees. This needs to be done responsibly and if offered some training and guidance could be a great win-win. The guidance (can & can't do is the key). We love our boulevard trees however are not enough town resources to adequately maintain them. Sadly after years of abandonment the disease has almost killed our boulevard trees :(
	A must and educate the public and private residents
	It would be great if property owners also addressed this as black knot is prevalent around town and can be easily taken care of if it is caught early It is important to protect what we have so mass removals can be kept to a
	minimum as you can't replace a mature tree with another mature tree it takes decades to grow back what was lost.
	Please assess the safety of the trees along the path from 50 avenue to four seasons park, behind beaumont estates and goudreau estates. Some of those trees could be thinned and cut off to allow more growth below. They are getting too tall and the bottoms are full of dead limbs.
	Very important to have the expertise and manpower to complete this job.
	Deal with black knot on public and private property need to be addressed before it spreads. Check out the area of 43rd St. and 47th Ave., get out of



## **CITY OF BEAUMONT**

	your truck and walk around for a half a block and look at the problem there's one house that is especially bad at 4304 47th St. this needs to be a addresed before it spreads
	We had a tree planting event in a field in Coloniale several years ago. It added interest to an open field, attracted birds, and the number of walkers increased on the nearby pathway. Unfortunately, the trees were not regularly watered or maintained. The ones that survived were periodically run over by town staff while mowing. Disappointing.
School Planting Program	Not just trees, they should have veggie garden and flower beds
Gardening	Very, very important to me & my backyard garden is key item that keeps me in Beaumont. I wish there were more community garden options as many are not fortunate to have suitable space for a garden. These thrive where the city takes an active role places for these to happen & some guideline structure so that fair for residents affected
	Growing locally sourced fruits and veggies inside greenhouses and gardens will liven up Beaumonts sense of community with the edlerly and the young alike. Great learning opportunities for everyone to be had as well as socialization
Learning from Experts	Please, will attend. City staff can have own army but many home owners would like the opportunity & knowledge. Healthy trees are a mutual win- win. I am very upset as our boulevard trees got sick a decade ago and due to town resource limits have not gotten adequate attention and are about to die
Nature Experiences	Very important as people aren't the only residents of Beaumont. Animals, birds and insects also need adequate habitat. We do what we can on our property but one lot is not a lot in the bigger picture
	As Beaumont keeps growing and expanding, we need forward thinking as to how much of Beaumont could be in the future an urban forest. its not going to happen overnight but not ALL of Beaumont should be subdivisions. Set aside a quiant sizeable portion of Beaumont for strictly trails used for walking bike riding etc. Dont get me wrong we have trails now, its just they intertwine subdivision to subdivision. Im talking a huge park strictly for forest hiking trails
	I am an Eco-art therapist which combines nature with art for healing. I use the little wooded area by the creek out back. It's not ideal because there are only deciduous trees. During fall, spring and winter it becomes very open, noisy and windy because the leaves are gone. I also lead forest bathing sessions but have to go to Edmonton or Elk Island to find a forest. These are current trends that people are very interested in but have to leave our community to find them.
	This would be so amazing for the community and as an attraction for the city
Volunteer Opportunities	Good to make options available and those that want to volunteer will come out of the woodwork. Challenge is getting people aware to make that choice
General Comment	Once again, there should be an emphasis on fire safety. Pulling out deadfall, trimming out lower/dead limbs, buildup of dry ground cover, etc.



	This concern should override all others. Just look at what happened in Slave Lake and Fort McMurray - the situation was made worse from poor vegetation management.
Aesthetic Value	I don't think this could ever be overstated. Edmonton River Valley is an asset mostly because of the trees and the trail system within them. Working towards this in Beaumont could perhaps earn us as a go-to place for a beautiful outdoor cityscape.
	Plant some vibrant beautiful maple trees. The colours of orange and red in the autumn will have an everlasting effect on residents memories of how beautiful Beaumont really is
	Yes, this is very true. It's important for residents to treat these trees as if the trees belonged to them. Watering and maintaining. This is the most important value of an urban forest.
	•
Carbon Capture	We all need to do our part. Our own yard in Dansereau Meadows has 17 trees that we've planted in the 8 years we've been here.
	Possibly the most unintended best outcome for everyones sake that is just an added benefit of planting trees to which is free
	While the tree is growing and mature there is carbon capture. However, the carbon is released when the tree dies.
	Increasing our tree planting and ecosystems within the community is a big part of the climate change policies
	The oxygen the trees gift to us is so very important . What better way to solve the carbon problem than to plant lots of trees.
Heating and Cooling Cost Savings	I'm not sure how much impact that would be as I'm not seeing trees in Alberta typically getting to sizes where they would shade buildings so I think our motivations should be focused on environmental stewardship and community beautification. If we achieve cost savings as well then that's a bonus but I don't think it should be a goal that influences a program to be scrapped if we don't achieve it.
	Wind protection, shade and old growth are all characteristics Beaumont needs more of desperately.
	We live in such a windy environment, especially in the north west side of Beaumont in Eaglemont where we do not have many trees especially conifers. Planting more will solve this problem for the future. Last summer we planted 4 mature spruce trees on our property and it had made a lot of difference in wind and shade.
Infrastructure Costs	If this is true then it would make sense to have trees as part of a infrastructure maintenance strategy to prolong the life and capacity of our systems.
	Its all positive

Wrap	Up –	Additional	Comments	

Looking forward to seeing more trees!

I think it would be nice for the City to start planting fruit trees and maintain a map of all fruit trees in Beaumont. The fruit trees would be available to the public for picking. Beaumont's fruit tree map could then be combined with the City of Edmonton's fruit tree map and the future Strathcona County's fruit garden map.



### CITY OF BEAUMONT

I often run/ walk/ bike outdoors and noticed Beaumont doesn' forest type feeling. For this reason I drive to Devon, Leduc, Ed from the suburb/ urban feeling. I would love for Beaumont to not only for myself but future generations.	Imonton to trail run and get away have more tree coverage and trails
My main beef about Beaumont is there is not enough trees. Do more mature communities with far more trees (naturally occur	
I think we need to do more to maintain and develop trees and land is overly groomed and there would be a benefit to having	more natural areas.
Trees that are native to our environment. Please don't plant tr as climate change occurs, we may have a shortage of moisture	e.
Thank-you for having this survey. It is nice to have input into	the future of our community
Please make a bylaw against Black knot	
Yay trees! It would be nice to add more trees for parks.	
Plant more trees along trails, Edmontons river valley is the gol close to edmontons	d standard for trails. Make them
Happy to see that Beaumont is thinking about urban forestry a	and making it a priority in our city.
I would like to see an actual forest area near Beaumont with r and animals. In terms of increased planting, it would be nice in Park incorporated more native species growing in more natura grove" program could be launched so that those of us backing planting of a small grove of natural vegetation to attract birds down wind in the area.	f the trail system in Four Seasons al manner. Perhaps an "adopt a g onto the park could support
Beaumont is a beautiful city, but with many newer neighborho trees. I think increasing the number of trees in parks and neig the fututre.	
The city needs to be responsive when calls are made about fu ie black knot. Calls have gone unanswered and trees unaddres species, bees (spring flowering like crab apples and apples) we trees is needed expand green spaces. Do not remove dead tree decomposition cycle and regrowth but if dangerous, bring tree replenish forest.	ssed. Trees which support bird ould be good. Expansion of trails and ses from the forest to allow proper
Need to plant trees that have been damaged or removed from	all the new house building.
Last summer, City staff removed trees on City property along soccer field because a home owner complained the trees were Regular cutting of their lawn would have been more productive The actions of City staff have spoken loud and clear about valu has. Hopefully this changes.	e shooting up into their yard. e than chopping down the trees. uing the few trees that Beaumont
An urban forest has many benefits and very happy to see Bear	umont planning.
Does the city insure their trees? I believe Regina has a similar program to maintain their elms. Also, Sherwood park would an excellent role model regarding you can see the impact their community landscaping has on the of landscaping- trees, shrubs and bio diverse plants. Maintena	ne beautification and diversity/health ance program is important
We live beside a pond and have no shading trees. Would like about the trees right behind their property. Would love to hav decorate at Christmas and provide some shade during the sum	ve a nice spruce that we could



It is unfortunate that more trees were removed in Forest Heights. Some were planted to replace trees along the new trail but were not taken care of and will be dead come this spring. Please look
at replacement with bigger saplings to hopefully root and grow.
It would be great to also look at areas where mature trees exist and figure out how to continue or
boost those tree levels as well.
Thank you for your survey !
Love the city's direction with this :)
Great timing for this survey. You conveniently allowed the destruction of acres and acres of trees for a subdivision south of the golf course before deciding trees were worth saving
Mature growth trees take years to grow. Plant today reap the rewards many years ahead.
Once again, disappointed this survey did not have anything in it regarding fire hazards / FireSmart.
Those concerns should be top priority.
Xeriscaping should be considered; as well, because Beaumont is always on a water restriction in summer, until the water supply is properly fixed, landscaping should be designed to use no/minimum water and still be fire safe.
Thanks for a fun survey. Thank you also for developing this urban forest strategy for our city. Suggestion: providing an interactive map of some of the city's public and private trees so residents can learn more.
I am happy to see this being looked it and that public feedback is being gathered.
 Are home owners allowed to remove shrubs and bushes from around the ponds in town? I e
noticed the pond in my neighbourhood had fewer shrubs and bushes this year. The branches have been disposed of in the pond.
I would like to have the ponds with natural foliage. There are a couple of ponds in the city that are like this. They are very beautiful, provide places for insects, birds and amphibious creatures. When you walk by these bonds you hear birds singing and can tell that the pond is teaming with life. This would be very positive for young people to learn about nature and how to keep it healthy
The old old row of trees beside Gudreau are in dire need of attention, cleaning out dead branches, weeding out unsightly trees, taking out some pine trees that are leaning and have dead bark on the trunks.
You need to plant trees around ponds to improve water quality.
I love exploring nature, the problem is that Beaumont lacks those natural spaces. the largest wooded areas in Beaumont are near forest heights and there's barely any there. With the rise of trees, however we need to be concerned of fires similar to the one by Beau Val. Four seasons definitely needs more tree cover however as the wind cuts right through the park and is especially harsh during the winter.
We have had many new housing areas built over the last few years, and I think it's very important to make up for the trees and plants that that killed. Environment is very important and we should be conscious of the health of ours in Beaumont. One thing that stands out about Beaumont is the greenery around town, and I would love to see even more trees planted all around.
Would love to have natural areas for children to explore, climb trees, wetlands to watch birds, waterbugs. Conserving wetlands is important. Save the wetlands on south end of town instead of filling it in and building homes or commercial space.
Beaumont is in need of repairing and maintaining its ecosystems. Doing so will offset our carbon footprint. More money is needed in our current budget to hire the manpower to maintain the trees shrubs etc that is planted and or in need of replacement.
As a community we need to stop using herbicides and pesticides to save our insects in danger.



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	end tax dollars wisely and don't add more red tape. You can do many programs without offering te items to residents at the expense of others.
	h our precious number 2 soil being developed over we need to ensure there is life going back
	o our city not just wiped away for a developed over we need to choose there is me going back
	nes for animals. Plant as many as we can!
	uld love to actually have a forest in the city.
	trees are nice, I don't have a preference. Fast growing should not be a primary consideration.
	gevity, and hardiness are more important ave nothing against baldness but we have to move significantly beyond our bald prairie. Some
	ds look awfully barren. Not braggingwe have 65 noticeable trees/shrubs in our yard. So
	d for the soul and the planet.
	es and greenery, make any city look beautiful and inviting. However, they must be maintained
	be healthy and look their very best.
	*A general mix of trees is best.
	Fruittrees that anyone could pick the fruit in a few specific locations would be good BUT it
	uld have to be managed and cleaned when the fruit starts to fall.
	re trees around the ponds. I walk past the one by the ball diamonds and water park (not
	asons) and it is plain and hasn't been beautified yet. Would love to see that one done now tha
	the houses are filling in. Always water birds and it would be nice to attract more variety in the
are	
Gla	d to see this issue being addresssed
The	e pond east of the water park parking lot is lacking trees and it would be a good time to
	but fy it with an assortment of trees. It borders two busy walking paths and is very plain. Addin
	rees around the ponds will not only add to the beauty but invite more wildlife therefore
	anding the ecosystems.
-	Beaumont, thinking outside of the box. I like it!
I be	elieve that planting native species should take precedent, studies have shown that preservation
	native grasslands are beneficial to the longterm health of urban ecosystems. I encourage
	ncil to focus on the eradication of invasive species while they have the chance.
	sider planting street trees on every street in beaumont. If the city doesn't have a boulevard
	e then it should be mandatory for the home owner to have at least one front yard tree. Also let
	some street trees on 45 st south of beau meadows school
-	id fast growing trees. They have a shorter life span and are susceptible to diseases. They are
	y costly to cutdown once they die.
	already done things like this and it makes me happy that this opportunity has been shown to
oth	
tree	e is cool
T lo	ve fruit trees because the bark tastes good. They're also free just like me I'm a 80-year-old
	men who loves her fruit trees.
	ank you for initiating and making this strategy a priority for Beaumont. A few additional
	efits: a residential amenity to draw future homebuyers to Beaumont and also a tourism draw
	regional residents to use our bike trails and enjoy the ambiance while visiting.
	e city needs to control the growth around storm water ponds. The one in our neighbourhood is
	rgrown.
	love to see a community food forest, or sections of parks that have a variety of fruit trees.
ľd	, , , , , , , , , , , , , , , , , , , ,
	e retaining ponds near Canal Park need some real tress planted. It's and the unused soccer field



More trees! And more than just trees, less grass, and more plants. Lets normalize getting rid of grass, as it males little sense in our climate, other than to show people how green we can keep ot, with chemicals and water. Educate people on better options.

I will most likely move from beaumont to devonor leduc because there are more trees, forested areas and true nature trails.

We would like to see some integration between the urban Forrest strategy and food security. By emphasizing local species of trees and shrubs that produce fruit and or medicinal properties we can increase the benefits realized by all residents.

