



City of Moose Jaw

COMMUNICATION # CC-2019-0228

TITLE: Urban Forestry Program

TO: City Council

FROM: The Department of Parks and Recreation

DATE: November 4, 2019

PUBLIC: PUBLIC DOCUMENT

RECOMMENDATION

THAT the City of Moose Jaw establish a dedicated crew to maintain the City's Urban Forest with the source of funding being the 2020 Operating Budget in the amount of \$45,850.00; and

THAT the City of Moose Jaw expand the contracted block pruning program with the source of funding being the 2020 Operating Budget in the amount of \$14,185.00.

TOPIC AND PURPOSE

Requesting that City Council approve an additional \$45,850.00 to implement a year-round, 2-person urban forestry crew and that an additional \$14,185.00 be approved to expand the contracted block pruning program to decrease the City's tree pruning cycle from thirty-three (33) years to fourteen (14) years.

The total cost of both requests is \$60,035.00.

BACKGROUND

Trees are an important part of a vibrant, liveable city. Growing research supports the many benefits of an urban forest on the environment, economy and human health. Moose Jaw's publicly owned and managed urban forest has an estimated population of fifteen thousand (15,000) trees with an estimated collective value of \$90-\$100 million. Like many other City assets, the City's urban forest requires annual maintenance funding to ensure it remains healthy, safe and valuable into the future.

Please see link below for further information regarding the benefits of an Urban Forest:

<https://treecanada.ca/resources/canadian-urban-forest-compendium/3-benefits-of-urban-forests/>

Current State of Moose Jaw's Urban Forest

The Parks and Recreation Department is currently completing a GIS tree inventory of all City-owned trees, which provides data on the health, species, size and maintenance history of the trees.

There are currently 6,661 trees logged in the inventory. Of these trees, 522 have been marked as "poor health" and have a remaining lifespan of less than ten (10) years, which means these trees will need to be removed and replaced in the near future. Additionally, 2,128 trees have been marked as "fair health", indicating that they have an estimated remaining lifespan of greater than ten (10) years but need maintenance to prevent a further decline in their health and becoming a safety concern.

In order to maintain our urban forest, the Department strives to plant a new tree for every tree that is removed. Ideally, every newly planted tree would be pruned approximately three (3) years after planting and again approximately seven (7) years after planting to ensure a strong structure which reduces the risk of failure when it's mature and increases the trees' longevity.

DISCUSSION

The request to implement a year-round, 2-person urban forestry crew would result in an additional seasonal staff being added to the department from the beginning of May to the end of October. In November one of the existing crew leads would replace the seasonal staff to maintain the 2-person crew for the winter months.

The second request to increase the funding for contracted block pruning would allow the City's in-house forestry crew to focus on other priorities such as responding to requests for service, the removal of dead fall, tree planting, stump removals, tree inventories and tree inspections. The request would also assist in decreasing the City's tree pruning cycle to a projected fourteen (14) year cycle instead of the current thirty-three (33) year cycle.

Current In-House Pruning

The in-house tree pruning crew prunes mainly in November, January, February, March and April but not full time. The Parks Department carries seven (7) staff through the winter months which try to balance the outdoor rinks, pathway snow removal, cemetery operations and tree maintenance. In December, this crew is primarily concentrated on building ice for the outdoor rinks. Pruning can be sporadic in January and February as outdoor rinks and snow removal are priority. Summer tree pruning consists of responding to tree damage from storms, addressing safety concerns, addressing infestation or disease issues and the removal of trees infected with Dutch elm disease (DED). The pruning crew also does stump removals throughout the warmer months.

The current in-house tree pruning program has pruned 1,355 trees over the past seven (7) years which accounts for approximately 9% of our urban forest.

In-house tree pruning is primarily complaint driven but in 2019 City staff were able to complete some block pruning. Staff pruned the boulevard trees along the 1100 block of Duffield Crescent, all of Currie Crescent and the 900, 1000, 1100 and 1200 blocks of Grace Street, for a total of 0.6% of City-owned trees. The estimated cost of in-house block

pruning is \$150 per tree and this cost will decrease over time with experienced staff and a dedicated crew.

A year-round, 2-person forestry crew would provide a greater response time to complaints and would deal with tree removals related to underground infrastructure replacements, DED removals, stump removals and additional block pruning. The full-time forestry crew would also be two (2) more sets of eyes watching for symptoms of DED, Cottony Ash Psyllid, and the future threat of emerald ash borer, which is expected to be found in Moose Jaw in the next few years.

It is uncommon for a city the size of Moose Jaw to not have a year-round crew dedicated to urban forestry. For example, the City of Prince Albert has an inventory of 40,000 trees with a 4-person year-round crew and the City of North Battleford has an inventory of 20,000 trees with a 3-person year-round crew.

Current Block Pruning

In 2014, \$40,000.00 was added to the Parks and Recreation budget for contracted tree pruning. The budgeted amount is now \$47,816.00 and the request for an additional \$14,185.00 would bring the total budgeted amount to \$62,000.00.

The following is a summary of the contracted block pruning that has been completed since 2014:

- 2019 YTD – No contracted block pruning completed
- 2018 – No contracted block pruning completed
- 2017 - 420 trees completed at a cost of \$33,463.00; \$80 per tree (2.8% of our trees)
- 2016 - 319 trees completed at a cost of \$24,715.00; \$78 per tree (2.1% of our trees)
- 2015 - 309 trees completed at a cost of \$42,258.00; \$136 per tree (2.1% of our trees)
- 2014 - 290 trees completed at a cost of \$31,125.00; \$107 per tree (2% of our trees)

In 2019, most of the urban forestry work required a contractor due to a shortage of qualified in-house staff which did not allow for any block pruning to take place. (Spent \$37,700 YTD on these services)

In 2018 the Department only contracted emergency calls and trees that the City bucket truck could not reach. (Spent \$10,900 on these services). The Department was advised to limit spending in this area due to potential budget cuts stemming from the Provincial government municipal funding reductions.

In 2014/2015 work was concentrated in the Avenues. The boulevard trees in this location are large, older trees that require more work, contributing to the higher cost per tree.

It is also important to note that the price for contract tree pruning has been decreasing due to greater competition in the market and a possible work slow-down for contractors.

In total, contractors have pruned approximately 9% of our trees since 2014.

The following table reflects the City's current pruning cycle and options to enhance it:

Current Program	Trees per year	Projected Pruning Cycle
In-house	200	75 years
Contracted Block Pruning	260	58 years
In-house & Contracted Block Pruning Combined	460	33 years
Expanded Program	Trees per year	Projected Pruning Cycle
In-house	600	25 years
Contracted Block Pruning	500	30 years
In-house & Contracted Block Pruning Combined	1,100	14 years

*Based on estimated tree population of 15,000

If approved in 2020, contracted block pruning could complete roughly 500 trees and the in-house crew could complete an additional 400-600 trees. The in-house forestry crew would also have the opportunity to catch up on other priorities such as responding to requests for service, the removal of dead fall, tree planting, stump removals, tree inventories and tree inspections.

OPTIONS TO RECOMMENDATION

1. City Council can decide to approve only one (1) of the two (2) recommended options. This was not recommended as the establishment of a full-time urban forestry crew and the enhancement of the City's block pruning program are both considered high priority.
2. City Council can deny the expansion of the Urban Forestry Program in 2020. This option was not recommended as it would result in a further backlog of urban forestry work for the Department. Tree health would continue to decline at an increased rate which also heightens safety and liability concerns.

STRATEGIC PLAN

The Urban Forestry Program request supports the strategic priorities of Community Safety and Community Pride. It also aligns with our values of being forward thinking and innovative when addressing problems.

OFFICIAL COMMUNITY PLAN

The request also supports the Official Community Plan objectives identified in the Natural Environment/Conservation Section of the plan which speaks to ensuring the protection and sustainability of the "urban forest" in Moose Jaw through new planting and the protection and maintenance of existing trees throughout the City.

BYLAW OR POLICY IMPLICATIONS

The Parks and Recreation Department is working on a Tree Protection Bylaw which will be brought to City Council for approval in 2020. This new Bylaw would align well with the protection and maintenance strategies identified with the expansion of the Urban Forestry Maintenance Program.

FINANCIAL IMPLICATIONS

The request would result in an additional \$60,035.00 being added to the Parks and Recreation Department operating budget.

Breakdown:

Wages – \$25,300

Seasonal Employee Benefits - \$2,050

Equipment Charges - \$18,500

Contracted Services – \$14,185

Note: There will be no additional training costs as one of the City's certified arborists resigned in 2019 therefore training for a new staff person will be required either way.

OTHER CONSIDERATIONS/IMPLICATIONS

There is no privacy implications or other considerations.

PUBLIC NOTICE

Public Notice pursuant to the Public Notice Policy as incorporated into the City Administration Bylaw No. 5175 of 2016 is not required.

PRESENTATION

VERBAL: The Director of Parks and Recreation will provide a verbal presentation and will be available to answer any questions related to the report.

ATTACHMENTS

- i. Pruning Cycles of Urban Forests

REPORT APPROVAL

Written by: Derek Blais, Director, Parks and Recreation
Daily Lennox, Parks Supervisor
Sarah Wist Regent, Parks Gardener
Reviewed by: Tracy Wittke, Assistant City Clerk
Approved by: Jim Puffalt, City Manager
Approved by: Fraser Tolmie, Mayor

To be completed by the Clerk's Department only.

Presented to Regular Council or Executive Committee on _____.

No. _____ Resolution No. _____

Report Approval Details

Document Title:	Urban Forestry Program - -2019-0228.docx
Attachments:	- attachment i Pruning Cycles of Urban Forests.docx
Final Approval Date:	Nov 21, 2019

This report and all of its attachments were approved and signed as outlined below:



Tracy Wittke



Jim Puffalt



Fraser Tolmie