

## **CALGARY TREE DISASTER – RECOVERY AND RESTORATION ANNUAL UPDATE**

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### **EXECUTIVE SUMMARY**

The 2014 September snow event damaged over 50 per cent of Calgary's urban forest. The Calgary Tree Disaster 2014 Recovery Framework (the Framework) presented to Council on 2014 November 17, provides a recovery plan with principles and key result areas that will guide the recovery of the city's urban forest. On 2014 November 24, Council approved this comprehensive recovery plan that acknowledged the value and benefits of a safe and resilient urban forest. Council approved \$35.5 million for the Recovery phase with funds being utilized for this work until the end of 2017.

The recovery and restoration phases are well underway and plans are in place to achieve the outcomes as defined by the Framework. The ReTree YYC program has been well-received; leading to significant increases in public trees planted, and opportunities for public education and collaboration with local neighbourhoods and industry partners. This report provides a summary of the 2016 recovery and restoration work and an update on the 2017 workplan (Attachment 1) as well as the budget summary for 2015/2016 and the 2017 budget allocations (Attachment 2). Administration will return to Council with a final Tree Disaster Recovery and Restoration report no later than 2018 Q1.

### **ADMINISTRATION RECOMMENDATION(S)**

That the SPC on Community and Protective Services recommend that Council:

1. Receive for information the Calgary Tree Disaster – Recovery and Restoration Annual Update; and
2. Direct Administration to report back to Council, through the SPC on Community and Protective Services, no later than 2018 Q1 on the Recovery and Restoration progress.

### **PREVIOUS COUNCIL DIRECTION / POLICY**

On 2016 March 14, Council received report CPS2016-0202 (Calgary Tree Disaster – Recovery and Restoration Annual Update) for information and directed Administration to report back to Council through the SPC on Community Services and Protective Services no later than 2017 Q2 on the Recovery and Restoration phase.

On 2015 May 25, Council received report CPS2015-0418 (Calgary Tree Disaster 2014 – Response and Recovery Update) for information and directed Administration to report back to Council, through the SPC on Community Services and Protective Services no later than 2016 Q1 on the Recovery phase.

On 2014 November 24 with respect to Recommendation 1 contained in Report C2014-0863, the Community Services & Protective Services Department: Parks Business Unit 2015-2018 Operating Budget Program 445, Net Amounts, contained on Page 346 of Attachment 1, be adopted as amended by Council as follows: *In Program 445, Calgary Tree Disaster 2014, by the addition of one-time funding of \$35.5 million over 3 years, \$11.9 million in 2015, \$11.8 million in 2016 and \$11.8 million in 2017, from the Fiscal Stability Reserve and further, that Report C2014-0888 and Attachment 3 be received for information.*

On 2014 November 17, the Administration Recommendations contained in Report C2014-0888 were adopted by Council, after amendment, as follows:

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1. File Administration Recommendation 1 and receive the PowerPoint presentation and Report C2014-0888 for information; and
2. Refer Report C2014-0888 and the distributed PowerPoint presentation to the November Council budget deliberations of the 2015-2018 Action Plan.

At the 2014 November 17 Council meeting, Motion Arising, moved by Councillor Colley-Urquhart that with respect to Report C2014-0888, the following was adopted by Council: Direct Administration to report back no later than 2015 Q2 on the Recovery, Resilience and Restoration framework.

On 2014 October 6 with respect to Verbal Report VR2014-0069, the following was adopted by Council:

1. Receive this verbal update for information;
2. Direct Administration to continue with the Response plan, at an estimated incremental cost of up to \$12 million in 2014;
3. Direct Administration to advance discussions with the Province regarding assistance through the Disaster Recovery Program or other eligible funds; and
4. Direct Administration to report back to Council 2014 November 17 with a progress update on response actions, recovery plan and budget recommendations for consideration at 2015-2018 Action Plan.

### **BACKGROUND**

The unprecedented 2014 September snow event required a coordinated emergency response to manage public safety risks and city-wide damage to trees in all communities. This phase is commonly referred to as the Response phase. The City transitioned from the Emergency Operations Centre (EOC) after nine days to a Tactical Operations Centre (TOC). The Parks TOC was established to complete the Response phase and to resource and facilitate the Recovery phase.

The City and the Province coordinated resources during the 2014 September snowstorm. The 3-1-1 call system received over 10,000 tree emergency service requests from citizens from the start of the storm on 2014 September 8 up to the end of the Response phase on 2015 January 31. This far exceeds the 2,000 emergency requests 3-1-1 receives in a typical year. Due to the joint efforts of numerous City business units as well as many partners including: Canada Taskforce 2, crews from The City of Edmonton, private contractors, and wildfire crews from Alberta Environment and Sustainable Resources Development we successfully responded to the event. Administration completed the Response phase on time on 2015 January 31, having completed an initial debris removal process from all communities and addressing over 14,000 high risk trees.

Once the Response phase was complete, Administration moved into the Recovery and Restoration phases with a plan to revitalize and build resiliency into Calgary's urban forest. There is one year remaining in the Recovery phase with a continued focus on recovery and restoration and an aim to address all storm damage by the end of 2017. Building the resiliency of the urban forest has been an important focus in 2016 and this will continue through to the end of the program.

### **INVESTIGATION: ALTERNATIVE AND ANALYSIS**

The program is now well established and has sufficient resources to achieve its goals. Moving into the final year of the program, Administration will continue to focus on building resiliency in our urban forest

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through proper pruning for form, structure and to protect damaged trees from becoming more susceptible to decay, disease and death. This will ensure continued success following the formal end of program funding in 2017. The below sections contain highlights of the work completed within the various elements of the Framework in 2016. A full summary of the 2016 recovery and restoration work as well as the 2017 workplan is included in Attachment 1.

### Ensure public safety through effective asset management

Administration continues to utilize an online map that allows citizens to track both the timing and type of tree recovery work in their communities. Additionally, the map system uses an open data set to provide some information regarding tree ownership. From January 2015 to December 2016 this online map has received over 21,000 views. This online map is now the standard platform used to inform the public about the planned tree work in their communities into 2017.

### Recovery update – Addressing remaining storm impacts

Over the 2016 season, Calgary Parks Urban Forestry performed work in over 54 communities, including restorative pruning of 94,238 trees and assessing 34,747 trees. This is approximately a 95 per cent increase in pruning activities than a typical year.

### Restoration and Resiliency – Restore and enhance canopy cover

The ReTree YYC program saw continued success in 2016. ReTree Communities are selected based on: available open canopy area, 2014 snowstorm impact, and community interest. The goals of this program are to increase the urban canopy and to engage Calgarians in tree stewardship. These goals are achieved through strategic tree planting and pruning citywide, as well as each ReTree community. In each ReTree community tree planting and pruning take into consideration existing trees in established communities, and as well as providing education around the design of yards in new communities. Planting sites and educational opportunities are tailored to each individual community to ensure a city-wide recovery from the 2014 Tree Disaster.

The International Society of Arboriculture (ISA) recognized the ReTree YYC program for the contribution to Calgarian's knowledge of tree care, and the emphasis on public education and promotion of tree stewardship. The Harry J. Banker Gold Leaf Award was given to the program in October 2016 to acknowledge worthy individuals, organizations or municipalities for projects that have had a significant and long-term impact on a community or region.

### Develop a public urban forestry stewardship

Administration has continued to attend public events, host educational forums, and work with industry partners to ensure citizens can easily access the information and resources they need. The ReTree YYC information booth was on site at the Calgary Zoo and Heritage Park numerous times throughout the summer of 2016. Administration will also meet with industry partners in 2017 February to discuss urban forestry trends, explore new ways to support Calgarians and continue to build a tree care culture in Calgary.

Administration is currently developing a series of eLearning modules to promote tree canopy health and encourage individuals and communities to learn and continue to contribute to the recovery. These

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programs will be delivered online and at community events. The first module, Right Tree, Right Location, has been completed and is available for the public on [calgary.ca/trees](http://calgary.ca/trees).

### Improve parks internal processes

In 2016, Calgary Parks partnered with Corporate Analytics and Innovation to create a system that uses mobile technology to collect tree information. This data collector app allows public tree information to be uploaded to a server within twenty four hours, improving consistency in data and reducing the lag time that currently exists with manually inputting data.

### Build organizational capacity

An Urban Forestry-specific emergency response plan has been developed as per direction in the Calgary Tree Disaster 2014 Recovery Framework. In 2016 a table top exercise was conducted to test the plan and train participants in its use. The plan and associated training will ensure that The City is better prepared for future tree-related disaster events.

### Program management

Administration continues to track key metrics and monitor progress on the ReTree YYC Program. A summary of the 2016 metrics and the planned 2017 actions can be found in Attachment 1.

## **Stakeholder Engagement, Research and Communication**

In 2016, the ReTree YYC team held or attended 126 events and meetings and spoke in person with nearly 11,000 Calgarians about tree care. An interactive map was also created to provide a citizen-focused tool that contains information on urban forestry work scheduled in communities across the city. To date, this map has had nearly 21,000 page views.

In 2017, Administration will continue to engage and communicate with Calgarians and City employees to inform them of program progress and planned work. Detailed plans for communication and engagement are in place and another City Panel survey will be conducted to ensure the plans are based in research and meeting current citizens needs. Attachment 1 includes a summary of the planned communication.

## **Strategic Alignment**

The Calgary Tree Disaster 2014 Framework supports existing objectives and policies related to the many benefits that the urban forest provides within The City's long-range planning and policy documents. The Framework aligns with the following documents: Municipal Development Plan (2009); The 2020 Sustainability Direction; Municipal Emergency Plan; Biodiversity Strategic Plan (2015); Parks Urban Forest Strategic Plan (2007); and Action Plan 2015-2018.

## **Financial Capacity**

### **Current and Future Operating Budget:**

Council approved one-time operating budget from Program 445 of \$35.5 million over 3 years (2015 - \$11.9 million, 2016 - \$11.8 million, 2017 - \$11.8 million), from the Fiscal Stability Reserve (FSR) during the 2014 November budget deliberations (Action Plan 2015-2018). We are continuing to work on inventorying in 2016 to catch-up on 2015 work that was delayed due to technology limitations and the

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resourcing available. The budget spending analysis for 2015/2016 and a summary of budget allocations for 2017 can be found in Attachment 2.

### **Current and Future Capital Budget:**

A one-time capital budget of \$700,000 from Calgary Parks infrastructure capital was used to fund additional vehicles and equipment for recovery and to better respond in the future. The four aerial units have been in service since 2016 Q1. The units provide additional flexibility to prune trees in smaller park spaces and along narrow roadways, and allow Urban Forestry to respond to tree emergencies in a more timely and effective manner.

### **Risk Assessment**

The Calgary Tree Disaster 2014 Framework provides the direction for recovery, restoration and building resiliency into The City's urban forest and programs. Without this comprehensive approach The City and the urban forest may not be as prepared for future storm events and may not meet long term policies and goals. An Urban Forestry emergency response plan has been developed and training is ongoing.

### **REASON(S) FOR RECOMMENDATION(S):**

The Calgary Tree Disaster 2014 Recovery Framework contains recovery and restoration plans and these are being followed to ensure that The City of Calgary's urban forest is restored and resilient. Calgarians will be educated about the importance of the urban forest and provided with tools and resources to manage their trees. A collaborative and community-based approach is being undertaken to ensure long-term policy and community goals are met.

### **ATTACHMENT(S)**

1. Calgary Tree Disaster, Summary of 2016 Recovery and Restoration and 2017 Workplan
2. Calgary Tree Disaster, 2015/2016 Spending Analysis and 2017 Budget Allocations