

## **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 & Restoration Framework (the Framework) presented to Council on 2014 November 17, provides a recovery and restoration plan with principles and key result areas that will guide the recovery and restoration of the city's urban forest. On 2014 November 24, Council approved this comprehensive recovery and restoration plan that acknowledged the value and benefits of a safe and resilient urban forest. Council approved \$35.5 million over the next three years to implement these plans. Attachment 1 provides an overview of the planned recovery and restoration outcomes.

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 initiative was very well-received; leading to significant increases in public trees planted, and opportunities for public education and collaboration with Calgary neighbourhoods and industry partners. This report provides a summary of the 2015 recovery and restoration work (Attachment 2), an update on the 2016 planned recovery and restoration work that is currently underway (Attachment 3), as well as budget spending analysis of the work for 2015 and a summary of budget allocations for 2016 (Attachment 4). Administration will return to Council through the Standing Policy Committee on Community and Protective Services with another Annual Tree Disaster Recovery and Restoration Update no later than 2017 Q2.

### **ADMINISTRATION RECOMMENDATIONS**

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 2017 Q2 on the Recovery and Restoration progress.

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

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 Quarter 1 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, receive Report C2014-0888 and Attachment 3 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 Operating 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 next three to four years of Recovery phase will focus on recovering, restoring and building resilience into the urban forest.

During the 2014 September snowstorm we came together as a City and a Province to coordinate our resources. 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 tree emergency requests 3-1-1 receives in a typical year. We successfully responded to the event 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. 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.

The Response phase was completed on 2015 January 31, Administration moved into the Recovery and Restoration phases with a plan to revitalize Calgary's urban forest and address all storm damage by the end of 2017.

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

Currently the program is well funded and resourced to achieve its goals. Detailed plans were created to address the various elements of the Framework and these are described below. Attachment 1 also contains a summary of completed and planned outcomes.

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### Ensure public safety through effective asset management

In 2015, Calgary Parks Urban Forestry created an online map that allowed citizens to track the timing and type of tree recovery work in their communities. Additionally, the map system used an open data set to provide some information regarding tree ownership. This map won two awards, with GeoAlberta recognizing The City of Calgary with the 2015 Best Interactive Map award and ESRI Canada awarding it as a finalist in the national App of the month contest.

In 2016, Calgary Parks is partnering with Information Technology (IT) and Infrastructure Information Services (IIS) to create a Parks Work Flow unit; a data collector app that will allow public tree information to be uploaded immediately to a server. This will decrease inconsistency in data and the lag time that currently exists with manual uploading.

### Recovery update – Addressing remaining storm impacts

Over the 2015 season, Calgary Parks Urban Forestry performed work in over 80 communities, including restorative pruning of 59,000 trees and assessing 69,000 trees. This is approximately 35 per cent more than a typical year. Calgary Parks Urban Forestry is planning to assess and prune another 80,000 trees in 2016.

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

In 2015, Calgary Parks Urban Forestry planted over 7,400 trees, which is an increase of nearly 1,700 trees compared to 2014. This work was supported by a successful campaign called ReTree YYC that led to many opportunities for public education and collaboration with communities and industry partners. The number of communities included in the NeighbourWoods program increased from 10 to 29 in 2015 and over 700 trees were planted. The goals of this program are to revitalize the urban canopy and to engage Calgarians in tree stewardship, and as a result of the success of the ReTree YCC recovery campaign, a decision was made to transition NeighbourWoods into the new ReTree Community program.

Administration is planning to plant even more trees in 2016 through the new program and an increase in contractor output. Twenty-five communities have been selected using the following criteria: available open canopy area, September 2014 snowstorm impact, and community interest. Calgary Parks Urban Forestry will work closely with communities to target opportunity sites for new trees and create unique educational programs specific to each community's needs to ensure tree canopy improvements. Program offerings may include pruning and gardening around existing trees in established communities and designing new yards in new communities. These varied and unique programs are required to ensure that a city-wide recovery from the 2014 Tree Disaster occurs.

### 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 onsite at the Calgary Zoo and Heritage Park numerous times throughout the summer of 2015. Administration also met with industry partners in 2015 March to develop a plan to host four tree resource days where the public could find tree care information and participate in free educational sessions.

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In 2016, The City and industry partners will come together again to discuss urban forestry trends and explore ways to better support Calgarians. Additionally, Administration is developing several educational programs and initiatives to promote tree canopy health and encourage individuals and communities to learn and continue to contribute to the recovery. These programs will be delivered online, at community events, and through Calgary Parks led forums.

### Improve Calgary Parks' services and processes

Calgary Parks continues to analyze how the flood and snow events have impacted Calgary's urban forestry canopy in order to determine where to focus recovery and restoration actions. The initial data has been collected and is being analyzed to determine total canopy loss. This data will then be used to identify locations for planting opportunities to increase the tree canopy city-wide. Additionally, the Calgary Parks Urban Forestry section has undergone a realignment of its operational structure to improve citizen-facing services, and is on track to update the Parks Urban Forest Strategic Plan and Management Plan.

### Build organizational capacity

An Urban Forestry-specific emergency response plan has been developed and will be included in the Business Continuity Plan for Parks. This project will ensure that The City is better prepared for future tree related disaster events. In 2016 Calgary Parks Urban Forestry will use the plan for training and make improvements as needed.

### Program management

This project follows The City's project management standards to ensure good governance, accountability and transparency. The Calgary Tree Disaster, Summary of 2015 Recovery and Restoration (Attachment 2) outlines the final 2015 metrics and the Calgary Tree Disaster, 2016 Recovery and Restoration Workplan (Attachment 3) contains planned actions for 2016.

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

In 2015, the ReTree YYC team held or attended approximately 130 events and meetings and spoke in person with nearly 10,000 Calgarians about tree care. Through an online "live-chat," Calgarians were able to ask questions from the comfort of their own home. During the chat, The City's webpage received over 2,400 page views and there were over 850 link clicks received. An interactive map was also created to provide a citizen focussed tool that contains information on urban forestry work scheduled in communities across the city. To date, this map has had nearly 20,000 page views.

In 2016, Administration plans to continue to engage and communicate with Calgarians 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 3 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: imagineCalgary (2007); Municipal

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Development Plan (2009); 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 a 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 resourcing available. Analysis of 2015 spending and the 2016 budget allocations are contained in Attachment 4.

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

A one-time capital budget of \$700,000 was set aside from Calgary Parks' infrastructure capital to fund additional vehicles and equipment for recovery and to better respond in the future. The aerial units are in the final stages of commissioning through The City's Fleet Services and will be in service in 2016 Q1. This will allow Calgary Parks 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. To prepare for future events, an urban forestry emergency response plan has been developed.

#### **REASONS FOR RECOMMENDATIONS:**

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.

### **ATTACHMENTS**

1. Calgary Tree Disaster, Recovery and Restoration Outcomes
2. Calgary Tree Disaster, Summary of 2015 Recovery and Restoration
3. Calgary Tree Disaster, 2016 Recovery and Restoration Workplan
4. Calgary Tree Disaster, 2015 Spending Analysis and 2016 Budget Allocations