

CORPORATE FLOOD WORKPLAN UPDATE – 2013 JUNE FLOOD RECOMMENDATIONS

EXECUTIVE SUMMARY

The City of Calgary has an unwavering commitment to continuous improvement and recognizes the importance of lessons learned. This report provides an update on the Corporate flood work plan resulting from the internal and external debriefs following the 2013 June flood. The internal debrief of the Calgary Emergency Management Agency (CEMA) highlights strengths and improvements for future emergency management and business continuity activities and practices. The Conference Board of Canada's external assessment identified best practices and provides recommendations for emergency response and initial recovery actions. The Corporate flood work plan compiles findings from the internal and external debriefs and is a complimentary stream of work to the River Flood Mitigation Program.

The City has adopted a comprehensive all-hazards approach to emergency management. The City's capacity and capability for future emergency events is strengthened through emergency management and business continuity activities implemented as a result of lessons learned. Increasing effectiveness and improving emergency management and business continuity practices and processes can be achieved through the completion of the Corporate flood work plan strategies. This in turn supports The City's efforts to save lives, protect property (critical infrastructure), preserve the environment, and the economy.

The City of Calgary continues to implement the recommendations and lessons learned from the 2013 June flood, helping to build a more resilient corporation and community. Many of the strategies, both completed and underway, have improved the emergency management capabilities within Calgary.

ADMINISTRATION RECOMMENDATION(S)

The Emergency Management Committee recommends that Council receive this report and its attachments for information.

RECOMMENDATION OF THE EMERGENCY MANAGEMENT COMMITTEE, DATED 2015 APRIL 01:

That the Administration Recommendation contained in Report EM2015-0246 be approved.

PREVIOUS COUNCIL DIRECTION / POLICY

On 2006 February 13, Council approved report DS2006-04 "2005 Flood Policy and Procedures Changes Report," which included 74 recommendations to enhance emergency management within The City. All of the recommendations were adopted by City Council.

On 2013 December 16, Council approved report EM2013-0822 "2013 June Flood Emergency Response and Initial Recovery Efforts," which summarized the key emergency management, response and early recovery efforts provided by The City, CEMA and its partners.

On 2014 May 12, Council approved report EM2014-0321 "June 2013 Flood Debrief Results: Update Report," which summarized work completed on initiatives to strengthen The City's preparedness and response capabilities ahead of the 2014 flood season.

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On 2014 June 23, Council approved report PFC 2014-0512 “River Flood Mitigation Final Report,” which presented 27 recommendations from the Expert Management Panel on River Flood Mitigation to improve The City’s flood resiliency. All of the recommendations were adopted by City Council.

On 2014 July 21, Council approved EM2014-0414 “2013 Flood Internal and External Debriefs,” which included direction that Administration consolidate the recommendations of the June 2013 Flood Internal Debrief Results and the Conference Board of Canada Report to develop a Corporate flood work plan and to return to the Emergency Management Committee in 2015 April.

On 2014 October 28, Council approved report PFC 2014-0777 “Implementation Plan for River Flood Mitigation and Establishing Corporate Resiliency,” which outlined an implementation plan in response to the 27 recommendations from the Expert Management Panel on River Flood Mitigation. The activities and budgets were approved by Council.

BACKGROUND

The 2013 June flood affected Calgary and the southern Alberta region. It was the costliest natural disaster in Canadian history. Economists project damage losses and recovery costs from the flood to exceed \$6 billion, including a record \$2 billion in insured losses.

Systematically documenting qualitative and quantitative information in the form of lessons learned is essential to developing improved practices. To that end, CEMA conducted internal debrief sessions to capture areas of strength and identify opportunities for improvement. In addition, CEMA engaged the Conference Board of Canada to complete an external review on The City’s emergency response and initial recovery efforts to the 2013 June flood. Findings from the internal and external debriefs were compiled into a single Corporate flood work plan outlining strategies developed and implemented by accountable business units.

In parallel to this work, an Expert Management Panel on River Flood Mitigation was convened in 2013 and presented recommendations in 2014 June on how The City can become more resilient to future floods, with a focus on flood forecasting, structural protection, land use planning, watershed management and understanding the dynamic flood risks facing Calgary. The implementation of those recommendations are being coordinated by Water Resources, and are complementary to the strategies outlined within the Corporate flood work plan, which focus on emergency management and recovery.

The City is tracking 20 strategies within the Corporate flood work plan. Many actions are completed while those still underway have been incorporated into *Action Plan 2015-2018*. Tracking included strategies implemented prior to the 2014 flood season. These strategies remain relevant on an ongoing basis, such as communications and monitoring of environmental conditions which continues to be part of the Administration’s spring activities for 2015. Additionally, 2014 saw the completion of many other strategies. The longer term initiatives included in the business units’ business plans for *Action Plan 2015-2018* address ongoing projects, some of which require cross-business unit coordination.

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Based on the advisory project undertaken by the City Auditor's Office, CEMA leadership was provided with a management letter indicating the oversight and guidance of the City Auditor related to the capture and prioritization of lessons learned, as well as the associated implementation. The Auditor's Office concurred with CEMA's approach to work with business units to prioritize lessons learned and include strategies in their respective business plans and budget deliberations for *Action Plan 2015-2018*. Of interest to the City Auditor is the assurance that high priority opportunities have been assigned ownership, and implementation has taken place.

Leading up to *Action Plan 2015-2018* business planning and budget deliberations, CEMA staff worked with business units to provide advice, shared learnings and best practices from other disasters and engaged staff to contribute to the multi-business unit strategies in the Corporate flood work plan. Business units were engaged and motivated to address the recommendations through enhancements that were included into *Action Plan 2015-2018*.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Following the conclusion of a significant emergency event, an important role of CEMA is the gathering and facilitating of lessons learned. This requires the coordination of input from staff at all levels, designed to identify best practices and areas for improvement, with the common purpose of continuous improvement for future emergency events.

The internal debrief resulted in six core areas where recommendations were identified following the 2013 June flood, including: community response, communications, business continuity, resource management, workforce safety and well-being, and cutting red tape. While some strategies are business unit specific, others involve coordination across two or more business units. Where cross collaboration is required, lead and supporting roles have been assigned. Accountability for implementation of the strategies is within each business unit and is based upon available resources, including budget. In addition, the evaluation of the effectiveness of certain strategies is within the accountability of the respective director.

Council was informed of disaster readiness accomplishments in EM2014-0321 "June 2013 Flood Debrief & 2014 Emergency Event Preparedness" and EM2014-0414 "2013 Flood Internal and External Debriefs" in 2014 May and 2014 July, respectively. Throughout 2014, CEMA continued to work with business units, their Directors and Business Continuity Coordinators, to identify opportunities to address recommendations, and facilitated engagement across business units where coordination was needed. Strategies that will continue through *Action Plan 2015-2018* are highlighted in Attachment 1.

The establishment of a cohesive Corporate flood work plan compiled on the basis of lessons learned is an important step towards creating incremental change in The City's emergency management and business continuity capacity and its resilience. To date, CEMA has continued to follow up with business units to track progress on recommendations, facilitate cross-business unit discussions and to identify areas for ongoing improvement. The Corporate flood work plan represents a key component of preparedness in advance of the 2015 flood season. Progress

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on ongoing efforts to address recommendations can be tracked through the *Action Plan 2015-2018* and via updates to Council from individual business units after 2015 April 1.

To ensure flood readiness for 2015, CEMA continues to participate in a multi-business unit communications approach, led by Customer Service & Communications, to review requirements should environmental conditions develop that warrant information to the public. Information on river hydrology, snow pack, and approaching weather systems must be coordinated to ensure situational awareness and promote preparedness. Additionally, many business units in the City are stronger and better prepared as a result of implementing actions from the Corporate flood work plan.

Stakeholder Engagement, Research and Communication

Emergency management requires collaboration, coordination and integration to facilitate complementary and coherent action. Throughout the post-event evaluation process, CEMA engaged business units, and continues to promote and assist with cross-departmental initiatives.

Ongoing engagement with business units has identified several key accomplishments to enhance flood resiliency and address opportunities for improvement from the review process. These accomplishments are highlighted in attachment 2. To strengthen The Corporation, there has been a focus on strengthening business continuity and has included:

1. The Administrative Leadership Team approving Administration Policy GN-039, the Corporate Business Continuity Framework;
2. The completion of a vendor contact list to support emergency procurement of resources;
3. The identification of a designated back-up Council Chamber to support the event of a Municipal Building evacuation.

Efforts have also been directed to strengthen the community. Citizens will benefit from frontline strategies including:

1. The development of READYCalgary, a community resilience train-the-trainer program focused on emergency preparedness; and
2. The development of a business continuity handbook and templates to support Calgary small businesses strengthen resiliency during crisis; and
3. Community support and outreach by business units to connect citizens with resources and information as they recover from the 2013 flood.

While strong and timely communications were key successes during the response and immediate recovery to the 2013 June flood, we also found ways to improve our efforts including:

1. Updating the Common Operating Picture Software within the Emergency Operations Centre and increasing its use to select business units;
2. Establishing a streamlined building assessment process that shares vital data in real time among stakeholders allowing for faster responses and more informed citizens; and
3. Utilized *Report to Calgarians* to inform Citizens of our work, highlighting the importance of business continuity for small businesses.

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Strategic Alignment

This report and its attachments align to the following:

1. Strategic Leadership Plan – Better serve our citizens, communities, and customers.
2. Council Priorities – “a prosperous city” and “a city of inspiring neighbourhoods”.

Action Plan 2015-2018 Strategies – “Build resiliency to flooding,” “enhance The City's capacity and resiliency to prepare for and respond to pandemics, natural disasters and emergency situations,” “advance purposeful economic diversification and growth” and “seek out partnerships with other governments and community partners to achieve community well-being.”

The City's Sustainability Direction 2020 objective – “Calgary, its communities and neighbourhoods are safe, resilient and supportive.”

Social, Environmental, Economic (External)

Social impacts related to the 2013 June flood, continue to be felt by some individuals. Citizens, families, communities, and businesses in Calgary are relying on The City to provide an environment in which negative impacts resulting from emergencies and disasters are minimized. Emergency preparedness, planning, training and exercises are necessary at a personal, family, community and business level. The level of preparedness is correlated with the ability to resume normalcy in daily life as quickly as possible following an event. The strategies outlined in the Corporate flood work plan seek to enhance the capacity and capabilities of City business units who are asked to respond to events, as well as those individuals that could be directly affected.

Although the focus of the Corporate flood work plan was drawn from the experience of the 2013 June flood, the strategies may be equally applied to the 2014 September snow event or the 2014 October underground fire and power outage. These strategies are intended to support CEMA's all hazards approach to emergency management.

The inclusion of the Corporate flood work plan strategies in *Action Plan 2015-2018* is intended to capitalize on a business unit's financial and human resource capacity to implement the strategies in a timely manner.

Financial Capacity

Current and Future Operating Budget:

The operating impacts of the strategies and recommendations have been included within each business unit's business plan and budget presented in *Action Plan 2015-2018*.

Current and Future Capital Budget:

The capital budget impacts of the strategies and recommendations have been included within each business unit's business plan and budget presented in *Action Plan 2015-2018*.

Risk Assessment

CEMA continues to focus on improving actions and activities found in the comprehensive emergency management model adopted by The City. The Corporate flood work plan is one mechanism to track the implementation of activities between emergency events and Emergency Operations Centre openings. The successful implementation of each business unit's planned

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actions included in *Action Plan 2015-2018* is necessary to address recommendations brought forward following the 2013 June flood event.

CEMA's ability to transform disaster-specific lessons learned and adapt them into an all-hazards approach is beneficial in preparation for any emergency that may impact the city. CEMA will continue to employ a risk-based approach to enhance emergency response and recovery capabilities that contribute to The City's preparedness regardless of the type of disaster.

REASON(S) FOR RECOMMENDATION(S):

CEMA continues to advance the comprehensive emergency management model adopted by The City. Administration is working collectively to implement strategies as a result of lessons learned from the 2013 June flood. Employing an all hazards approach to enhance emergency response and recovery capabilities will help to ensure The City is prepared for any event that impacts the city.

The Corporate flood work plan is one mechanism to track improved practices between emergency events and Emergency Operations Centre openings within The City. A business unit's planned actions to address recommendations have been included in *Action Plan 2015-2018* in an effort to enhance mitigation, preparedness, response and recovery in future events.

ATTACHMENTS

1. Corporate Flood Work Plan
2. 2015 Readiness