
Urban Forestry Cottony Ash Psyllid Response Plan - 2019

Recommendation

That the report of the General Manager, Community Services Department, be forwarded to City Council recommending:

1. That the Capital Project and corresponding funding plan, as outlined in this report, be forwarded to City Council for consideration during the 2019 Business Plan and Budget Review; and
2. That the Administration report back regarding status of the 2019 program and funding options for 2020.

Topic and Purpose

The purpose of this report is to provide an update on the progress in dealing with the cottony ash psyllid infestation impacting black and Manchurian Ash trees in the city, as well as to request approval for a capital project in 2019 to continue managing the response to this emerging pest issue.

Report Highlights

1. Saskatoon continues to experience tree loss due to an infestation of cottony ash psyllids (psyllids), a pest, which is negatively impacting the city's urban forest.
2. A city-wide canopy assessment was completed in 2018 in which an additional 2,900 trees meet criteria for removal.
3. Insecticide treatments have been trialed in Saskatoon with limited success, as results only delay the need for tree removal; the use of insecticide injections has been discontinued.
4. Tree removal and replacement of affected trees in appropriate sites with alternative tree species continues to be the most viable option to ensure the long-term health of Saskatoon's urban forest.
5. Given the state of susceptible ash trees and the underlying threat to all ash species by the emerald ash borer, removing and replacing dead/dying ash trees continues to be an opportunity to invest in increased diversity and a more resilient urban forest.

Strategic Goals

This report supports the City of Saskatoon's Strategic Goals of Continuous Improvement and Quality of Life through offering citizens a clear plan for managing dead /dying trees adjacent to their property impacted by cottony ash psyllids as well as addressing trees in parks and open spaces that impact citizens' enjoyment and use of these spaces. This report also supports the Strategic Goal of Environmental Leadership

through planning for diversification of the urban forest to protect the resource against impacts of additional invasive pest species.

Background

The current outbreak of psyllids was initially detected in 2015 when egg counts found that psyllids were widespread on black ash trees in Nutana, Sutherland, and the Central Business District. In 2016, an increase in dieback of susceptible trees was observed in the central Business Improvement Districts (BIDs) and surrounding neighbourhoods, but egg counts in other neighbourhoods were still low.

Throughout 2017, Parks reallocated operational resources to address removal requirements within the central business districts and conducted a city-wide assessment of the susceptible ash tree species. Of the trees assessed, approximately 1,000 were identified as meeting the criteria for removal. A Cottony Ash Psyllid (CAP) Response Plan (Capital Project 1669), was approved to remove 1,000 trees and replace 385 trees in 2018. The remaining 515 replacements were unfunded.

Report

2018 Psyllid Update

While the psyllid population was set back over the winter months, it became clear in the spring of 2018 that psyllid susceptible trees were continuing to decline city-wide.

As part of the 2018 CAP Response Plan, 1,000 trees were scheduled for removal. Through the process of strategically planning, costs for removal and stumping work rendered substantial savings and allowed for an approximate 661 additional tree removals and 175 additional stump removals in 2018 (see Attachment 1). It is anticipated that good tender prices will continue in 2019; however, staff have continued to budget conservatively. It is also expected there will be additional removals required over the next year, as per the removal policy.

Urban Forestry initiated a second city-wide canopy assessment in July as part of the 2018 Plan to determine the extent of further tree decline. Data indicated that an additional 2,900 trees meet the criteria for removal (40% or greater defoliation and dieback). It is recommended that additional capital funds for three necessary response activities include tree removal, stumping, and planting. The total estimated cost to remove and stump the identified trees and to plant replacement trees is \$823,000; these costs and proposed funding are detailed in Attachment 2.

An expedited tree removal option will be provided to citizens in 2019, however, negligible impacts on overall city-wide removal numbers is expected. There is the risk that more trees will be assessed for removal in 2019, however it is expected that by 2021 the number of psyllid susceptible trees will have decreased to the point that any remaining ash trees assessed for removal should be managed through ongoing tree maintenance operations.

Treatment Plans

Administration is not recommending the application of insecticide products in 2019 as there is no peer-reviewed literature that shows this to be effective. Individual home owners who wish to treat trees on their private property have the option to do so and are referred to their local garden centre for options.

Given the combination of environmental factors Saskatoon is facing and the data gathered in the most recent canopy assessment, Urban Forestry continues to recommend a program of tree removal and replacement to mitigate the tree loss from psyllids. The recommended plan for 2019 is to remove and stump 1,727 trees and complete an additional 410 stumps remaining from 2018 removals through a combination of in-house and contracted work. Removal priorities will be based on an efficient removal process and eliminating the need for site revisits and the duplication of road closures and also taking into consideration risks associated with standing dead trees.

As part of the ongoing CAP response efforts, Urban Forestry recommends a program aimed to replace boulevard and park trees over the next 5 years. Saskatoon is no longer planting psyllid susceptible ash varieties. Replacements will be achieved by reallocating the Urban Reforestation Program to CAP tree replacement planting. This will also limit the impacts to the other planting programs. While the Community and Industrial Tree Planting programs will not be impacted, the Plant by Request Program will see a reduction of its service level over this period of time. This will allow for a more efficient tree replacement program moving through communities and parks hardest hit by loss in a systematic way. The nursery will continue to work through continuous improvement efforts to increase production numbers and to increase tree stock available for planting programs.

Other Emerging Tree Threats

In addition to the effects of psyllid activity, drought and other insect pests can potentially lead to the decline of trees. The emerald ash borer, an insect pest, is currently responsible for the loss of millions of ash trees across North America. This insect threatens all Ash (*Fraxinus*) species including those already impacted by psyllids. The current large number of ash trees makes our urban forest vulnerable to the introduction of emerald ash borer. The need to plant a wide variety of hardy, drought tolerant trees is very important to building resilience in the urban forest.

Although the City is no longer planting black and Manchurian ash trees, it will require some time to completely phase out the production of all ash species. The need to address future large scale tree threats is addressed through a Committee report called Establishment of an Urban Forestry Reserve and will also be addressed through the Urban Forestry Management Plan that is currently in progress.

Options to the Recommendation

City Council could choose to partially fund this response plan, however, associated risks would include a reduction in service levels that would see dead trees standing for two or more years and replacement planting completed over a lengthened time frame. When ash trees stand dead over several seasons, there is an increased risk associated with branch or tree failure. There will also be an expected increased number of calls about these standing dead trees due to the aesthetics requiring an increased effort in communication to the public.

City Council could also choose to increase funding to complete tree and stump removals and replacement planting more quickly.

City Council may direct the Administration to further investigate additional options to the removal program proposed in this report.

Public and/or Stakeholder Involvement

Parks has worked with Communications to provide the public and the BIDS with information about this continued threat. When assessments were completed, letters were provided to all home owners with psyllid impacted city tree(s) explaining the result of the assessment and what to expect.

Parks continues to receive calls in 2018 inquiring about susceptible trees in decline. Callers are provided information about the canopy assessment program and the emerging pest issue (also posted on the City's website).

Parks has also worked with several Community Consultants and Community Associations most affected by the psyllid outbreak to ensure their residents are kept informed on this emerging issue.

Communication Plan

Parks continues to work closely with the Communications Division to provide updated information about this emerging issue on the City website, as it becomes available.

Financial Implications

Financial Implications are outlined on Attachment 2.

Environmental Implications

There will be a negative environmental and amenity impact in the short term, reflecting the loss of trees. In the long term, increased diversity should provide greater resiliency for the urban forest.

Other Considerations/Implications

There are no privacy, CPTED, or policy implications or considerations.

Due Date for Follow-up and/or Project Completion

In accordance with the recommendation, a follow-up information report will be provided in 2019 on progress of the capital project, should it be approved.

Public Notice

Public Notice, pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Attachments

1. 2018 Psyllid Impacted Tree Removal/Replanting Program Results
2. Costs Associated with Psyllid Impacted Tree Removal Program in 2018-2019

Report Approval

Written by: Michelle Chartier, Superintendent, Urban Forestry Section

Reviewed by: Darren Crilly, Director of Parks

Kerry Tarasoff, CFO/General Manager, Asset and Financial Management Dept.

Approved by: Randy Grauer, General Manager Community Services Department

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