GREEN DROP Tree Care

Urban Forest Management Plan

City of **North Battleford**,

(2024-2040)

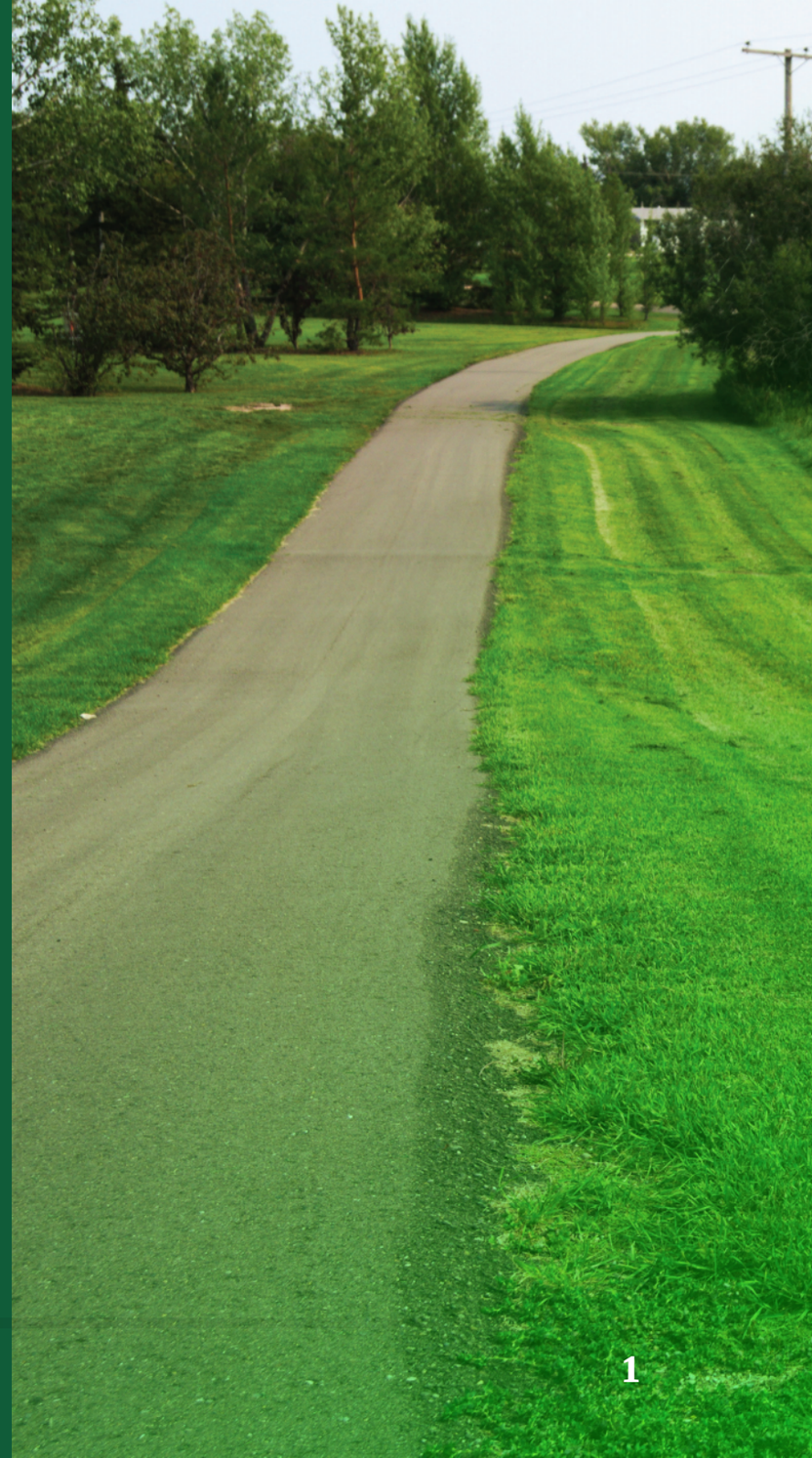
September 15, 2025

Summary

Trees are a vital part of North Battleford's infrastructure. They improve our environment, support the economy, bring social benefits, and help the city adapt to climate change. Our study found that the city's urban forest is mature but at risk. There are too many elm and ash trees, records are still paper-based, and threats like Dutch elm disease, emerald ash borer, heat, drought, and storms are increasing. The tree canopy covers about 14% of built-up areas — better than many other Prairie cities. Public input showed strong support for focusing on maintenance, creating a modern digital tree inventory, and adding more staff to move from reacting to problems to preventing them. The plan sets a clear path forward:

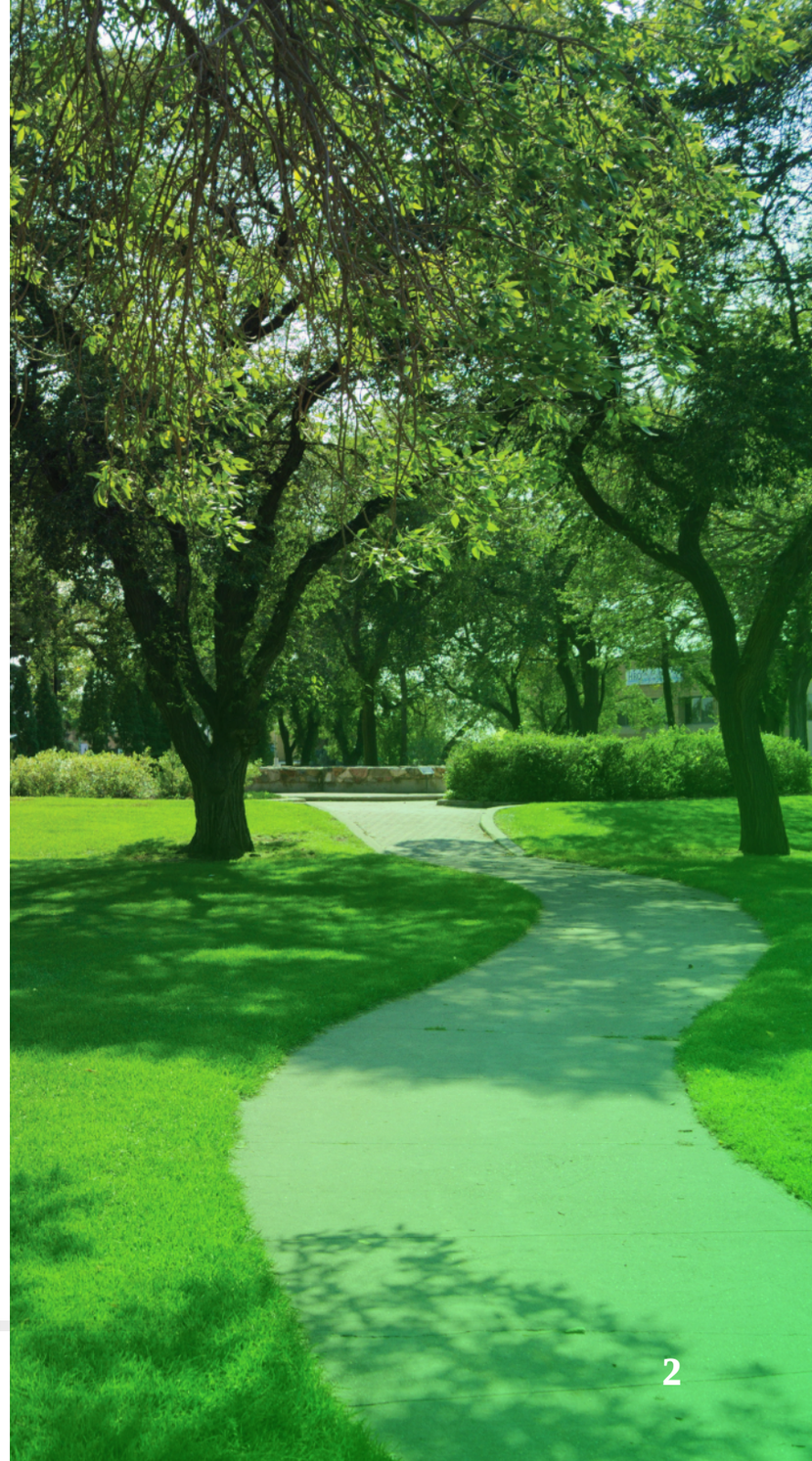
- ***Digitize tree records*** within 12 months.
- ***Hire a Tree Foreman*** to turn plans into real results.
- ***Use a risk-based system*** to focus work where it's most needed.
- ***Start a regular pruning program*** to protect and strengthen existing trees.
- ***Plant new trees each year*** with diverse, climate-ready species, spaced at least 5 m apart, while avoiding more elm and ash.

The goal is to increase canopy cover to 16% by 2040 in developed areas — a realistic target supported by better bylaws, community involvement, and climate-smart practices like efficient watering and drought-tolerant trees. By following this plan and reporting progress openly, North Battleford can keep people safe, make neighbourhoods more pleasant, and grow a healthier, more resilient urban forest for the future.



The objectives of the UFMP are as follows:

- Inform Council and residents about the value of the urban forest, highlighting its economic, environmental, and social benefits as a critical component of the city's green infrastructure and an essential service that enhances quality of life – ***Chapter 1***
- Conduct a comprehensive review of the current conditions of the city's urban forest - ***Chapter 2***
- Evaluate current practices, procedures, priorities, resources, soil and pruning challenges, risk management related to disease or infestation, trends, successes, operational gaps, and both capital and operational budgets – ***Chapter 3***
- Engage the public, community partners, and interested stakeholders to contribute to the success of the urban forest. – ***Chapter 4***
- Establish a clear vision, methodology, and framework for managing the urban forest of the City of North Battleford – ***Chapter 5***
- Provide guidance to related city policies, guidelines, and regulations regarding the integration of trees into the city's infrastructure.- ***Chapter 5***
- Address the impacts of climate change by proposing strategies aimed at maintaining and improving the urban forest. – ***Chapter 6***
- Offer guidelines for tree risk management and hazard abatement, including wildfire prevention, aligned with the Fire Smart program.- ***Chapter 7***
- Action Plan and Budget – ***Chapter 8***



1 Benefits of the Urban Forest

Trees in the urban forest provide numerous benefits to both people and the environment. They could be categorized into four categories: Environmental, Social & Community, Economic and Climate Change Adaptation.

1.1 Environmental Services

Carbon storage & CO_2 absorption. Urban trees remove CO_2 from the atmosphere each year and store carbon long-term in wood and soils (Nowak and Crane 2002).

Air-quality improvement. Leaves capture ozone, NO_2, SO_2, and fine particulates, improving urban air quality (Nowak, Crane, and Stevens 2006).

Urban heat mitigation. Shade and evapotranspiration cool streets and buildings, reducing peak heat stress (McPherson and Simpson 2003).

Stormwater management & flood risk. Canopies intercept rainfall and slow runoff, easing demand on drainage systems (Xiao and McPherson 2002).

Soil stabilization & waterway protection. Roots reduce erosion on slopes and along riverbanks (inferred from urban forestry BMP literature consistent with Xiao and McPherson 2002).

Biodiversity & habitat. Street trees, parks, and naturalized areas provide food, nesting, and movement corridors for birds and pollinators (general urban ecology consensus; aligns with Wolch, Byrne, and Newell 2014 on green-space benefits).

1.2 Social & Community Benefits

Shade, comfort, and walkability. Treed streets make active travel more comfortable in summer (supported by heat-mitigation mechanisms above; McPherson and Simpson 2003).

Public health & well-being. Access to green space is associated with lower stress and better health outcomes (Wolch, Byrne, and Newell 2014).

Perceptions of safety. Greener, well-kept courtyards and streets correlate with lower crime or fear of crime (Kuo and Sullivan 2001).

Community identity & pride. Landmark trees and green streetscapes strengthen local character (supported by the social benefits framework in Wolch, Byrne, and Newell 2014).

1.3 Social & Community Benefits

Energy savings. Strategic shade and wind-break effects reduce building cooling loads and winter heat loss (McPherson and Simpson 2003).

Property value uplift. Homes on greener streets and near well-treed parks commonly command higher sale prices (Donovan and Butry 2010).

Stormwater infrastructure savings. Rainfall interception defers or downsizes grey-infrastructure upgrades (Xiao and McPherson 2002).

Local jobs & skills. Urban forestry supports skilled employment across planting, maintenance, arboriculture, ecology, and GIS (sectoral consensus; aligns with investment/attractiveness effects in Donovan and Butry 2010).

1.4 Climate Change Adaptation & Resilience

Heat-risk reduction. Shade and cooling reduce heat-island intensity and heat-related health risks (McPherson and Simpson 2003; Wolch, Byrne, and Newell 2014).

Risk-smart species palettes. Diverse, climate-ready species reduce vulnerability to pests, disease, and shifting climate zones (best-practice principle, consistent with the resilience framing in Wolch, Byrne, and Newell 2014).

Equity & access. Targeted planting in low-canopy, heat-vulnerable areas supports fair access to health-protective green space (Wolch, Byrne, and Newell 2014).

2 Existing Conditions

2.1 Species and Age Composition

A healthy mix of tree species and ages is important for a strong and resilient urban forest. Tree experts often refer to something called the 10-20-30 rule:

No more than **10%** of any **species**

No more than **20%** of any **genus**

No more than **30%** of any **family**

This rule helps prevent massive losses if a disease or pest targets one kind of tree.

In the Prairies, though, following this rule perfectly is hard because only a few tree types can handle both hot, dry summers and long, freezing winters. Still, moving closer to this balance will make North Battleford's trees more resistant to disease and climate change.

At present, the city manages its trees using a paper-based inventory, which makes tracking species and ages slow and difficult.

According to the Parks and Recreation Department, there are roughly 15,000 public trees in the city — including about 7,600 elms and 5,600 ashes.

With a population of around 14,000 people, North Battleford actually has more trees than residents — a remarkable ratio that shows the community's strong investment in green spaces. On average, each person benefits from more than one public tree, which helps improve air quality, shade, and overall liveability.

However, this also means that about 88% of the city's trees are either elm or ash — making the urban forest highly vulnerable to disease outbreaks.

- Dutch Elm Disease (DED) kills thousands of elms each year in Winnipeg. It was first found in Regina in 1981 and has been spreading west across Saskatchewan. Saskatoon — only 140 km southeast of North Battleford — has reported cases, and in 2025, the town of Melfort (300 km east) recorded 127 DED cases.
- Emerald Ash Borer (EAB), a pest that destroys ash trees, was first found in Ontario in 2002 and has since reached Winnipeg.

Both threats are deadly to trees, and even a small number of infected beetles can wipe out large parts of a city's tree population.

Recommendation:

- Increase species diversity in new planting
- Digitize tree inventory (GIS-based)
- Focus more resources on maintenance, such as removing dead elm and ash trees. Removing dead/unhealthy branches promptly to reduce favorable nesting site for the beetles
- Set aside dedicated funds within the annual forestry budget to build a reserve for potential Dutch Elm Disease (DED) or Emerald Ash Borer (EAB) outbreaks.

2.2 Species and Age Composition

North Battleford's tree canopy — the total area covered by tree leaves and branches when viewed from above — is estimated at 21% across the whole city. This number includes both natural areas and shelterbelts (rows of trees planted along the edges of the city to reduce wind and protect farmland).

If we look only at the built-up urban areas, the canopy cover is about 14%. This difference matters because it shows that trees in the city's outer areas play a big role in providing environmental benefits, while the 14% figure better represents tree cover within neighbourhoods, streets, and parks — the spaces where most people live and work.

Even at 14%, North Battleford is doing well compared to other Prairie cities. It has more tree cover than Saskatoon (about 10%) and Calgary (around 8%), is close to Winnipeg (about 17%), but still has room to grow to match coastal cities like Vancouver (around 25%) or Toronto (28–31%).

2.3 SWOT Analysis

A SWOT analysis looks at the Strengths, Weaknesses, Opportunities, and Threats of North Battleford's urban forest. It's a simple way to understand what's working well, what needs improvement, and what outside factors could help or harm the city's trees in the future.

This analysis helps the city plan wisely by:

- Building on its strengths, such as having many mature trees and strong community support.
- Tackling weaknesses, like limited staff or funding.
- Taking advantage of opportunities, such as new technologies or grants; and
- Preparing for threats, like pests, disease, or extreme weather.

By looking at both internal and external factors, the SWOT analysis keeps the Urban Forest Management Plan focused, realistic, and ready to protect North Battleford's trees for the long term.

- Large and mature urban forest that already contributes significant shade, stormwater management, and ecological benefits.
- High level of community appreciation for trees. Residents strongly value the role of trees in neighbourhood character and livability.

- Limited municipal resources dedicated to tree management, including staffing, equipment, and funding.
- Reactive maintenance approach dominates over proactive care, leading to increased long-term costs and potential loss of canopy.

- Potential funding streams and extra resources available from provincial, federal, and non-profit programs to support urban forestry initiatives.
- Residents are willing to fund extra resources for the urban forest.

- Dutch Elm Disease (DED) continues to spread in Saskatchewan, threatening the city's elm population.
- Emerald Ash Borer (EAB), although not yet detected in the province, poses a significant risk to ash trees if it arrives.
- Climate change impacts such as drought, heat waves, and extreme storms further stress trees and increase vulnerability to pests and diseases.

3 Evaluation of Current Practice

3.1 Tree Inventory

Keeping an up-to-date record of all city trees is the foundation of good urban forest management. A tree inventory helps the city understand what kinds of trees it has, how old they are, and how healthy they're doing. It also tracks their maintenance history, such as pruning or treatments.

A modern, digital inventory makes the City's work faster and more efficient. When a concern or complaint comes in, staff can look up a tree's information right from their computer and send the right team or equipment — without needing to visit the site first. It also helps plan where to plant new trees and what species to choose.

Right now, North Battleford's tree inventory is paper-based and outdated. Because staff have limited time and resources, only a few updates have been made in recent years. Finding information in these paper files is time-consuming.

Switching to a digital, GIS-based inventory would make tree management much easier and free up staff time for fieldwork and proactive care. There's also a new opportunity on the horizon: the Federation of Canadian Municipalities (FCM) is expected to launch a grant program for tree inventories this fall. This could help North Battleford partner with a contractor to modernize its system and apply for funding.

Recommendation

Create a digital tree inventory using a GIS system to modernize records and improve efficiency.

Work with a qualified contractor to help build the new system.

Apply for funding from the Federation of Canadian Municipalities (FCM) when their tree inventory grant program opens.

3.2 Staff Resources

North Battleford's Parks and Recreation team has a small but dedicated crew of two to three staff, including one ISA Certified Arborist, responsible for caring for about 15,000 public trees and overseeing contractor work. The team consists of two permanent employees with training and experience in tree care, supported at times by additional help from the Parks Department.

During the busy growing season, both the manager and director take on extra duties — handling public complaints, preparing reports for Council, and managing their regular workloads. In winter, which is the best time for elm pruning and removals, about half of the front-line staff are reassigned to snow clearing, limiting the time available for tree work.

Currently, the Manager and Director are responsible for planning tree maintenance and planting programs while also managing administration and reporting. To strengthen daily operations, the city would benefit from adding a Tree Foreman position — a hands-on supervisor who can turn plans into action and lead field crews.

This new role should be filled by someone with strong arboriculture expertise, ideally holding an ISA Certified Arborist credential and several years of experience. Additional qualifications, such as the ISA Tree Risk Assessment Qualification (TRAQ) or formal education in urban forestry, would be an asset. A Tree Foreman would help ensure that maintenance programs run efficiently and that Council receives accurate, timely technical advice.

Proposed Tree Foreman Role

Qualifications and Experience

- ISA Certified Arborist designation (required)
- Minimum 5 years of experience in tree management or arboriculture
- ISA Tree Risk Assessment Qualification (TRAQ) — preferred
- Formal education in arboriculture or urban forestry — preferred

Key Responsibilities

- Lead and supervise the City's tree care team and outside contractors
- Provide expert advice and technical recommendations to the Manager on arboriculture matters
- Investigate and respond to tree-related public complaints
- Maintain and update the City's tree inventory system
- Plan and coordinate annual and seasonal tree maintenance programs

Recommendation

Create a new Tree Foreman position

3.3 Urban Forest Management Approach

Right now, North Battleford manages its urban forest in a mostly reactive way — responding to issues as they arise rather than following a long-term maintenance plan. On average, the city receives about 2 to 3 tree-related complaints per day, with numbers rising to around 10 per day in summer.

During the busy season, city crews spend roughly:

Most complaints involve broken or falling branches or limbs that block sidewalks, roads, or buildings. Because time and staff are limited, less attention goes to proactive work such as crown cleaning and training young trees, which are important for long-term tree health. Trees not on complaint lists may go longer without pruning, which increases the chance of pests and disease. To reduce this backlog, the City may need to hire outside contractors in the short term.

While new trees are being planted, it's the mature, healthy trees that deliver the most benefits — like shade, air quality, and beauty. Young trees need more care in their first few years, so balancing new planting with maintenance of existing trees is essential.

Currently, the city does not have a system for prioritizing tree risks. Work is handled on a first-come, first-served basis, meaning high-risk trees might not get attention as quickly as they should. A better approach would be to introduce a risk-based system, similar to how snow removal focuses on the busiest roads first, or how emergency rooms treat the most serious cases first.

Under such a system, tree work would be prioritized based on location and the likelihood and impact of failure — helping ensure that limited resources go to the areas where they are needed most. This risk assessment framework is explained in more detail in Chapter 7.

Recommendation

- Increase resources for tree maintenance to keep up with growing needs.
- Use external contractors as a short-term solution to reduce the backlog of pruning and care work.
- Plan new tree planting carefully, balancing maintenance of existing trees with new growth.
- Develop a simple, easy-to-follow tree risk assessment plan to prioritize work based on safety and urgency.

4 Public Consultation

North Battleford

September 15, 2025

Overview

In July, the city launched a public survey using the ArcGIS Survey123 platform to gather community feedback on North Battleford's urban forest. To make sure everyone could participate, paper copies were also available at community centres.

The survey asked residents about their views on the benefits of trees, management priorities, and future goals for the city's urban forest. A total of 95 responses were received online.

Key Findings and Recommendations

Importance of Urban Forest Benefits

What Residents Said:

- The top benefit of trees, chosen by 42% of respondents, was providing shade for streets, parks, and homes.
- The second most valued benefit was cleaning the air and reducing pollution.

Recommendations: Focus tree care on maintaining healthy tree canopies and planting trees that grow larger, wider crowns for better shade and cooling.

Urban Forest Priorities

Findings:

- About 56% prefer fewer but larger, healthier trees rather than many small ones.

Recommendations: Prioritize caring for and growing the city's existing mature trees before adding new ones.

Tree Inventory System

Findings:

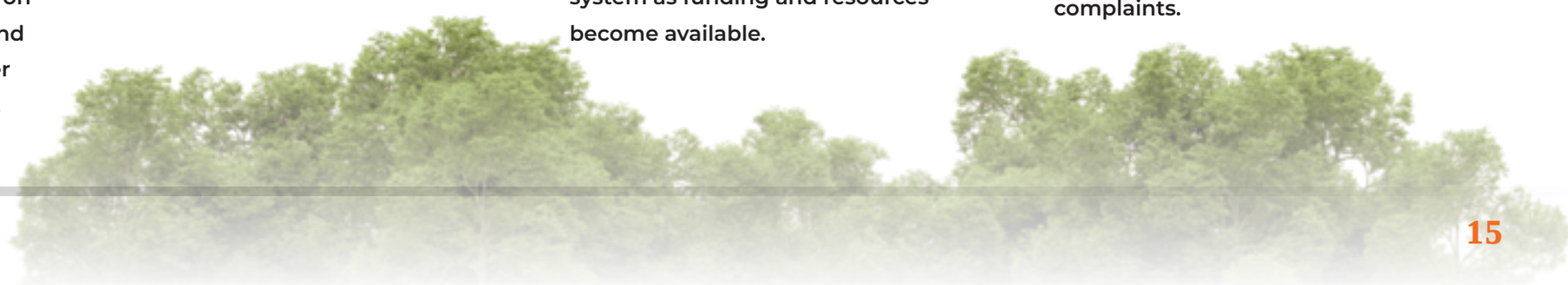
- 43% support investing in a GIS-based digital tree inventory.
- 34% said they were unsure or wanted more information.

Recommendations: Move toward implementing a digital tree inventory system as funding and resources become available.

Pruning Strategy

- **Findings:**
- Over 80% support a proactive pruning program, even if it means investing extra resources.

Recommendations: Increase the budget and staff capacity to adopt a proactive tree maintenance approach rather than responding only to complaints.



Tree Foreman Position

What Residents Said:

- More than 85% agree that the City should create and fund a new Tree Foreman position.

Recommendations: Allocate funding for this role to provide expert supervision and ensure consistent, professional tree care.

Overall Performance Rating

What Residents Said:

- he City's current urban forest management received an average rating of 2.4 out of 5.

Recommendations: Increase investment and visibility in the City's urban forest program so residents can see clear, ongoing progress.

Willingness to Pay Extra for Improvements

What Residents Said:

- Among respondents who supported proactive pruning or hiring a Tree Foreman, 54% were willing to pay slightly higher taxes to fund these improvements
- Around 34% were willing to pay extra specifically for the new Tree Foreman role.

Recommendations: Plan for new staffing and funding over the medium to long term (5–15 years) by:

- Offering training to current staff interested in becoming certified arborists.
- Creating a new Arborist position as a stepping stone toward a Tree Foreman role.
- Developing a succession plan for internal advancement.
- Redirecting funds from lower-priority programs, such as nonessential tree planting.

Importance of Urban Forest Elements

What Residents Said:

- The most valued management actions were:
  - Having a regular pruning cycle.
  - Maintaining a long-term tree planting strategy — both rated important by 74% of participants.

Recommendations: Make these two priorities — pruning and long-term planting — the core focus of the Urban Forest Management Plan (UFMP).

5 Vision and Management of the Urban Forest

North Battleford

September 15, 2025

5.1 Vision

Public feedback showed strong support for building a larger, healthier tree canopy in North Battleford. Most residents want the city to focus on caring for existing trees rather than just planting new ones.

Vision Statement:

> *"To protect, preserve, and strengthen North Battleford's urban forest by caring for existing trees—helping them grow broader crowns that provide shade, resilience, and beauty for generations to come."*

5.2 Methodology and Framework

5.2.1 Proactive Tree Maintenance

The City's top priority is to improve the health of existing trees—especially elm and ash—so they can live longer and provide more shade.

Right now, about one-third of available resources go toward pruning, with only 2–3 front-line staff. This is not enough to handle the large amount of overdue pruning work.

Short-term solution:

Instead of hiring permanent staff, the city should bring in external contractors for a few years to help clear the pruning backlog.

The new Tree Foreman position, supported by public input, would be responsible for prioritizing pruning work based on safety and urgency.

The first priority should be removing deadwood and hazardous branches, especially from elm and ash trees, as well as clearing branches that block sidewalks, driveways, or buildings.

A proactive program focused on crown cleaning, crown raising, and crown balancing will make trees safer, healthier, and reduce future complaints.

5.2.2 Prioritizing Tree Work by Risk Level

Currently, the department spends ***20–35%*** of its time responding to complaints—an average of ***2.6 per day.*** Many of these could be prevented through regular pruning.

To improve efficiency, the city should adopt a risk-based system that prioritizes trees by their likelihood and impact of failure—ensuring dangerous situations are handled first. A detailed risk strategy is provided in Chapter 7.

5.2.3 Developing a New Tree Planting Strategy

Appendix I lists suitable species for North Battleford, including their growing habits, water and sunlight needs, and maintenance requirements.

A. Increase Species Diversity

A healthy, resilient forest depends on having a wide mix of species to withstand pests, disease, and climate extremes.

The City should follow Santamour's 10-20-30 rule as a guide:

- No more than ***10%*** of any one species,
- No more than ***20%*** of any one genus,
- No more than ***30%*** of any one family.

B. Species Selection

Elms and ashes are already overrepresented. Because of Dutch Elm Disease (DED) and the threat of Emerald Ash Borer (EAB), new plantings of these trees should be limited.

When elms are planted, choose disease-resistant varieties such as Brandon Elm and Jefferies Elm.

C. Tree Spacing

New boulevard trees should be spaced at least five metres apart to allow healthy crown and root growth and to reduce maintenance and safety issues.

Larger species will require more spacing to develop properly.

D. Growth Space

Choose trees that fit their surroundings.

- Small species are best for areas near sidewalks, utilities, or overhead wires.
- Larger trees should be planted in parks, open boulevards, or large yards.

Matching the right tree to the right space helps trees live longer and reduces costs.

E. Site Conditions

Each planting site is unique.

- Drought-tolerant species should be planted in dry, sunny areas.
- Moisture-loving trees are better near natural areas or low-lying ground.
- Maintenance needs, such as pruning frequency or pest resistance, should also guide planting choices.

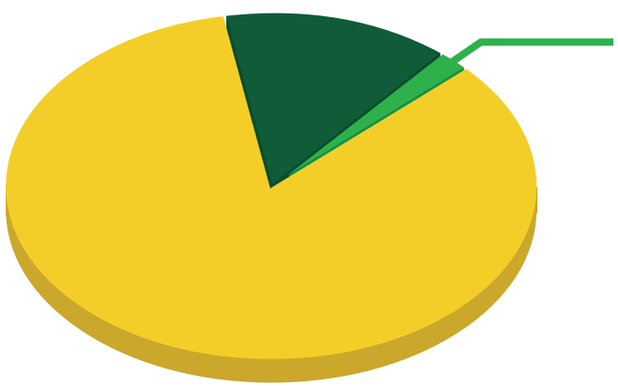
5.2.4 Tree Canopy Target

North Battleford's current tree canopy cover is 14% in built-up areas. With limited staff and funding, the best approach is to protect and maintain existing mature trees, since they provide the most environmental and community benefits—like shade, stormwater control, and carbon capture.

At the same time, the city should continue strategic new planting each year—focusing on diverse, climate-resilient species and on neighbourhoods with less canopy or higher heat exposure.

Canopy Goal:

Increase canopy cover to 16% by 2040 — a realistic and sustainable 2% increase over 15 years.



An increase in canopy cover of

2%

This approach balances maintenance and new planting while offsetting natural tree losses from pests, storms, and aging.

5.2.5 Digitizing the Tree Inventory

Faster Field Work
A GIS-based tree inventory lets staff locate and update tree data in the field using mobile devices—saving time and improving efficiency.

Real-Time Updates
Crews can update records immediately after inspections, pruning, or planting, keeping information accurate and up to date.

Comprehensive Tree Records
Each tree will have a digital history of care, pest management, and risk assessments, helping staff track trends and plan proactively.

Smarter Planning
Mapping trees digitally helps identify areas that need more planting, track canopy growth, and plan for species diversity—creating a healthier, more balanced urban forest for the long term.

6 Climate Change Response

North Battleford

September 15, 2025

Challenges

North Battleford's climate is changing quickly, and this will have a major impact on the city's trees over the coming decades.

Climate models show that by ***2051–2080***, average annual temperatures could rise to around ***6.5°C under high emissions,*** compared to just ***2.1°C over the past 25 years.***

Hot days:

The number of days above 30°C could rise from 10 per year to nearly 40 per year under a high-emission scenario.

Cold days:

Extremely cold days below –30°C are expected to drop from 14 per year to only 3 per year.

Rain and moisture:

Overall rainfall is projected to increase, but hotter summers will cause more evaporation, leading to drier soil during the growing season.

Frost-free season:

The frost-free period may extend from 122 days to about 154 days by mid-century — good for growing, but it may also increase heat and water stress.

These shifts will challenge the health and stability of North Battleford's urban forest by:

Increasing heat stress:

Trees may grow more slowly, lose leaves early, and become more vulnerable to pests.

Worsening droughts:

Hotter, longer summers may cancel out the benefits of extra rainfall.

Rising pest and disease risks:

Milder winters could let more pests and diseases survive.

More storm damage:

Stronger storms may cause more broken branches and fallen trees.

Recommendations

To prepare for these changes, North Battleford should build a more resilient and climate-ready urban forest through several key actions:

Plant climate-tolerant species:

Focus on heat- and drought-resistant trees that can handle extreme weather. Prioritize native species but include proven non-native varieties if they are well suited to local conditions.

Diversify the urban forest:

Avoid planting too many of one species. A mix of different trees will reduce vulnerability to disease, pests, and storm damage.

Use water-efficient practices:

Adopt smart irrigation systems, rainwater harvesting, and mulching to keep soil moisture and reduce water use.

Practice proactive tree care:

Monitor tree health regularly, prune preventively, and manage pests early to reduce stress from heat and drought.

7 Tree Risk Assessment Strategy

A structured tree risk assessment system helps North Battleford manage its urban forest proactively — keeping people safe, protecting city infrastructure, and maintaining a healthy tree canopy.

By ranking trees according to their location and level of risk, the City can focus staff and resources where they're needed most, while also reducing safety hazards and liability.

7.2 Location-Based Prioritization

Similar to the City's snow removal priority system, tree care will be handled first in the areas that matter most for public safety and essential services.

High-priority areas include:

- Hospitals and health-care facilities
- Fire and police stations
- Major roads and school zones
- Busy parks and public gathering spaces

Medium-priority areas such as collector roads, neighbourhood parks, and community centres will be managed next.

Low-priority areas — like quiet residential streets or naturalized spaces — will be scheduled once higher-priority sites are completed.

7.3 Risk-Level Categorization

Within each location, trees will be assessed using the International Society of Arboriculture's Tree Risk Assessment Qualification (ISA TRAQ) standards.

Risk levels:

High Risk: Trees with major structural problems that could fail in high-traffic areas. These require immediate action — removal, heavy pruning, or temporarily blocking access.

Moderate Risk: Trees showing some defects with a moderate chance of failure. These should be repaired or monitored within the same season (for example, within six months).

Low Risk: Trees that are healthy and stable. These can be handled as part of the regular pruning cycle.

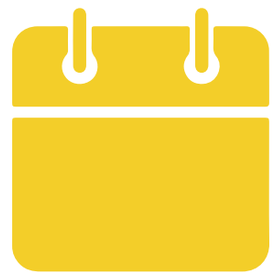
This two-step approach — first by location, then by risk level — ensures that a hazardous tree near a hospital or school is dealt with before a similar one in a park or greenbelt.

7.4 Implementation

To make this system work effectively, the city should:

- Conduct routine inspections: Check high-priority sites annually, and lower-priority areas every 3–5 years.
- Document everything: Record all inspections and maintenance actions in the digital GIS-based tree inventory. This creates a full history of each tree's condition and the work done.
- Set response timelines:

High Risk Trees:
Address within 48 hours.



Moderate Risk Trees:
Address within 6 months.

8 Action Plan and Budget

North Battleford

September 15, 2025

Action Plan

This plan outlines the key steps North Battleford will take to strengthen and sustain its urban forest over the short, medium, and long term.

Each phase includes specific actions, measurable results, and timelines to track progress.

Short Term (0–5 Years)

Key Actions

- Digitize the tree inventory using a GIS system (complete within 12 months).
- Apply for FCM funding and hire external contractors to clear the backlog of pruning work.
- Adopt a risk-based triage system to prioritize trees by location (e.g., hospitals, schools, major roads) and TRAQ risk level.
- Begin a strategic planting program following the 10-20-30 diversity rule, reducing elm and ash planting, and maintaining at least 5 m spacing between new trees.

Expected Results / KPIs

- 100% of the tree inventory digitized and current.
- Tree-related complaints reduced by 25% within five years.
- Backlog of elm and ash pruning and removals fully addressed.
- At least half of all new trees are species other than elm or ash.

Medium Term (5–15 Years)

Key Actions

- Establish a regular pruning cycle (every 7–10 years).
- Continue annual inspections for high-priority areas.
- Create a Tree Foreman position to lead field work and quality assurance.
- Expand planting of climate-ready species that tolerate heat and drought.
- Introduce water-efficient practices, such as mulching and slow-release watering.
- Strengthen tree protection bylaws and integrate the UFMP into city planning.

Expected Results / KPIs

- 100% of street trees included in a predictable pruning cycle.
- At least 70% of new plantings are non-elm/ash species, aligning with the 10-20-30 diversity guideline.

- Canopy cover increases by 2% over 15 years.
- Tree survival rate ≥ 95% after establishment.
- Tree Foreman position filled and operational.

Long Term (15+ Years)

Key Actions

- Maintain a mature, healthy canopy that provides shade, biodiversity, and storm protection.
- Update the Urban Forest Management Plan every 10 years.
- Stay ahead of new pests and diseases (e.g., DED, EAB, and emerging threats).
- Embed proactive tree care into standard city operations.
- Build community stewardship programs for volunteer planting and monitoring.
- Make the urban forest part of North Battleford's civic identity and long-term sustainability goals.

Expected Results / KPIs

- Canopy cover maintained at 16%.
- At least 70% of new trees are non-elm/ash, maintaining the 10-20-30 balance.
- Five or more long-term partnerships with schools, NGOs, or community groups active each year in planting or monitoring

Budget

Item	Budget/Year	Remarks
GIS Base Tree Inventory	$45,000	One-off
New Tree Foreman Position	$110,000	---
Proactive tree pruning program	$32,500	Assume 100 trees

9 Conclusion and Summary of Recommendations

North Battleford's urban forest is both a strength and a challenge. With around 15,000 public trees—more than the city's population—the forest provides shade, clean air, and natural beauty that enhance life across the community.

However, the city's canopy is heavily dominated by elm and ash, making it vulnerable to Dutch Elm Disease (DED) and Emerald Ash Borer (EAB). Current canopy coverage stands at 14% within built-up areas, leaving room for smart, sustainable growth.

A recent SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) identified key insights:

- Strengths: strong community support, mature tree canopy
- Weaknesses: limited resources, reactive maintenance, outdated paper-based inventory
- Opportunities: new funding programs and external partnerships
- Threats: invasive pests, extreme weather, and climate change

This plan offers a practical roadmap for creating a healthier, more resilient urban forest. While many recommendations will take time to achieve, each action contributes to long-term success.

As the saying goes, "A journey of a thousand miles begins with a single step." By investing today in better data, proactive care, and staff expertise, North Battleford can protect and grow its green infrastructure for future generations.

Priority Recommendations

#	Reccomendation	Goal/Rationale
1	Develop a GIS-based tree inventory	Streamline maintenance, complaint response, and planning for new plantings.
2	Prioritize tree work based on risk and site use	Focus resources on the highest-risk areas such as schools, hospitals, and busy streets.
3	Adopt a proactive pruning approach	Improve canopy health and reduce long-term maintenance costs.
4	Focus on maintaining existing trees	Protect mature trees that provide the greatest environmental and community benefits.
5	Create smarter planting strategies	Select the right species, for the right place, with the right spacing to ensure long-term success.
6	Increase tree diversity	Reduce the risk of widespread loss from pests or disease.
7	Establish a Tree Foreman / Arborist position	Provide on-the-ground leadership, technical expertise, and consistent quality control.

10 References

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